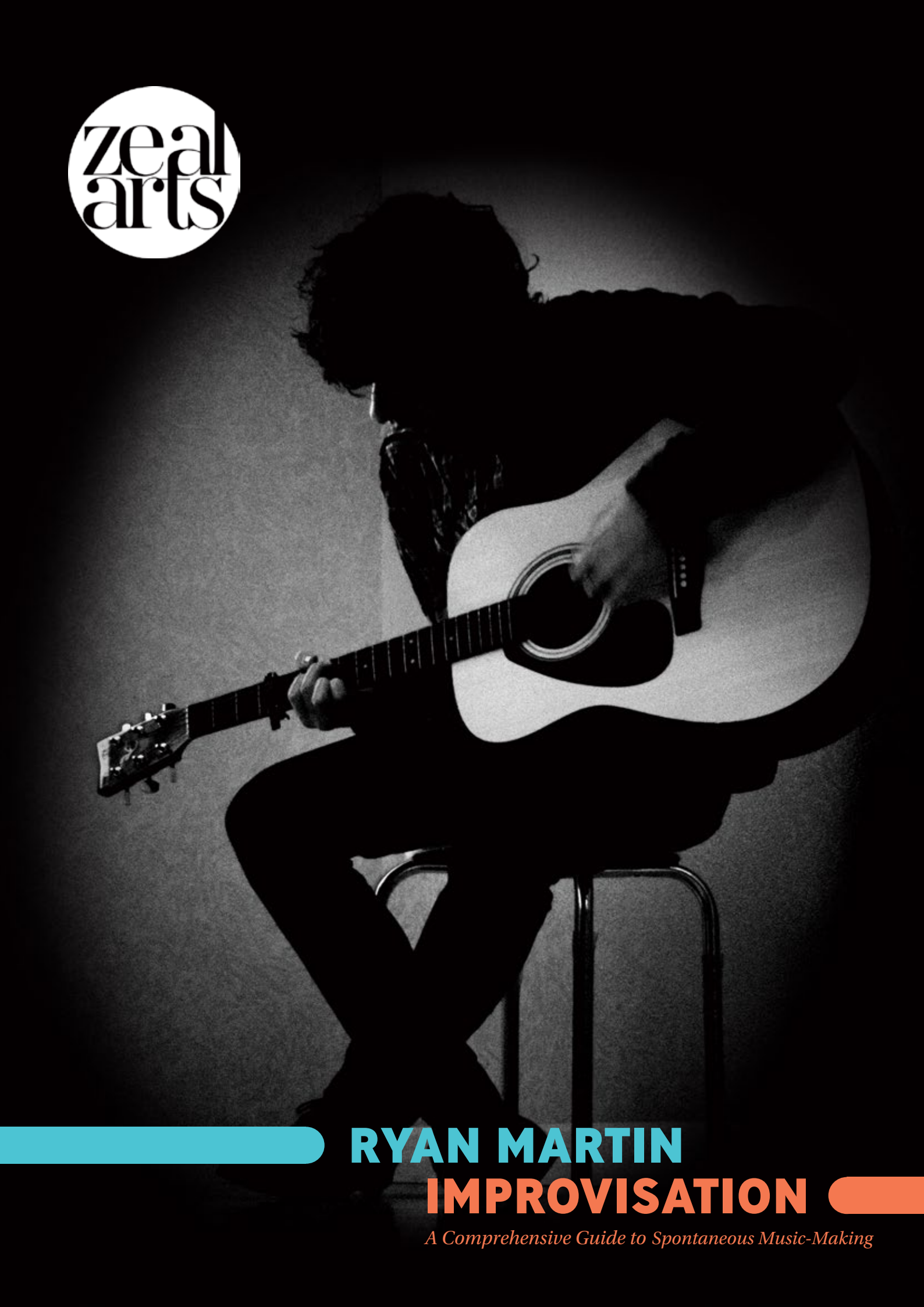

RYAN MARTIN

IMPROVISATION

A Comprehensive Guide to Spontaneous Music-Making

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PREFACE

Improvisation exists in almost every style of music in some form or another. It might be an expected part of the performance itself, such as the instrumental solos of a Jazz performance. It could be an integral part of the composition process, like how Rock and Pop musicians "jam" with each other to figure out the different parts of the song they're writing. In many styles of music, improvisation has a practical purpose. Church organists often improvise preludes, interludes, and other musical sections when accompanying a service. Improvisation also exists in situations we usually don't think of as being improvised. When playing music that seems completely pre-composed, small details like the specific dynamics you use or minute differences in rhythm can be chosen mid-performance, and this is a kind of improvisation. Even if you don't feel like you improvise at all, the skills of improvisation can be used to help you compose music, work better as an ensemble, quickly figure out a solution when a performance goes wrong, and much more. After all, if you can work as a group to create a composition mid-performance, then you can surely bring any kinds of music to life!

Despite the importance of improvisation, it is often seen as a side activity only relevant to specific musicians, usually those that play Jazz. As I hope the last paragraph has shown though, this is a limited view of what improvisation is and what it can do. The same techniques used by composers to write melodies or to create chord progressions can be used by improvisers too. A performance of a well-known song may include a great deal of improvising, with the performer adding new notes or changing the rhythms slightly. There are countless examples of compositions that use ideas which came from improvisations. As Derek Bailey puts it, "mankind's first musical performance couldn't have been anything other than a free improvisation" (1993, p. 83). Because of this blurring between improvisation, performance, and composition and because of the large number of ways to improvise, we usually keep it simple and define improvisation as the creation of a piece of music or the final form of a piece of music during the performance.

What is created in the moment, however, doesn't come from nowhere. When we improvise, we are drawing on all of our knowledge of how music should sound and applying that to our current situation to improvise the appropriate music. When a Jazz saxophonist wants to reach the climax of their solo, they draw on all of their experience by creating intensity on their instrument to improvise the music they need. It is because improvisation requires all of this preparation and existing knowledge that instructional books like this one can even exist!

Despite all of this philosophical talk, this book is actually about how to play improvised music! Given that improvisation exists in many styles of music and the fact that it isn't entirely separate from composition or performance, I took a broad and comprehensive approach when designing this book. As a result, I do not write with a specific instrument or style in mind. I also, to the best of my ability, have tried to consider how these improvisational skills might be used in ways other than merely performing an improvised solo, which is often the most common context for improvisation.

Jazz is usually the first musical style assumed when a musician states that they are an improviser. There is an abundance of Jazz degrees at a tertiary level, many Jazz workshops and ensembles available, and a plethora of instructional books about improvisation that focus solely on Jazz. In reality though, there are many traditions where improvisation plays a role, including non-western styles like Indian music and Arabic Classical music or other western styles like church organ playing, Rock guitar solos, and Free Improvisation, to name a few. Each of these traditions have their own approaches to improvisation, and many of the practices from these styles are beneficial to improvisers regardless of the specific style they eventually choose to play.

As a result, I have avoided focusing entirely on Jazz, although it still plays an essential role in this book. I have made sure to include techniques and strategies from music outside of Jazz and to discuss improvisation in ways that are appropriate to many different styles. The examples are from an array of different genres, including Swing, Bebop, Rock and Roll, Pop music, Baroque, Classical music, North Indian Classical music, and more. Where possible, I also try not to be style specific, but discuss improvising in more general terms.

Beyond exploring a broad range of styles, I aim to expand the areas of music we usually discuss when teaching improvisation. Most resources on improvisation focus on what notes we should play and over which chords. This obsession with pitch and harmony often excludes many other important aspects of improvisation though, like phrasing, structure, or working as a group, as well as more abstract considerations like how to make the improvisation memorable and how to stand out as a performer. This does not mean that I won't discuss which notes to use over which chords, as this is still a vital aspect of many kinds of improvising.

In the book, Improvisation: A Comprehensive Guide to Spontaneous Music-making, I have endeavoured to create a resource that teaches anyone on any instrument, the fundamentals of improvisation, as well as many advanced techniques and strategies. The book also focuses on how you can use these techniques in several different ways and what effects these techniques might have on a potential listener. Throughout this process, I provide explicit explanations and exercises, while still giving you room to experiment and discover things on your own. By the end of this book, you will have a deep and broad understanding of the many processes that go into improvising. You will also have a strong foundation to build your improvisational approach upon, as well as some good advice about

where to go from there. By the end of the book, you will be working towards being a versatile and well-rounded improviser.

Before moving into the actual instructional component of the book, I would like to give a short breakdown of the different sections of the book and why I made some of these choices.

PART ONE

The start of Part One focuses on the basics of improvisation: what notes to use, what rhythms to use, and how to arrange these into complete musical ideas. Part One explore scales and time signatures; some tips for writing satisfying melodic material; what rhythms are typically used for which time signatures; how to phrase your material; and what effects all of these choices will make in an improvisation. From there we continue onto specific topics such as improvised ornamentation; two-part harmonies; harmonic accompaniment; and how to improvise over chords. Part One ends with an extensive list of scales, including how they are typically used and what effect they will usually have on the listener.

PART TWO

Part Two continues by exploring some of the more complex issues involved in improvising. I start by continuing directly from Part One and provide some more approaches to improvising over chords, before moving onto improvising with others, improvising harmonic progressions from scratch, and improvising your endings.

PART THREE

While the first half of the book is aimed to be as general as possible, Part Three begins to introduce more specific topics. These include how to improvise new music from all or part of an existing composition; more advanced techniques for improvising chord progressions; how to reinterpret existing chord progressions; advanced rhythmic devices; more advanced ways of improvising as a group; and how to effectively structure your improvised performance. All of the topics in this part require you to have a good understanding of improvising in general, so make sure you spend plenty of time solidifying the earlier parts of the book before moving onto here. By the end of Part Three, you should have a diverse improvisational language and be well-prepared for most musical situations.

PART FOUR

Part Four is titled 'Developing Individuality' as we are applying what we have learnt throughout the book to create music that is unique and interesting. It starts by looking at how to make each of your improvisations stand out and feel individual, before gradually moving to discussions on how you as an improviser can differentiate yourself. While these aspects are a broader approach than the previous sections, there are a variety of exercises to create music that is memorable and unique and what you can do to achieve that. There are final exercises to bring all of your knowledge together based on one of the main styles discussed throughout this book, being Jazz, Rock/Pop, Classical, Indian Classical, and Free Improvisation. This will aim to apply components such as: the structure of the improvisation, your sense of style, and how you are improvising as a group. The final part concludes with some thoughts about where you can go after you have finished the book and what to do to maintain the skills you have learnt.

Finally, I encourage you to always be revising content and finding new ways to apply the skills and knowledge you already have. We are always learning as musicians, and revisiting material that we think we know is an important part of that ongoing process. Assumed Knowledge

While this book goes through some of the basics of music theory, it is assumed that you already have a reasonable amount of experience with your instrument or voice. You should already be able to play most of the notes in your instrument's range, be able to play pieces at a moderate tempo, and have some control over the dynamics and articulation of your notes. Additionally, you should be familiar with the fundamentals of Music Theory.

NOTES FOR USING THE BOOK

SOUNDBITES

The soundbites are audio clips that accompany the text and assist in your learning. They are usually demonstrations of the exercises or backing tracks for you to play or sing along with. They will usually be accompanying the sheet music for he notated exercises, but many of the soundbites are based on text descriptions as well. The icon for the soundbite will be placed next to corresponding score or text.

EXERCISES

Throughout the book there are various exercises to help you attempt the concepts. Some involve following a score while others involve following written instructions. You should use the explanations and demonstrations that come before each exercise to help you in doing it yourself. Feel free to spend as long as you need with each of the exercises. Many will take multiple attempts before you are able to perform them freely, so stick with them!

REGISTER AND NOTATION

In most cases, the exercises have been written around middle C and the octave above or below it. Obviously, though, not every instrument will play most comfortably (or at all) in this range. You can and should transpose the exercises to fit whatever register is best for your instrument.

CONVENTIONS NOT RULES

Throughout the book, I will give what seems like a lot of "rules" about how to improvise "correctly", but it is important to remember that this is not the case. The advice that I give is a combination of the approaches used by many musicians and some of my own ideas about how to improvise, but they are only that, ideas. While people from the same culture or with similar musical tastes will often agree on what makes a particular piece of music enjoyable, the quality of any one piece of music is often deeply personal. Don't take these "rules" too literally, but use them as a guide as to how people will typically perceive whatever technique or approach I am discussing.

TAKE YOUR TIME

This book covers both basic and advanced forms of improvisation. The information in the later parts of this book get particularly complex, so do not be concerned if you are having trouble with them at first. Take your time through the book. Ensure you confidently understand each technique, approach, or exercise before moving on. This book will teach you a variety of ways to improvise, but it can't replace practice.

BUILD YOUR KNOWLEDGE UP

This book is structured to build your knowledge of improvising progressively. It may be split into different sections and chapters, but these are not meant to be examined in isolation. As you move through the book, do not forget previous sections. Continue to apply what you have learnt even if the section does not focus on that particular aspect. Just because you have moved onto rhythm does not mean you should forget how to improvise a good melody.

FOR VOCALISTS

Vocalists have an additional issue when improvising, and that is what lyrics to use. In Jazz, vocalists will often use 'scat', a practice where non-lexical syllables (syllables that do not have actual meaning) are used as the lyrics of their solo. In certain styles of Indian Classical music, improvisers say the note names as the words for their improvisation. A simple solution is to choose a single syllable like 'ah' or 'oo' and use that for every note that you sing while improvising. Other choices might be to use solfège (eg. 'doh', 're' etc..), singing the note names (eg. C, D etc..), or making up lyrics as you go.

UNPITCHED PERCUSSION

While the book explores various aspects of improvisation that are not about pitch, it nevertheless plays a significant role in much of the book. This book can still be relevant for players of unpitched percussion. Many sections, such as those on structure, rhythm, or group interaction do not require pitch at all and will be very useful to a percussionist. Aside from this, understanding how improvisers of melodic instruments form their improvisation is essential knowledge, and it can make interacting with these improvisers easier if there is some mutual understanding. If you are reading this book and play unpitched percussion, it is recommended that you still read and engage with the material that focuses on pitch material.

GROUP EXERCISES

This book is written so that almost every exercise can be performed as a group and often this can be done by adding harmonic or rhythmic accompaniment to the activities. Another way is to have people swap roles after a pre-determined amount of time, such as a certain number of bars or cycles of the chord progression. For large groups, one suggestion is to have students stand/sit in a circle and go around the room, taking turns doing the exercise.

There are also certain exercises that require a group. Improvisation is often a group activity, and I found it vital to add tasks that are specifically about how to work with others in an improvised situation.

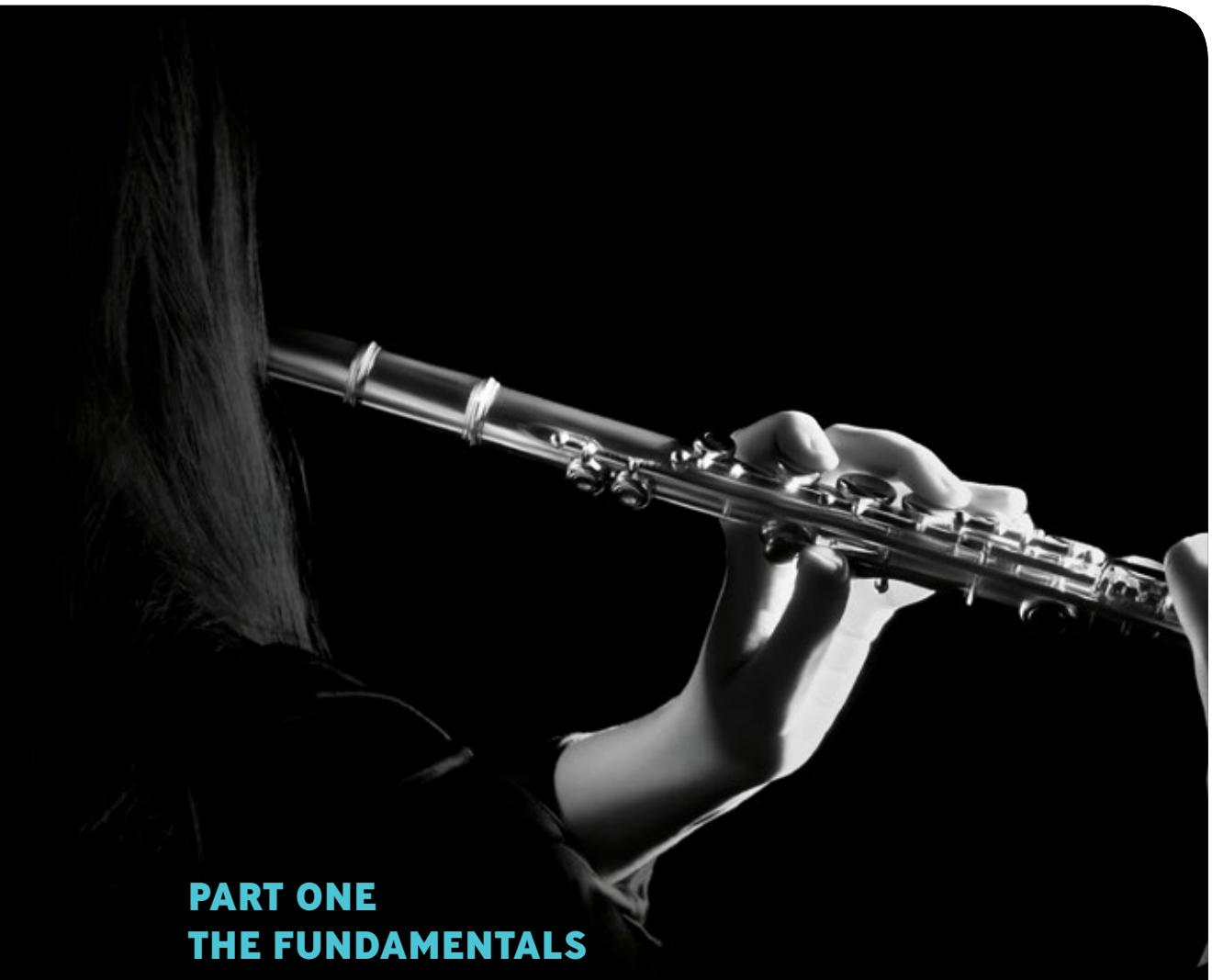
E-BOOK

Please note that if you are viewing this as an e-book, Soundbites and other external links will be available on-screen by clicking on any Soundbite and locating the corresponding file in the pop-up.

REFERENCES

Bailey, D 1993, Improvisation: Its Nature and Practice in Music, Da Capo Press, USA

PART ONE
THE FUNDAMENTALS



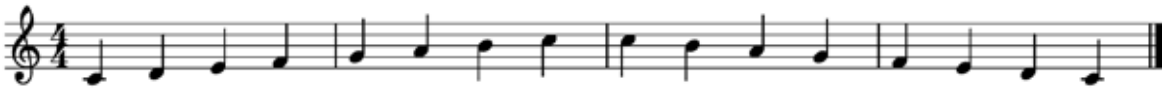
PART ONE
THE FUNDAMENTALS

PITCH

For many people, the hardest part when improvising for the first time is knowing what notes to play. Luckily, this is also one of the most straightforward aspects. Almost every system for improvising around the world involves limiting the performer to using certain notes. We call this limited set of notes a scale. Scales come in a variety of forms, but all of them restrict the possible options for the improviser to ensure they create a particular kind of sound. The major scale, for example, is probably the most common scale in Western music and is associated with brightness and happiness. A less commonly used scale, the diminished scale, is much darker and is often used to create tension in the listener. How a scale is used depends on the style of music being played, but the important point is that scales make it easier for improvisers to create usable melodies.

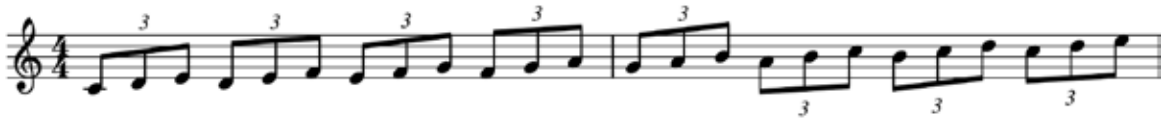
THE MAJOR SCALE

The major scale is often one of the first scales musicians learn on their instrument and, like all scales, it can start on any note. The note we choose to start on is called the tonic and the scale will be named after this tonic (e.g. C major). Play the C major scale notated below:

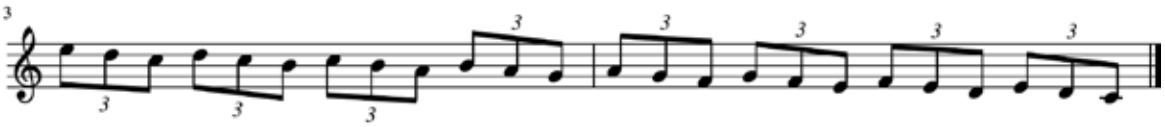


Soundbite 1.1

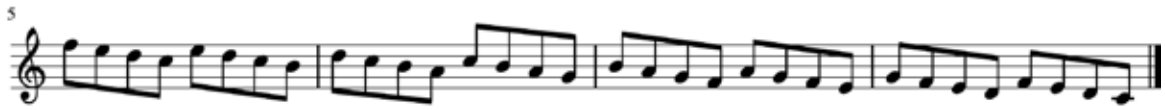
When learning a scale for the purpose of improvisation, it is essential to practice the scale in a variety of ways. Try these exercises to better remember the C major scale:

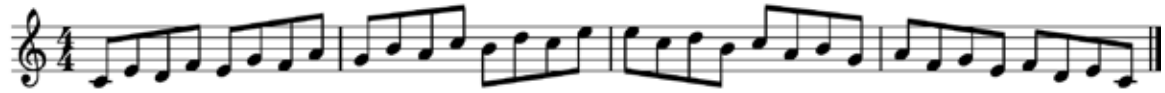


Soundbite 1.2



Soundbite 1.3





Soundbite 1.4

Underneath each note in the above exercises are numbers. These numbers are called scale degrees, and they tell us what position that note has in the scale. For example, C is the first note of the C major scale so it is 1, D is the second note so it is 2, and so on. Different scale degrees will tend to create different effects in the music you are playing. Ending on scale degree 1, for example, will create a strong sense of finality. You don't need to know the effect of each scale degree just yet, but try to start learning which notes fall on which scale degrees as it will be important when we begin using chords later.

Play through these exercises to warm up every time you practice your instrument and you will have the major scale memorised in no time! Scale exercises are often used to practice technical skill, however, for improvisers, practicing scales is important for becoming comfortable with improvising using certain notes.

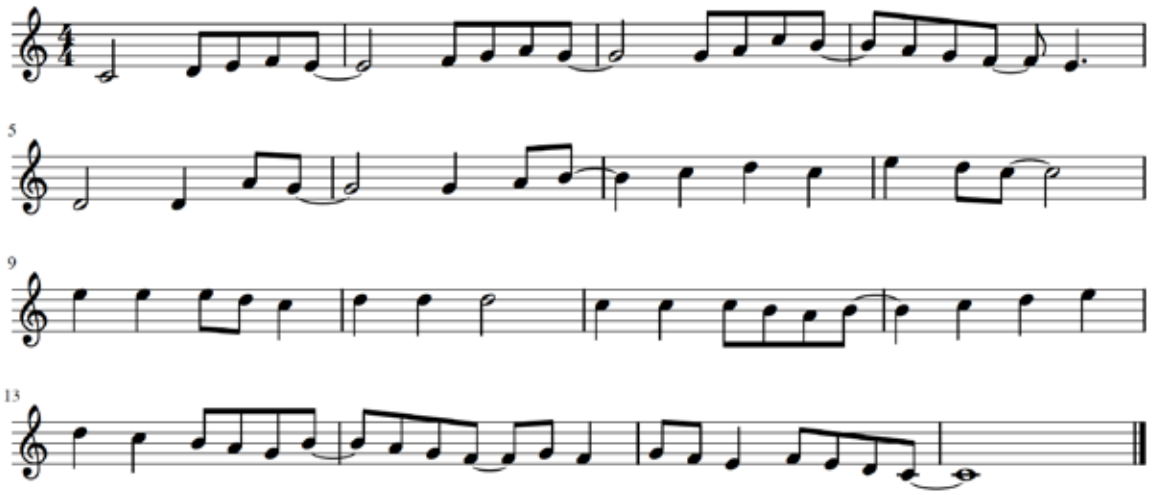
NOTE

If your instrument allows for it, try playing each of these across two octaves instead of just one.

THE MAJOR SCALE IN ACTION

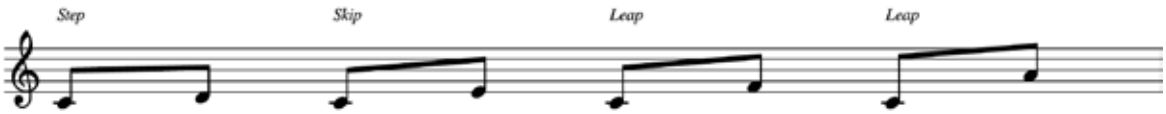
Being able to play a scale is great, but it isn't exactly a piece of music, so how do improvisers go from a set of seven notes to a full improvisation? When musicians improvise, they use their understanding of what melodies should sound like (according to their specific style) to arrange the notes of the scale in a musical way. Look and listen to the below improvisation:

Soundbite 1.5.1



Notice how most of the time the melody will *step* up or down to the next nearest note of the scale. Skipping over the nearest note and moving to the next one in the scale is called a *skip* or a third. Moving by an interval greater than that is called a *leap*. See this in visual form below:

Soundbite 1.6



When you first start improvising, it is good to improvise melodies that mainly use steps, sometimes use skips, and very occasionally use leaps. Try not to use more than two skips in a row and avoid playing consecutive leaps as well. It is also good to step in the opposite direction after a leap. This will help you make melodies that are tuneful and satisfying to listen to. It should be noted that melodies which break these rules are not forbidden by any means, they just take some more experience to get right and are often used in specific situations, so let's start here for now.

EXERCISE

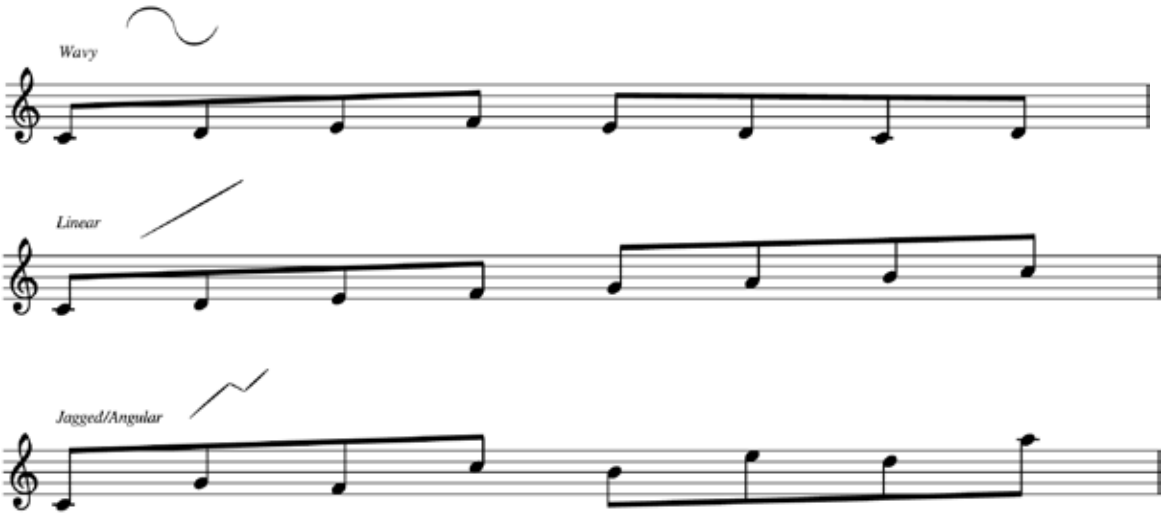
Now it is your turn to try improvising. Using the C major scale, improvise a few melodies that:

- *Use mainly steps*
- *Don't use too many skips in a row*
- *Don't use leaps more than once in a row*
- *After a leap, steps in the opposite direction*

Don't worry too much about the other aspects of your improvisation just yet; for the moment, focus on making the melodies you improvise memorable and singable (i.e. you could sing or hum along to it if you wanted to). Do this for some time and listen to what you are playing. Try to remember licks or melodies that sound good to you and see if you can replicate them. Do this for some time until you start to feel comfortable with improvising melodies.

