Gary Burton Improvisation Course

Intro

Improvisers usually get started by listening to records and trying to copy their favourite players. We also learn from other musicians and from just experimenting as much as we can. As a result pretty much everyone's knowledge of improvisation is not only incomplete, but also has a perspective unique to each player's learning experience. At some point along the way, this haphazard way of learning isn't enough, and the intermediate level improviser needs to learn more about the techniques and mental processes that take place in improvising. In this course, we will explore three areas of importance for improvising. One is technical information—how improvisers deal with harmony, melodic construction, and execution in ways that are different from playing written music. Two is learning how to analyse and understand compositions from the point of view of the improviser in order to play meaningful solos that capture the important elements of the songs we use as the basis for improvising. And three is learning how the mental processes function in improvising, again different from performing written music, and key to being an effective improviser.

We will also take a look at a lot of ancillary topics ranging from use of dynamics to theme development, chromaticism, and accompanying other soloists, among others that are important for the improviser to understand and use properly. By the end of the course, you will have a well-rounded understanding of improvisation and be able to assess your strengths and areas to work on in future practicing and how to go about it.

There is no one way to explain or perceive improvisation—if you ask five different players to describe how they see it, you will get five different explanations—but for all improvisers there are shared techniques and skills that everyone uses. When you have completed this course, your understanding and knowledge of improvisation will provide you with direction and answers in the future as your playing continues to evolve.

Gary Burton

Lesson 1

Unfortunately, most books about improvisation spend a great deal of time practicing scales and practicing familiar jazz phrases in different keys with the idea that you will somehow become fluent as an improviser because you have gone through these groups of notes over and over. That approach is sort of like learning a language by reciting a list of words or a certain sentence a thousand times. I don't think anyone learns a language doing that. One learns a language by making conversation with people. My approach to improvisation is in a very opposite direction. I'm opposed to any kind of repetitive, over-and-over-again exercises. Practicing in this fashion actually works against you as an improviser.

People sometimes ask me, "What's the difference between a Miles Davis, or a John Coltrane or Sonny Rollins from my friend Joe who plays the saxophone? What are these great musicians doing differently?"

While we all manage to speak, some people have a way with words. What they say is more captivating, and more spellbinding, that what most individuals have to say. The
truth is that jazz improvisation is like a language. While we all manage to speak, some people have a gift of being more interesting as speakers both in the way that they project and form words, and also what they have to say is more captivating, and more spellbinding than what most individuals have to say. A great jazz solo has a similar effect—once the solo starts, the listener can't take his or her ears off it, and they are dying to hear what notes are coming next. A great solo is a story that unfolds and you can listen to a recording of it over and over and continually get the same excitement and intensity from it. That high level of communication is what we're hoping to achieve, as we become better improvisers. It's not enough to play the right notes, get through the chord changes without making mistakes, and to sound like a familiar jazz improviser; we must aspire to being great storytellers when we improvise.

Improvisation is unique among different types of music, in that while all music tends to be interesting to our ears and our minds, there's a special characteristic to improvised music—it's being created spontaneously for that very moment. In that regard, it's like speaking. When we speak with each other we don't do so from a written script. Instead, we fine tune our speech, shape it, and give it emotional content as we speak for that particular moment with the person we're speaking to, expressing how we feel about a particular subject. The same is true with an improvised solo—it has a sense of immediacy to it. When someone is listening to an improvised solo there is a sense of not knowing where it's going to go until one hears what's next. The musician is up there much like a juggler with three or four balls in the air and we're watching and listening to see where he or she is going with it. This phenomenon is part of the intrigue and mystery of listening to improvisation and one of the reasons that music fans are drawn to improvisation and to jazz.

Now, let's take a closer look at the relationship between language and improvisation.

In spoken language, we learn from experience, talking and listening to others. We also learn from studying and analysing language in school. Over time, one becomes fluent in a language and no longer has to consciously think about the mechanics while speaking. The same process of assimilation takes place in learning to improvise. We become fluent when the vocabulary (scales and chords) and grammar (harmonic progressions) are assimilated into conversational content or story (melodic themes and structure) and we no longer have to consciously think about them while we play.

There are some ways of teaching improvisation that encourage a student to develop a collection of familiar jazz phrases that are then strung together. To me, while one might "sound" like a jazz player when doing that, it's not true improvising. Comparatively, let's say I'm heading to a vacation in France and I've studied from a
little phrase book on the airplane and have learned how to say, "What time is it?," "Where's the train station?," and "I'd like to order an omelette." If I'm sitting at a Parisian cafe and a passerby happens to hear me say, "I'd like to order an omelette," they might think that I speak French. But the truth is, all I can say are a few common phrases; I can't tell a story or make a joke, discuss politics, etc. In order to do those things, one must have full understanding of the language.

The point is, if all you have is a collection of familiar phrases, then you're going to sound like a musical-tourist when you take your solo instead of somebody who really knows what they're talking about. There are some jazz players who, in my opinion, miss this important element entirely, in that they play a lot of familiar jazz phrases, but don't tell a story. The mood is there, it sounds like jazz, but the content is missing. Some players with this approach have nonetheless become very successful musicians because of a strong individual style, and we seem to enjoy them in spite of the lack of thematic content in their solos. It is so much better if there is more meaning in the solos. When I was younger I couldn't easily discern the difference between the type of players who strung jazz phrases together at random, and those who were master improvisers. As I learned more about improvising, I began to tell the difference.

Here's a thoughtful description of improvisation from Bill Evans's liner notes from the Miles Davis record, *Kind of Blue*.

There is a Japanese visual art in which the artist is forced to be spontaneous. He must paint on a thin stretched parchment with a special brush and black water paint in such a way that an unnatural or interrupted stroke will destroy the line or break through the parchment. Erasures or changes are impossible. These artists must practice a particular discipline that of allowing the idea to express itself in communication with their hands in such a direct way that deliberation cannot interfere. The resulting pictures lack the complex composition and textures of ordinary painting, but it is said that those who see well find something captured that escapes explanation. This conviction that direct deed is the most meaningful reflections, I believe, has prompted the evolution of the extremely severe and unique disciplines of the jazz or improvising musician.

Group improvisation is a further challenge. Aside from the weighty technical problem of collective coherent thinking, there is the very human, even social need for sympathy from all members to bend for the common result. This most difficult problem, I think, is beautifully met and solved on this recording. As the painter needs his framework of parchment, the improvising musical group needs its framework in time. Miles Davis presents here frameworks that are exquisite in their simplicity and yet contain all that is necessary to stimulate performance with sure reference to the primary conception.

Lesson 2

What we really want to have at our fingertips is a complete scale that works on each harmony. Typically, we call these **chord scales** and they make up the improvisers vocabulary. As it turns out, there are **10 types of scales** that occur most frequently in typical song forms. A player is expected to be very familiar with these 10 kinds of scales.
There are other scales that occur less frequently, but I advise you not to become too absorbed working on them at this time. Get the most familiar chord scales under your fingers first.

That means you need to memorize them and be able to recall them instantly without having to consciously think about the individual notes that make up the scales. At the sight of a chord symbol, the player needs to have an instant response:

- a visual image of the shape and pattern of the scale
- an aural memory of the sound of that particular scale

With the combination of a visual and an auditory memory, the player should be able to start playing on the scale immediately without having to consciously think about the mechanics involved.

I'm sure you are already familiar with some of the most frequently occurring scales such as the C scale, or the scale for an F7 chord. But, we need to have instant recall to draw upon for each of the 10 commonplace scales—in all 12 keys. That makes a total of 120 scales.

The point of all this is that there is no time to think about the scale notes individually while a tune is being played. There are only two or three seconds for each chord in a typical medium tempo song with changes occurring every two or four beats, as is often the case. So, you do not have time to consciously think about what notes are available to you. You have to have the information assimilated already and be able to play without stopping to consciously think about the scales.

Becoming intimately familiar with that many scales is not as daunting a task as it may seem since a number of the scales share the same note groupings, just in a different order.