MELODIC CONTOURS

Now that you are able to improvise some basic melodies, let's talk more about what makes a melody sound satisfying. An important aspect to consider is the melodic contour of what you are playing. Melodic contour refers to the "shape" of your melody, in other words, the way that it moves up and down. Look at the below diagram to see some examples of melodic contours:



Soundbite 1.7.1

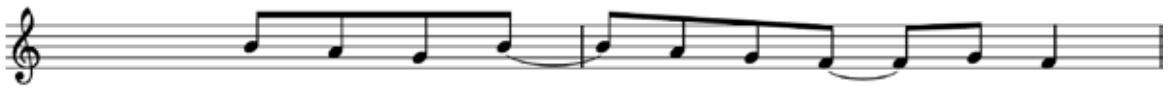
Soundbite 1.7.2

Soundbite 1.7.3

Your choice of melodic contour will depend on the style of music and what effect you are trying to create, but generally, you will want a shape that avoids repetition but isn't completely unpredictable. The two main aspects to consider in regards to a contour's repetitiveness are the *intervals used* and the *direction that they go*.

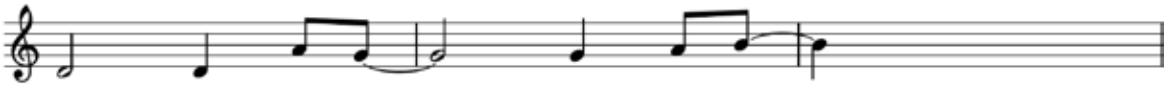
Compare the linear and jagged examples above. The linear contour does not change direction at all and always moves by the same interval (a step). As a result, it becomes stale and repetitive after a few notes. The jagged contour changes direction with every note and uses various kinds of intervals which makes it seem so random that it loses its melodious qualities. The wavy contour changes direction less frequently and consistently moves by a step, however, it too becomes repetitive after some time.

Looking at our original example, you will see that the melodic contours used strike a balance between consistency and unpredictability. The melodies rarely change direction on every note, but they also do not continue in the same direction for too long either. The improvisation uses a variety of intervals and avoids using the same interval in the same direction for too long. See below for some specific examples of this:



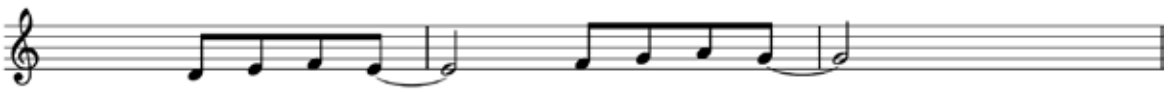
Descends for three notes, ascends for one; descends for three notes, ascends for one.

Soundbite 1.8.1



Leaps up, steps down, and then steps up a few times. Notice how the more dramatic leap is followed by more tame stepwise motion.

Soundbite 1.8.2



Similar to the wavy contour, this example balances repition and unpredictability by using the same interval (a step) but changing direction every few notes. Unlike the wavy example though it does not repeat the exact same notes when the contour repeats itself.

Soundbite 1.8.3

For another example of satisfying melodic contours, listen to the different instruments improvise between 1:44 and 3:23 in this performance of 'When the Saints Go Marching In' by Louis Armstrong's All Stars

'WHEN THE SAINTS GO MARCHING IN' BY LOUIS ARMSTRONG

Clip 1.1.1

You will notice that the musicians rarely continue in the same direction for too long or use the same interval too many times in a row. You can even try tracing the melodic contour on a piece of paper as you listen to see this for yourself.

EXERCISE

Once again improvise using the C major scale, this time thinking about the contours you create. Think about how often you change the direction of your melody and how often you repeat the same interval. Is it too repetitive, too random, or just right? Consider what aspect of your playing made it sound that way and what you should do next time to replicate that result (if it was good) or improve your result (if you felt it needed improvement).

OVERALL PITCH MOVEMENT

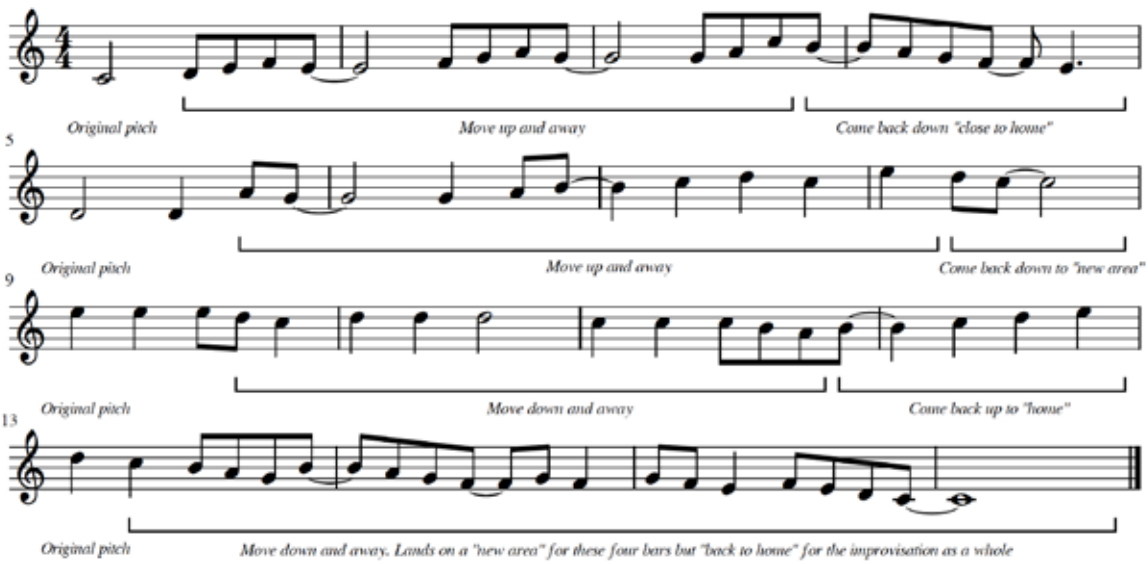
It is important when improvising to look beyond the specific moment you are in and think about what is coming next in your improvisation. Look and listen to our example once again. Does it feel like a set of random melodies stuck together or does it feel like the music is going somewhere?

One of the simplest ways to give your music movement is to

(1) have your improvisation start at a particular pitch,

(2) have it gradually move up or down, and then,

(3) move back towards the original pitch. If you choose to move back to the original pitch (or near it) the music will sound like it has "returned home". If you move back to a pitch away from the original, it will feel like the music has "moved to somewhere new". You can see how this happens both in every four bars of the example improvisation and across the improvisation as a whole.



Check the soundbites and listen for the pitch movement in each four bar excerpt.

Soundbite 1.9.1 - Soundbite 1.9.4

These gradual movements in pitch can occur across any number of bars, not just four. Similarly, the pitch can move as far away from the starting note as many octaves or only move a few steps away.

EXERCISE

Improvise in C major and think about the pitch movement you are using. Try starting at a note, moving up or down, then either "coming back to home" or "coming back to a new area". Look to the example improvisation for inspiration, and remember this can be done over many bars or just a few.

EXERCISE

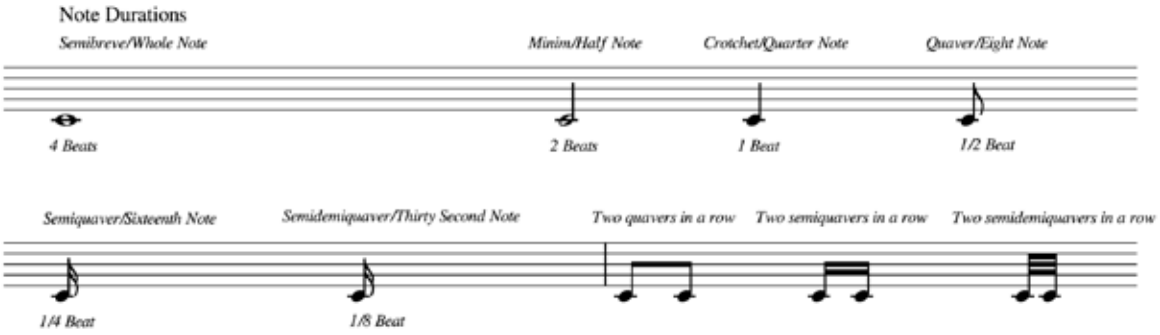
Improvise in C major, once again using the gradual changes in pitch you used in the previous exercise. This time though, think about it on a larger time scale with the whole improvisation also starting on a note, moving up or down, then coming "back home" or "to a new area".

TIP

You can see in the example improvisation how it starts on C, moves up to the E an octave higher in bar twelve, then comes back down to C at the end (aka our "home").

RHYTHM

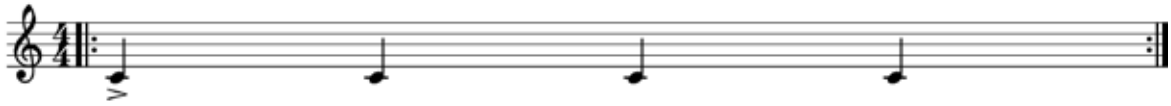
Rhythm refers to how the notes of a composition or improvisation are placed in time. The timing of the notes and how long they last are all aspects that affect rhythm. We usually measure rhythm by examining how many beats a note lasts for and which beats the notes land on. There are a variety of symbols that we use to help us understand rhythm:



The above symbols determine how many beats a note lasts for, however, most music organises the pulse into repeated cycles. These cycles are called measures or bars, and the number of beats per bar is defined by the time signature. The time signature is indicated by two numbers, one on top of the other, at the start of the piece. Look and listen to the following examples:

4/4 TIME

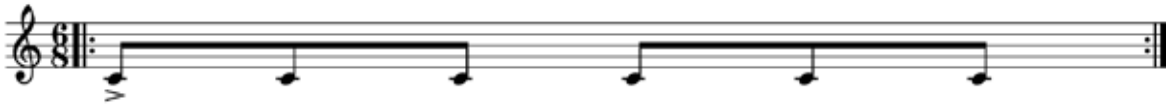
Soundbite 2.1.1



3/4

Soundbite 2.1.2

6/8 TIME



Soundbite 2.1.3

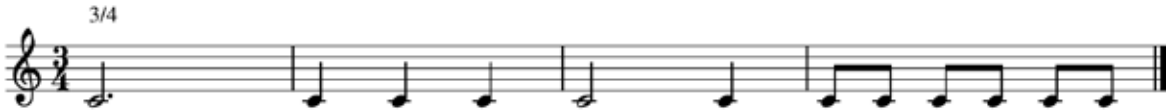
The bottom number in a time signature symbol determines what note value is worth one beat. For example, if the bottom number is four, a crotchet is worth one beat. If the bottom number is eight, a quaver is worth one beat. If it is sixteen, a semiquaver is worth one beat. As this number continues to double the note duration assigned to one beat continues to half. The top number tells us how many beats there will be in a single measure. 4/4 means that there will be four beats in one measure, with a crotchet being worth one beat. 6/8, on the other hand, is six beats with each quaver worth one beat.

TIME SIGNATURES

Different time signatures have different nuances with the ways they are usually played. These include which beats are strong beats, what kinds of rhythms are typically used, and more. When you are improvising melodies in a certain time signature, emphasising the strong beats by playing them more loudly or playing long notes on them will really reinforce the feeling of that time signature. This being said, it can also be good to play rhythms that emphasise other beats in the bar or use less common rhythms, especially as a way of making your improvisation more varied. Below are some time signatures and some common ways of playing them.

3/4 TIME

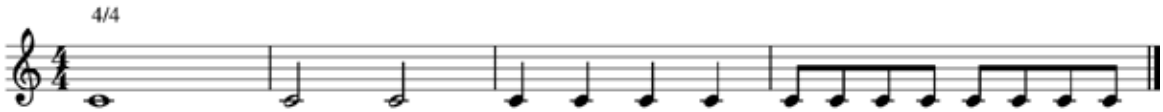
In 3/4 time, beat one is the strongest and beat three is also strong. A common rhythm in 3/4 is a minim on beat one and a crotchet on beat three.



Soundbite 2.2

4/4 TIME

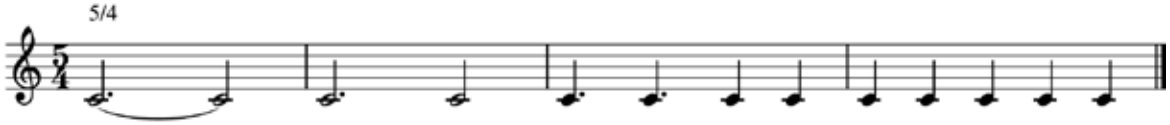
In 4/4 time, the strongest beat is beat one, with three also being a strong beat. 4/4 time is so common in Western music that you can play more unusual rhythms without losing the feeling of 4/4 so easily.



Soundbite 2.3

5/4 TIME

Usually, the first and fourth beat in 5/4 time are the strong beats, with beat one as the strongest. An alternative is to have beat one as the strongest and emphasise the other four equally.

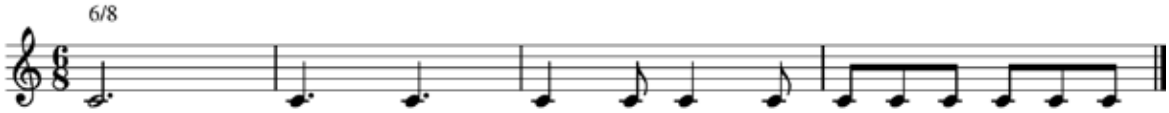


Soundbite 2.4

6/8 TIME

In 6/8 time a single bar is spread into two strong beats that are split into three beats each. As a result, beat one and beat four of a 6/8 bar are the strong beats, with beat one as the strongest. To properly evoke a compound time signature, it is important that the smaller subdivisions of the beat are used. For example, if you only play dotted crotchets, 6/8 time ends up sounding like 2/4. Try to combine dotted crotchets and quavers in interesting ways.

Soundbite 2.5



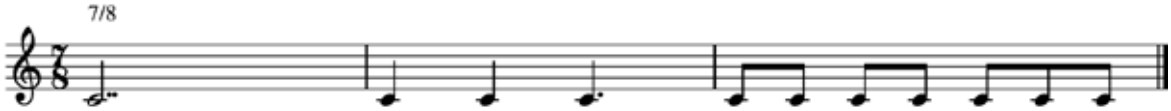
TIP

When a time signature has two or more strong beats split into smaller beats, it is called a compound time signature. 6/8, 9/8, and 12/8 are examples of this.

7/8 TIME

7/8 is a somewhat rare time signature in Western music; however, it is used in many kinds of folk music from around the world. Generally, 7/8 is played as three strong beats, with two split into two subdivisions and one split into three. The beat with three subdivisions can be placed anywhere in the bar, but usually it is the first strong beat or the last one (this can be seen in the image below).

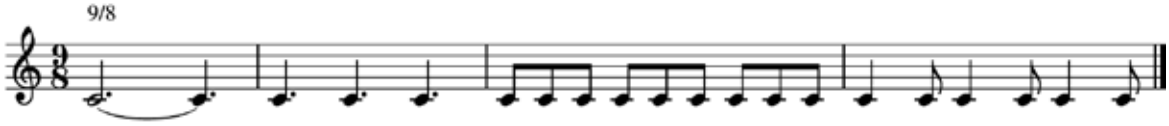
Soundbite 2.6



9/8 TIME

9/8 time is a compound time signature formed by splitting three strong beats into three smaller beats. Beats one, four, and seven are strong beats with beat one as the strongest. Like the other compound time signatures, it is important to emphasise the beat's subdivisions.

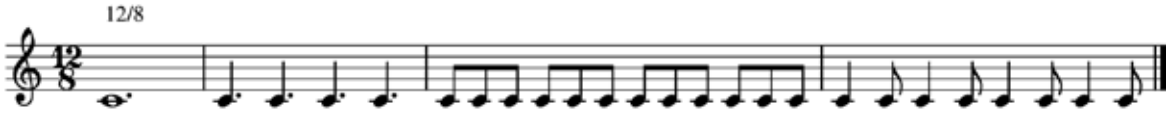
Soundbite 2.7



12/8 TIME

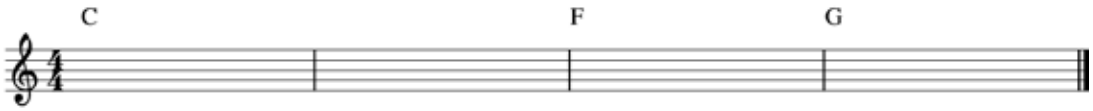
In 12/8 four strong beats are split into three smaller beats. 12/8 can be thought of as 4/4 with each beat divided into three further sub-divisions. As a result, beat one and beat seven (which would be one and three in 4/4) are the strong beats, with beat one the strongest. Beats four and ten are also stronger than usual because these are the points where the beat is split into three.

Soundbite 2.8



EXERCISE

Improvise in C major in each of the discussed time signatures. Go back and read the description for each time signature before you play in it. Be sure to improvise melodies that understand the strong beats of the time signature and that uses some common rhythms. Once you are confident doing this on your own, have a friend or teacher play the following chords or use the backing track and improvise over it in each time signature. Practice staying in time and bringing out the intricacies of each time signature together.



Soundbite 2.9.1 - Soundbite 2.9.7

EXERCISE

Once again improvise in C major in each of the time signatures, but this time occasionally emphasise the weaker beats in the bar. An example might be holding a long note that starts on beat two in 4/4 or emphasising beat two and three in a bar of 6/8 instead of one and four. This can also be done with the backing track or with a friend accompanying you.

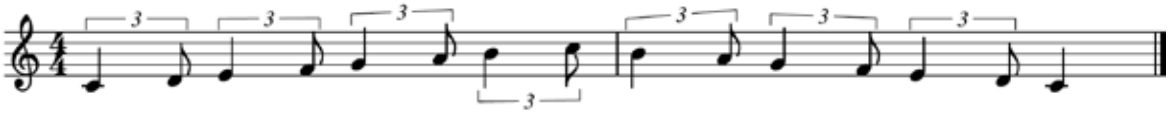
TIP

When you emphasise notes that are off the beat (e.g. "one-and" instead of beat one) it is called syncopation.

SWING

The word "swing" can be used to refer to a lot of different things, but it is most commonly used to describe the alternation of long and short notes when playing quavers. Usually when playing quavers, a single beat is divided into two parts of equal duration. With swung quavers, however, the first of each pair of quavers is held for longer than usual and the second held for a shorter amount of time than usual. Here is a general demonstration of this below:

Soundbite 2.10.1



Quavers have more "swing" the longer the first note is compared to the second. Quavers with no swing are called "even quavers". How much longer the first quaver is compared to the second will depend on the tempo, style of Jazz being played, and the musician's personal style. For example, it has been found that in general, Jazz musicians use more swing the slower the tempo and less swing the faster the tempo. At really fast speeds, swung quavers basically become even. Let's explore the amount of swing used in some Jazz styles.

EARLY JAZZ AND SWING

Soundbite 2.10.2

In early Jazz, such as that from the 1920s and earlier, the first quaver in each pair of quavers is around two times longer than the second (like in the notated example above). This being said, the long note isn't always exactly twice as long as the short one. Faster tempo songs still tended to produce less swing, and the amount of swing still varied between different artists. Hear this in the soundbite and examples below:

'ONE O'CLOCK JUMP' BY COUNT BASSIE

Clip 1.2.1

'TAKE THE A TRAIN' BY DUKE ELLINGTON

Clip 1.2.2

BEBOP, HARD BOP, AND OTHER GENRES OF "BOP"

These genres of Jazz, starting in the late 1940s with Bebop and continuing in the 1950s and 1960s were less about dancing and more about creating artful music. As a result, the swung quavers that made the listeners of earlier Jazz styles dance were not as important to bop musicians who created music for listening. Quavers in Bebop and related genres range between the 2:1 ratio of earlier styles to reasonably even. Think of swing from this era as being quavers where the first note was longer than the second note. Exactly how long depends on the tempo of the piece and the personal taste of the artist. Hear this in the soundbite and examples below:

Soundbite 2.10.3

'ON THE SUNNY SIDE OF THE STREET' BY DIZZY GILLESPIE (THIS EXAMPLE IS MORE SWUNG)

Clip 1.2.3

'LAZY BIRD' BY JOHN COLTRANE

Clip 1.2.4

This example still uses swing, but also uses more even quavers in John Coltrane's solo

CONTEMPORARY JAZZ

A lot of Contemporary Jazz uses quavers that are even or close to being even. A feeling of swing is still created by the way the offbeat of each quaver is accented. Contemporary Jazz musicians will still use swing when playing older styles of music, but the contemporary style uses very straight quavers with every off-beat accented. Here are some examples:

Soundbite 2.10.4

'26.2' BY JACOB DINESEN, KURT ROSENWINKEL, ANDERS CHRISTENSEN, AND KRISTEN OSGOOD

Clip 1.2.5

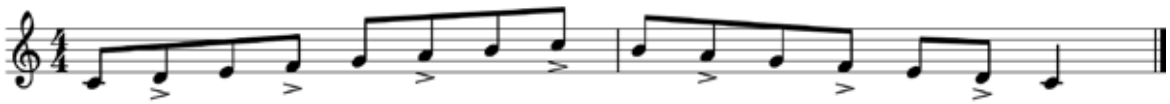
There is still swing here but the ratio is much closer to even than in the previous examples

'KABOOM' JAMES MULLER

Clip 1.2.6

Similar to the previous example, there is still some swing, but it is very close to being even

In all of the genres of Jazz, articulation also plays an important role in creating swing. Generally, the second note (the shorter note) of each quaver pair is accented. This can be achieved in various ways depending on your instrument. For example, woodwind and brass players may only tongue the second note or piano and guitar players might use more physical force when playing the second note. Even completely even quavers gain a vague feeling of swing when played with the second note accented:



Soundbite 2.10.5

EXERCISE

Play the C major scale in each of the above styles of swing (Early Jazz/Swing, Bebop/Hard Bop/other genres of Bop, and Contemporary Jazz). Be sure to accent the offbeat and use the correct swing ratio for each style. Listen carefully to the soundbites and Youtube recordings to really understand the correct swing ratio.

EXERCISE

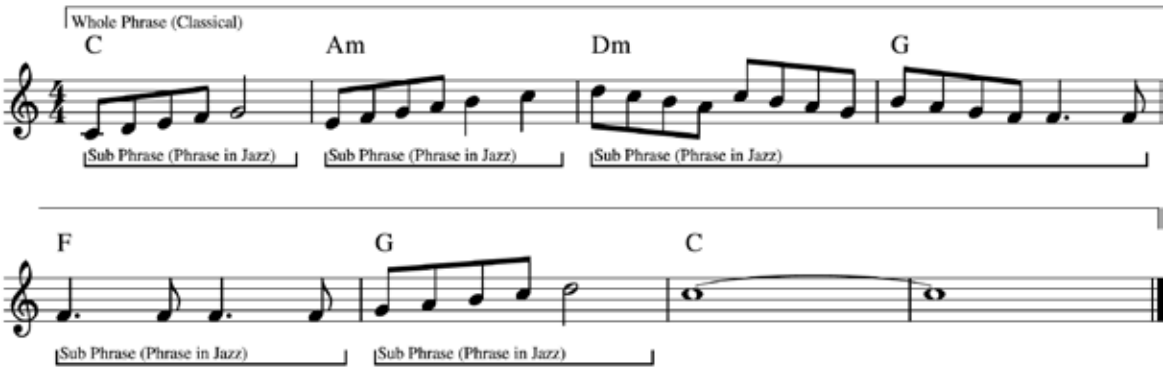
Improvise in C major for some time in each of the above styles of swing. For each style, improvise slowly, at a moderate speed, and at a fast tempo. Use slightly more swing at the slower tempos and slightly less at faster tempos.

PHRASING

Phrasing can refer to different things depending on the context, but it generally refers to how a piece of music is divided up into smaller subsections called phrases. A phrase, similar to a sentence in writing, is a complete musical idea with a clear start and a definite end. The end of a phrase is usually made clear by a cadence. A cadence is like a musical full stop and can be signified using melody, rhythm, harmony, dynamics, and other musical features. Phrasing helps break up the music into smaller and more digestible chunks. What this means for us as listeners is that music sounds more satisfying and expressive.

In Jazz, a phrase is usually any melody that reaches a point of rest. In Classical music though, this is called a sub-phrase. Look at the analysis below and listen to the accompanying track to see how to recognise phrases and sub-phrases. Also, take note of the different ways that the word is used in Jazz and Classical music.

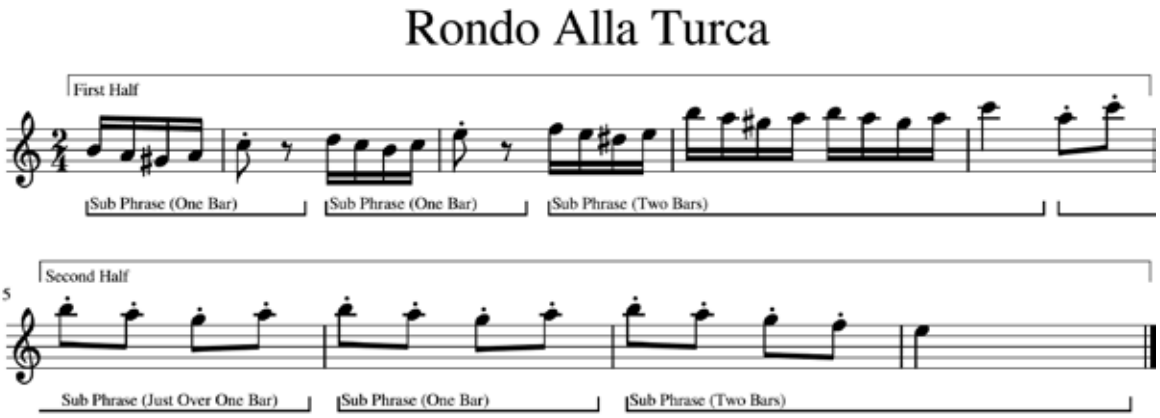
Soundbite 2.11



Notice how each sub-phrase is indicated by things like a pause in the music (such as because of a long note), a change of chord, or a change in the rhythm or direction of the melody. Phrases as a whole are signified mainly by the harmony coming to a cadence. The cadence in the above example is when the C note and C chord are sustained in the last two bars. The way the musician phrases the music will have a significant impact on its sound.

EVEN PHRASING

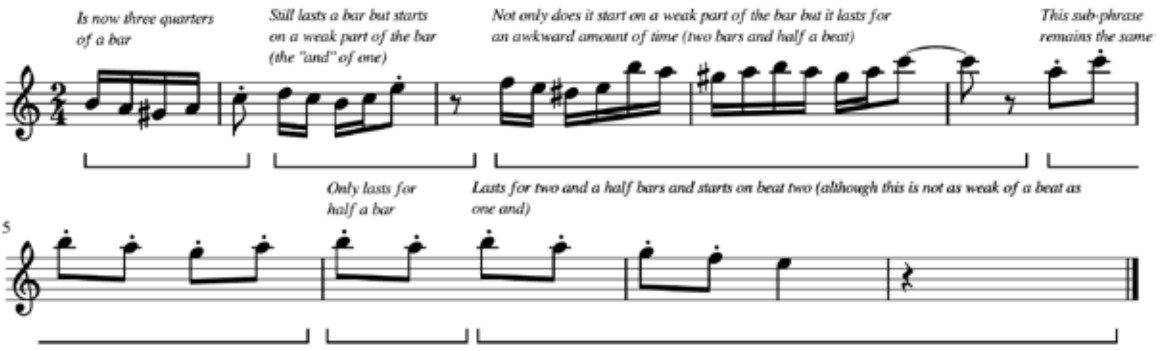
The majority of music you are likely to hear will have what we call "even phrasing". Specifically, this means that the number of bars in each phrase is one, two, four, eight, or any further multiple of four. Sub-phrases can also be described as being even or not. Sub-phrases are even when they last for an even division of the bar, one bar, or an even number of bars (e.g. half a bar, one bar, two bars). Look and listen to this excerpt of the melody from the third movement of Mozart's Sonata No. 11, 'Rondo Alla Turca'.