Let's begin exploring the 10 commonplace scales:

- the seven modes
- the lydian 7
- the altered scale
- the symmetrical diminished scale

The Modes

We start by considering the modes—seven scales derived from the diatonic scale. You maybe have already learned about the modes if you have studied traditional harmony. Simply put, if you start with the diatonic scale, say the C scale, that's the Ionian mode. Using the same notes starting on the second tone (D), it's the Dorian. Starting on the third note (E) it's the Phrygian mode. Starting on the fourth note (F) gives us the Lydian, and the fifth note (G) results in the Mixolydian. Beginning the scale with the sixth note (A) is the Aeolian mode, and finally with the seventh note (B), we get the Locrian.

(It's interesting to note that most musical terms in common use today are taken from the Italian language, but in the case of the modes, the words are Greek.)
As improvisers, we are going to find it more useful to think of the modes a little differently than the technical explanation described above.

What is important to us as improvisers is the sound of the scale and the type of harmonic coloration suggested by the mode.

- is it brighter or darker?
- is it major or minor or dominant 7?

Consequently, it is more logical to think of the modes in this order: from brightest to the darkest, and note which modes are major or minor, and the one mode that is dominant 7th in nature.

In addition to the seven modes, there are three scales that are very common in popular songs and jazz. We need to add these three to arrive at the complete list of ten scales. And as I said previously, these ten scales are used on roughly 95 percent of all the harmonies you will encounter in typical show tunes, jazz compositions, pop songs, etc. These are the ones you will be expected to know if you are at a session or a rehearsal and new music is put in front of you. All three of these additional scales are employed on dominant 7 harmonies.

The last two of the dominant 7 type are close cousins. Both include what we call altered notes. You've seen chord symbols such as C7(9) or F7(9), etc. Those notes, the 9, 9, and also the 13, are very strong notes in a harmony, and they are described as altered, since they are either raised or lowered a half-step to increase their dissonance.

The symmetrical diminished scale is closely related to the altered scale. The first five notes of the scale are, in fact, the same. But instead of the 13 used in the altered scale, the symmetrical diminished scale uses the 5th and 6th. Of course, this scale strongly suggests the sound of the diminished chord.

NOTE: The symmetrical diminished scale also is used when the diminished chord symbol occurs. In that case, instead of using the pattern half-step, whole-step, half-step, whole-step, etc, as used on a dominant 7 harmony, the pattern for a diminished chord symbol is the opposite: whole-step, half-step, whole-step half-step, etc.

So, now we have all 10 scales in front of us. How do we go about learning them and establishing a strong imprint in our memory of the sound and shape of the scales?

One approach is to be methodical. That is, choose, say, four scales a day for practice and memorization, and over the course of 30 days you will have covered all 120 scales. Actually, I don't know anyone who has taken this approach, though it seems logical enough.

Most players learn new chord scales as they encounter the need for them in new songs. So if you are starting to learn a new song, the first thing you might want to do is check out all the chord scales that will be required and see if there are any you are not yet familiar with. If so, spend some time becoming familiar with them, so when you proceed to play on the song, you will have the notes you need. If you come to a chord and you don't get an instant image of the chord scale required, remember to spend a few minutes playing on it and memorizing it for next time. Eventually, over the course of learning a variety of songs in a variety of keys, you will get to know all the relevant chord scales.
Practice Tip

The important thing when learning new chord scales for a tune is to not allow yourself to cheat. Yes, you may be able to get past a certain harmony you don't know very well without having a chord scale ready, but you're going to want to know the scales for all the chords of a song and not have to resort to guessing or waiting to hear what someone else plays on a harmony so you can try to pick up usable notes by ear. Learning the vocabulary now will allow you to better express yourself later.

Let's begin to look at how I recommend learning how to use these 10 scales in your improvising.

The traditional approach to practicing scales is to:

- start on the root note (or tonic)
- go up and down the scale

That approach doesn't help the improviser much, and in fact works against us in a couple of ways.

Our goal is to imprint the shape and sound of the scale in our memory, and also to have a variety of ways to group the notes of the scale, which will come in handy when we want to make melodies. We're never going to be improvising by simply going up and down the scales. We also have to learn how to comfortably start playing on a scale without having to start with the root note every time.

Being sure to use several keys, practice the 10 scales we have covered:

- in random patterns
- using a variety of intervals
- with the full range of your instrument
- leaping around the range frequently
- while varying the rhythms

Speed isn't all that important. The goal isn't to be able to play these variations on the scales faster and faster. The important thing is to make a strong imprint in our memory, and use as much variety as possible as we sort of ramble around on the chord scale we are practicing, getting increasingly familiar with how it sounds and how it is shaped. Spend time this week practicing the scales in the method listed above.

You may ask what is the difference between say, practicing on the G Mixolydian, and the C Ionian scale. It is the exact same seven notes, after all. The difference is that we will give different emphasis to certain notes depending on the chord symbol.

If the chord is a G7 and we are playing G Mixolydian, then the G, B, D, F are the strong chord tones of the harmony, and the other notes in the scale are passing notes filling in. The same notes used on a C major chord calling for the Ionion scale would feature the chord tones C, E, G, B, and so on.

When we play on a harmony, it is our responsibility as a soloist to help establish the sound of the chord for the listener, so we tend to feature the chord tones at strong
points in our melodic phrases (such as the down beats), filling in with the other scale notes.

**Lesson 3**

Last week, we learned that improvisers must be able to quickly recall chord scales and be able to play around on them fluently. This becomes important when choosing which chord scale to use on a given harmony — another thing we must be able to determine immediately. When a new tune is put in front of you at a session or a rehearsal, there isn't time to take the music home and spend an hour or two working out the correct scales. Improvisers need a quick, mostly intuitive way of making these scale choices in real time as the tune is being played.

This week, I am going to show you how to do this and we will look at some examples.

Essentially, there is one, sometimes two, questions that have to be answered to determine the correct chord scale for a harmony. Let’s look at an obvious example.

**Question:** What scale should you use if the chord symbol is for a major chord, say Cmaj7?

Look at last week’s list of 10 common chord scales and you will see that there are two common scales for major type chords: Ionian and Lydian.

The difference between these two versions of the chord scale is just one note, the 4th degree of the scale. In the Ionian it is a natural 4, in the Lydian it is a raised 4 (also called the 11). So, as we approach the Cmaj7 chord we are searching for either an F or an F to tell us which of the two possible chord scales we should use.

**Answer:** There are two places to look for the answer...

1. First look at the written notes taking place during that harmony. As your eyes scan the notes and you look for an F or an F, you will see very quickly if either note is there. About half the time, the note in question, the one about which you need to decide, will be included among the written melody notes.

2. If you don’t see it when you look at the written melody, then you can find it in the preceding chord scale. That is, the scale just before the Cmaj7. Let’s say the preceding chord is a G7. Think of the G7 chord and you will quickly notice that it has an F in it. The principle at work here is that the notes in a chord and its corresponding chord scale will want to continue ringing into the next harmony, unless something in the next harmony forces it to change. So in the case of G7 to Cmaj7, the F in the G7 harmony wants to carry over into the C harmony, indicating that the Ionian scale is the one that will work best on the Cmaj7 chord.

In reality, all the players in an ensemble are following a similar process; making decisions about what is the most appropriate chord scale for each harmony. And, like our examples, they are looking for the notes in question to decide which scales are the best choices.

Most of the time, the choice is fairly obvious and can be determined in an instant. Occasionally, there will be a situation that is less clear cut, and you may find that your
first guess doesn't match what the other players chose the first time through the changes. If that happens, you'll know to adjust the next time through. Also, sometimes you'll find a chord where maybe two different scales both seem to work. In that case, you can either choose which one you like or check to see what scale the other musicians are using for the harmony.

The purpose here is not to necessarily get every chord scale correct the first time through. The intention is to have a system you can use that will be correct most of the time, and allow you to keep up with the flow of the music in real time. To do this, you can't take more than a second or two to decide what scales to use.

Let's consider other examples. As we learned already, in the case of major type chords, there is just one note that requires a decision—the 4th. In minor-chord types, there are two notes that need to be checked—the 6th and the 2nd. So, it works like this. On a minor chord:

1. Determine whether the natural 6 or 6 is appropriate. If it is natural 6, then it will be the Dorian scale. If it is 6, it may be the Aeolian scale or the Phrygian scale.
2. If you notice the 6 is present, then you must also check the 2nd to see if it is natural (Aeolian) or flat (Phrygian).

This method can be carried out almost at a glance once you get used to doing it, giving you the ability to smoothly improvise from one chord to the next, even on a new song.

As you'll see from the steps below, the process for determining the correct scale for a dominant 7 chord is only slightly different.

When you see a dominant 7 chord symbol in a chart, ask yourself the following...

1. Is the 4th natural or sharp based on the melody or the preceding chord's scale? If it is natural, then the scale is Mixolydian. If it is a sharp 4th, then it could be Lydian b7, or one of the two scales in the altered family (the altered or the symmetrical diminished).
2. Are there any altered notes? It is easy to notice the altered notes, like b9, #9, etc., because they have such a distinctive sound. If you see either a b9 or #9, you can assume that nine times out of ten both will be used in the scale. (The two altered nines seem to usually be used together, so if you see either one, you can assume they are both going to be in the scale.) In the case of a dominant 7 harmony that has altered notes, occasionally there is a third step required.
3. In order to decide between the altered scale or the symmetrical diminished, you need to check the 6th note of the scale (also called the 13th), to see if it is natural or flat. If it is flat, use the altered scale. If the 6th degree is natural use the symmetrical diminished scale.

Lesson 4

Of course, you already have some familiarity with chord symbols and some knowledge of how the harmonies move from one chord to the next. Some chords feel like they are in motion—other chords feel at rest. Just as with scales, the improviser
needs to be able to quickly understand the chord progressions of a song in order to improvise in time with the flow of the music.

It is important for the improviser to clearly imply the harmonies when improvising. It is not enough to just play correct notes on each chord. You have to also help the listener follow the changes as the chords move from one to another. Whatever kind of motion the harmonies suggest, it is the improviser's job to show this to the listener.

One thing you should notice when you hear a good solo is that a strong soloist doesn't even need an accompanist to suggest the chords in his or her improvisation. A good solo melody will feature enough of the important notes in the harmonies for the listener to hear the progression of the chords. To put it simply, the improviser needs to help the listener follow the chords' movement. These notes that make harmonic resolution are called guide tones. This is very important for the improviser because as we play, we have to make decisions about which notes to feature in our melodic lines. The guide tones are a way to bring out the harmonic motion during our solo.

Let's take a look at an example of how to construct a melody that implies the underlying harmony.

Often, there will be a series of chords in a progression, and the guide tones actually make up a scale-like line that moves through the harmonies, providing a very strong line on which to base your melodic improvisation. This is called a guide tone line.

There is more than one way to approach soloing when a guide tone line is present.

- Using the conventional approach, a soloist would think of each chord individually, outlining each harmony.
- Or, the player could use the guide-tone lines built in to the progression as a basis for the improvisation. Think of it like a clothes line on which you can hang your melodic improvisation.

One of the first clues that a guide-tone line is available is when a chord symbol has a substitute bass note. If the progression has chord symbols with a substitute bass note (a note other than the root of the chord), then the composer is indicating either the presence of a guide-tone line or a pedal situation, and these are very easy to tell apart.

Once you notice there is a guide-tone line because of a chord symbol with a substitute bass note, the first place to look for the guide-tone line is in the bass notes of the chord symbols.

In many if not most cases, when there is a guide-tone line based on the bass line of the chord symbols, there is another line available a third above it. See the second guide-tone line for "Con Alma."

Sometimes, there is even a third line possibility. In this case, it is going up instead of down, but note that it still is a scale-like line made up of chord tones.

Now we have a growing number of choices for how to think about our improvising when we play on these changes. Remember, we want to show the listener what is interesting about these chord changes. We can outline the chords conventionally, or we can feature one or more of the guide-tone lines.
There is even a third possibility for interpreting this progression. If you look at the chord scales for these chords, you may notice that several of the scales share the same or almost the same notes and can be grouped together in our thinking. The advantage of this is that the more time you have to improvise on a group of notes that share a common scale, the easier it is to make complete melody statements before you have to change to a new group of notes. One of the challenges of playing songs with fast moving changes is that we don't have time to play complete melodic thoughts on each harmony. Instead, we have to find ways to group the chords together in our thinking so it is easier to play complete melodic phrases.

One way of grouping them together is to focus on the scales the chords share in common. Another way is to use the guide-tone lines to move through the changes, instead of trying to play something complete on each individual change.

Harmonies move and resolve in different ways, and each way has it's own unique and distinctive sound and feel. Try it. Listen to something as familiar as B♭7 to Eb, and then listen to E7 to Eb, using the substitute dominant: A very similar group of notes, but a very different sound and effect for the listener.

One of our jobs as improvisers is to feature the movement for the listeners, showing them how one harmony moves chromatically, another upward or downward, etc.

Often, a suggestion of physical movement is implied by the way a chord moves to the next harmony. For instance, a progression moving upward chromatically strongly suggests moving up. Since it's far more common for harmonies to progress downward, upward resolution tends to sound more unique to the listener.

The following progression is an example of constant structure: All the chord tones and chord scales retain the same values on each chord, so that the melody phrase you improvise on the Cmaj7 can be repeated exactly on the Ebmaj7 and Dbmaj7 simply by transposing the notes to each new chord.

In the case of constant structure, instead of showing the listeners how harmonies resolve to one another, this time we are showing them how some chord stays fixed in colour as it moves around. Constant structure sounds very different from more conventional harmonic motion.

Chromatic movement has a very distinctive character to the listeners' ears. The movement can be downward chromatic or upward chromatic. It is a very unique and recognizable kind of harmony progression. When chromatic motion appears in a song, soloists will almost always want to make sure it is featured in the improvised melody.

Chromatic movement that continues over several consecutive chords is another example of constant structure, meaning that whatever melody phrase or line you play on a chord can be repeated exactly on the next chord by simply transposing it to the new harmony.

Lesson 5

I started the first week talking about how similar improvisation is to speech and I will return to this comparison several times throughout the course. It is, in fact, a fundamental issue for improvisation. If we can't use it like a language, gaining the same fluency that we have in speech, then being a good improviser is not possible.
We have been discussing language basics, such as chords and chord scales, which I think of as the **vocabulary of improvisation**. We have also looked at how harmony moves from chord to chord in a song and how the improviser utilizes the movement of the harmonies in improvisation. This, to me, is the **grammar of improvisation**.

Once players become fluent at improvising, and comfortable with the knowledge of the scales and harmonic movements, these language-like functions are carried out almost automatically as mostly unconscious functions. That is, we don't consciously think about the notes in the chord scales, or think about how a G7 chord moves to a C chord, any more than we think about nouns and verbs when we speak.

A good solo is like an explanation, or a good story. The explanation or story is the **content of improvisation**. Think about how an explanation takes place when speaking to someone. The first sentence introduces the subject. The next sentence adds some more information, and the following sentences add even more information. This continues until the explanation is complete. A good story unfolds similarly, holding the listeners' attention, building interest and suspense, and never getting off track.

The most common technique for telling a musical story that engages the listener for the duration of your solo is by using a traditional concept called **theme and variation**. That is, you introduce a theme—a musical phrase—then repeat it, making variations on it to develop an interesting storyline.

Listeners like to follow a solo that unfolds like a story; it pleases their ears and engages their minds.

- they want a time feel they can identify. Whether it is swing, straight eight, or ballad, or other—it doesn't really matter
- they want chords and harmonies that sound pleasing and rich
- and, most of all, listeners want a storyline—some way to follow the development of the improviser's solo. It's our job as players to make sure our story is clear and likely to be followed by our listeners (if we lose them, then they won't be with us when we have our great moment of creativity somewhere in the third chorus)

In the theme and variation approach, each melodic phrase has three characteristics that we can use as the basis for our variations.

1. first, there is a rhythm that we can identify and repeat.
2. second, there is some kind of melodic shape to the phrase: is it an arpeggio, is it going down or up, is it chromatic, etc.?
3. third, the melody line will usually suggest a harmony, perhaps a major 7 chord, or dominant 7 chord, for instance.