Soundbite 2.12

Notice how it is easy to predict when the end of each sub-phrase is about to occur. On the most basic level, this is because all of the phrases and sub-phrases are symmetrical. The sub-phrases are either one or two bars long and the whole phrase is eight bars long. Aside from this, each sub-phrase starts on the beat rather than off the beat (beat two rather than "two-and"). The final note of each of these sub-phrases also occurs on a strong beat of the bar, specifically beat one. This is another important part of creating even phrasing.

Look at this edited version of 'Rondo Alla Turca' and see how changing the placement and length of the sub-phrases changes the evenness of the music:



Soundbite 2.13

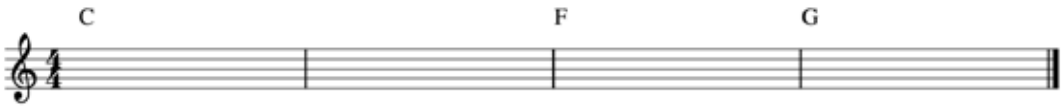
Aside from two notes that are taken out in the sixth bar, nothing has changed except the placement and length of each sub-phrase. Sub-phrases now last uneven and asymmetrical lengths like three-quarters of a bar or two and a half bars. They also begin and end in awkward places and on weak beats such as on upbeats (the "and" of a beat). The piece now sounds awkward, slightly random, and difficult to follow. The ending and beginning of each sub-phrase is difficult to predict, and the overall effect is not satisfying for the listener. You will notice that the entire eight-bar phrase is still even, but this makes little difference when the sub-phrases within it are not also even. Aim for the first version of 'Rondo Alla Turca' when creating evenness.

EXERCISE

Improvise in 4/4 time using C major in the following ways:

- *Play sub-phrases that are an even division of a bar long (e.g. half a bar or a quarter of a bar), one bar long, or an even number of bars long*
- *Start and end your sub-phrases on strong beats*
- *Ensure that sub-phrases start and end on the same beats and have similar lengths*

You can try this exercise with a friend or teacher or use the backing track by having this chord progression as accompaniment.



EXERCISE

The above exercise focused on sub-phrases, but let's try playing even phrases as well. In addition to the restrictions from the following exercise, also try and play four, eight, or sixteen bar phrases overall.

EXERCISE

Repeat this exercise but with the other time signatures discussed in the previous section. All of the same rules apply, but revise "Time Signatures" on page 19 to see what the strong and weak beats are for each time signature.

TIP

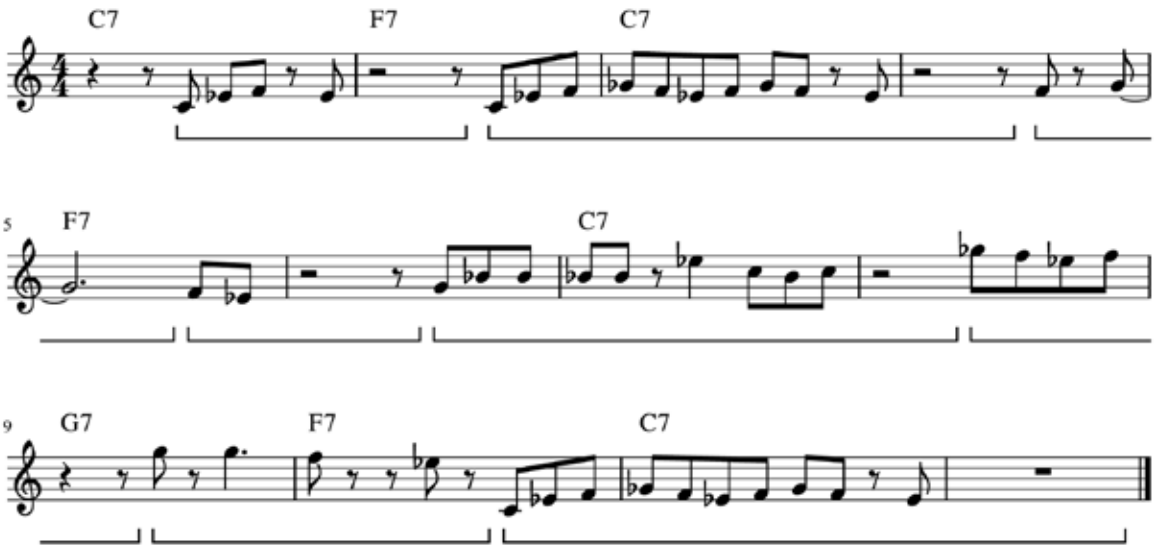
Look back at 'Rondo All Turca' to see a clear example of even phrasing if you need some inspiration.

Using even, symmetrical phrases makes the music easy to follow and satisfying to listen to. It also makes endings very strong because audience members can easily anticipate when the end of the phrase is coming up. This doesn't mean you should always use even phrasing, however. It can be exciting to also use phrases that phrases that are a bit more asymmetrical.

ASYMMETRICAL PHRASES

Many kinds of music accept and actually encourage phrasing that isn't perfectly even. A lot of Jazz from the second half of the 20th century and the 21st century employs phrases with different levels of asymmetry. Even genres where evenness is valued like Classical, Pop, and Rock will use phrases with varying amounts of asymmetry. There are two different kinds of asymmetrical phrases: those where the various sub-phrases are asymmetrical and those where the phrases as a whole are asymmetrical. Let's begin with the sub-phrases kind.

Look and listen to this basic jazz solo over a twelve bar blues progression:

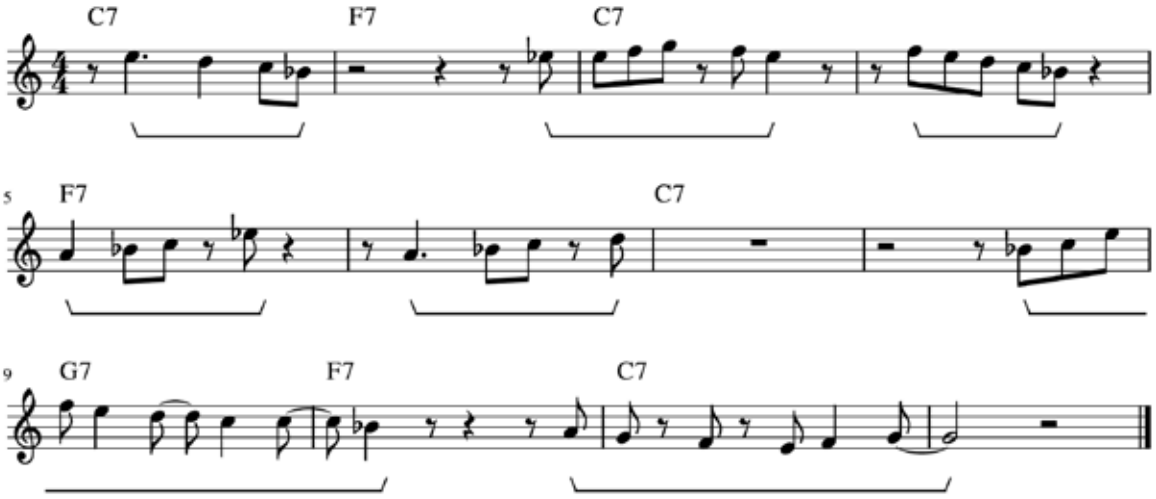


Soundbite 2.14.1

Unlike in the second 'Rondo Alla Turca' example, the asymmetry actually enhances the music! This for a few reasons. For one, asymmetrical phrases are standard in jazz to the point that they are an expectation. Aside from that, this improvisation is a simulation of what would be the solo section of a piece of music, which is a section of music that is generally less about predictability and memorability and more about virtuosity and personal expression. Just because asymmetry is more acceptable in this context does not mean that you can play as uneven as you like though. Listen to the example again, and you will notice that there is a delicate balance between symmetry and asymmetry.

Look at which beat the final note of most of these phrases occurs on. Whilst most of these sub-phrases are different lengths and start off the beat, their final note tends to be on the "and" of beat four. Another way that predictability is created is with the distance between the end of one sub-phrase and the start of the next. Most of these sub-phrases are around three beats apart from each other, give or take half a beat, and this provides the audience with some ability to anticipate the start of the next sub-phrase.

Look and listen to another basic jazz solo:



Soundbite 2.14.2

This example takes a different approach to the first. Like example 1, it balances asymmetry and symmetry, just in a different way. For the first eight bars of this example, the gaps between the last note of each sub-phrase vary a lot, but most of the sub-phrases are around a bar in length. The final two sub-phrases vary this by being much longer, but, nevertheless, we once again see a balance between consistency and unpredictability.

EXERCISE

Try this for yourself now. Improvise in 4/4 time using the C major scale and employ asymmetrical sub-phrases. Like in the above examples, try and maintain the balance between predictability and unpredictability by keeping some aspects even and others uneven. These aspects include the length of each sub-phrase, the time between each sub-phrase, the beat each sub-phrase starts or ends on, and whether each sub-phrase starts on a strong or weak beat. Look and listen to the given examples for inspiration in this. When you are confident with this, have a friend or teacher accompany you or use the backing track with the same chord progression as the previous exercise.

EXERCISE

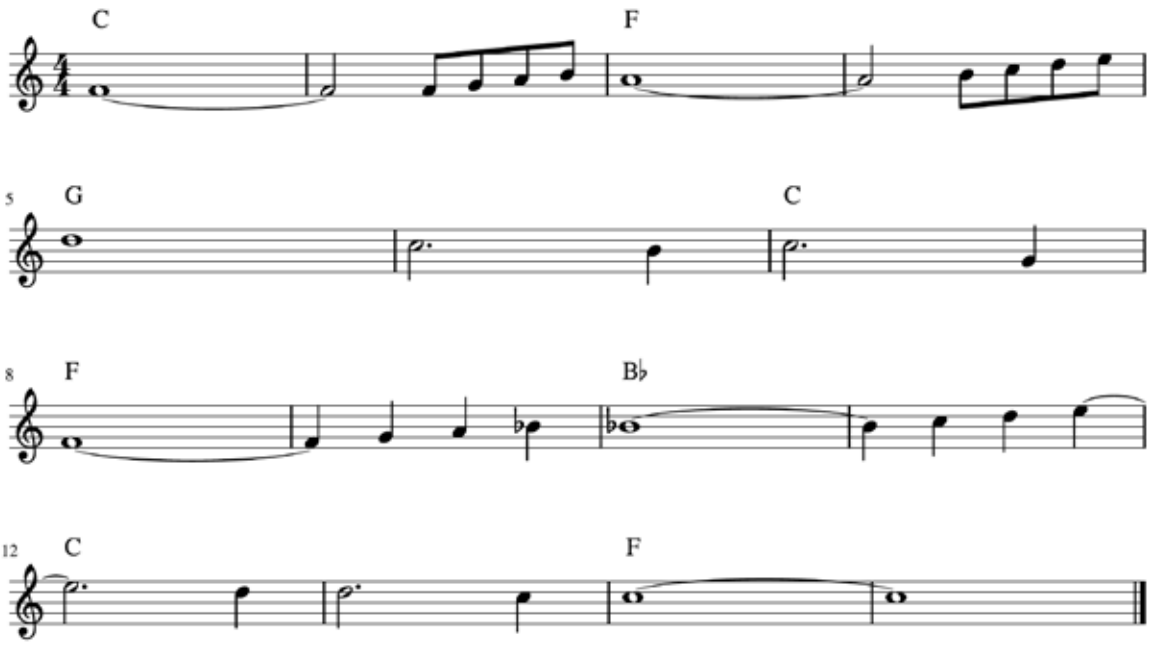
As before, try the exercise again in each time signature on page 19 to page 20

TIP

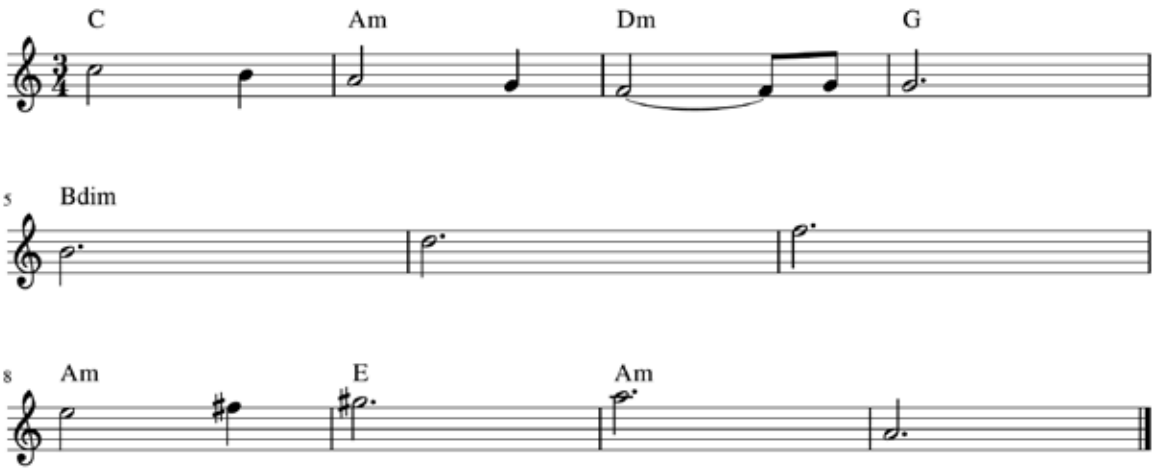
A metronome can be handy when you practice asymmetrical phrasing in case you start to lose track of where beat one is.

Asymmetrical phrasing also refers to when the phrase as a whole is asymmetrical. If done right, the effect of this is usually less intense than when sub-phrases are uneven. Look and listen to the below example:

Soundbite 2.15.1



Despite being only seven bars long, the first of the two phrases (bars one to seven) still sound fine. Whilst sounding a little unusual, it fits because it is a point where the music is moving to another section and therefore does not require the strong ending or sense of completeness that even phrasing provides. In fact, the unpredictable phrasing can actually create more momentum into the next phrase which is the actual end of the piece. Here is another example of asymmetrical phrasing:



Soundbite 2.15.2

Like the previous example, the three bar phrase in the middle works because it does not need to be predictable. It is a transition in the middle, and like the previous example, the uneven phrasing adds to the instability of that section before returning to a much more straightforward four-bar phrase to finish.

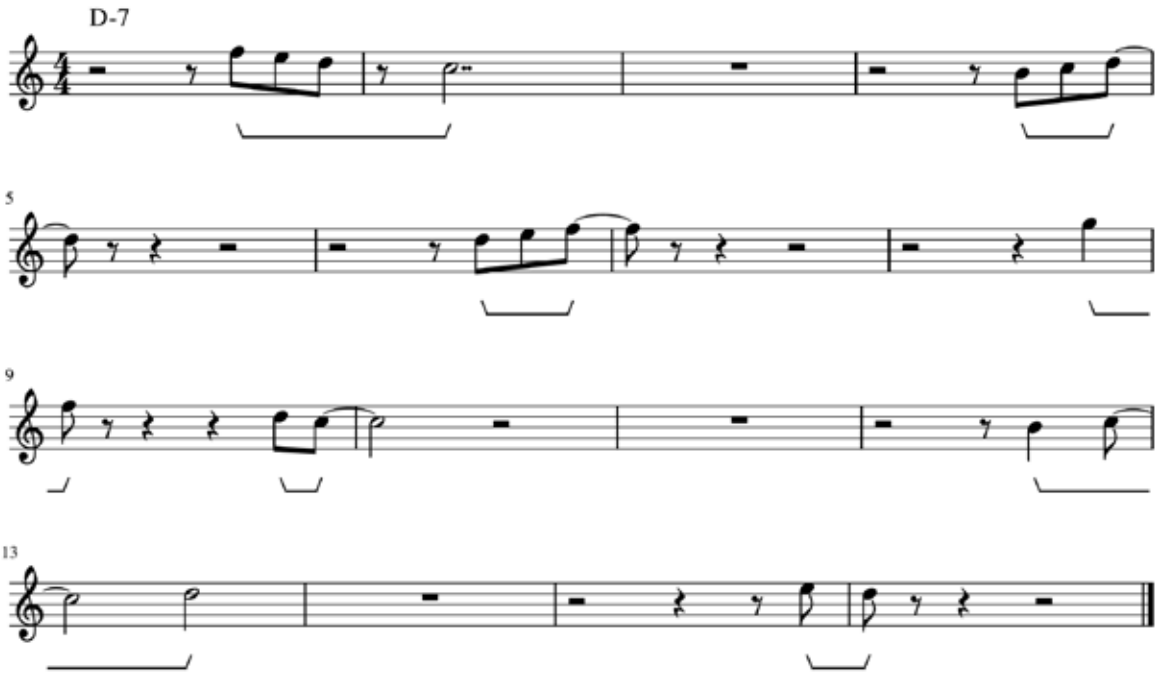
EXERCISE

In the key of C major, improvise a short piece of music that uses both symmetrical and asymmetrical phrases (whole phrases, not sub-phrases). Listen to the sound created by the asymmetrical phrases and use them either to create an unusual sound or during points that transition between different ideas. As with the previous exercises in this chapter, repeat this in different time signatures.

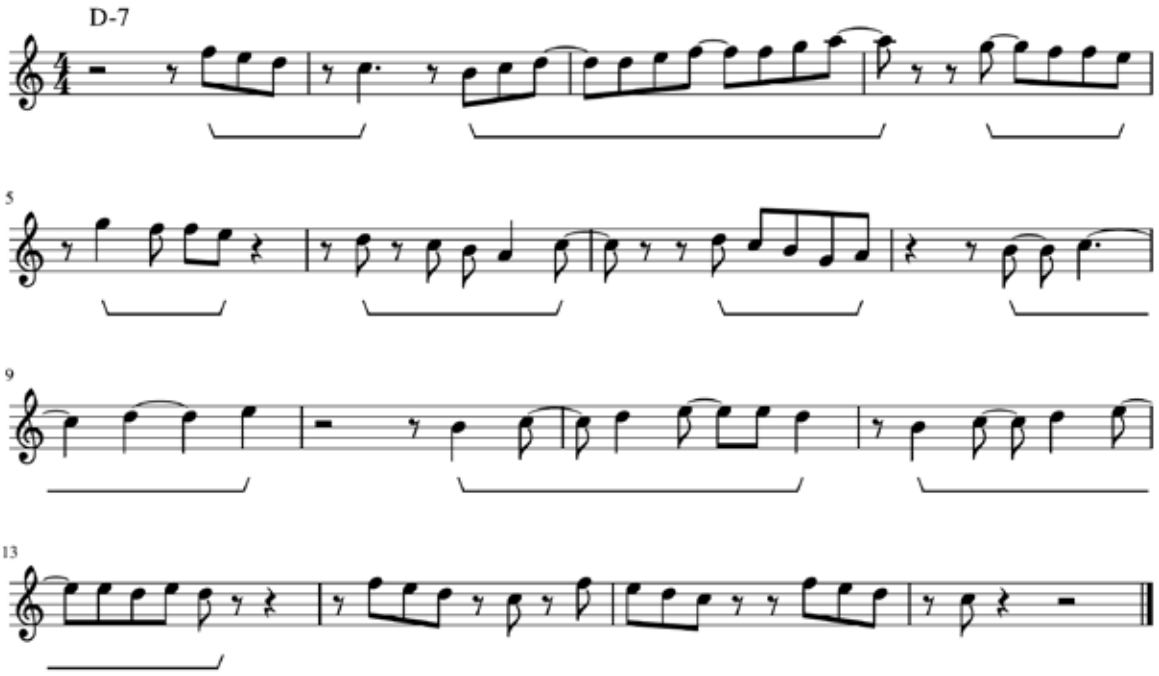
SPARSE PHRASING

Phrases do not always need to be judged in terms of how even they are. Another common characteristic of phrasing that is discussed is the sparseness of the phrases. Sparseness refers to how much time there is between the start of each sub-phrase. The sparsity of a group of sub-phrase can have a significant impact on how the improvisation sounds. Compare the two examples below:

Soundbite 2.16.1



Soundbite 2.16.2



Both examples use fairly similar melodies but create entirely different sounds. This is because of the space between the last note of one sub-phrase and the first note of the next (i.e. the sparseness). The first example, which has a lot of sparseness, maintains a low level of intensity. This kind of sparseness is often used in genres such as Cool Jazz. It also provides plenty of space for the accompanists to fill in. The second example, however, is much busier creating a higher level of intensity.

Generally speaking, Jazz musicians will use phrasing somewhere in the middle of these two extremes, leaving enough space to differentiate each sub-phrase and allow for accompanists to react but not so much space that it breaks the momentum and intensity of the solo.

EXERCISE

Improvise in C major and implement very sparse phrasing by leaving plenty of space between each phrase. Listen to the effect that phrasing in this way creates. Improvise over a friend or teacher playing a C major chord repeatedly (or use the backing track) and hear how this kind of phrasing leaves space for the accompaniment to come through.

Soundbite 2.17

EXERCISE

Improvise again in C major, this time trying to achieve the busy phrasing of the second example by leaving, at most, a bar of space. Once again have someone accompany to see the difference with sparse phrasing.

EXERCISE

Improvise in C major, this time alternating and balancing between sparse and busy phrasing. Use both long and short gaps between sub-phrases and experiment with the different sounds created. Once you have done this on your own for some time, have someone accompany with a repeated C major chord (or use the backing track) and see how the different lengths between sub-phrases affect the ability for the accompanist to interact with what you are playing.

USING PHRASING FOR EFFECT

Often improvisers will use multiple levels of evenness and various levels of sparseness in the same improvisation. For example, a great way to add shape to your solo is to start with sparse, asymmetrical sub-phrases then gradually move into more even sub-phrases that are closer together. As another example, the improviser might start with busy, asymmetrical phrasing and gradually get sparser and more even. You can hear this use of phrasing to create certain sounds in the accompanying soundbites and in the clip below.

Compare the busy asymmetrical phrasing of the trumpet from 25:00-27:11 with the sparser and more even (but still fairly asymmetrical) phrasing from 27:37-29:47 in Christian Scott aTunde's performance of 'K.K.P.D.'

'K.K.P.D.'. BY CHRISTIAN SCOTT ATUNDE

Clip 1.2.7

Do you notice that the asymmetrical and busy phrasing is much more intense than the sparser and more even phrasing?

Soundbite 2.18

EXERCISE

Improvise using the C major scale and try using multiple kinds of phrasing in a single improvisation. Experiment with how symmetrical your phrases and sub-phrases are, as well as their sparseness or busyness. Listen to the effect you are creating and experiment with different approaches. Changing your approach to phrasing can not only make the music less repetitive but give the improvisation a sense of structure.

This idea is explored in detail in the section on Structure on page 266.

TEMPO

Tempo refers to how fast or slow the music is. It can be communicated to the performers with words like fast and slow (although, because of convention, we usually use Italian terms like andante and allegro). It can also be defined more specifically by clearly stating how many beats to play per minute (e.g. 120bpm). Many styles of music also allow for the tempo to speed up or slow down. This can be a gradual change in tempo (accelerando or rallentando in Classical music) or it can involve suddenly increasing or decreasing the tempo, usually by doubling or halving it. Needless to say, a gradual tempo change will be smoother and less noticeable while a sudden tempo change will be more jarring. A specific example of a gradual tempo change is the gradual increase of tempo in North Indian Classical music in the jhala. Listen to this example:

'IN THE HALL OF THE MOUNTAIN KING' BY EDVARD GRIEG

Clip 1.2.8
From Peer Gynt

As the piece continues, listen to the tempo gradually accelerates as the piece comes to a climax. The accelerando (gradual increase in speed) maximises the intensity as the piece comes to its end.

EXERCISE

On your own or as a group, improvise in a key/scale and metre you are comfortable with. After a short amount of time, gradually increase the tempo to a medium one. After improvising at this tempo for some time, increase progressively to a fast tempo. After a while, once again slow down to a medium tempo and then back to a slow tempo. Repeat this exercise multiple times ensuring that the tempo change occurs smoothly and evenly. Listen carefully to your fellow performers as you do this and ensure you all increase and decrease tempo together.

Tempo changes can also be immediate. Some examples of sudden tempo changes are the use of double time or half time in Jazz and popular music, where the rhythm section (drums, bass, and chordal instrument) suddenly double or halve the tempo they are playing at. Sometimes the entire ensemble suddenly changes tempo, while other times only some of the improvisers do. Here are some examples:

'BLUE TRAIN' BY JOHN COLTRANE

Clip 1.2.9
On the album Trane's Blues

Listen from 1:17 in the recording. At 1:40, the drummer plays at double the tempo, even though the bass and pianist continue playing at the same speed as before.

'SMOOTH JAZZ APOCALYPSE' BY REINIER BAAS

Clip 1.2.10

Performed by Reinier Baas, Ben van Gelder, and the Metropole Orkest on the album Smash Hits

At 1:35 when the composition transitions to the first improvised solo, the drums, piano, and strings change to a half time feel. Given the entire recording goes for 6:42 and much of the middle section is improvised solos, half time changes allow for more variety in the music and the alleviation of repetition.

EXERCISE

On your own or as a group, improvise in a key/scale and metre you are comfortable with. At various points, suddenly double or halve your tempo and stay in that new tempo for some time. If doing this as a group, you can signal each other for these changes. Practice this until you can confidently double or halve your tempo.

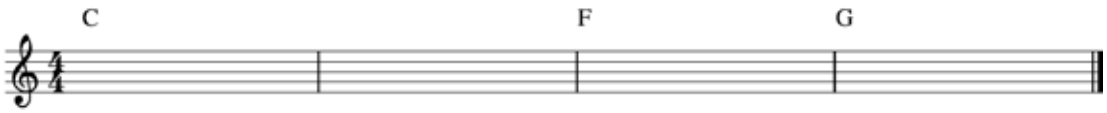
TIP

It won't sound out of time if only part of the ensemble halves or doubles their tempo suddenly. For example, if you are playing crotchets and then you suddenly double your tempo, your crotchets will still be in time because they will just sound like quavers to everyone else in the original tempo!

These tempo changes can be for various reasons, and often it will depend on the style of music and whether the change is gradual or not. Gradual changes in tempo are often used for expressive purposes (as the music gets sadder the music gradually slows down to reinforce this emotion) or to create progressive changes in the music's intensity (gradually getting faster leading into the climax of the piece, for example). They can also be used to transition between different sections that are in different tempos. Sudden changes can also be used to increase or decrease the intensity of the music, it's just that the change happens more quickly. Sudden changes in tempo can also be used as a way of creating variety, especially in long improvisations (for example a four-minute Jazz solo might go into half time for part of it as a way of creating variety). Both kinds of tempo changes have their uses; listen again the recordings provided and think about how the tempo change might be affecting the music.

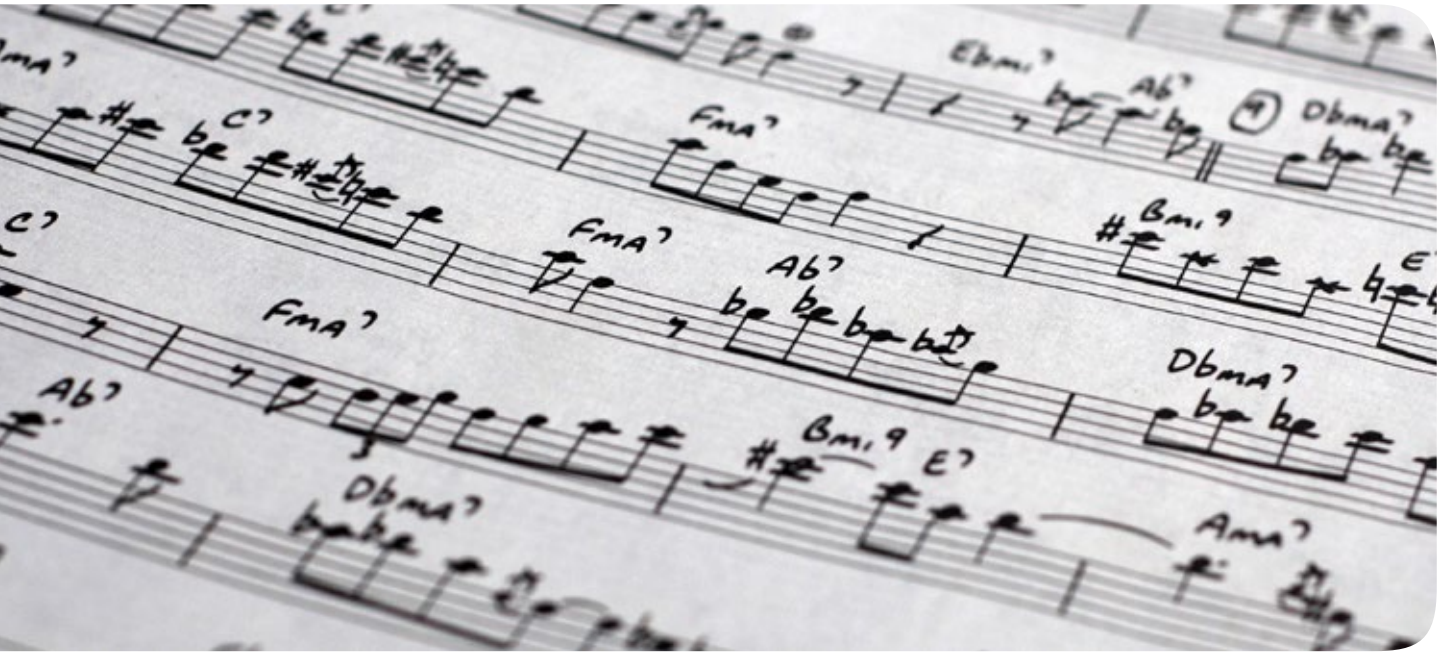
EXERCISE

Improvise over the following simple chord progression, either as a group or on your own (there is no backing track since it is not possible to predict your changes in tempo):



Revise the above discussion on the effect of tempo change. Create an improvisation that uses both gradual and sudden tempo changes to create different effects in the music. If you do this as a group, be sure to work together in changing tempo.