At first, this might seem pretty straightforward. And if you are playing on one chord scale that never changes, it is relatively easy to keep making variations on a theme as you develop a solo. However, most songs have more than one chord scale; quite a few chord scales usually. So, the challenge becomes how to continue the theme and at the same time keep transposing it to fit the different harmonies as we play through the song. This takes some practice and some getting used to.
Many, if not most, student improvisers tend to cut their theme developments short because the chord changes are moving too often and they can't transpose quickly enough.

When I listen to a beginning improviser, I often feel it’s like I’m listening to someone who introduces a topic but only stays on it for one or two sentences before starting another topic, so I don't sense much of a story line to follow.

Ideally, you want to keep the melodic development going until you feel you have fully developed it and not be forced to abandon it prematurely because you can't keep up with the chord changes.

I'm going to return to my analogy between improvising and speech to make my next point. Just as we want an explanation to another person to be clear and easy to follow, we want the same thing to happen in our improvising.

Think about how we listen to spoken language. There are sentences and phrases, separated by spaces. The purpose of the spaces is to allow the listener a moment to comprehend each sentence or phrase they have just heard, and get prepared to hear the next thought. If the sentences are too close together, with no rests in between, the listener will be unable to keep up. We use the same concept when soloing. Our melodic phrases are sentence-like and require spaces between them in order for the listeners to absorb what they have heard. Just as with sentences, some are short and simple, and some are longer and more complex. And, the spaces between them are also of different lengths. We have to use our instincts to tell us how long to make a musical phrase and how much space to leave after a phrase before we continue playing.

In the case of horn players, there is sort of a built-in tendency to play in sentence-like phrases because horn players have to breath.

Those of us who play piano, guitar, vibes, or drums, on the other hand, have to intentionally learn to phrase melodies in a sentence-like manner, always being aware of the danger of playing too continually; not leaving opportunity for the listeners to comprehend what we are playing.

Try developing a theme of three or four notes over a single chord. Explore the possibilities of the theme while maintaining the theme's character. Imagine you're telling a story and taking the listener along for the ride. Explore the following developmental possibilities:

- reversing the theme
- changing the inversions
- displacing the timing
- varying the rhythm
- adding embellishments
- extending the theme

Lesson 6

We'll be discussing how to deal with the unique characteristics of the blues. I'm sure everyone taking the course already plays on blues changes. You might be surprised about the scope of blues compositions, or blues moments within a composition, that improvisers encounter. There is more to understanding the blues than meets the eye.
Many songs in the jazz repertoire are based on the blues, both in form and in harmonic and melodic content, and the improviser must make some adjustments when improvising in a blues situation.

The rules of the game change in several ways when we improvise on a blues. Let's take a look at what identifies a song, or a section of a song, as being "blues."

I am pretty sure that all of you are familiar with the basic 12-bar blues form, using the I, IV and V chords. There are thousands of songs based on this form. When we come across this song form or some variation of it, usually we quickly recognize it as a blues, although some blues compositions are so extensively reharmonised that we might not figure out the connection right away.

There is a very unique and identifiable characteristic in a blues situation: dominant 7 chords used as I chords. I chords are normally chords of rest and are not usually dominant 7 chords. Using a dominant 7 chord, a chord of motion, as a I chord gives it extra tension, extra buzz, something that we quickly recognize as sounding like blues as soon as we hear the familiar C7 followed by F7 and back to C7, etc. Those dominant 7 chords used on all the basic blues chords are one of the most recognizable elements of the blues.

Finally, we also have certain melodic notes that when featured prominently send the message that this is "blues." The 7 is already in the dominant 7 chord, of course. The 5 is a common blue note. To my ear, the most interesting blue note is the 3. Normally when the 3 is present, it makes the harmony sound minor. But in the case of the blues, the 3 co-exists with the natural 3, creating something of a buzz between these two notes, and we strongly identify the use of the 3 and the 3 both present in a melody as sounding bluesy.

While some players have an assortment of specific chord scales for use in blues situations, I take a different approach. The dominant 7 chord is the most flexible and variable of the chord types. Depending on the specific circumstances, every note except the major 7 is a possibility for inclusion in a chord scale or voicing. (The major 7 can be used as an approach note or passing note, but not as a continuing tone on a dominant 7 chord). The other notes however are: 1, 9, 2, 9, 3, 4, 4, 5, 13, 13, 7. All are legitimate possibilities in one situation or another—practically the entire chromatic scale.

Being aware of this takes me to the blues situation...

The strongest blues characteristics are the co-existence of both the b3 and natural 3, the natural 4 and #4, also sometimes the 13 and b13. So, instead of thinking of a new blues scale, I picture a dominant 7 scale I know, such as the Mixolydian, and add extra notes, the b3 and #4, for instance, giving me an enlarged scale. The point is to cause us to think of more than just a seven-note scale and to encourage us to use a somewhat more chromatic approach to playing over blues changes. Take a look at the notation below and give this approach a try.

How do we know we are playing a blues? Sometimes it is pretty obvious because it is a familiar 12-bar blues progression, and it is pretty obvious to our ears that the song is a blues. Other times, the 12-bar form has been reharmonised to such a great extent that it isn't immediately obvious, but we soon recognize some tell tale signs, such as dominant 7 chords acting as I chords, or use of blue notes in the melody.
It is also fairly common for a song that isn't a full-on blues to nonetheless have a section, maybe two, four, or eight bars in length, within the song that is blues in nature. Again we might spot the dominant 7 used as I chords, the blue notes, etc. And, as soon as we identify that this section of the song is a blues moment, we need to take that into account by featuring the blues elements in our improvisation.

Minor Blues are a little more difficult to recognize at first, since the dominant 7 chord might only be present, if at all, on the V chord late in the 12-bar form. However, there are some very creative minor blues compositions and we need to identify them as blues when they come along.

Lesson 7

Analysing a composition in order to understand everything that is going on in the piece is an important requirement for the improviser. If the extent of your knowledge about a song is limited to only playing correct notes on each of the harmonies, but not much else, then you really don't know what the song is about, nor how to present it to the listener when you solo.

First of all, we need to be aware of the overall nature of a composition.

- what is its mood?
- what is the time feel?
- is the song simple or complex?
- is it dark, as in minor, or is it bright harmonically?
- is the melody line instrumental in nature or vocal (meaning is it a melody that could be sung, as opposed to a busier melody that would have to be played on an instrument)?

I start by making some assumptions about the style and mood of the composition I am going to play. I think of it the way an actor considers a role in a play. Maybe the character an actor is to portray is funny, energetic, and friendly. Or maybe the character is sad or troubled. Musicians should approach a composition in much the same way. When we decide to perform a song we need to know what kind of characteristics we should bring out in our performance.

In preparation for performing a song, we first need to get a sense of the general characteristics of the composition, such as:

- What is the melodic theme or themes like?
- What is the time feel?
- Is the tonality minor, major, bluesy?
- What's the general mood?

Next, we want to review the vocabulary we'll be using by taking a look at the chord scales that we'll most likely use in the song, to make certain we are already familiar with them.

Next, we take a detailed look at the composition itself. My approach to this is to break up the tune into sections, such as four-bar sections, or eight-bar sections, though sometimes the sections are divided with uneven numbers of bars such as a three-bar or five-bar section. Most often it is four or eight, so your first assumption is to look for natural divisions in those groupings. Start a section and notice how long a certain
compositional element goes on before it comes to rest or changes to something different.

Once you have identified a section, figure out what is going on compositionally.

After you've determined the general characteristics of the song, the chord scales you'll be using, and what constitutes a section of the song, ask yourself, "What can an improviser feature in the solo that demonstrates the compositional elements of this section of the tune?"

Different players will not necessarily analyse a piece exactly the same way. One player may see something going on that another player misses, and vice versa. The important thing is to have enough information about a composition to provide substance for your improvisation.

It should appear obvious by now that choosing songs is very important. The more interesting the content and construction of the song, the easier it will be to play well. A song that is weak compositionally, that doesn't really have much to say, is surprisingly difficult to play effectively. Just as important, if the player doesn't really understand the compositional elements in a song, the end result is most likely going to be lacking in interest.

Personally, I put a lot of effort into selecting the songs I perform, always looking for pieces that have content that I can relate to. These are the songs I will be able to play at my best.

Lesson 9

I'm always disappointed when I hear a musician play the melody to a very interesting song, and then solo in a completely different vein, using none of the elements of the original song. I have great respect for the songs I play and I want to show the listeners what it is about them that I find inspiring.

Now let's decide how the song divides into sections and what is going on in each section. How do the harmonies relate to each other? How about the use of guide-tone lines? See what you think.

What about the composition? What are the sections and what things are going on?

As you demonstrate the composition in your improvisation, remember to help move the harmonies forward, and to develop your melodic themes in a sentence-like manner. That's a lot to think about, I know, but it's good practice for you!

Writing a jazz song is one of the greater challenges for a composer. First of all, a jazz composition is usually pretty short, maybe 30 to 60 seconds in length, and it has to stand up to multiple repeats as we improvise on the form, chorus after chorus.

In addition, a jazz tune has to be both familiar and yet unique at the same time—two contrasting elements. If a song is too familiar and everything seems predictable, then it will sound boring and cliché. On the other hand, if the song has too many unusual and unpredictable elements it will seem awkward and too foreign for comfortable improvisation.
Some composers seem to have a real knack for writing short, familiar-sounding songs that also contain a few unexpected elements, enough to make the song feel unique. A truly successful composition will be playable for years and years, in a variety of contexts, and still be comfortable and inspiring for the musicians.

Week 10

Something I often notice when listening to great improvisers is how well shaped their solos tend to be. Students who are learning tend to have poorly shaped solos. Think of a solo as being like a short speech to the audience. The overall shape of a solo should have the effect of taking the listener on a trip or telling them a story. Usually, this is demonstrated by the soloist adding energy and intensity to the improvisation so that it builds over the course of the solo. In fact, the most common approach is to start a solo playing somewhat softly and sparsely, using simple melodic phrases, then gradually making the phrases louder and busier until reaching a peak at the end. Actually, this is hard to do effectively.

It is difficult to crescendo steadily over, say, the course of three choruses of a song going gradually from soft to loud, from sparse to busy, in a smooth way. What tends to happen instead, is that the soloist goes from soft to loud by the end of the first chorus, and is then stuck playing at top volume and intensity for the next two choruses. The solution is that we want to give the impression that the solo is building in volume and complexity, but we don't want to get trapped into making it follow one long arc. It is better to think in waves. After building in intensity somewhat, pause and drop down to a lower intensity and start building again. While in the act of soloing, there is a natural fear that if you leave a high level of energy and drop back to a lower one, the bottom will fall out of the solo, and the audience will notice the sudden drop in intensity. However, that is not usually the case. You can start over, again and again, and keep building anew, until the final crescendo that marks the conclusion of the solo.

How you start and end a solo is also very important. Often, I notice a soloist spending the first chorus of a solo just kind of meandering around, waiting for some inspiration. Think how you would start a speech. You wouldn't walk out in front of an audience and start by saying, "Well, I don't really know what I'm going to talk about yet, but I'll let my thoughts wander for a bit and eventually I'll think of something to say." Instead, you would want to start your speech with a strong, explanatory statement that introduces your topic in a compelling way and grabs the attention of the audience. Remember, when you solo in a band setting, you are competing with other distractions, other players at work, etc. You want your opening phrases to announce to the audience, "Okay, now it's my turn, check this out, you're going to find this really, really interesting!" Try to make them forget the soloist that just preceded you.

Ending a solo is equally important. Do you notice that in the case of a professional group, when one soloist ends, the next player is ready and smoothly takes over the melodic role? In student groups, this isn't always so smooth and there are times when a player ends a solo somewhat abruptly or unclearly, and the next soloist has to let eight bars or so by before he or she is ready to start, or to make sure the previous soloist is actually finished.

Consider again how you would end a speech, or a conversation. There are always some words, a sentence or two, that send the message that this is coming to an end. You might say, "This is all I have to say about the subject, what do you think?" or,
"It's time for me to go now, but we can talk some more later." The point is, you don't just stop in the middle of talking about something and leave things hanging without signalling to the listeners that you are wrapping things up.

So, just as in speaking, we want a smooth transition to take place when we come to the end of our solos. Generally, this means that the volume and intensity levels peak near the end of a chorus and then start declining to a lower level. The melodic phrases become simpler and we start thinking about cuing the other musicians, letting them know that you are finishing your improvisation and it is someone else's turn now.

All professional level players end their solos clearly and effectively, and the succession of soloists moves smoothly from player to player.

I often get asked how long a solo should last; there is no set rule about this. In the early days of recording, tracks were limited to about two-and-a-half to three minutes, so solos had to be only a chorus or two in length. Even when long-playing vinyl records became popular in the 1950's, record companies insisted on tracks being under five minutes, in order to better accommodate radio airplay requirements. However, certain jazz musicians began playing much longer solos on their records and that sent the message that long solos were the new trend.

Today, every extreme is seen. Some solos are surprisingly short, maybe only half a chorus, while others go on for six or eight minutes. One thing to keep in mind is the attention span of the typical listener. And, certainly if you are considering playing a lengthy solo, it had better be a strong performance and one that holds the listeners' attention over a long period of time. Not everyone has a gift for sustaining interest over a long solo.

To a great extent, the success of your solo will be determined by your own thought processes. Here's what I used to do when I first started as a student musician: I would start playing with the mindset that, "I will keep playing until I get something interesting going and manage to reach some kind of climax, before I end my solo." And I would typically use the first chorus or more of a solo just settling into the song and kind of fishing around for ideas. With no game plan about how long to make a solo, the improvisation tends to be poorly shaped, and there will be sections that lack interest. I learned it is better to always start a solo with a plan for how many choruses I am going to play. You are the only person who knows that you are, say, intending to play three choruses. So if things are going really well as you get near the end of the third chorus, you can always add another and go on a bit longer. But, by having the number of choruses in mind, you will be more likely to have a well-executed solo, paced nicely, and you will be more likely to get something going in your improvisation in the early part of your solo rather than spending time experimenting, looking for a direction.

A word of advice I offer to all players—try to start your solo with a strong, exclamatory melodic phrase that introduces you to the listeners and serves as a starting point for the development of your solo. Don't waste valuable time or the listeners' attention by starting out with something tentative or boring.

Now, let's talk about dynamics and how important they are to an effective solo. We tend to think of dynamics as being soft, loud, or in between, and played according to those markings we see on the music, FF or PP, etc. And yes, that is the overall concept of dynamics—some passages are played softly, others are played loudly, and
there are crescendos, as volume rises and falls. But there is more to it than just those markings on the written page. (And of course when we are improvising there are no dynamic markings to tell us what we should do.)

In essence, every melodic phrase makes use of dynamic variation, unless it is some kind of repetitive background figure intended to have no variation in volume. In all typical melodic passages, as notes go from lower to higher, and vary from short notes to long notes, from staccato to legato, there will be a natural dynamic variety that enhances the phrase. So start thinking of every phrase you play as having a dynamic shape that you as the player need to make sure is properly executed.

For starters, take into account there is a difference in how we deal with dynamics depending on which instrument we play. Wind instruments have something of a built-in tendency to use natural phrasing. As a melody goes higher, a horn player will naturally tend to get louder, and they will get softer going down. Faster, shorter notes are played with less volume than longer held notes—not as much air gets into the horn, when playing sixteenth notes compared to playing quarter notes. In brief, the brass and woodwinds mimic the characteristics of the human voice more than the other instruments, and the voice is the model we use for phrasing. If you want to see dynamic phrasing in action, listen to top quality vocalists.

Instruments such as piano, vibraphone, guitar, bass, or drums, do not have a natural, built-in tendency for phrasing. It is equally easy to play high notes or low notes on these instruments. So, those of us who play these less vocal instruments need to simulate the phrasing of a vocalist or horn player. Personally, when I play melodies, I am usually imagining how a singer would execute it, or I picture a trumpet or a saxophone playing the line, and that gives me a sense of what the dynamic shape of the melody line should be. If I picture how a vibraphone would play a phrase, I don't get much of an impression. I use horns and vocals as a guide for phrasing.