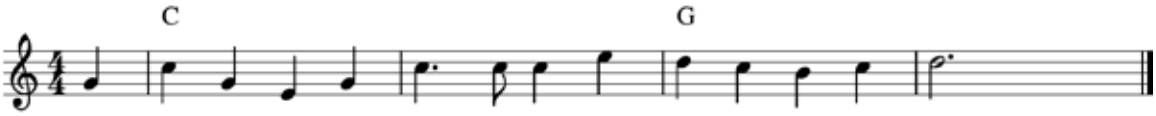
ORNAMENTATION



Ornamentation is the process of adding new material to an already existing melody. To ornament a melody, one takes the existing melody and adds more notes between those that already exist. Compare these two versions of an excerpt of Advance Australia Fair for example.

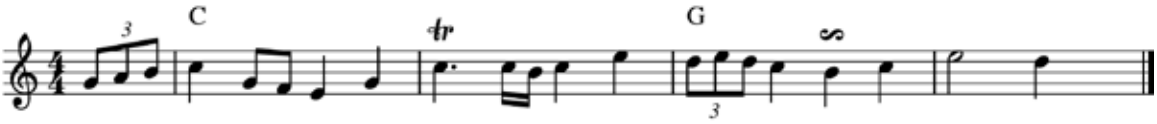
Original

Soundbite 3.1



Ornamented version

Soundbite 3.2



Notice how the original melody is still there in the ornamented version, it is just that additional notes have been added. Different styles of music have different conventions for how ornamentation should work. Generally speaking, the goal is for the original melody to be recognisable, but with additional material that changes the effect of the music in some way. Sometimes though, a piece of music is ornamented to the point that the original is unrecognisable. It really depends on the intentions of the artist.

In Jazz, ornamentation is often used as a way of differentiating a particular performance and for the artist to evoke a sense of personal expression. Because Jazz performance involves performers reinterpreting and improvising over well-known (at least to people that listen to Jazz) tunes called Jazz standards, it is important that artists find a way to differentiate themselves. One way to do that is to ornament the melody.

Ornamentation in Classical music has a fascinating past. During the Baroque and Classical eras, improvisation was common practice, and, depending on the context, ornamentation would be frequently used (it was expected that the performer extensively ornament slow music for example). When performing these pieces now though ornamentations are written into the score as a variety of different symbols.

Similar to Jazz, ornamentation in popular music is generally seen as a form of self-expression. In Pop, R'n'B, Soul, and other kinds of popular music, it is common for singers to ornament a melody, both in improvisational and pre-planned situations. Also similar to Jazz, ornamentation is a way for musicians covering popular songs to put their own personal spin of the song they are covering, and differentiate their performance from the original and from other covers.

TYPES OF ORNAMENTATION

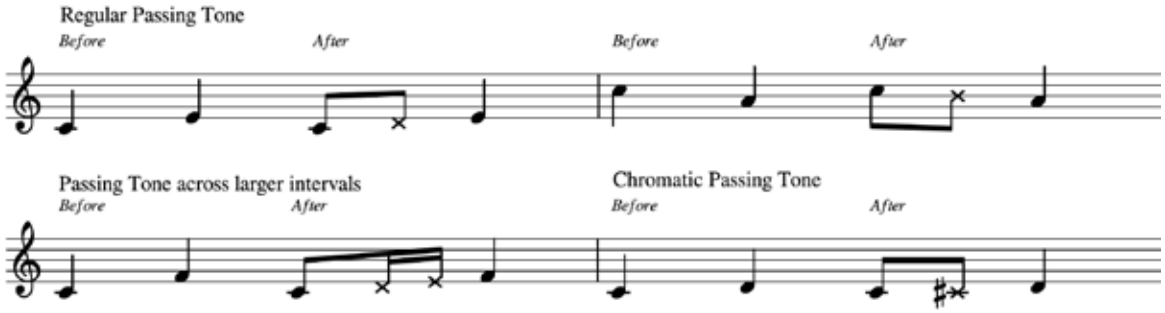
Whilst ornamentation can be any added material, there are some common ways of ornamenting melodies, and each has a different effect.

NOTE

In each of the notated examples, the ornamentation has a cross as its notehead.

PASSING TONES

A passing tone is a note added between two notes so that the melody has stepwise movement. It is usually between two notes that are a third apart; however, multiple notes can be used to join two notes that are a larger interval apart. Chromatic notes can also be used to join two notes that are a step apart, in which case it is called a chromatic passing tone. Passing tones occur on unaccented parts of the bar, meaning they occur in between beats (e.g. on "one-**and**" not on beat one itself). All of this can be seen in the examples below:



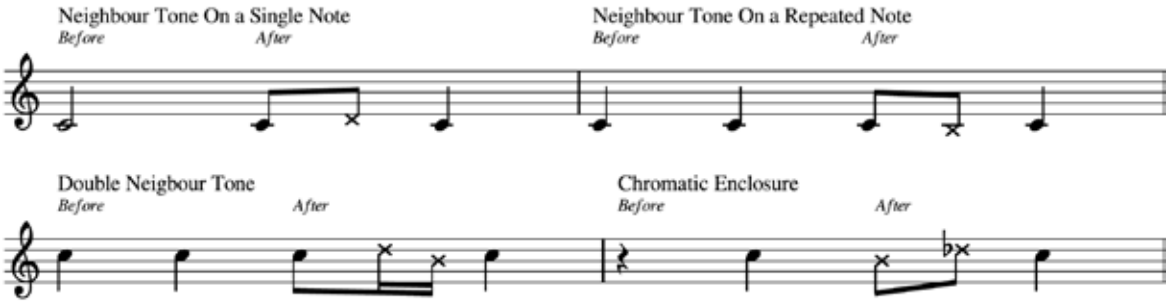
Soundbites 3.3

Passing tones create a greater amount of stepwise movement and speed up the rhythm of the piece. This can smooth out leaps in the melody, but can potentially remove the memorability and impact of larger intervals. Passing tones are a good fundamental way to vary a melody and increase the intensity of the melody, but, like all ornaments, have the potential to remove its recognisability.

NEIGHBOUR TONES (ALSO KNOWN AS AUXILIARY TONES)

A neighbour tone is a note added a step above or below the note in the melody that returns to the same note. It can be used when a note is repeated in the melody or can just be added to a note that is on its own. This can be made a double neighbour tone by moving both a step above and below (or below then above) the melody note before returning to it. Like passing tones, neighbour tones occur on an unaccented part of the bar. Something similar to a double neighbour tone called chromatic enclosure is used in Jazz and involves playing the notes a semitone above and a semitone below the targeted note.

Soundbites 3.4



Neighbour tones have a reasonably small impact on the recognisability of a melody. Because the original melody note is present on either side of the ornament, it feels more like an addition to the melody as opposed to a critical change.

TRILLS

A trill is a rapid oscillation between two notes usually a tone or semitone apart. In Western notation, trills are signified by the letters **tr**. Technically speaking, trills are the rapid repetition of an upper neighbour tone, however, they are so distinct and commonly used that they have their own name. See how trills are notated as well as how it would actually be played in the example below:

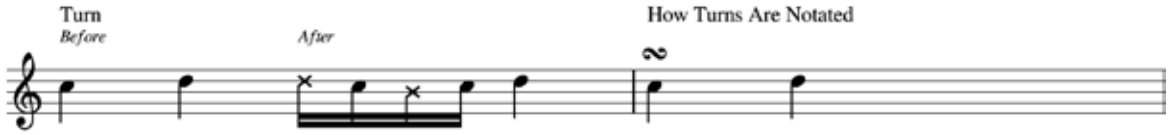
Soundbite 3.5

Trills have a variety of effects in different contexts. In Baroque music, for example, trills are often used before a cadence to emphasise that cadence further. Trills can also be used for textural purposes, filling in a lot of space without too much effort. Whilst trills do increase the rhythmic intensity when used because it is the rapid alternation between the melody note and another note, the original melody is usually still strongly evoked.

TURNS

A turn is a short phrase where the performer plays the note above the melodic note, the note itself, the note below, and then the note again. It is generally played quickly; however, its specific implementation will depend on the context. Like the trill, a turn is the name for a common and specific use of neighbour tones. See how it is notated and implemented below:

Soundbite 3.6

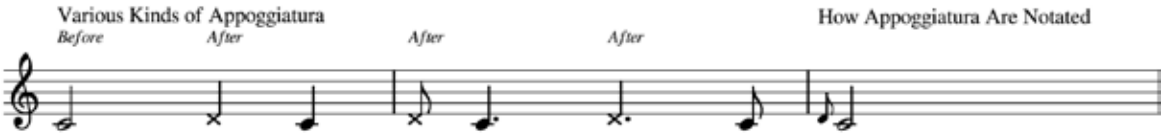


Turns, like neighbour tones and trills, generally have a minimal impact on the recognisability of the melody, simply functioning as “decorative” material. In certain genres of popular music a turn is used to evoke a sense of strong emotion and personal expression.

APPOGGIATURA

Aside from the turn, all of the ornaments discussed so far have been unaccented ornaments. This means the additional notes occur off the beat. There are, however, ornaments that occur on the beat. An appoggiatura is a note, usually a step above or below the melody note, that occurs on the beat where the melody note would usually be, before returning to the actual melody note. How long an appoggiatura is held for depends on context. Depending on how long the improviser wants to maintain the tension, an appoggiatura could be sustained for anywhere from a quarter of the original note value to three-quarters. Generally, the combined duration of the added note and the original note

will add up to the total value of the melody note before it was ornamented (e.g. if you add an appoggiatura to a note worth two beats, the appoggiatura might be one beat and the melodic note might be one beat).

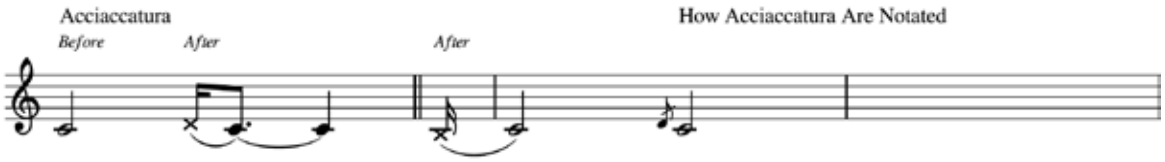


Soundbite 3.7

Where there are chords, appoggiaturas are generally used on notes that are chord tones (notes that match the underlying chord). This means that the note added to the melody will clash with the harmony before resolving to the consonant melody note. This creates a sense of tension and release, and to Western ears, is often evocative of greater emotional intensity. Because appoggiaturas are particularly emphasised, too many can destroy the recognisability of the original melody.

ACCIACCATURA/GRACE NOTES

Like appoggiatura, acciaccatura are notes added in front of the melody note. The difference, however, is that they are played very quickly. Unlike an appoggiatura, acciaccatura can either occur on the beat before quickly resolving to the melody note or just before it with the melody note still on the beat. Acciaccaturas are often also called grace notes, although, technically speaking, grace notes can refer to both acciaccaturas and appoggiaturas. The articulation on an acciaccatura is often slurred, smoothly transitioning from the ornament to the melody note. See the acciaccatura in action below:



Soundbite 3.8

Because acciaccaturas are held for a short amount of time and, depending on the context, may also be unaccented, they have little impact on the recognisability of the melody. They often end up being a colourful addition to the melody for the sake of interest.

BENDS

Whilst not possible on all instruments, bends involve smoothly moving from one note to the next. On fretted string instruments, this is done by pushing or pulling the string up or down, changing the pitch until it reaches the desired note. On fretless string instruments, the musician only has to slide their hand up or down the fingerboard. On woodwind and brass instruments, bends are achieved by adjusting the embouchure (how the mouth connects the instrument's mouthpiece to the player's air supply). Bends often start a step or less away from the melody note and quickly bend the pitch to the melody note, similar to an acciaccatura. How quickly the performer slides the note to that of the melody note depends on convention and personal taste. Bends can also be used to exit a note of the melody, often as a way of smoothly transitioning to the next note. Listen to this in action in the accompanying soundbite.

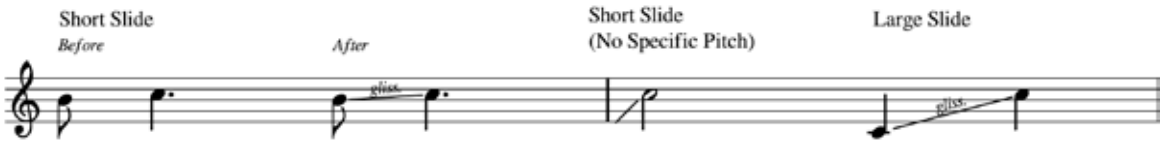
Soundbites 3.9

Like most ornaments, bends and inflections can create a greater sense of emotion and drama. They are often used in Blues, for example to create a sense of sadness and emotion. This really depends on the style and tempo being played, however. If not employed carefully, bending can make the music sound out of tune, especially when overused.

SLIDES

Slides involve moving across multiple notes in the same direction in one smooth movement. On fretless string instruments, the process is the same as bending, the player simply slides their finger across the fingerboard. Vocalists can also smoothly slide across multiple notes. On fretted string instruments, most woodwind and brass, and pitched percussion instruments, musicians perform a slide by quickly and smoothly passing through multiple notes. Slides can be used to connect two notes already present in the melody, however, like bends, fast slides into or out of a note are often used as ornamentation. They are generally notated with a straight or wavy line between the first and last note of the slide. See how slides are used in the following examples:

Soundbites 3.10



Short slides are often used in a similar way to bends, adding a greater sense of emotion or expression without fundamentally changing the melody. Part of this is because on many instruments, like fretless strings and vocals, they are the same thing! However, slides across large intervals have a different effect. Often, large slides create tension as the listener is anticipating when the slide is going to stop. As a result, these large slides are useful to increase the intensity of an improvisation at a climactic moment.

VIBRATO

Vibrato involves rapidly bending the melody note up and down. Like bends, this is only possible on instruments that allow the performer to smoothly move between notes. How far the note is bent up and down will vary depending on the situation and personal preference of the artist. Usually vibrato bends the note up and down by less than a semitone; however, it is also possible to do a wide vibrato that occurs over a semitone or more. Listen to the accompanying soundbite to hear how vibrato sounds.

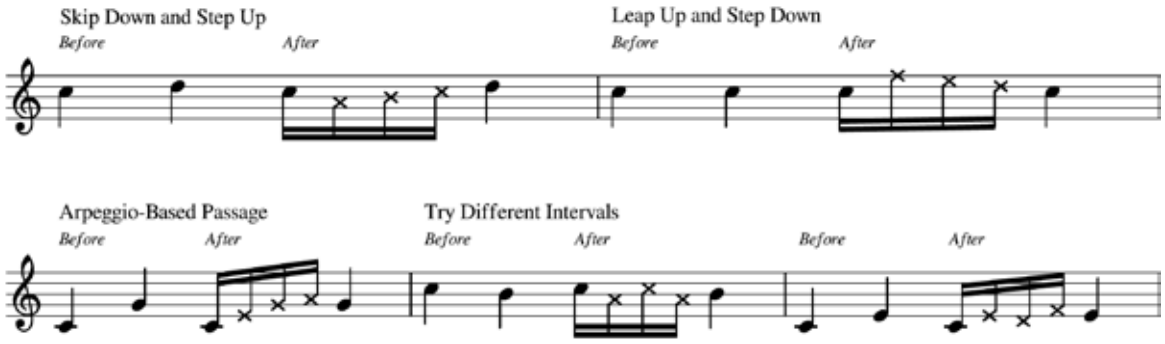
Soundbites 3.11

Like bends, vibrato is an ornament that does not affect the character of the melody too much, but evokes a sense of emotion and personal expression. Vibrato is usually used on longer notes because there isn't enough time to perform it on each individual note of a fast passage and it tends to sound better over longer notes anyway. Further, wide vibrato is generally seen as evoking a greater sense of emotional intensity; however, it can also be a purely aesthetic choice, like with the Jazz clarinetist Sidney Bechet. Be careful of using vibrato too frequently and with too much width, as, like bends, it can make the music sound out of tune and lose its expressive effect.

ORNAMENTAL PASSAGES/RUNS

Not every note or series of notes used as ornaments is easily classified in the categories above. It is also possible to simply place a series of notes into an existing melody as a means of ornamentation. Experiment with different rhythms and different intervals to find interesting and satisfying passages. This freedom does not mean you should play without any thought, however. As always, consider the effect of what you are playing and what is appropriate to the style and musical context.

See some examples:

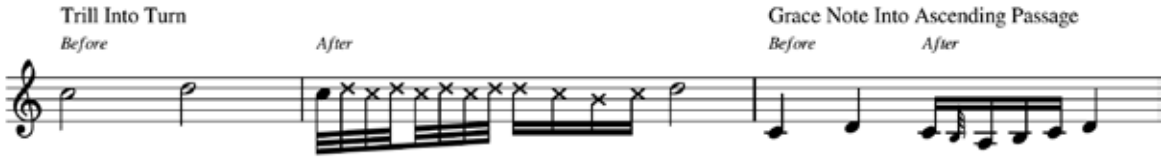


Soundbites 3.12

When improvising entire ornamental passages, it is important to consider the contour of the melodic line you are creating. If the pre-written melody is ascending and the passage you add is descending, then you may end up reducing the momentum of the overall melodic line. Similarly, adding a passage that uses a lot of leaps to a melody that is mostly step-wise may feel out of place. It is also important to remember the musical style you are playing and the context. A wedding singer might add a few stepwise runs in, whilst a Jazz saxophonist covering a song for artistic reasons might add various complex runs into their performance.

COMBINATION OF THE ORNAMENTS

It is important to note that there is no reason why the same note can't have multiple ornaments applied to it. You can trill before going into a turn, you can play a grace note that then goes into an ornamental passage. Combining ornaments is a good way to make the melody more interesting. At the same time, too many ornaments can not only make the melody note unclear but also make the music sound jumbled and confusing. Play around with combining ornaments to see which combinations you like best. Here are two examples:



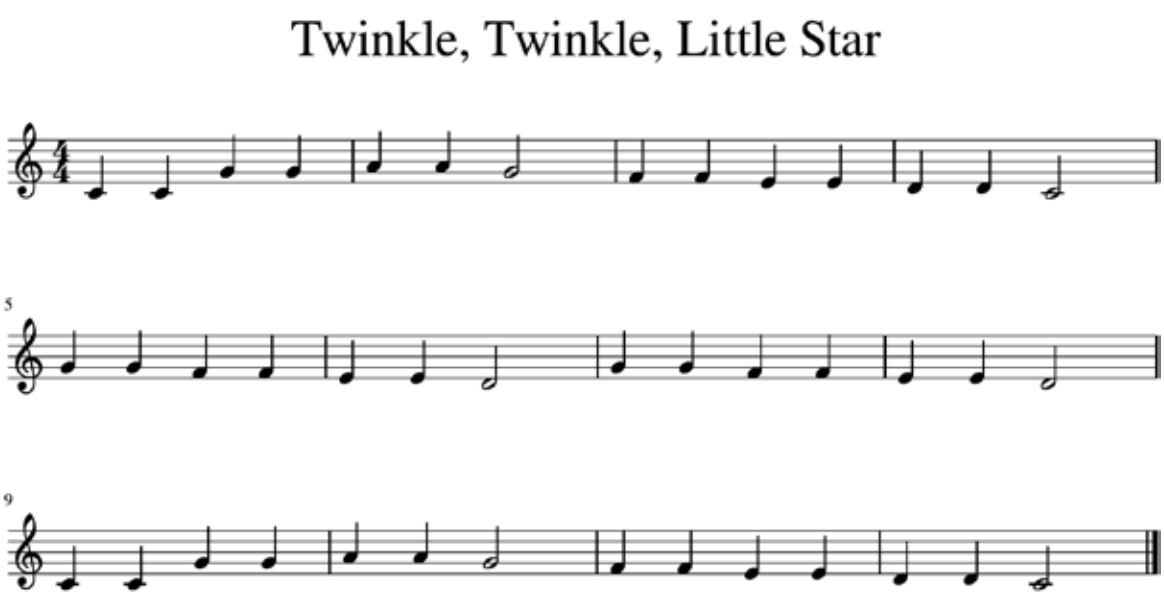
Soundbites 3.13

EXERCISE

Go through and play each of the types of ornamentation described above. Start by playing the examples that are written (where a specific example is given). Once you have done this, experiment with the ornamentation on different notes. For ornamentations that connect two different notes (like passing tones and ornamentation passages) choose two notes and use ornamentation to connect them. Be sure to try combining different kinds of ornamentation and see what you can create!

ORNAMENTATION IN PRACTICE

It is time to apply ornamentation to an actual piece of music. Here is the melody of 'Twinkle, Twinkle, Little Star':



Soundbite 3.14.1

EXERCISE

Play the melody of 'Twinkle, Twinkle, Little Star' on repeat, ornamenting it with passing tones and neighbour tones (page 35). Listen to how your additions change the melody and what parts of the melody are most improved by the additional notes. Continue until you feel reasonably comfortable with passing tones and neighbour tones.

EXERCISE

Repeat the above exercise, this time using trills and turns in addition to passing notes and neighbour tones. Think about how often you add trills and turns, ensuring the melody does not become too messy.

EXERCISE

Play the melody of 'Twinkle, Twinkle, Little Star' on repeat, this time using appoggiatura, acciaccatura, bends, slides, and vibrato to ornament it. As with before, listen to the effect you are creating and consider the information given on page 36 to page 38. Be wary with how often you use bends, slides, and vibrato, ensuring that the melody does not begin to sound out of tune.

EXERCISE

Play through the melody on repeat again, this time using any of the ornaments, including ornamental passages and combinations of ornaments. Limit yourself to three ornaments at a time, and try to experiment with those three for a while before changing to three others. Listen to the effect that your ornamentation has on the music.

EXERCISE

Once you are comfortable using ornamentation, take away the three ornament limit and try again. Listen to yourself, and think about how your ornaments change the music. Just because you are no longer limited in what ornaments you can use does not mean you should use every ornament that you can. Avoid making the melody too messy and ensure that the final result is still satisfying to listen to.

EXERCISE

Choose a few melodies of your own, and try ornamenting them. As always, listen to yourself and think about the effect you are creating.

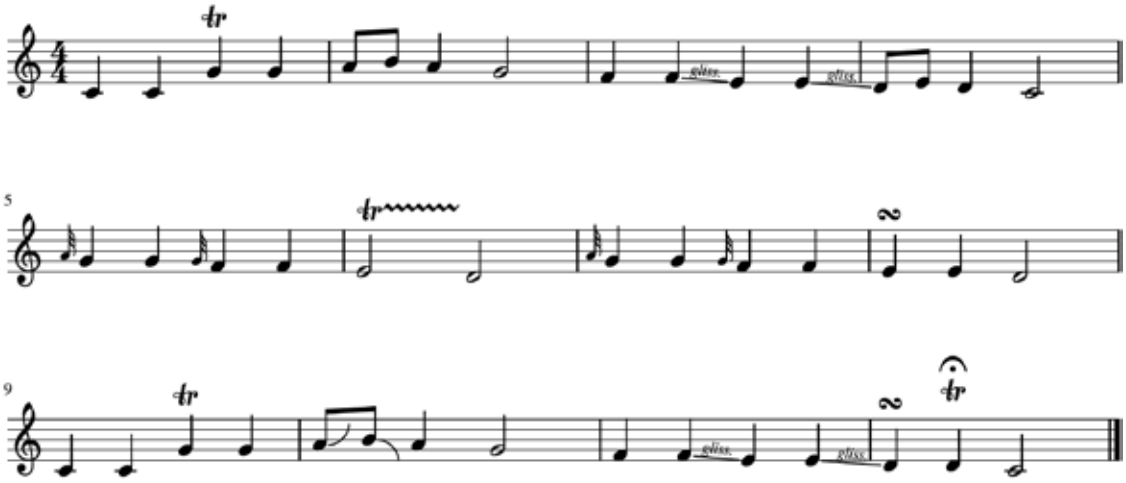
USING ORNAMENTATION EFFECTIVELY

Now that you are adept at using ornaments, it is time to think about how you can create specific effects with your ornamentation. Below are three possible effects that ornamentation can have on a melody.

I. "THE MELODY IS STILL RECOGNISABLE BUT MADE MORE COLOURFUL OR INTERESTING"

For this approach, you will not want to use ornaments too frequently. You will also want to use ornaments that do not overly change the melody. Try and use mainly trills, turns, bends/inflections, acciaccatura, and some neighbour tones. Use appoggiaturas and passing tones sparsely and be particularly wary about where you add an entire passage if at all. This being said, adding a whole passage when there has otherwise been very little ornamentation can be effective if used at the climax of the improvisation. Experiment with the different sounds you can create. Exactly how you use these ornaments will also depend on the style and context of what you are playing.

Soundbite 3.14.2



This approach is probably the more common way to use ornaments, and is seen sometimes when playing the head of a Jazz composition (especially slower tempo ones such as ballads), when covering a song in popular music, and in certain kinds of early Classical music performance practices (such as a de capo aria). It is a way to make a melody more interesting and put your personal spin on it and is especially useful when repeating a melody or when playing a melody that is particularly well known.

Listen to the theme (0:00-0:50) and the second variation (1:40-2:31) of Mozart's 12 variations on Twinkle, Twinkle, Little Star.

'TWINKLE, TWINKLE, LITTLE STAR' - MOZART'S 12 VARIATIONS

Clip 1.3.1

While pre-composed rather than improvised, it demonstrates ornamentation really well.

TIP

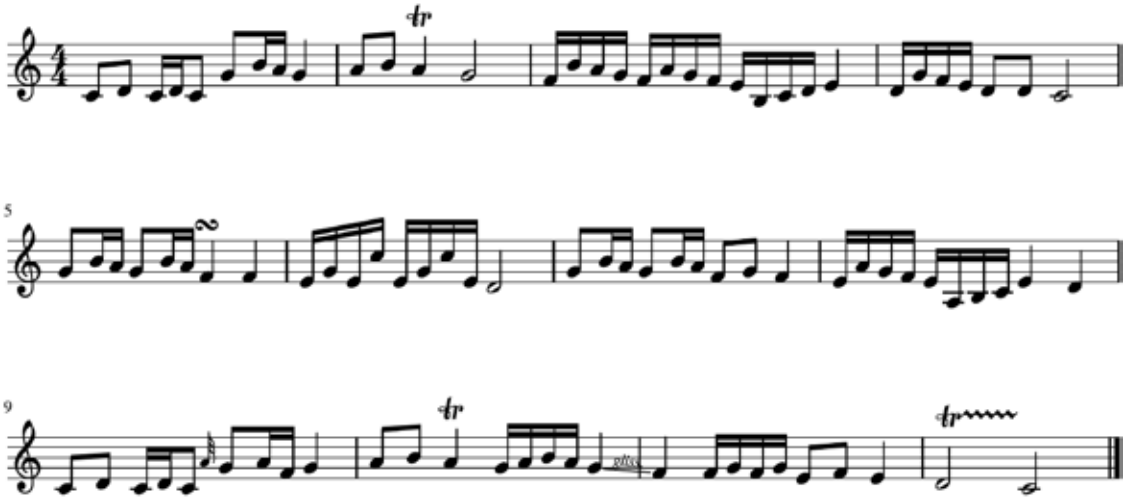
Listen out for the melody in these examples not the accompaniment.