Next is a brief discussion of chromaticism. I have a saying: "Chromaticism is the improviser's best friend." Let's explore why.

What is chromaticism exactly? We know the chromatic scale using all the half steps. For many instruments, playing the chromatic scale is a bit cumbersome. Horns especially are designed for playing diatonic scales, with the fingering patterns laying comfortably. Playing around on the chromatic scale can be something of a fingertangling experience on many instruments. But for the improviser, it is highly recommended that we become comfortable playing around on the chromatic scale.

You will notice something when you play chromatically for a bit. Unlike diatonic scales or chord outlines, the chromatic scale does not establish any particular harmony. And, it doesn't clash with the harmony either. This is one of the ways chromaticism is helpful to the improviser.

Sometimes you may want to depart from the tonality of the song's harmony because it is starting to sound boring or has a growing sense of sounding the same for too long. Inserting some chromatic notes into your melodic line will liven up the sound of the melody giving you a break from the given scale, and yet the chromatic line will not clash with the underlying harmony, either.

We also make use of chromatic notes to help us land on target notes on strong beats. For instance, we may be approaching a strong chord tone in the next harmony and we
want to lead up to it and land on the downbeat of the next measure. We may need to insert some chromatic notes in the approaching melody line in order to make certain we get to the target note on the right beat.

Sometimes, using a chromatic line will also help you finish a melodic theme. It is similar to what we experience in speech. You might be explaining something and your sense is to speak another four or five words to finish a sentence, but you're blanking out on the exact words you want. What do we do when that happens? We don't just end the sentence in mid-air and shut up because we have a strong urge to finish the rhythm of the sentence even if we don't have the words at our fingertips. So, we quickly substitute a catch phrase like, "Well, you know what I mean." That allows us to complete the rhythm of the sentence so that the flow of our speech doesn't sound awkward.

The same situation occurs in improvising. You may start your melody phrase intending to play a string of notes leading up to the next harmony resolution, perhaps ending on a I chord, let's say. But, as you start playing the melodic line, you are gradually losing your grip on what scale tones are available and all you can think to do is to somehow keep going till you get to that strong chord tone on the I chord you have targeted. This is an occasion where you can go chromatic to fill in the remainder of the melody line to get you to the completion of your idea.

So, chromaticism can do several things to help us improvise more smoothly. It can enliven a moment in the solo when the basic chord scale notes don't seem interesting enough, and we can use chromatic notes to help us complete ideas and rhythmically smooth out how we lead into strong notes.

I'm not sure why, but the diminished chord and the diminished chord scale are often confusing and uncertain for many improvisers. To me, understanding the diminished harmony and scale is pretty straightforward. See if my way of thinking about them is helpful.

There is some history about the diminished chord to be aware of. In classical harmony, the diminished chord became the stepping-stone from tonal music to atonal music. Its first appearance in Western music a few hundred years ago was as a connecting chord between two harmonies, acting as a passing chord. That freeing up of the rigidity of tonality, over time, led to the modern, atonal sounds we encounter today in contemporary music.

The first fact to know about the diminished is that very often a diminished chord is functioning as a dominant 7 9 harmony in a chord progression. It's just that the root note is not present. But it's good for the improviser to know this fact, because it tells us how to play on that diminished harmony. For instance, in the example below, suppose that the diminished chord is really functioning as a dom 7 9 chord. Any diminished chord can have four possible roots that would turn it into a dom 7 9 chord. Check all four and see which is the most logical harmonically.

The next thing to know about the diminished is how it relates to the symmetrical diminished scale. It can appear in two different situations. If it is an official diminished chord symbol with the little circle, then the correct formula for the scale is whole step, half step, whole step, half step, etc. If on the other hand, the chord symbol is a dom 7 9 that calls for a diminished scale, then the correct formula is to start with the half step, whole step, half step, whole step, etc.
There are only three different versions of the symmetrical diminished scale. The diminished scales of C, Eb, Gb, and A all share the same group of notes, the same with C#, E, G, and A#. D, F, Ab, and B share the third diminished scale.

To me, the whole diminished concept can be pretty neatly explained. Play at random on the three scales so you have them at your fingertips, and then you should feel comfortable when you come to diminished chords and scales in the tunes you play.

Make sure you become familiar with the three diminished scales. Practice playing the following three scales in random patterns using the full range of the instrument.

We are sometimes misinformed about how to think of the sus4 chords. We are told that we should feature the 4th degree of the scale and avoid playing the 3rd of the scale. This is an awkward line of thinking because we are so programmed to use the 3rd and 7th of chords as strong chord tones. Avoiding the 3rd is awkward, like having to sidestep a puddle on the sidewalk. In truth, the 3rd is a perfectly legitimate note to use on a sus4 chord. The concept is that the 4th and the 3rd co-exist and the 4th gets featured more prominently than usual. It is not necessary to avoid the 3rd. So, when playing a sus4 harmony, use the Mixolydian scale, feature the 4th somewhat, and don't worry at all about playing the 3rd.

Some beginner improvisers seem to have a natural sense of time feel, and are fortunate not to have to work on developing this ability. But for most of us, it is something we have to learn. I struggled with this issue as a young player, during the first two or three years I was learning to improvise. I discovered a few ways to train my senses to maintain a steady tempo and comfortable rhythmic phrasing while I improvised. I started playing a lot with a metronome and play along tracks. I practiced playing along with records using a pair of brushes I borrowed from a drummer friend. And I started recording my soloing as often as I could to become more aware of my unsteady time.

Remember, almost all the great players you hear on record today started out with an imperfect sense of time and phrasing. Except for the lucky few who come by it naturally, we all learn this particular skill as we gain more experience.

While I am not a fan of repetitive exercises, this is one that doesn't repeat specific notes, even though the rhythm stays the same. This was recommended to me by a trumpet player I knew during my first days living in New York.

Pick a standard you are familiar with, and play continuous eighth notes, no rests, as you work your way through the changes. This helps us learn to twist and turn our lines to feature the strong notes on the strong beats, and so on. If you become skilled at this exercise, you will find playing over changes becomes more and more fluent.

One of the challenges is switching from one chord scale to another without having to jump to the root of each new chord scale. We need to be able to switch from the middle of one chord scale into the middle of another chord scale in order to keep a smooth melodic line going. So, practice going up and down the length of your instrument as you play over some changes. You will be required to switch chord scales without jumping to the roots, which will allow you to improvise more melodically.
Playing ballads is a different experience than playing on a medium swing tune or straight eighth-note song. First of all, ballads are pretty much exclusively melodies that are vocal in nature—singable, as opposed to the busy kinds of melodies that are designed for instruments to play. In order to stay in character on ballads, our improvised melodies should also be in the vocal style: simpler, less busy, often drawing upon the original melody and style of the song. Pick a ballad and give this approach a try!

One of my early teachers at Berklee, Herb Pomeroy, used to use the phrase "angular, probing lines" all the time, to describe the way a player should treat their improvised melodies. I have changed that advice a bit and use the analogy of flying. A bird flies in a straight line from tree branch to telephone wire, for instance. But a butterfly changes directions constantly and in unpredictable directions, in a graceful kind of ballet in flight. That's what we want our improvised solos to be like. All that unexpected change of direction and leaping around the range of our instruments provides a lot of energy and surprise to keep the listeners interested.

If you are mostly playing scale fragments up and down, and arpeggios in different combinations, think about trying more unexpected twists and turns, changes of direction and larger interval leaps. It will add a lot of variety to your melodies.

Lesson 11

Accompanying a soloist requires one to play in a way that doesn't come naturally to most players. It requires you to listen carefully and concentrate on what's happening in the moment.

A lot of today's highly popular instruments are often used in accompanying, or "comping," as we say. All of the rhythm section instruments: piano, guitar, bass, vibraphone, and drums, too, are used for comping. It is an important craft that every rhythm section player needs to develop. But, even if you play a non-comping instrument, such as trumpet or saxophone, it is just as important to know the good and the bad about comping, because you will undoubtedly find yourself explaining to other players how to do it properly when they accompany you.

Comping is a part of performance rarely given as much attention in jazz education as it deserves, probably because many of the teachers themselves are not all that familiar with what is involved. I often think it is just left up to players to figure it out, and some will have a knack for it and others won't, and that is often as far as the instruction extends.

Here in our course, we want to set the record straight, and really understand what is involved in comping, and how to work toward becoming expert at it.

First, there is a common misconception about comping. We are led to believe that the purpose of comping is to provide the harmonies, described as "laying down the changes," for the soloists. But that is not the most important job of the accompanist. The first job is rhythm. When comping you are part of the rhythm section, and that requires that we all strive to provide a nice, comfortable rhythm feel for the band. If the soloist knows the song, he or she doesn't really need you to spell out the harmonies. But if you are going to be part of a rhythm section, you must contribute to the time feel along with the other rhythm section players, first and foremost.
In addition to comping in syncopated time, you will also need to comp in straight eighth-time feel for pieces in a Bossa Nova style, or Latin and Rock styles. Comping in swing time involves catching accents, coordinating with the other rhythm section instruments, with some attacks on the beat and some anticipating the beat, alternating back and forth according to what your time feel instincts tell you. Comping in straight eighth time requires a more constant and steady flow of attacks rather than looking for accents to emphasize. Straight-eighth comping is more like providing a kind of smooth blanket of comping over which the soloists play. It is quite different from comping in swing time.

We need to keep our comping interesting and that is done mostly through featuring contrasts. Voicings can be spread out or closely clustered; voicings can be plain and consonant, or complex and dissonant. Some notes or chords will be of short duration and others of long duration. You can use full voicings of four to six notes, or small note groupings of two or three, or even single notes or octaves. Volume can vary from soft to loud. The idea is to keep changing things to keep it interesting. You don't want to comp nearly the exact same voicings and figures chorus after chorus or the soloist will find it uninspiring.

Here are some general tips for comping

- Use guide-tone lines when they are present in the music. They help support the flow of the harmony and are a strong compositional element in the song.
- Highlight strong harmony resolutions when you come to one in a song. Most of the time, only play one voicing on any given harmony, unless it holds for a longer period of time. The temptation is always to play too much and be too busy when comping. Better to comp less than to play too much.
- Don't feel you have to play something on every harmony in a song. When you practice alone, you naturally feel the need to include every harmony, but in a band setting other players are also providing content, so you don't have to include every harmony.
- Don't comp more busily than the soloist. Sometimes a soloist will play a very sparse and simple kind of melodic style. If you are playing twice as many hits per bar as the soloist it will seem out of place. Keep your comping less busy than the solo you are accompanying.
- Remember to keep your attention on the soloist more than on your own playing, so you can follow along and properly support the improvisation.

Here are some more comping suggestions

- Keep your comping mostly no higher than the C above middle C. If you go higher than that, do so only for a brief moment and then get back down into that more comfortable range.
- Suggest melodic possibilities to the soloist by offering musical hints, melodic or rhythmic fragments. Don't start some motif that is so persistent that the soloist is forced to drop what they are developing to match up with you. But hint at possibilities for the soloist to consider, and if he or she picks up on something and uses it, keep on developing it. Just don't take over. The soloist is in charge and leads the way. Always be an attentive follower.
- When there is more than one comper in the rhythm section, keep this advice in mind: No matter how many accompanists are chording at the same time, the overall effect should add up to the equivalent of one comper. So each chord
player will need to play less and listen carefully to the other compers in order to provide a balanced amount of accompaniment.

**Listen Up!**

Finally, the big secret to comping is what you do with your thinking.

When we are playing the lead part ourselves, we are primarily paying attention to our own playing and only secondarily to those playing around us. But when we accompany someone else, we need to change that mindset and put the majority of our attention on the soloist and pay less attention to our own playing. This does not come naturally!

We are so accustomed to focusing mostly on our own playing that it takes a lot of conscious effort, at first, to get used to paying attention to someone else's playing. But, that is the big secret. If you can intently follow someone else's solo you will not clash with it or get in the way whatsoever. It's kind of amazing how well this works.

When I comp, I sort of pretend that I have another set of arms and I'm playing that other instrument as well as my own. I follow every phrase and melody line, and play right along with the soloist. The best soloists are really easy to follow because their solos develop very logically. But in any case, that is your job as a comper. You must become a fanatic listener when comping, even at the expense of giving your own playing full attention.

Like comping on swing tunes versus comping on straight-eighth style tunes, comping on ballads also requires a unique approach. We expect comping on ballads to be fairly constant and smooth rather than punchy like swing time-feel. And, it also cannot be busy with lots of notes, unlike straight-eighth note comping.

The melodies of ballads and soloing on ballads will not have a lot of notes being played, and the comping must not be any busier than the solo playing. Ideally, it is less active, keeping the attention on the soloist.

**Week 12**

Even during week 1 of the course, I talked about the necessary role the unconscious mind plays in the art of improvisation. To recap, just as we use our language ability to construct grammatically correct and understandable sentences when speaking, without having to consider things like nouns and verbs, etc., we do the same thing when improvising. Our unconscious mind organizes all the appropriate information about harmonies and chords and scales and melodic development and so on, and as we play through a song, melodic themes, like musical sentences, spring into our conscious awareness as we simultaneously playing them on our instrument.

It's kind of an amazing capability that we all share. After all, pretty much everyone can speak conversationally. There's no reason a musician should be hindered from playing spontaneously either. When thinking about the mental processes that take place, it can be helpful to consider how we function in speech to get a sense for what we are trying to do musically.

So, now we come to the interesting part. If our unconscious is going to be responsible for so much of the playing, becoming what I often refer to as my "inner player," then
we need to have a very thorough understanding of how it works and how we can assist in the process with our conscious mind.

Let's take a look at how we learned music when we were beginning. The usual experience is somewhat similar to how we learned the language we speak everyday. At first, we learn to speak partly from experience, hearing other people speak and trying to copy them. Later on, we study language more formally in school to gain a thorough knowledge of grammar and vocabulary.

Learning music is pretty similar. We learn music partly by just playing around with it and listening to others, trying to emulate what we hear on records, and so on. Most young musicians also study with teachers or in school to gain a more formal knowledge of music. Just as the student of language gradually assimilates the rules of grammar and structure, the improvising musician does the same with the grammar and vocabulary of music (harmony progressions, scales, etc.).

One of the things we typically learn at first in music is something we have to unlearn later on. That is the fear of making mistakes. Remember your first music lessons? All your attention was on trying to avoid hitting wrong notes and using the correct fingerings. As a result, we quickly develop the habit of using caution when we play. Fear of mistakes works against us in the long run, though. Ultimately we want to be spontaneous and free, and creative—the opposite of controlling everything we play. Part of the challenge of being a musician, and especially of being an improvising musician, is finding the balance between spontaneity and discipline. On one hand, we have to be very committed and disciplined, practicing thousands of hours to develop our instrumental craft. But at the same time, we need to be loose and creative when we ultimately perform. It's always a challenge to keep these two opposing things in balance.

Let's look at how the learning process evolves over time. The diagram below shows what is going on with a beginning musician. Most aspects of playing are still being thought out consciously and only a small amount of information has become automated, under the direction of the unconscious. Next, we'll compare this chart to intermediate and advanced musicians.

Gradually, more and more of the nuts and bolts of music are assimilated into the unconscious, and there is less and less for the conscious mind to do when it comes to the decisions that have to be made: which fingerings to use, coordinating the physical movements required to play an instrument (blowing, hitting, picking, whatever), and basic awareness of musical vocabulary (scales, chords, etc.). There is an important role for the conscious mind, too, which we will discuss later on. Eventually, there comes a time where most of the playing functions are being overseen by the unconscious mind, and that's a good thing, too. The conscious mind cannot come close to making all the split second decisions required to play an instrument or spontaneously make up a logical melody. The unconscious, however, is brilliant at these tasks.

At this more advanced stage, the unconscious mind is doing almost all the work of playing, and the conscious mind is playing the role of gatekeeper, kind of keeping control over what is taking place, just making sure that no mistakes happen. At this stage, breakthrough moments start to occur. The improviser plays along comfortably on a familiar piece, and somewhere in the solo an unexpected melodic line pops out, something the player didn't anticipate playing, didn't think about before hand, and had never played before—a new melodic idea. This is the inner player in full charge,
while the conscious mind took a break from acting as gatekeeper. This leads us to the
final stage of evolution as an improviser.