EXERCISE

Ornament the melody of 'Twinkle, Twinkle, Little Star' or one of your own choosing with the intent of adding colour and interest while maintaining its recognisability.

2. "THE MELODY IS STILL SOMEWHAT RECOGNISABLE, BUT THE NEW VERSION HAS BEEN MADE INTO YOUR OWN"

Because the goal here is to keep the melody somewhat recognisable, you should be careful about how many ornaments you add, especially around critical parts of the melody. Things that make a melody particularly characteristic are notes at the start and end of phrases, characteristic leaps, and changes in the direction of the melody. As a result, avoid over-ornamenting these parts of the melody and maintaining the contour of the melody with any ornaments you add. To build upon the melody in a personalised way use passing tones, neighbour tones, trills, turns, and additional passages. Other ornaments can also be used to colour the melody even further, however, as already stated, be wary of adding too many ornaments to any one point of the music.



Soundbite 3.14.3

This approach is less common but still a useful way to make the melody more interesting. If the same melody is repeating multiple times, such as with a theme and variations, this method is an excellent way to continue varying the material. This approach to ornamentation is also good for increasing the intensity of the music and is useful when being applied at the climax of an improvisation.

Listen to final variation (11:10-12:36) of Mozart's 12 variations on Twinkle, Twinkle, Little Star.

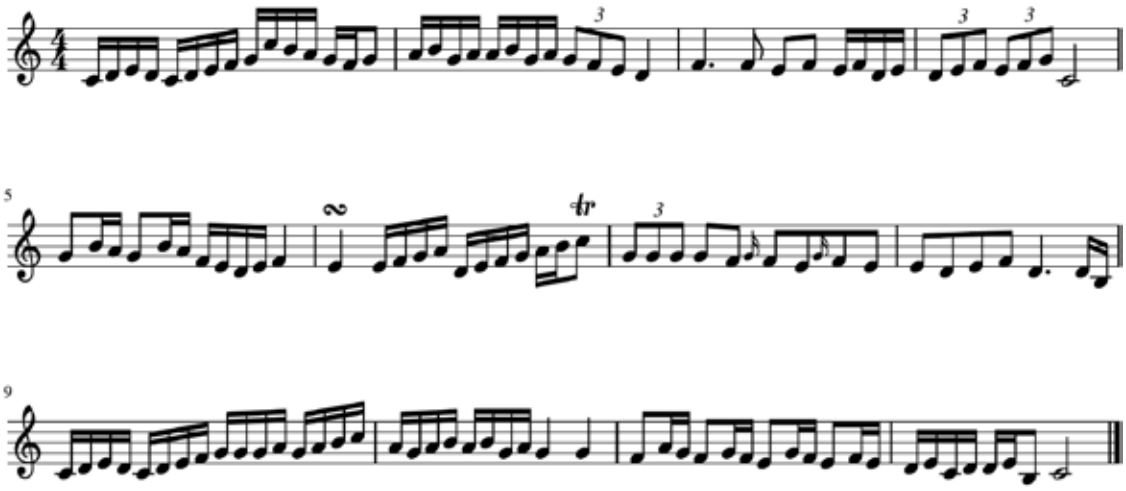
EXERCISE

Ornament the melody of 'Twinkle, Twinkle, Little Star' or one of your own choosing with the intent of keeping the melody recognisable but making it your own.

3. "THE ORIGINAL MELODY IS A BASIS FOR YOUR IMPROVISATION BUT NO LONGER RECOGNISABLE"

This approach is not about augmenting existing material to make it more interesting. Instead, it is about creating a completely new improvisation whilst still having a base to work from. If this is the effect you are trying to achieve, it is important that the new music you create is still satisfying. The existing melody will give you an existing structure and shape for your improvisation, but you still have to make the music you create engaging to listen to. If you want to get particularly creative, you need not even follow the original rhythms of the melody, using just the notes as the basis for the improvisation. Use any combination of ornaments you like, however, try not to use so many that the music becomes a mess. Experiment with this until you find you are improvising music that is enjoyable for you to play. See an example below:

Soundbite 3.14.4



This approach is most likely to be used to inspire an improvised solo, such as in Jazz improvisation. The entire melody does not necessarily need to be used either. It is also used in theme and variations where the composer or improviser is not worried about whether the original theme is recognisable or not.

Listen to first variation (0:50-1:40) of Mozart's 12 variations on Twinkle, Twinkle, Little Star.

EXERCISE

Ornament the melody of 'Twinkle, Twinkle, Little Star' or one of your own choosing with the intent of using it as a basis for an entirely different sounding piece of music.

NOTE

These approaches are just three common ways of using ornamentation, but don't feel like you have to fit your use of ornamentation into one of these categories every time. Ensure that your choices of ornamentation are right for the musical context you are playing in, as well as your personal artistic preferences.

USING ORNAMENTATION IN YOUR GENERAL IMPROVISATION

Ornamentation is useful for not only varying existing melodies but for making your improvisations more interesting in general. Sometimes when improvising, you may decide to repeat a particular phrase or lick. In these cases, ornamentation is a great way to make each repetition interesting and simply provides more options with your improvisation.

EXERCISE

Improvise a short four-bar melody in C major. Remember the melody that you create and then repeat it three times, ornamenting it each time. Ensure you ornament it differently each time. Once you are satisfied, improvise a new four-bar melody and repeat the process. You can make this a group exercise by teaching a friend or teacher your four bar melody and then taking turns playing ornamented versions of it.

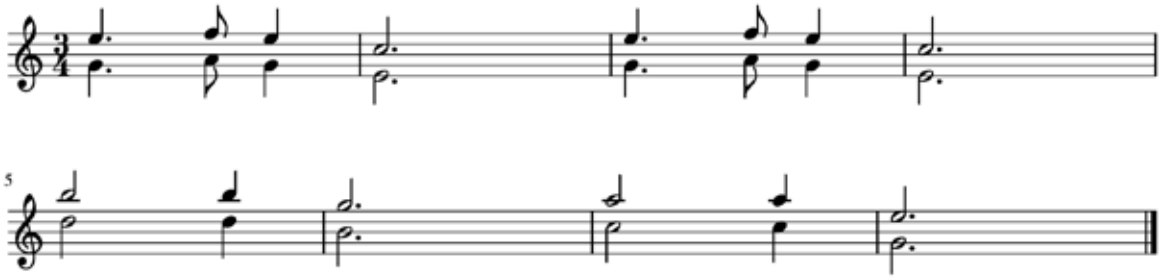
EXERCISE

Begin improvising. Occasionally repeat small fragments of your improvisation, but with ornamentation. This is a good way of making the improvisation more memorable (because repetition creates memorability), and it also makes it easier for you to improvise because you do not need to come up with new material continuously.

TWO PART HARMONY

The word harmony has different meanings depending on how it used. One common use of the word harmony refers to multiple notes played at the same time as chords (something discussed in detail on page 56). The definition of harmony we are talking about in this section is when two or more melodies are played at the same time and interact with each other in different ways. These two parts may be two separate instruments or two melodies played on the same instrument (such as a melody in each hand on a keyboard). See this two-part harmony on the Christmas carol "Silent Night" as an example:

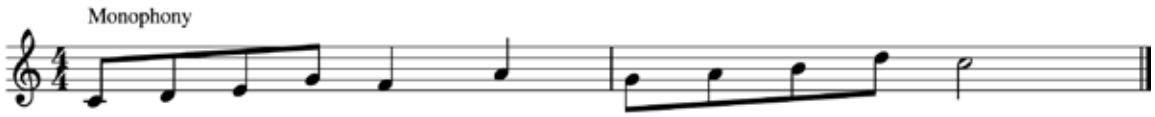
Soundbite 4.1



Two-part harmony is common in various genres of music, ranging from the Bach inventions of the Baroque period to the two and more part vocal harmonies of Rock and Pop. Before we explore two-part harmonies further, we need to briefly discuss the four types of textures possible in music:

MONOPHONY (OR MONODY)

Monophony refers to music that is made up of a single melodic line. This can be a single instrument or voice, but it can also be multiple instruments or voices playing the same melody.



Soundbite 4.2

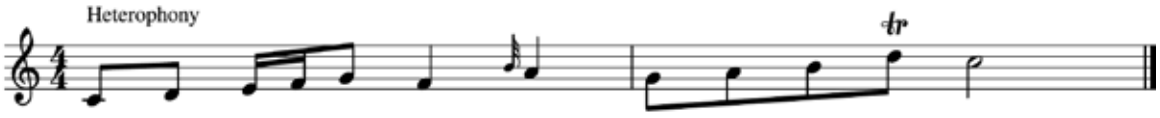
INVITATORIUM: DEUM VERUM' BY ETIENNE DE LIEGE

Clip 1.4.1
0:00-0:42

HETEROPHONY

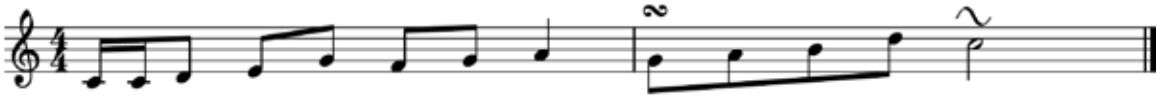
Heterophony occurs when two instruments or voices are playing essentially the same melodic line at the same time, but with minor differences between the two voices. For example, if two singers sang the same melodic line, but both added different ornaments, it would create a heterophonic texture.

Line One



Soundbite 4.3

Line Two



Compare the vocals and the sarangi (bowed string instrument) in this performance of a Khayal in Raag Multani by Pandit Venkatesh Kumar.

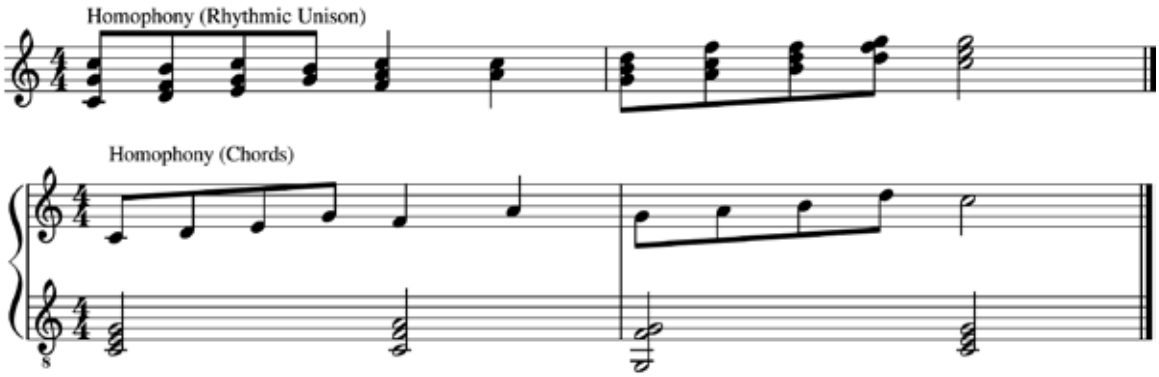
KHAYAL IN RAAG MULTANI BY PANDIT VENKATESH KUMAR

Clip 1.4.2

HOMOPHONY

Homophony is when multiple voices or instruments play in a way that creates harmony and melody. Harmony, in this context, means that the combination of voices forms chords that accompany the melody. There are two main types of homophony, one is multiple instruments/voices playing in the same rhythm but using different notes so that they form chords (like a choir), the other is when one or more instruments/voices play or outline chords and another one or more instruments/voices play the melody. Think of someone singing and playing the guitar, the guitar plays the chords and the voice plays the melody.

Soundbite 4.4.1



Soundbite 4.4.2

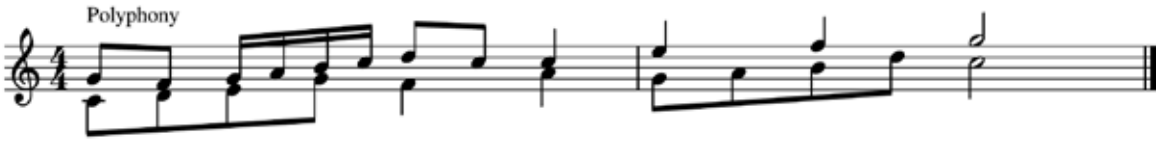
'Castle on the Hill' by Ed Sheeran demonstrates the chord and melody approach to homophony.

'CASTLE ON THE HILL' BY ED SHEERAN

Clip 1.4.3

POLYPHONY

Polyphony is when there are multiple independent melodic lines occurring at the same time. It happens when it is not possible to distinguish which melodic line is the main melody and which is providing the accompaniment. Some ways to do this are to ensure that each line has different rhythms, different notes, a unique melodic shape, and contrary motion (contrary motion and contrasting rhythms are discussed over the next few pages).



Soundbite 4.5

Listen to a variety of Bach's inventions and hear how both the right and left hand of the piano could be described as the "main melody"

BACH'S INVENTIONS

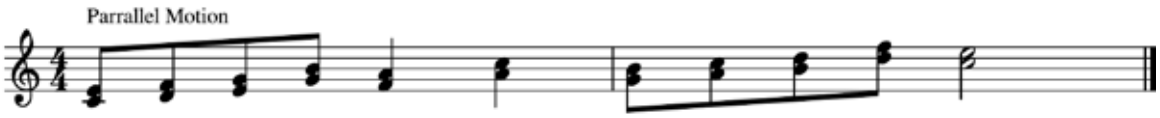
Clip 1.4.4

MOTION BETWEEN TWO PARTS

How the two melodies move in relation to each other will have a significant impact on the effect created by the two-part harmony. There are four ways of classifying motion between two parts based on which direction they travel (these categories also apply when it is more than two-part harmony).

PARALLEL MOTION

This is when both melodic lines move in the same direction by the same interval. The interval does not have to have the same quality though. For example, if one melody ascended a minor third and the other a major third, it would still be considered parallel motion because both are thirds.

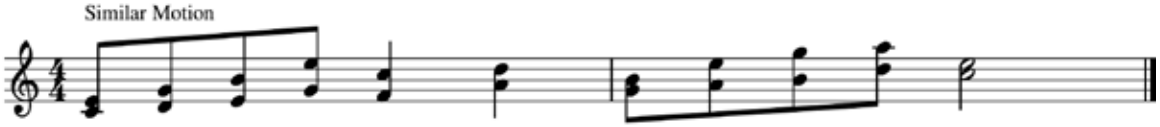


Soundbite 4.6

Parallel motion is a good way of having both melodies blend together, making it difficult for the average listener to hear the melodies as two separate lines. The combined melody will often sound richer and more colourful, and still sound like a unified melody. Parallel motion is a common way of harmonising in Popular music and is an important part of harmonisation in most forms of Western music.

SIMILAR MOTION

Similar motion occurs when the two melodies move in the same direction but not by the same interval. For example, one melody may ascend by a third whilst the other ascends by a fifth.



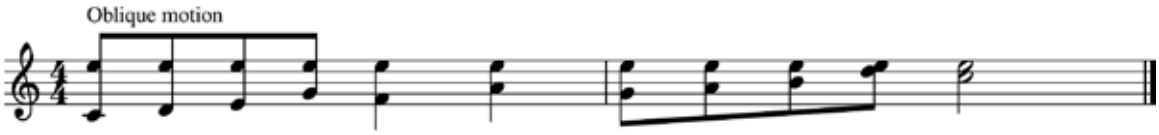
Soundbite 4.7

Similar motion gives the melodies some independence without making them sound completely disconnected. Similar motion is important if you want multiple melodies (even more than two) to form certain chords and create different sounds because if you only ever move in parallel motion the interval between the melodies will always be the same.

OBLIQUE MOTION

Oblique motion occurs when one melodic line moves and the other stays the same.

Soundbite 4.8

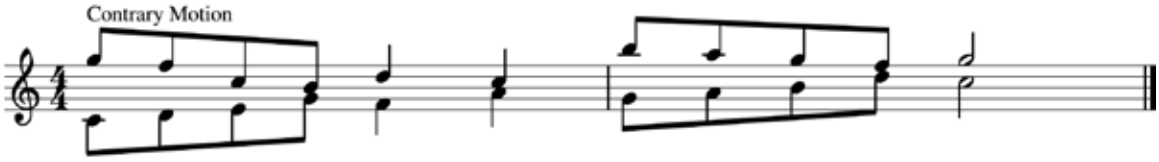


Oblique motion is generally used fairly sparsely in a piece of music. Because one line is not moving at all, it can make the music feel too static if used too much. It is, like similar motion, necessary for making sure the multiple melodies combine to form certain chords or for emphasising and creating tension.

CONTRARY MOTION

Contrary motion is when the two melodies are moving in different directions. The melodies can change by the same interval (like parallel motion) or by a different interval (like similar motion). For example, one melody may ascend a major third whilst the other descends a major third.

Soundbite 4.9

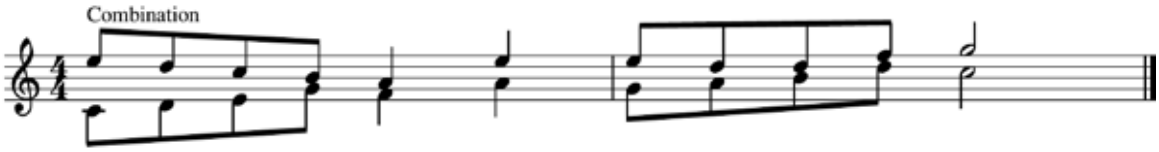


Contrary motion is good for maintaining a sense of motion and giving each melody independence. It is also essential for ensuring that multiple part harmonies can create certain chords. Using a lot of contrary motion, as well as giving the second melody different rhythms is a great way to make the second melody sound like an independent line, such as in polyphony.

COMBINATION OF DIFFERENT KINDS OF MOTION

The majority of the time improvisers and composers will use multiple different kinds of motion in the same passage of music. Similar and oblique motion, in particular, are rarely used on their own. A combination of different kinds of motion can be seen in the below example:

Soundbite 4.10



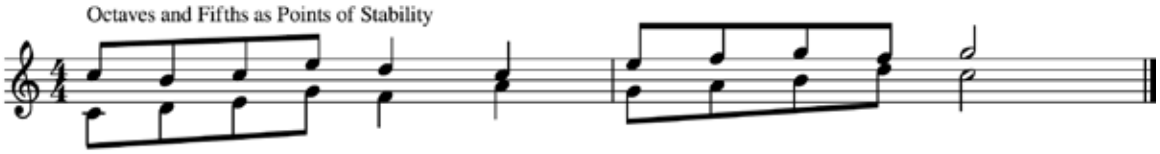
The overall effect when combining different kinds of motion will depend on the exact way that they are combined. Using multiple types of motion makes the music feel more organic as the effect created by the music is constantly changing and less likely to become repetitive.

PITCH AND RHYTHM IN TWO-PART HARMONY

Aside from the kind of motion used between the two melodies, there a variety of other components to consider when harmonising a melody. One of those is the interval between the two melodies.

PERFECT FIFTH AND PERFECT OCTAVE

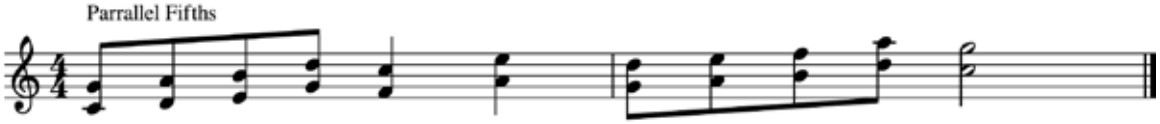
Perfect fifths and perfect octaves are very stable and consonant sounding (pleasant sounding) intervals. Because of this stability, when harmonising a melody in a Classical style, fifths and octaves are generally only used at the beginning or end of a piece or at points of rest within the composition. By moving from the stability of the perfect fifth/perfect octave to other more dissonant intervals, and then back again, it creates a feeling of tension and release, which is integral in Classical music.



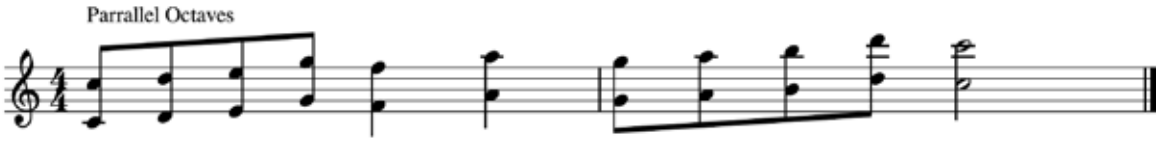
Soundbite 4.11.1

Harmonising an entire melody at the interval of a perfect fifth/octave is also possible. This will make the initial melody sound thicker and more powerful, but does not add much extra colour. Additionally, if parallel motion is used, the two melodies will have little independence and blend together particularly easily.

Look and listen to the below examples to see this:



Soundbite 4.11.2

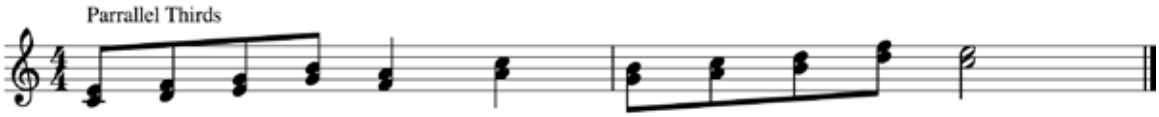


Soundbite 4.11.3

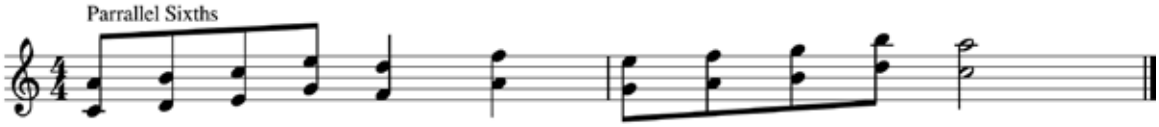
THIRDS AND SIXTHS

Thirds and sixths generally add colour to the piece whilst still sounding consonant. They are probably the most common way of harmonising a melody. If you want to make a melody sound more colourful or vary the line on a repeat, harmonising in parallel thirds or sixths will work well. Whether you use thirds or sixths makes a difference mainly in the separation of the two lines. Because the two notes are a short distance apart for thirds, harmonising two lines in parallel thirds tends to sound thicker and more blended. When parallel sixths are used, the greater separation between the two lines means that you can more clearly hear the two separate melodies. The choice of interval really depends on the effect you are creating, as well as the context of the music. Here is an example of harmonising with parallel thirds and sixths:

Soundbite 4.12.1



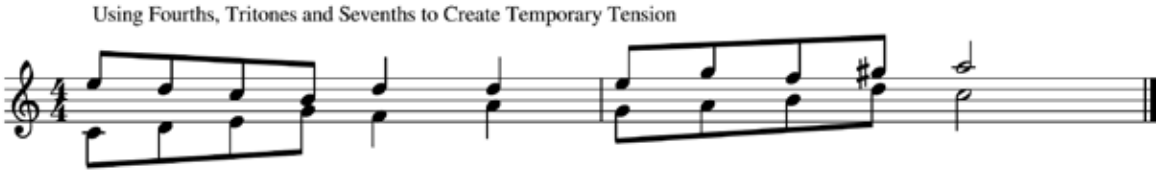
Soundbite 4.12.2



OTHER INTERVALS

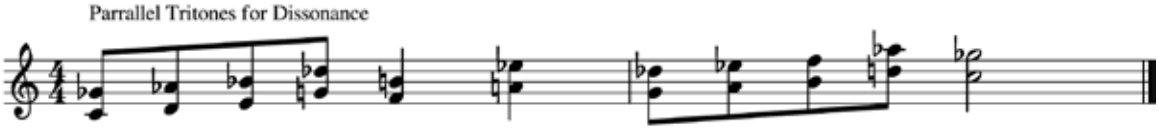
Seconds, fourths, diminished and augmented fifths, and sevenths are generally either used as temporary dissonances to create tension before resolving back to one of the more stable intervals or, in some style-specific circumstances, used extensively to create a particular sound. In most genres of Jazz and Classical music, these intervals are used in the first way. Depending on the style of music, there are different conventions for how these intervals should resolve and how frequently they should be used. Learn the conventions of your style, and consider things like the shape of each melody and where it is going when resolving these intervals. See an example of using these intervals as temporary tensions below (the tensions have crossed noteheads):

Soundbite 4.13.1



In many cases, these more dissonant intervals are used to create a particular sound. For example, in heavy metal or avant-garde music, parallel tritones or minor seconds are used to create a dark and dissonant sound.

Soundbite 4.13.2

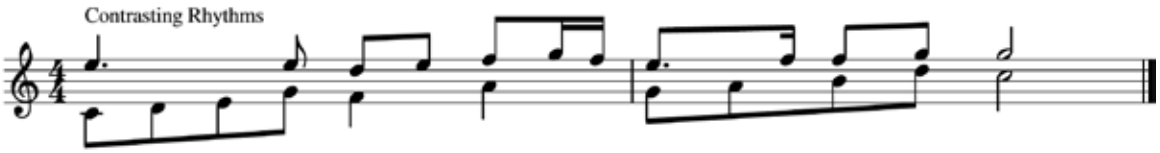


RHYTHMIC UNISON

Rhythmic unison is when two or more parts, even those using different notes, play with the same rhythm. In two-part harmony, this helps the two different melodies to blend together and feel like a single thicker part. How this choice is combined with the type of motion and interval choice will determine the specific effect. All of the examples given thus far (except for the polyphony example) have used rhythmic unison.

CONTRASTING RHYTHMS

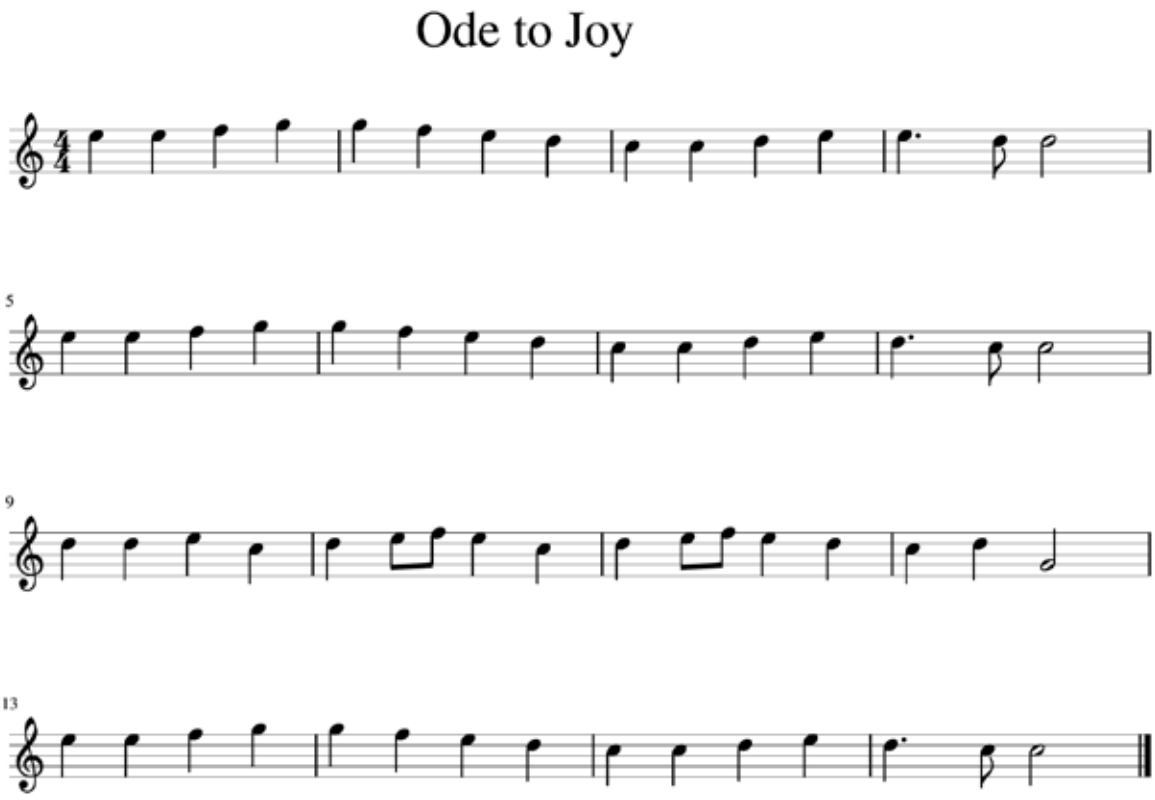
Using mostly different rhythms between parts gives each line a greater degree of independence, making them easier to differentiate from each other. This approach is used in forms of Classical polyphony such as motets and fugues, as well as other forms of polyphony like early Jazz. This independence is usually reinforced through other means such as using contrary motion and using a variety of intervals between the two parts. It is important to find a balance between having rhythms that differentiate the lines but still work with each other to create music that sounds coherent. A common way to achieve this balance is to have each part fill in the gaps of the other so that only one is being focused on at any one time. See and hear the example below for a demonstration of this:



Soundbite 4.14

IMPROVISING TWO-PART HARMONIES

Here is an excerpt of the famous melody 'Ode to Joy', part of the final movement of Beethoven's Ninth symphony.