We need to talk about the unconscious a little more to fully understand how it works,
and how we can assist it and help it learn. That inner player needs guidance, it wants
guidance, in fact. We need to understand how to help it learn.

Picture the unconscious as having two capabilities. First, it functions as memory with
its own unique filing system. Every song you ever played, every record you ever
listened to, all the music instruction and information you have received over your
lifetime goes into your memory for possible recall and use later on. And, this is where
the magic happens. The filing system the brain's memory uses allows for combining
bits and pieces of related information in a split second, so it can be used in either
language when we speak, or in music when we play, to express and communicate
something. Remember when I was talking about how we explain something earlier in
the course? We picture something we want to talk about, and immediately key words
are retrieved from our memory and brought into our consciousness as our brain puts
those words into grammatically correct sentences and you spontaneously speak the
words. The same thing happens with music. A certain harmony change, for instance,
might trigger a handful of bits of information, a melodic phrase you heard on a record,
a memory of playing a similar harmony in the past, and so on, and as that information
is instantly assembled into a logical melodic phrase, it appears in your conscious
mind, just as you are in the act of playing it on your instrument. So, a major function
of the inner player is this wonderful memory and filing system. It is nourished and
expanded as we add new information: new material, new songs, new listening
experiences, and so on.

The second function of the unconscious is a more constant thing. Again, let's look at
how people speak. Everyone has their own unique patterns of speech, the way they
pronounce certain words, the tonal modulation of their voice, and the unique sound of
their voice. That's how we can recognize the voice of a friend on the telephone after
just a few words are spoken. It's an expression of our personality, you might say. This
is something that may well change, but it will only change gradually over time.

The musical equivalent is our unique sound and style on our instrument. We can often
identify our favourite players within just a few seconds because of their recognizable
sound or phrasing. It isn't something that changes from day to day, although it tends
to gradually evolve over time. This is another function of the unconscious. It is the
home of our musical personality, our individual sound and way of phrasing melodies.

The style function communicates our personality to the listener, while the memory
function provides us new and different content for our storytelling as we improvise.

Now we need to return to discussing the conscious mind again. We were last
describing it as acting as a gatekeeper, until eventually relaxing and giving up that
role. Getting out of the way allows the inner player to function more effectively, and
as we get used to giving up conscious control, it becomes natural to let the
unconscious do the playing.

There is a job for the conscious mind, however. It seems odd to say it, but the first
responsibility of the conscious mind is to stay out of the way. Think of what happens
when you are speaking and you start to think consciously about the words you are
saying instead of just letting the words flow out. Within a few seconds, your smooth
speaking becomes awkward and you will get tongue-tied. A similar thing happens when the conscious mind gets too close to the functioning of the inner player. What the conscious mind is good for, however, is acting as an observer, a critic. When I am playing, it's as if I am watching another person playing the instrument, taking the solo, and my conscious mind comments to myself about it. I might say, "this seems too busy, people probably are having trouble following this." Or, "this is sounding too plain, better liven it up."

Note that I don't make any musical decisions, like it's time to play a half note A, followed by an eighth-note run on the C minor, etc. Those decisions are made by the unconscious. For me, the conscious mind, I am just a commentator making observations and suggestions.

People often will ask what I am thinking about while I am soloing, expecting me to naturally say I am thinking about scales and chords and such things. But, really I am consciously thinking about how well the performance is going, I am also concentrating on how I feel about the song, the mood and feel of it, to help give guidance to the inner player. I am also paying attention to the audience I am playing for. Yet in many instances, my mind is kind of drifting around thinking about all kinds of random things: what someone said to me earlier, what time I have to get to the airport tomorrow, the funny hat the guy in the second row is wearing, etc. The main thing is to not let the conscious mind get in the way, and let it contribute in these other ways. I would say that most of the time my conscious mind drifts in and out of the music, bouncing between awareness of the audience, staying focused on the mood and feel of the song, and any other random thoughts that pass through my consciousness.

Since the inner player is doing the lion's share of the playing, we need to communicate with it. We want to use our conscious mind to offer guidance, to direct it toward what we want our playing to accomplish. The challenge is that our inner player does not use words. It communicates via feelings and imagery. We need to communicate to our unconscious about how we want the music to feel, and how we want it to sound. We need to keep sending instructions to the unconscious about what we want to have happen.

One learning technique that appears to work effectively in communicating to the unconscious is something you already are doing at least some of the time, and probably don't realize that it is a form of learning for the inner player: recording yourself. If mirrors didn't exist, and you never saw yourself in reflection, it would be a revelation the first time you saw yourself and you would learn a lot about how you appear to others. Listening back to your playing as recorded is a great way for the unconscious to sort of look at itself in the mirror, and learn from this opportunity to re-experience what was played.

All this discussion of these mental functions may seem pretty exotic or mystical, but in fact, we use these mental functions in a variety of ways in every day life. We already have talked about speech and how the unconscious mind coordinates the majority of the functions of speaking. Another every day example is driving a car. Once you learn to drive, you quickly assimilate the various functions: accelerator, brakes, steering, turn signals, etc. We drive for miles while listening to the radio and talking to a friend in the next seat, while hardly ever giving a conscious thought to the various pedals and levers and movements required to keep the car in the right lane at the right speed. Yet, as soon as we get in a car with a novice driver, we become aware
of their awkwardness at the wheel, and we usually feel less safe than with an experienced driver, who is actually not thinking that much about the driving!

We also have the experience of having a desire for something to happen, but then achieving it at a later time. Like a request was placed but the necessary information wasn't available until a later time, and then the request gets carried out.

As a musician, we express a lot of desires to our inner player. We picture over and over how we want our playing to sound, how we want it to feel, and that gives guidance and direction for the unconscious to follow. Then, when all the necessary information is brought together, we eventually get the results we are asking for.

I find it helpful to imagine that I am playing in front of an audience when I practice. Improvisation is like conversation. It's hard to practice speaking while you are alone, with no one to speak to. So even if there is no audience, like in a recording studio, I find it necessary to imagine that there is an audience listening to what I am playing. It gives me some sense of feedback and response that helps me pace my soloing.

We also make subtle but important unconscious adjustments when we play to an audience. We also do this in speaking. We instinctively adjust our speaking volume, our speaking speed, and the complexity of our speech, depending on the circumstances. In a large, noisy room, we tend to speak slower and louder in order to be understood, for instance. And, if I am going to talk about, say, jazz improvisation, to an audience of non-musicians, I will instinctively avoid using musician jargon and technical words they won't understand. My goal is to have them understand me, not to dazzle them with my expertise.

Audiences are an essential element in a performance. Keeping their presence in our awareness helps us pace our soloing correctly for that specific playing situation—the acoustics, the space, and the listening capabilities of the audience members. I won't play as effectively for that audience if I am not taking their presence into consideration. This is one of the jobs for my conscious mind to take on, and the feedback that I perceive from the audience gives direction to my inner player.

Exercise: Two Practices

You can see that we are going to be doing two kinds of practice.

1. We need to keep practicing the physical act of playing our instruments, learning new songs and applying new techniques.
2. We also need to practice communicating with our inner player, picturing what we want to achieve in our playing. As a player becomes more advanced, future growth takes place more and more through communication with the unconscious.

Try sitting quietly and visualising yourself playing a favourite song.

Imagine that you are playing beautifully and how satisfying it feels to play so well. Show your inner player this is what you want to achieve; give your inner player guidance through picturing your desires for the playing experience.

Keep doing this and imaging how it will feel if you are playing, how you want it to sound.
A Farewell: As we complete this 12-week musical journey, I want to wish each of you all the best in your future endeavours. Being a musician is a lifelong pursuit and I hope that this learning experience has helped you in many ways, large and small. Creating this course has been, for me, a continuation of my career as a teacher of jazz improvisation begun long ago at Berklee, in 1971. Teaching improvisation was always my favourite pursuit at Berklee, and one thing I learned early on and still believe to this day, is that there is always more to learn. So, keep on going! - Gary