Soundbite 4.15

EXERCISE

Working with a partner, a recording of yourself, or the soundbite, improvise a harmony line over the melody of 'Ode to Joy.' Start by improvising in rhythmic unison with the 'Ode to Joy' melody and trying out the four kinds of motion, as well as a combination of them. Experiment with playing different intervals between both parts. If playing with a partner, swap roles every few play-throughs of the melody.

EXERCISE

Repeat the above exercise, this time using contrasting rhythms as you harmonise. Continue until you are confident with improvising a harmony line over a melody.

TIP

Try and listen to how it sounds as you use different kinds of motion, different intervals between the two parts, and rhythmic unison vs. contrasting rhythms.

EXERCISE

Now that you are confident, let's try to create a few specific effects using all of the information above. Improvise the second line in the following ways, ensuring you spend a good amount of time on each until you can reliably create the intended effect:

- *Have the second melody thicken the first: Play with parallel fifths and octaves in rhythmic unison.*
- *Have the second melody add colour but still blend with the main melody: Play with parrallel thirds and sixths in rhythmic unison.*
- *Create some independence between the melody line and harmony line: Play in rhythmic unison with the melody but create a variety of intervals between the two parts. You will need to use parallel, similar, and oblique motion to achieve this.*
- *Create independence between the original melody and the harmony line: Using a variety of intervals, improvise a harmony line that is mostly in contrary motion with the original melody. Do not let the harmony line and original melody cross. Ensure that the the harmony line always stays higher (or lower) than the melody. Use parallel, similar, and oblique motion to ensure they do not cross.*
- *Create independent lines that alternate between tension and stability: Start on a perfect fifth or perfect octave. Using mostly contrary motion between both parts, create points of tension with seconds, fourths, tritones, and sevenths; points of mild release with thirds and sixths; and points of strong release (such as during significant pauses or cadential points) with perfect fifths or perfect octaves. Like before, do not let the two melodies cross.*
- *Create a more dissonant or colourful sound: Experiment with more dissonant intervals to see what sounds you can create. Don't worry as much about it being pleasant, this is a chance to experiment with what is possible. Rhythms can be in unison or contrasting, and you should experiment with different kinds of motion.*

EXERCISE

Once you are confident improvising a harmony line over the melody of 'Ode to Joy,' try improvising both the main melody and the harmony line. As before, this can be done with a partner, by recording yourself and playing over it, or by yourself if your instrument allows it (e.g. on a keyboard). Choose a scale or key beforehand. Use your ears and listen to what you and your partner are playing. Try to work out what kind of motion and intervals are being created and how your rhythms are interacting. Because it is wholly improvised, it will be difficult to create the specific effects described above. Aims for these more general goals.

- *Play with a blended sound: As best as you can, use parallel motion, rhythmic unison, and intervals like thirds, sixths, and perfect fifths/octaves.*
- *Play with independence: As best you can, use contrary motion as much as possible, with parallel, similar, and oblique notion thrown in as well. Like before, try to use mainly thirds and sixths, and reserve seconds, fourths, tritones, and sevenths for points of tension. Because this is wholly improvised, don't expect to be able to do this perfectly. Use your ears and do the best you can.*
- *Experiment with the different sounds possible: Experiment with different intervals, unison or contrasting rhythms, and the different kinds of motion. Explore and see what sounds you can make with wholly improvised two-part harmony.*

USES OF IMPROVISING TWO-PART HARMONY

In practice, performers need not restrict themselves to the effects discussed here. These are just some common ways to use two-part harmony. The ability to improvise two-part harmonies is useful in many situations. In improvised duets, for example, the techniques described in this section can be used to improvise melodies that are independent but are still interesting and coherent. As another example, if you add an extra instrument to a band and they don't have a part they can harmonise a line played by someone else. These skills are particularly useful for bands that play Popular music or Jazz, bands that are unable to rehearse every song in detail such as cover bands or wedding bands, or performances where the audience is able to request songs for which the ensemble has not worked out a definite arrangement. These skills also apply to solo improvisations. Keyboard instrumentals and instruments that can easily play two or more simultaneous melodies can play these two-part harmonies as a performance in of itself. Additionally, the harmonisation and variation of a melody that can be created with two-part harmony is very important for organ improvisers.

IMPROVISING HARMONIC ACCOMPANIMENT

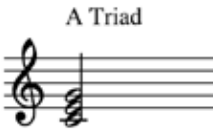
As previously discussed, harmony refers to multiple notes playing at the same time. We have so far discussed two-part harmony, but most of the time it is actually three or more parts being played together. When dealing with three or more notes at the same time, there are certain conventions for which notes sound pleasant when combined with each other. This usually means having each note a third apart from one another to form what we call chords. In Medieval and Renaissance choral music, chords were thought of as multiple individual melodies played at the same time. As history progressed, however, composers started thinking of chords not just as the combination of multiple melodies (horizontally), but as a stack of notes to be played on their own, such as on a keyboard (vertically).

CHORDS

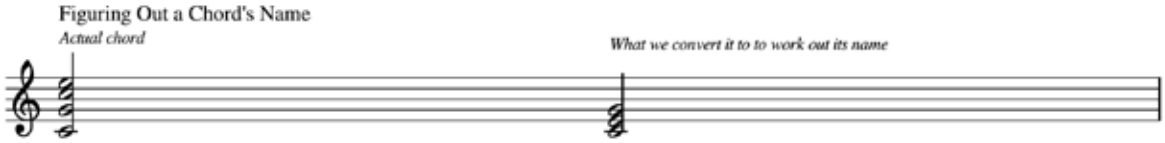
In most forms of Western music, chords are identified by a letter (e.g. C) and a quality (e.g. major or minor). The most common type of chords is a triad. These are three note chords stacked in thirds.

For example:

Soundbite 5.1

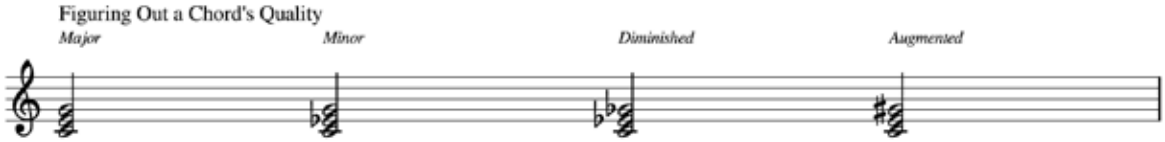


The notes of triads can be doubled (the same note played higher or lower) and the order of the notes can be moved around, but we still work out the name of the chord by seeing what notes it has when we stack it as thirds.



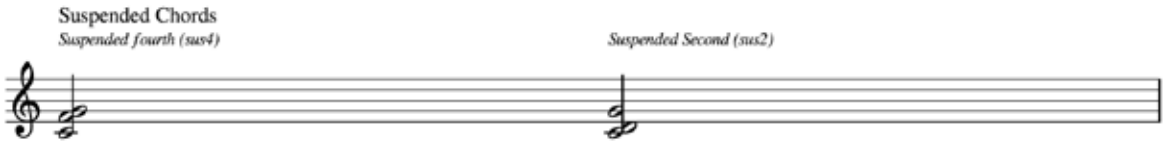
The quality of a chord is determined by the intervals between the different notes and its name is determined by the lowest note of the chord, known as the root. The second note in a chord is known as the third, because it is a third above the root. The third determines whether the chord is major or minor. The final note is the fifth, because it is

a fifth above the root. It differentiates diminished and augmented chords from major and minor chords. Here is a diagram to show this. Notice how the minor chord has a flattened third, the diminished chord is like minor with a flattened fifth, and the augmented chord is like a major chord with a sharpened fifth:



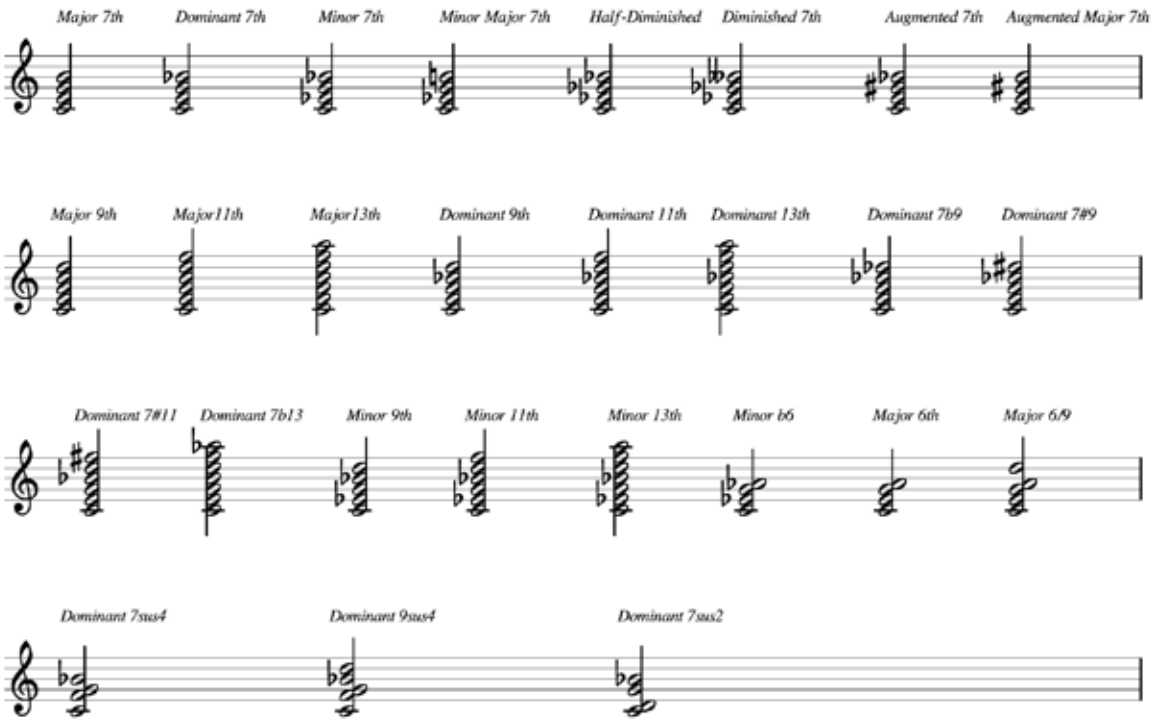
Soundbites 5.2

Not every chord is made up of a root, third, and fifth though. The third can be changed to the second or fourth to make what is called a suspended chord. Suspended chords are neither major nor minor as they do not have a third to identify it. In Classical music, the suspended note (called the suspension) usually resolves back to the third, however, in Jazz and popular music, this chord is frequently used without resolution. Of the two kinds of suspended chords, a suspended fourth is much more common. Here are examples of suspended chords:



Soundbites 5.3

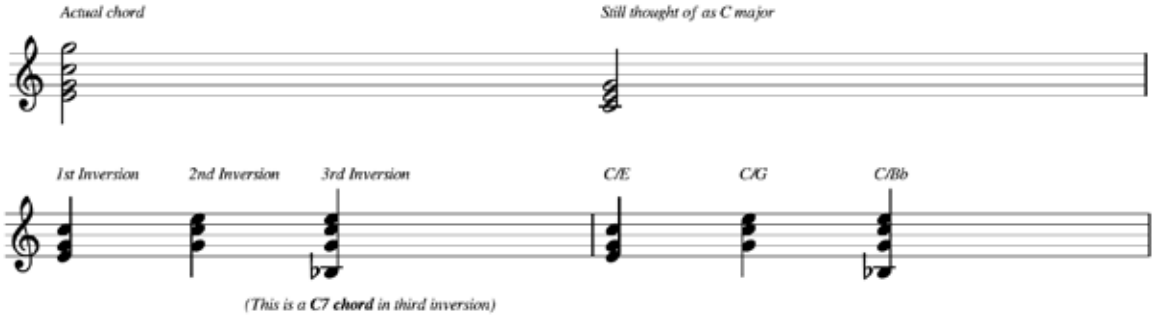
Triads can be extended by adding a fourth, fifth, or even sixth and seventh note above the fifth. These chords are used extensively in Jazz, some styles of popular music, and later styles of Classical music, such as Romantic and 20th century music. Other kinds of music will use extended chords occasionally, such as more mainstream genres of popular music like Pop, R'n'B, Hip Hop, Soul, and more. See these different extended chords below:



Soundbites 5.4

Even if the lowest note of the played chord is not the root, we still stack the chord as a series of thirds and identify the chord based on the root once stacked this way. Cases where the root is not the lowest note of a chord are called inversions. What kind of inversion we are dealing with depends on what the lowest note is. For example, if the third is the lowest note it is a first inversion, while if the fifth is the lowest note it is a second inversion, and so on:

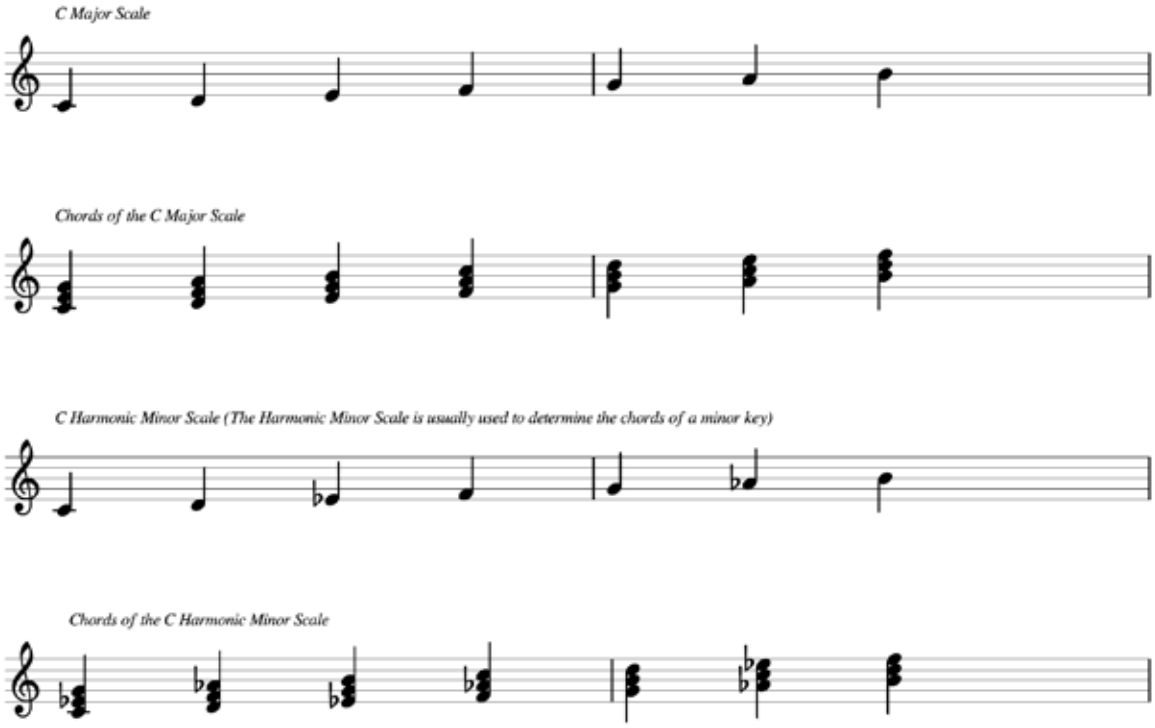
Soundbites 5.5



For Jazz musicians and performers of popular music, inversions are usually notated by having (1) the name of the chord, (2) a slash, and then (3) the name of the new bass note after the slash. You can see this on the right side of the above example.

When composing music that has chords, the composer will choose chords that fit the key of that composition. These chords are determined by stacking thirds on each note of the scale

Soundbites 5.6



Chords are not always fully notated. Often, a letter followed by a symbol is used to tell the performer what kind of chord needs to be played. This is common in many genres of Jazz and most types of Popular music. Here is a list of some of the most common ways to abbreviate each chord:

Major	*M (a capital M), maj, or Δ*
Minor	*m (a lowercase m), min, or -*
Diminished	*dim or o*
Augmented	*aug or +*
Half-diminished	*ø*
Suspended	*sus*
Dominant seventh	*7*
Major seventh	*M7, maj7, or Δ7*
Minor seventh	*m7, min7, or -7*
Diminished seventh	*dim7 or o7*
Augmented seventh	*aug7 or +7*
Half Diminished seventh	*ø7*

Further extensions just replace the 7 with the relevant number, as the lower extension are still implied. For example, a major ninth chord is M9, maj9, or Δ9.Where the further extension is altered (i.e. it is flattened or sharpened) the 7 is used, followed by whatever extension is being altered. For example, a dominant 7 chord with a flattened ninth is 7b9.

When suspended chords are extended, the symbol for the extensions comes first, then the type of suspended chord. For example, sus4 chord with a major seventh would be Δ7sus4.

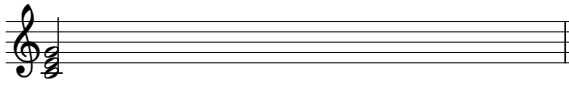
There are many other chords that exist, and there is a lot more to harmony than what has been outlined here. For more information on harmony see *Theory and Analysis* by Jane Piper Clendinning and Elizabeth West Marvin.

EXERCISE

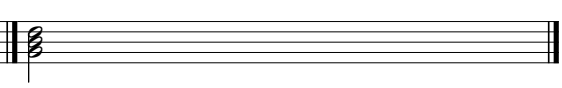
Time for revision. Using the information above, answer these questions:

Questions

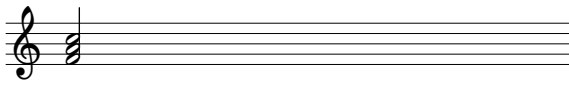
Question 1: What chord is this?



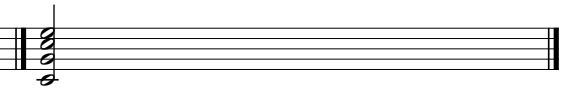
Question 2: What chord is this?



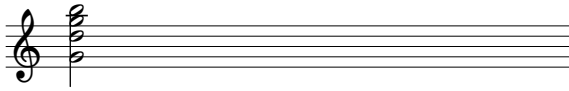
Question 3: What chord is this?



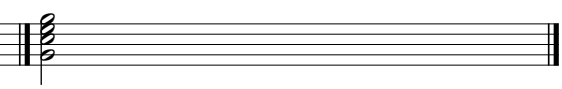
Question 4: What chord is this?



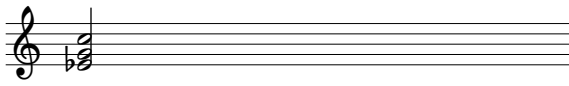
Question 5: What chord is this?



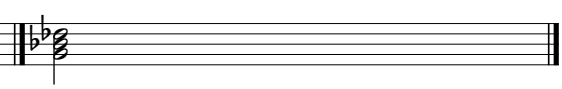
Question 6: What chord is this?



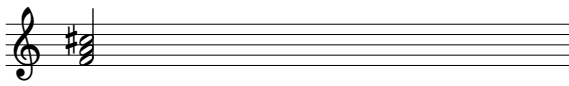
Question 7: What chord is this?



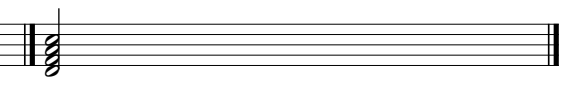
Question 8: What chord is this?



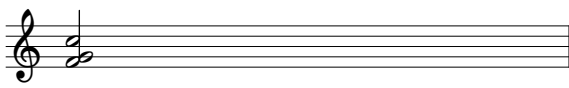
Question 9: What chord is this?



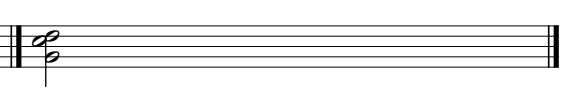
Question 10: What chord is this?



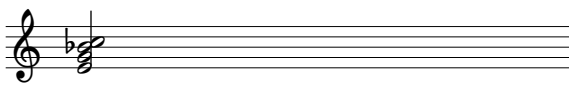
Question 11: What chord is this?



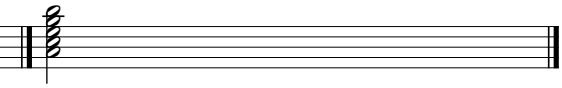
Question 12: What chord is this?



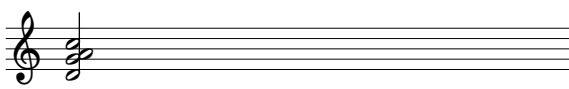
Question 13: What chord is this?



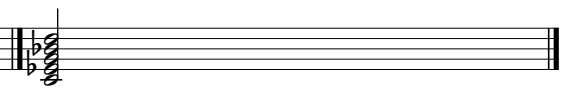
Question 14: What chord is this?



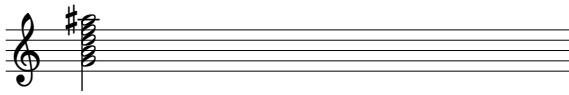
Question 15: What chord is this?



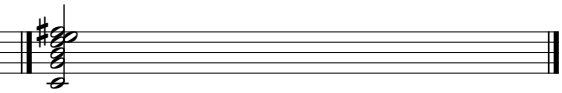
Question 16: What chord is this?



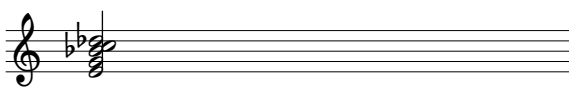
Question 17: What chord is this?



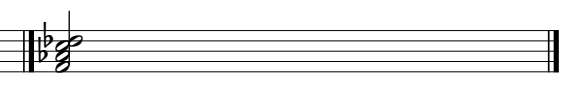
Question 18: What chord is this?



Question 19: What chord is this?



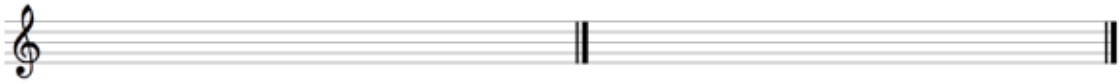
Question 20: What chord is this?



EXERCISE (CONT.)

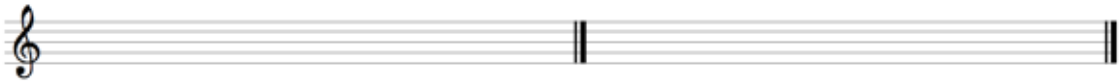
Time for revision. Using the information above, answer these questions:

Question 21: Play or write out a C chord



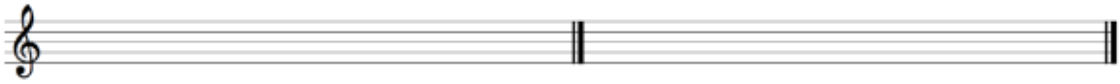
Question 22: Play or write out a Dmin chord

Question 23: Play or write out a G7 chord



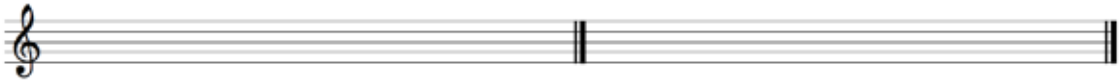
Question 24: Play or write out a C/E chord

Question 25: Play or write out a Gmaj7/D chord



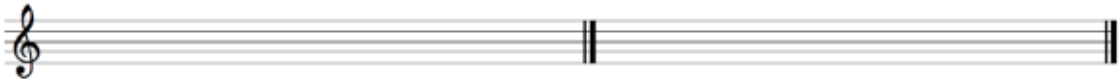
Question 26: Play or write out a Csus2 chord

Question 27: Play or write out a G7sus2 chord



Question 28: Play or write out a Dmin11 chord

Question 29: Play or write out a Caug7/E chord

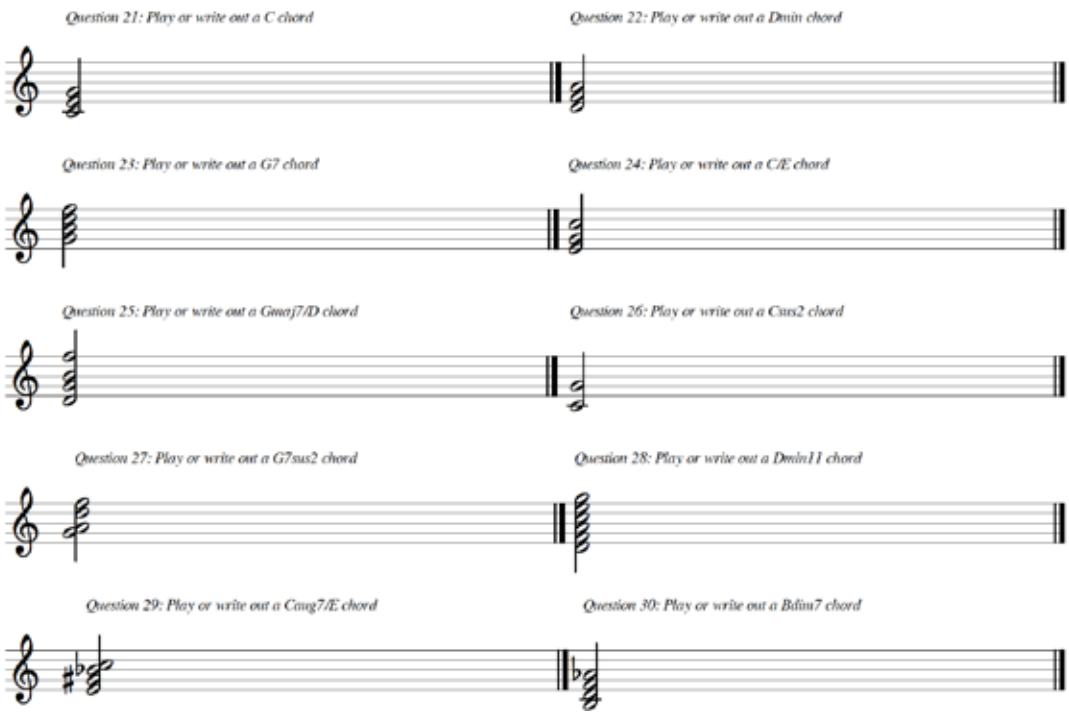


Question 30: Play or write out a Bdim7 chord

ANSWERS (PART ONE)

Question 1	*C*	Question 11	*Fsus2*
Question 2	*G*	Question 12	*Gsus4*
Question 3	*F*	Question 13	*C7/E*
Question 4	*C*	Question 14	*Am9*
Question 5	*G*	Question 15	*D7sus4*
Question 6	*C/G*	Question 16	*Cm9*
Question 7	*Cm/Eb or Eb6 (with no fifth)*	Question 17	*G7#9*
Question 8	*Gm*	Question 18	*Cmaj7#11*
Question 9	*F+*	Question 19	*C7b9/E*
Question 10	*Dm7*	Question 20	*Dbmaj7/F or Fmb6*

ANSWERS (PART TWO)

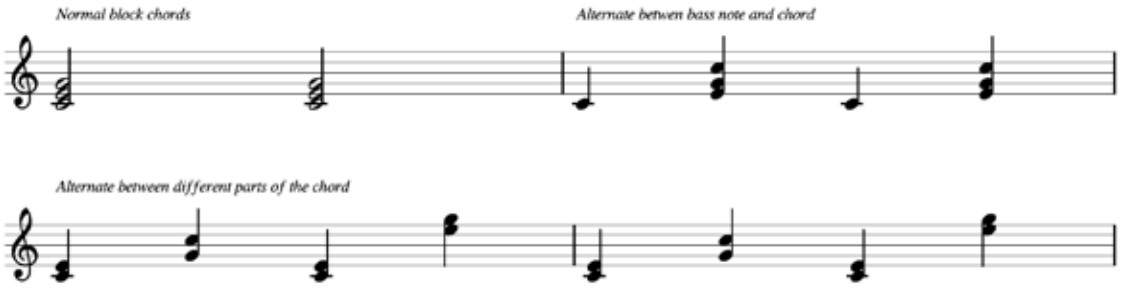


TYPES OF HARMONIC ACCOMPANIMENT

Accompaniment is often more than just playing these chords as stacks simultaneously. The four most common kinds of accompaniment patterns are block chords, arpeggios, a walking bassline, and riffs/ostinati.

BLOCK CHORDS

A block chord is probably what most people think of when discussing harmonic accompaniment. It involves the notes of the chord being played simultaneously. Block chords are used in most genres of Western music and are often employed improvisationally in Jazz and Popular music. There are many variations beyond just playing every note at the same time. In both Ragtime and Bossa Nova, the bass note alternates with the rest of the chord for example.



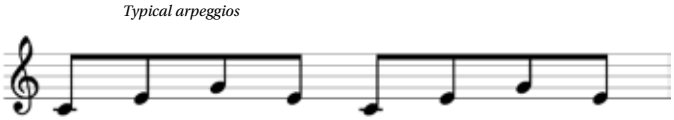
Soundbite 5.7.1

Soundbite 5.7.2

Soundbite 5.7.3

ARPEGGIOS

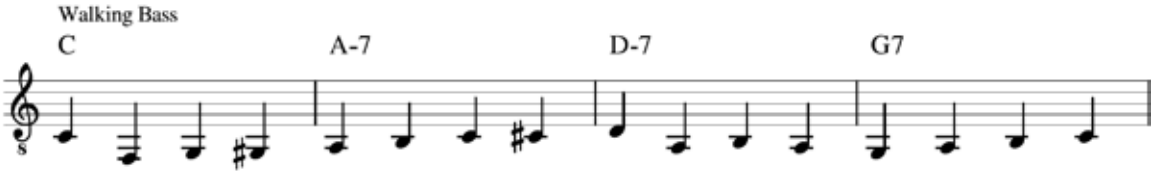
An arpeggio is when the notes of a chord are played one at a time, and is sometimes called a "broken chord". Whilst these notes can be given any rhythm, it is typical for the notes of the arpeggio to be played in a constant quaver rhythm. This helps the instrument create a sense that the chord is present even though only individual notes are being played at one time. When arpeggios are played on guitar or piano, an effort is made to ensure the notes of the arpeggio continue to sustain, either by using multiple strings on a guitar or by using the pedal of a piano. The order in which the notes are played depends on the style of music and the personal preference of the artist, but generally, the bass note or root of the chord comes first. See a typical arpeggio below (more ways of playing arpeggios are explored on page 76):



Soundbite 5.8

WALKING BASSLINE

Walking basslines are associated specifically with Jazz and are usually played on a double bass or an electric bass guitar. Walking basslines use a constant crotchet rhythm (one note per beat) to keep the beat and outline the chords simultaneously. They are somewhat similar to arpeggios in that they use the notes of the chord individually, but walking basslines are differentiated by their crotchet rhythm and their ability to use non-chord tones as well. Here is an example:

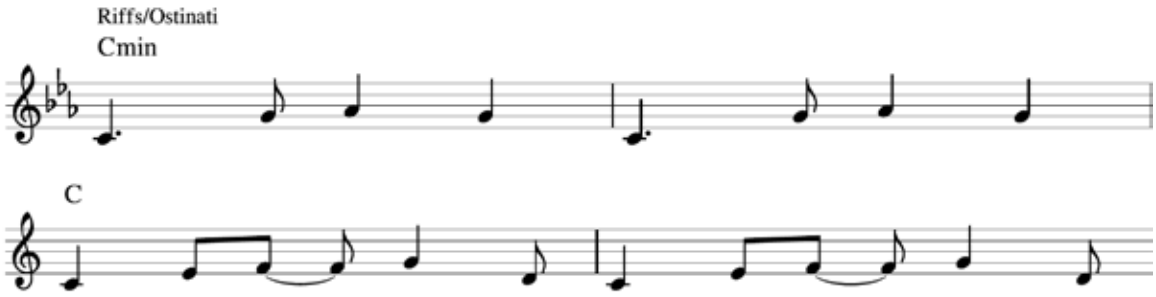


Soundbite 5.9

RIFFS/OSTINATI

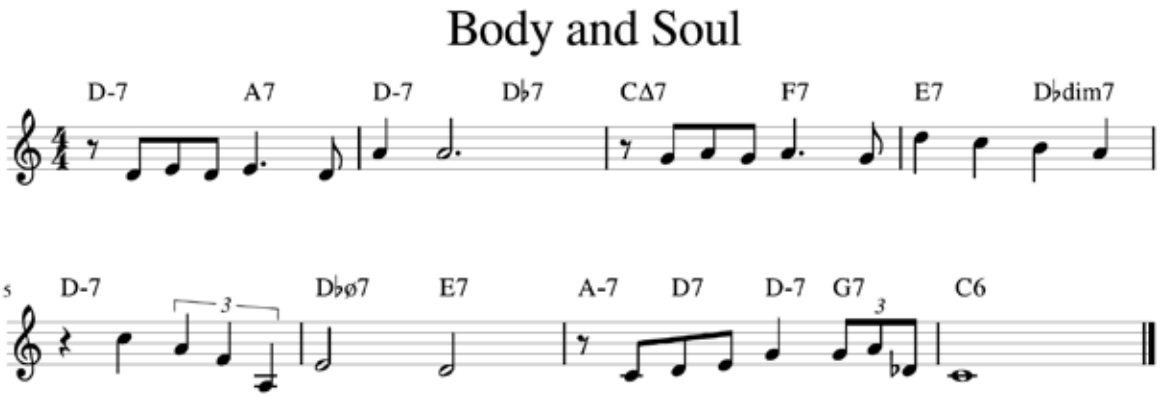
A riff or ostinato (ostinati is the plural of ostinato) is a repeated melodic pattern, generally used as a form of accompaniment. Ostinato is a technical term by music scholars, whilst riff is a colloquial term used predominantly for Popular music and Jazz. Ostinato also refers to repeated rhythmic patterns and harmonic patterns; however, we will mainly discuss the melodic variety here. Riffs and ostinati are used in many styles of music throughout the world, but when used in Western music it generally implies a chord, or at the very least a key centre. Riffs and ostinati, like arpeggios and walking basslines, will often be based on the notes of the chord; however, there is much greater freedom in choice of pitch and rhythm with an ostinato. See some examples below.

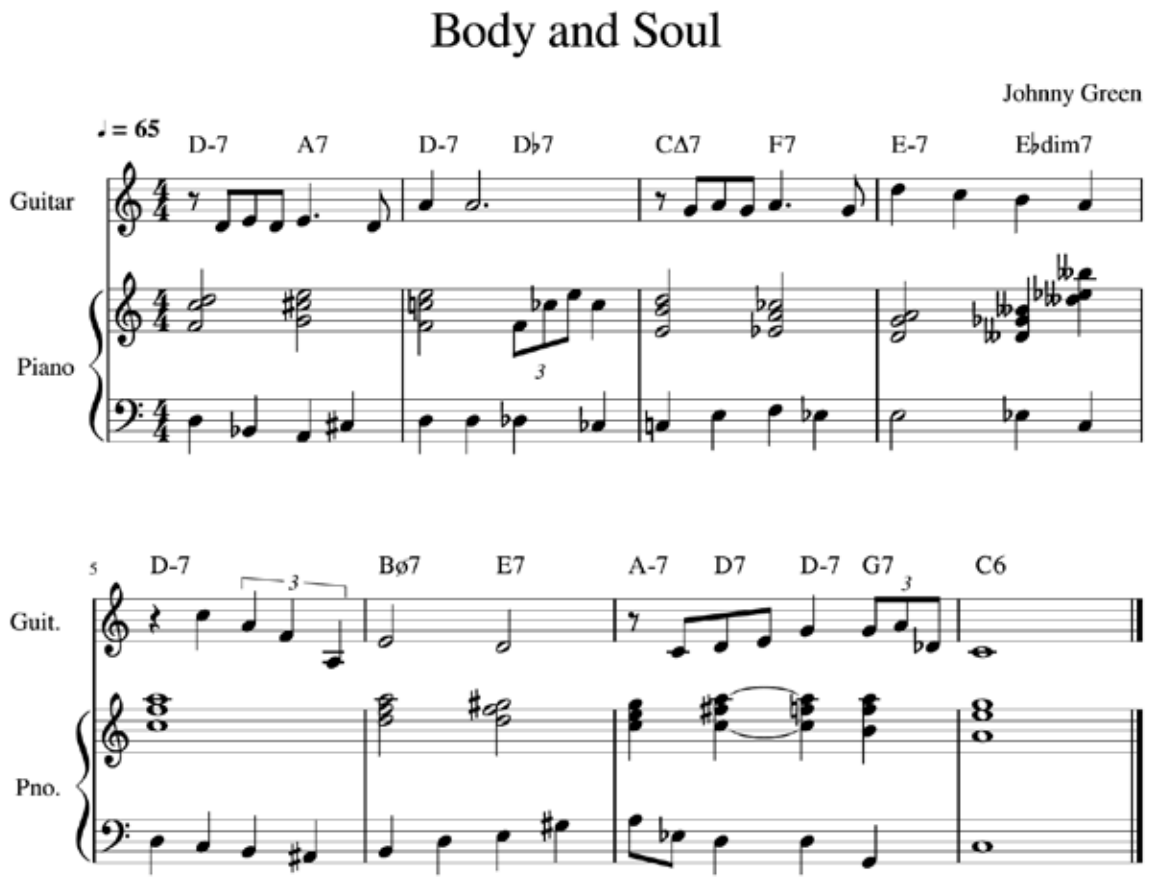
Soundbite 5.10



USING IMPROVISED ACCOMPANIMENT

There are many styles of music where the accompaniment is improvised. When notating Jazz and many kinds of popular music, often the melody is written out, and the chords are just given as symbols. When reading music written as a melody with chord symbols, performers are expected to either listen to a recording and work out how it was originally played or to just improvise the accompaniment themselves. Performers do this by bringing the given chords to life in one of the four ways described earlier. Compare the sheet music and what is actually being played in the below excerpt of 'Body and Soul':





Soundbite 5.11

BLOCK CHORDS

NOTE

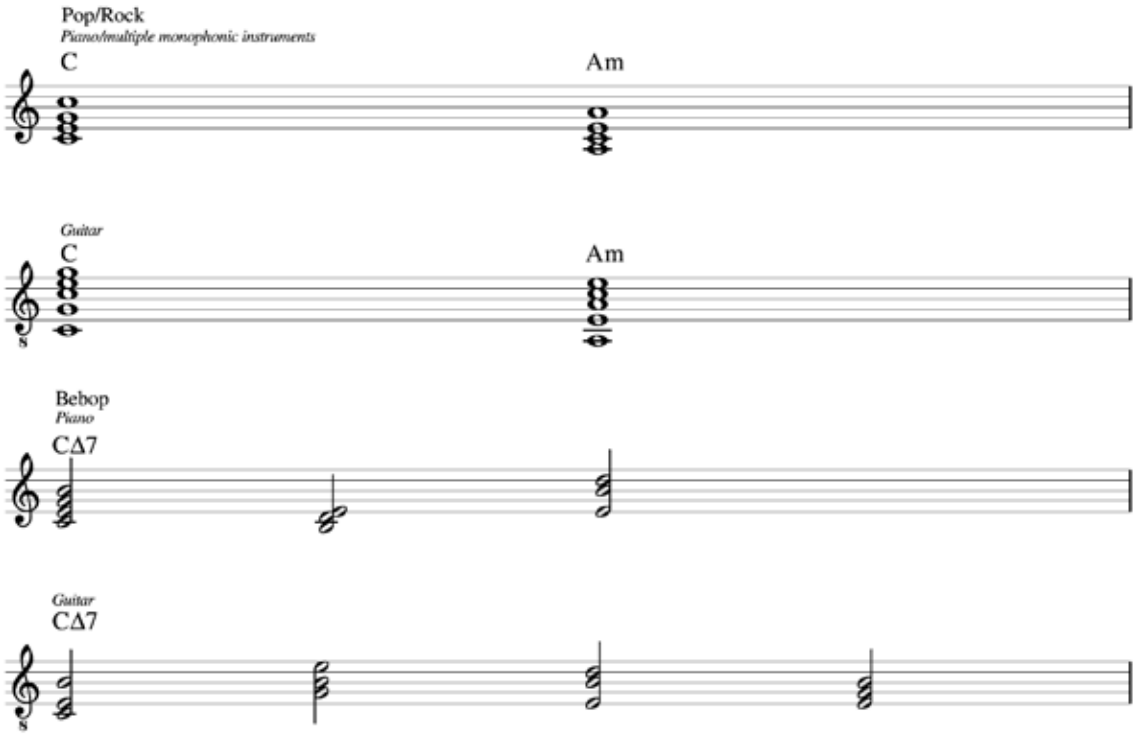
Because block chords require multiple notes to be played at the same time, not every instrument will be able to play them on their own. If you play a monophonic instrument (one that can only play one note at a time) and you have access to other people that also play monophonic instruments, try playing these chords as a group where each person plays one note of the chord. You can also try playing these block chords on a piano or guitar if you have access to one. If there is no way for you to actually play block chords in practice, still read through this section and listen to the different examples; it is still important information to know.

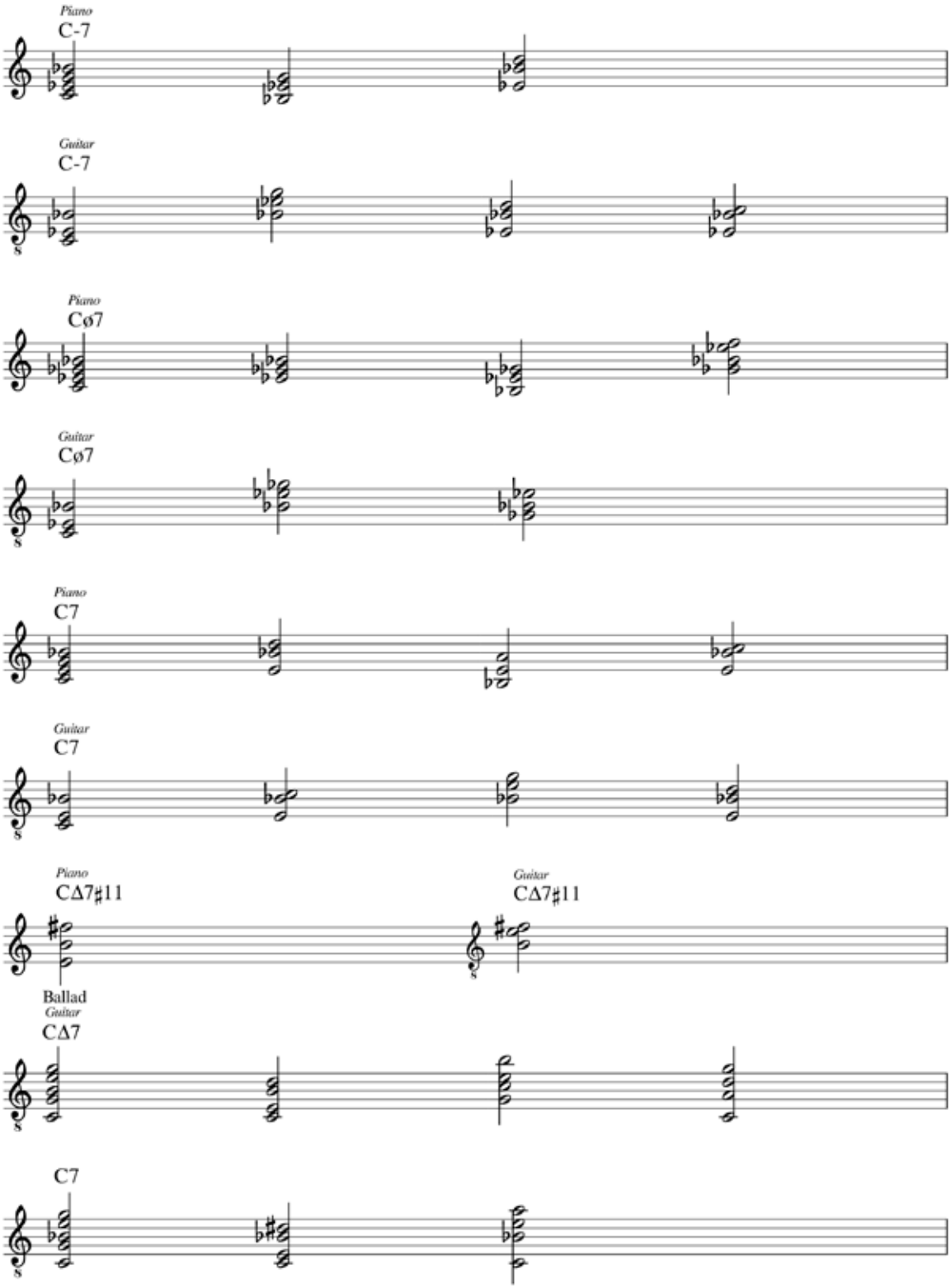
As stated earlier, block chords are when the notes of the chord are played at the same time. They are generally performed by a keyboard instrument, guitar, multiple monophonic instruments playing together, or multiple voices singing together. There are two main choices when improvising block chords: the voicing of the chord and the rhythm of the chords.

The voicing of a chord refers to how the notes of that chord are arranged when being played. As discussed on p. 41, the notes of the chord do not have to be played as a stack of thirds for it to still be considered that chord. For chords with multiple extensions, it is not necessary to include every single note in the voicing. In Jazz especially, performers will often omit the fifth or some of the upper extensions when a chord has a lot of notes in it.

Exactly how the chord is voiced will depend on the instrument being used, the style of music, and the effect being created. For example, because on piano your hand can only reach so far, it is better for the notes of the chord to be close to each other. On a guitar or other string instrument, however, the tuning of the strings will prevent the notes from being too close to each other. If multiple instruments are working together to form the chords (such as a choir or saxophone section), then the improvisers are restricted less by the limits of their instruments but by what voicings sound pleasant and are appropriate to the style. Some styles might expect the improviser to add additional extensions or even to remove certain notes from the chord. Here are some examples in different styles of music:

Soundbites 5.12





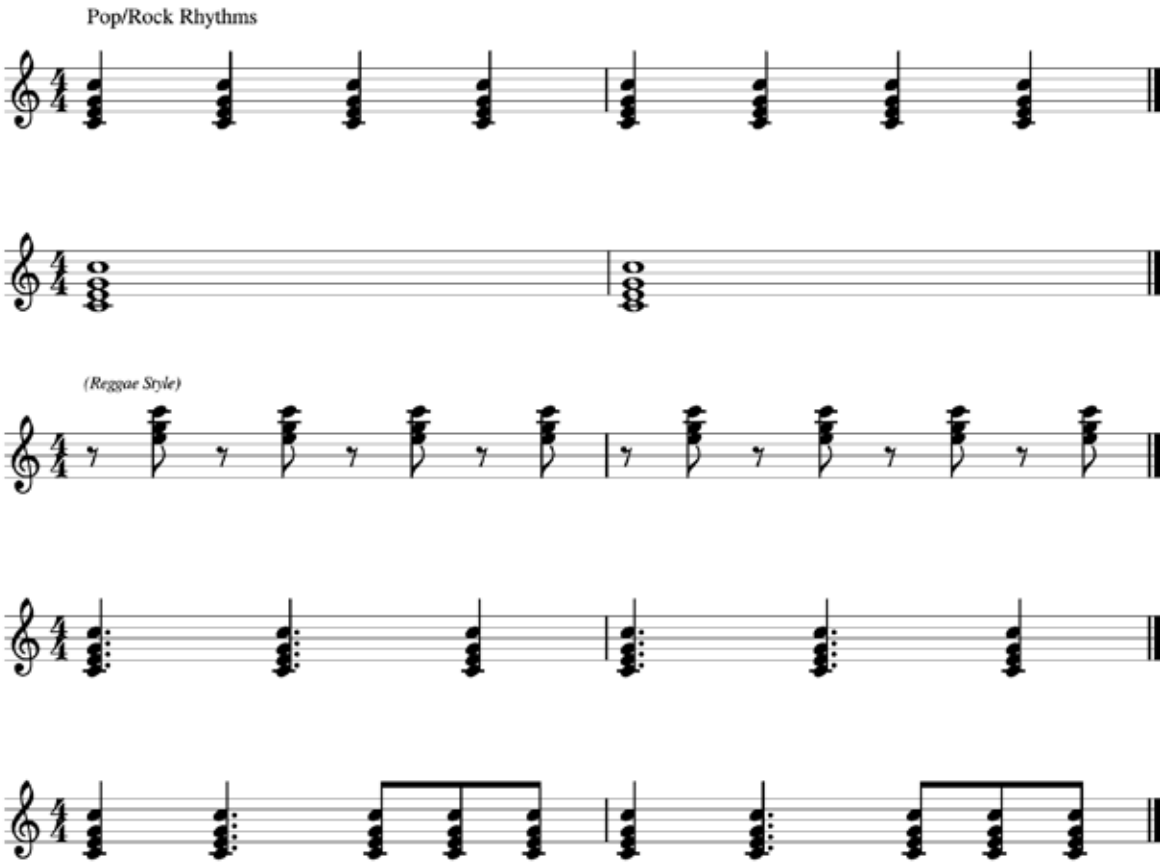
Soundbite 5.13.1

Soundbite 5.13.2

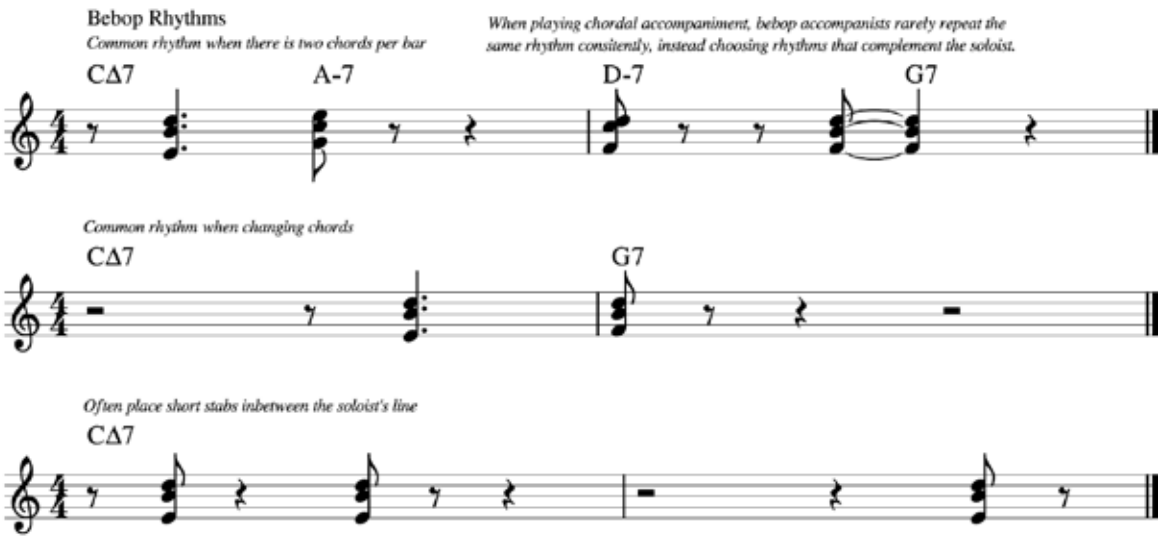
Soundbite 5.14

There is more to a chord than just its voicing though. Each style also has different expectations for the rhythm of the chord. Here are a few examples (only one voicing is used for each example, but you should use an appropriate voicing when actually playing in these styles):

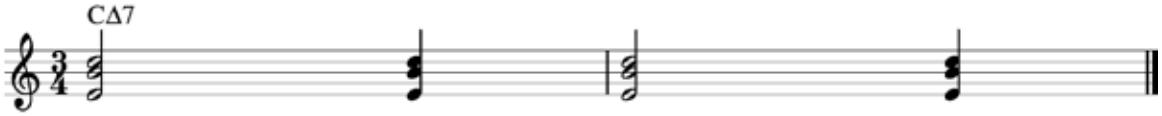
Soundbites 5.15



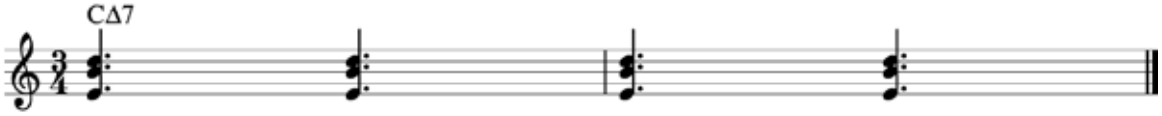
Soundbites 5.16



Typical 3/4 time pattern



Occasionally use dotted crotchets as well. Be careful not to overuse this as it will begin to sound like 6/8.

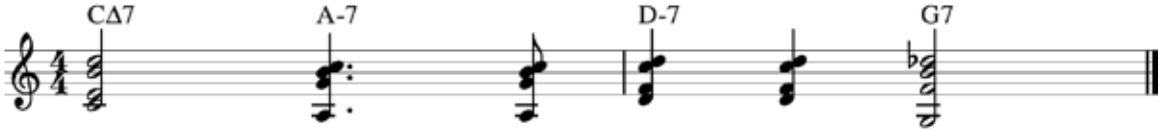


Ballad Rhythms

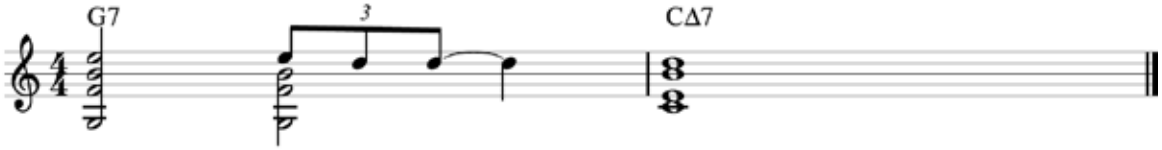
Sustained chords. Almost always on the beat, only very occasional syncopation.

Fast arpeggio

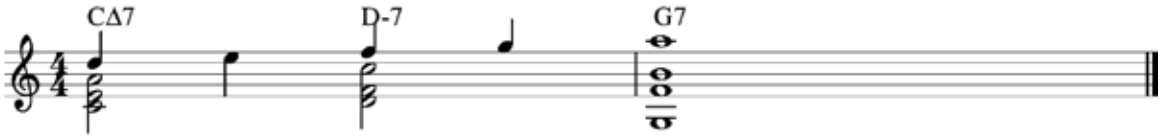
Occasionally incorporate faster rhythms as well.



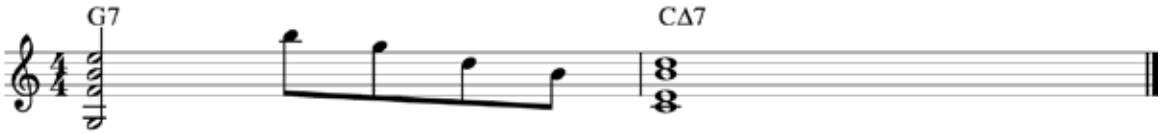
Add some simple fills, especially during gaps in the melody.



Play a simple melody across multiple chords.

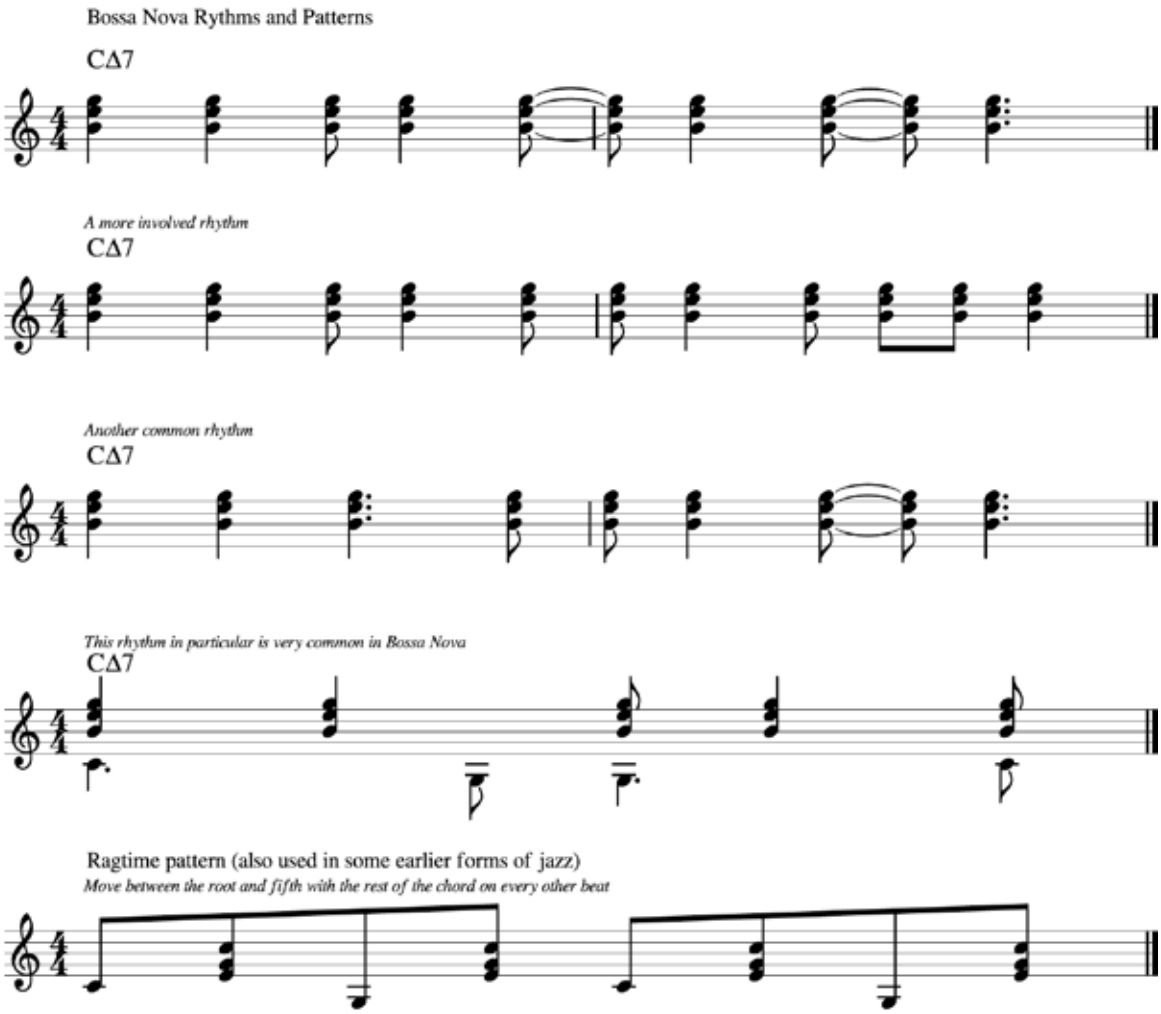


Use an arpeggio as a fill.



Soundbites 5.17

Soundbites 5.18



Soundbites 5.19

Here are some audio only examples in a few different styles:

POP: 'ALL OF ME' BY JOHN LEGEND

Clip 1.5.1
From the album Love in the Future (listen to the piano)

JAZZ: 'ON GREEN DOLPHIN STREET'

Clip 1.5.2
performed by Bill Evans on the album On Green Dolphin Street (listen to the chords played by the piano)

BALLAD: 'APRIL IN PARIS' PERFORMED BY ELLA FITZGERALD AND LOUIS ARMSTRONG

Clip 1.5.3

On the album Louis Armstrong & Ella Fitzgerald (listen to the piano and how it incorporates fills and arpeggios)

BOSSA NOVA: 'DESAFINADO' BY ANTONIO CARLOS JOBIM

Clip 1.5.4

On the album The Girl From Ipanema (listen to the guitar from 0:34)

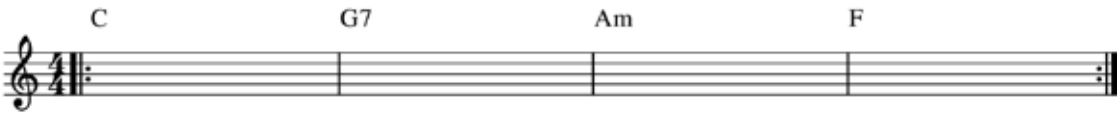
RAGTIME: 'RUSSIAN RAG' COMPOSED BY ELENA KATS-CHERNIN AND PERFORMED BY SALLY WHITWELL

Clip 1.5.5

On the album The Elena Kats-Chernin Collection (listen to the left hand of the piano from 0:30)

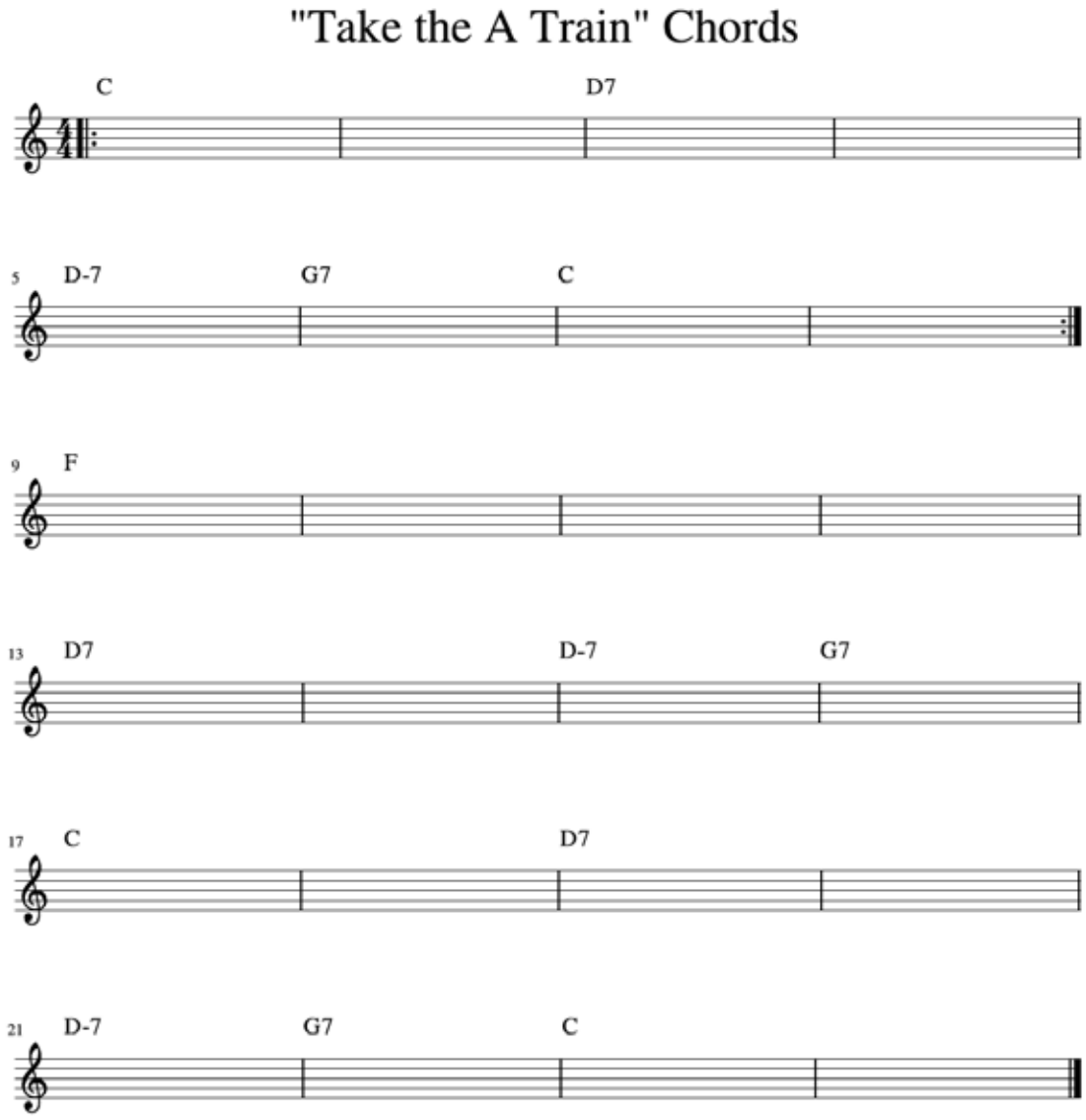
EXERCISE

Play the following "common chord progression" in each of the above styles (Pop/Rock, Bebop, Ballad, Bossa Nova, and Ragtime). Think about both the voicing of the chords and the rhythm of the chords in that style. This can be made a group exercise by having a friend or teacher improvise over the chords. You can swap roles every four cycles of the chord progression, so you both get a chance to practice improvising accompaniment.



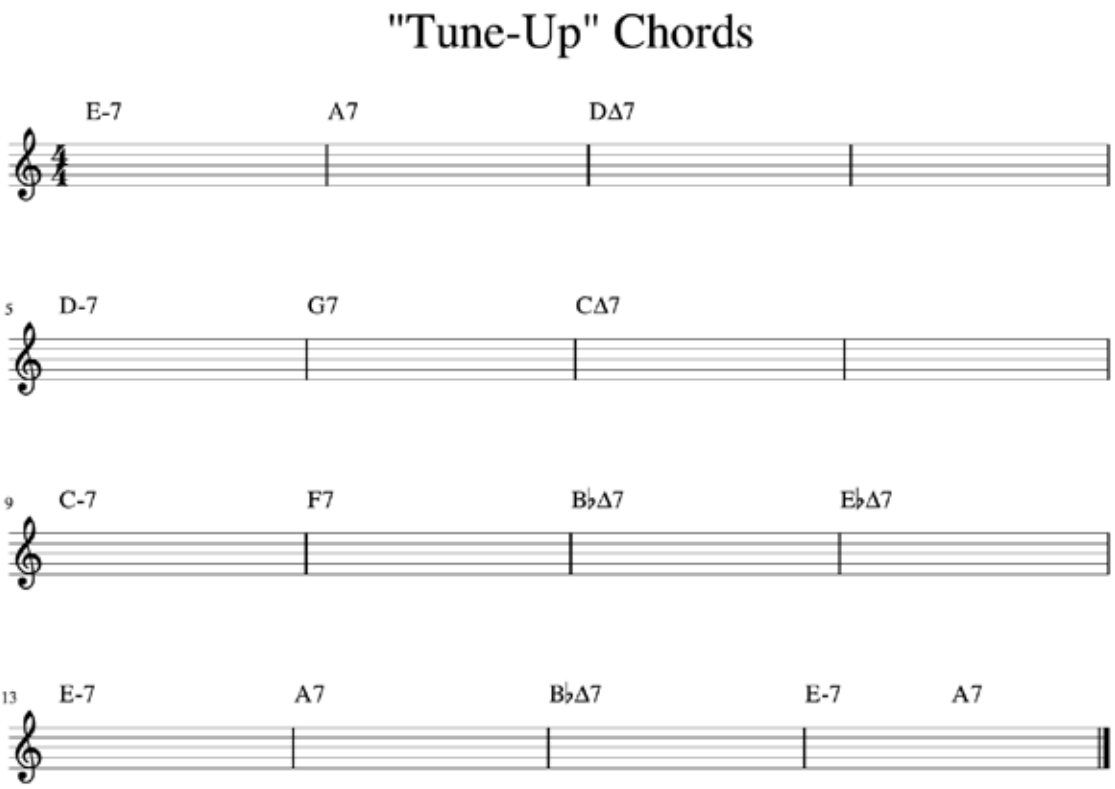
EXERCISE

Try each style over this chord progression now. These chords are from the Popular Jazz song 'Take the A Train.'



EXERCISE

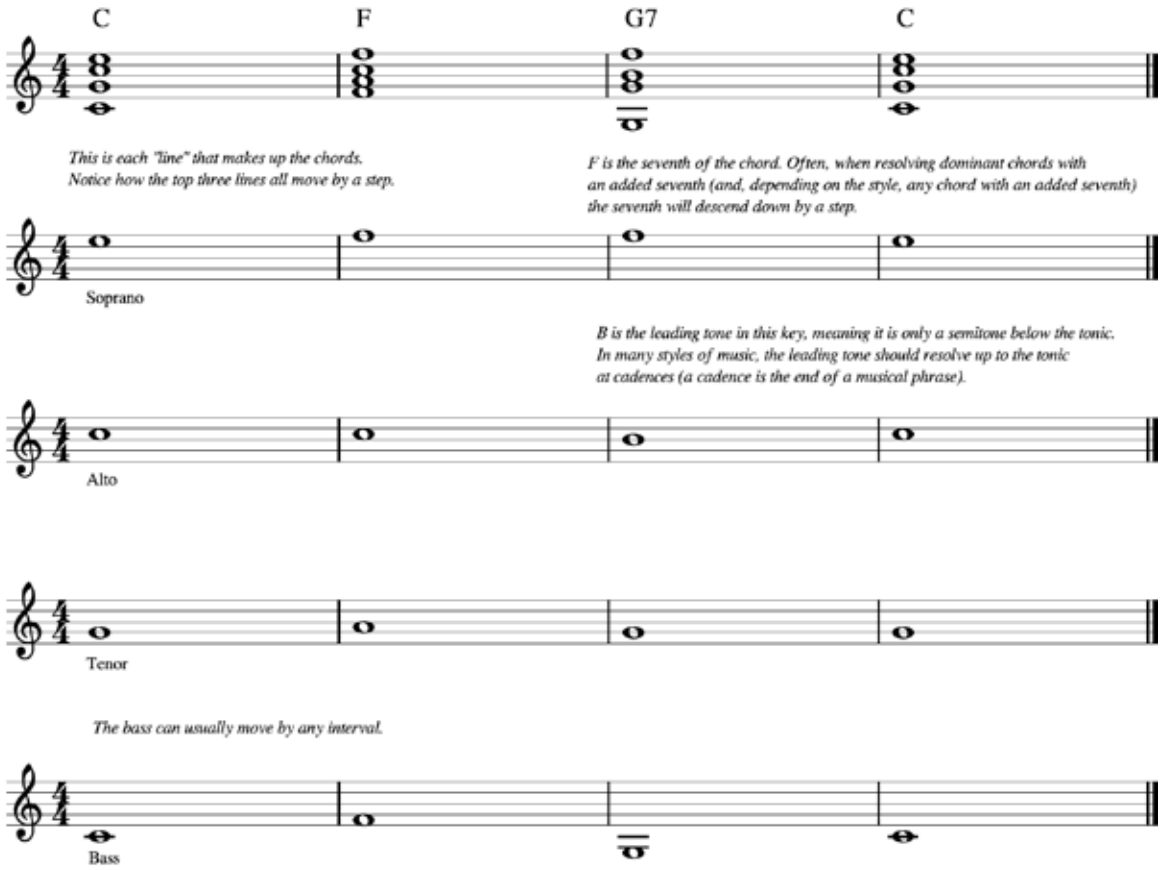
Try each style again, this time over the chords of the Jazz standard 'Tune Up.'



VOICE LEADING AND PLAYING BLOCK CHORDS AS A SECTION

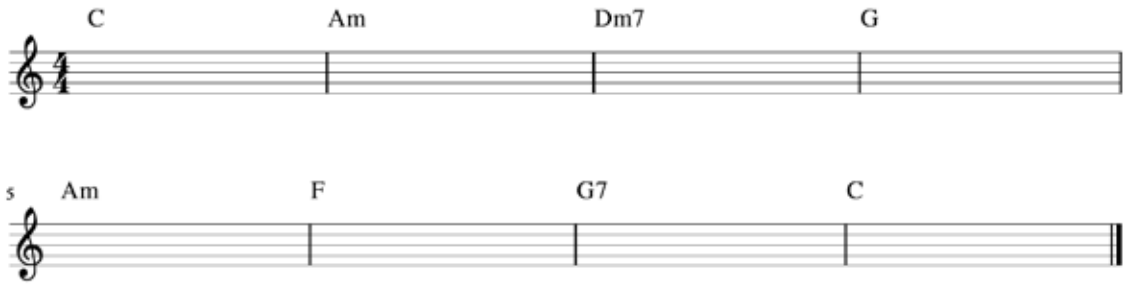
One final point to consider before trying these out for yourself is voice leading. Voice leading refers to the way each individual note of the chord moves to the next one when changing chords. Think of how individual singers moves between different notes in a choir. For smooth leading, each note (except for the bass note) should move to the next closest note when changing chords. Smooth voice leading does not always need to be used, and it will depend on the style of music being played as to whether it is appropriate. It does, however, make the transitions between chords smoother (as the name suggests), and is something that is often desired when playing chords. See smooth voice leading in practice below:

Soundbites 5.20



EXERCISE

Play through the following chord progression and implement smooth voice leading. As described in the above example, ensure that all of the voices aside from the bass mostly move by step. Use your choice of style-specific rhythm.



It is also possible for multiple instruments to work together to form chords. This is usually organised by separating the ensemble into parts. Parts are classified the same way as voices in a choir. Starting with the highest voice/part and going to the lowest they are: soprano, alto, tenor, and bass. Multiple instruments can play the same part. When you improvise block chords as a section, you need to make your part does not cross into the range of others (e.g. the bass stays as the lowest, the tenor as the second lowest, etc.). Looking at the example for the voice leading section you will notice that none of the individual voices ever get higher or lower than the other, they always stay in their position. This is harder for the alto and tenor as they have parts on both sides that they have to consider. Regardless, each role has to listen carefully to ensure they are staying in their own position. It is also particularly important to use smooth voice leading when improvising block chords as a section.

EXERCISE

In a group of four, play the three chord progressions from the style-specific rhythms exercise ('Common Chord Progression,' 'Take the A Train,' and 'Tune-Up'). Assign yourselves a role (soprano, tenor, alto, or bass) and listen carefully to ensure you don't cross into each other's range. Choose what note each part will start on, but then improvise from there on out. Be sure to use smooth voice leading by moving to the next closest note as the chord changes. What you improvise should look and sound something like the smooth voice leading example given earlier.

EXERCISE

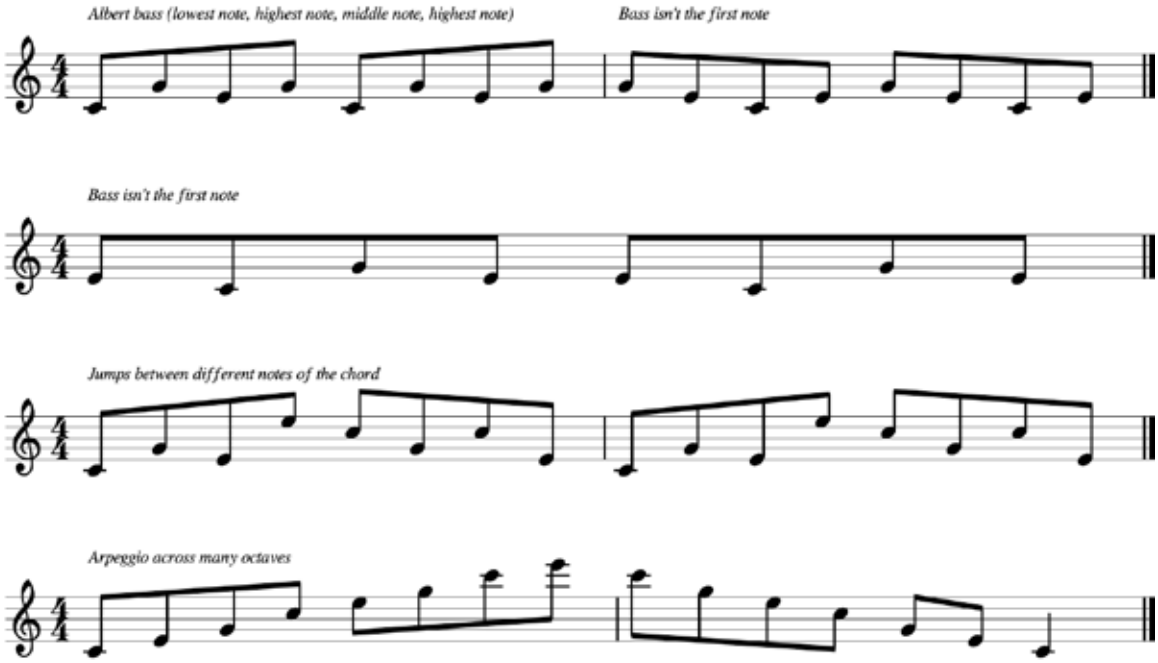
Repeat the exercise, but now attempt to use passing tones to connect notes that are a third away. You can also use neighbour tones between repeated notes to create more interest.

Improvising block chords as a section is useful in a variety of situations, and does not always need to be done as formally as it is described here. If you have a couple of monophonic instruments in the band, it is one way for them to provide accompaniment as a group when (or if) they are not playing the melody.

ARPEGGIOS

While arpeggios are just chords played one note at a time, there are various factors to consider concerning the rhythm of the arpeggio and the order that the notes of the chord are played. The most straightforward (and probably the most common) way of playing arpeggios is to play each note of the chord from lowest pitched to highest pitched (e.g. root-third-fifth). Arpeggios do not always have to follow this pattern though.

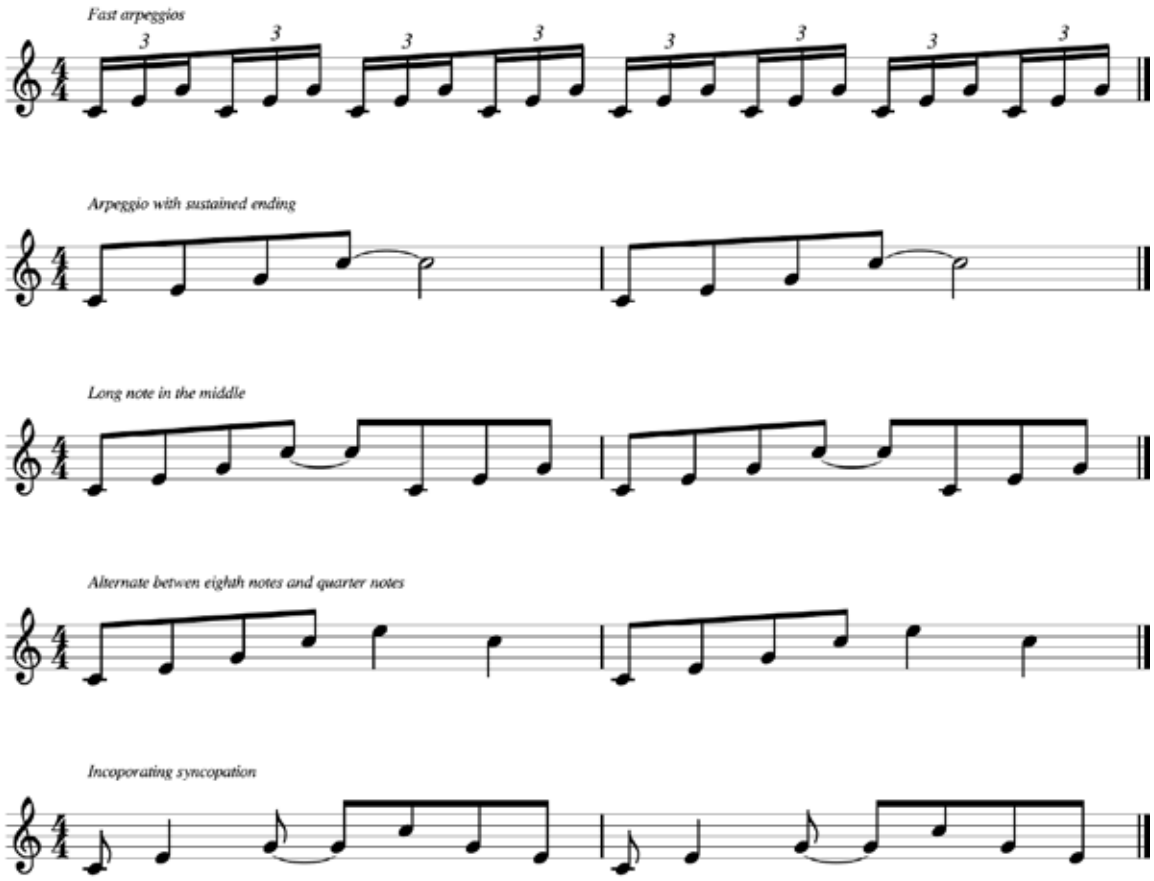
Soundbites 5.21



The exact order you play the notes of an arpeggio in is limited by the instrument you are using and the speed you are playing it at. For example, a guitar is pretty good at quickly leaping between different notes of the chord because of the way the strings are tuned, whilst a trumpeter might have trouble leaping around so fast. As another example, most instruments have problems playing large intervals at high speeds, so fast arpeggios are often played just up or down in intervals of a third.

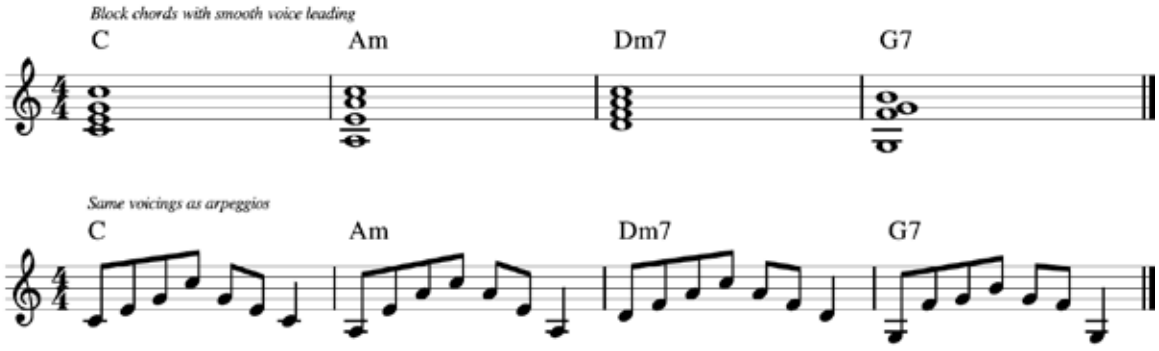
The rhythm of the arpeggio is also an important factor. Whilst playing constant eight notes is often the most common approach in many styles, there are many rhythms possible when playing arpeggios.

Soundbites 5.22



When playing arpeggios, voice leading is still something to consider. Voice leading with arpeggios works in much the same way as with block chords. The easiest way to incorporate smooth voice leading when improvising arpeggios is to imagine block chords with smooth voice leading and play them as arpeggios. The below example demonstrates this:

Soundbites 5.23



Like with block chords, smooth voice leading in arpeggios smooths the transitions between chords and is used in many styles of music, particularly when the piece is played at a slower tempo.

Depending on how they are played, arpeggios can have a variety of effects and can be used in a variety of styles. Arpeggios played slowly reduce the intensity of the music and generally create a thinner texture than block chords. As a result, slow arpeggios are often used in ballads and are frequently used in Pop/Rock songs that are going for a "softer" sound. Arpeggios played quickly can create a more intense or frantic sound. Fast arpeggios are often used in film music and more up-tempo pieces of music, and are commonly used to evoke a sense virtuosity (think of a heavy metal guitarist or a keyboardist playing a toccata). Different kinds of arpeggios also suit different styles and musical contexts, such as Alberti bass being used mainly in Classical music.

SOUL: 'JEZEBEL' BY SADE

Clip 1.5.6

On the album Promise (listen to the guitar)

CLASSICAL: MOVEMENT ONE OF MOZART'S PIANO SONATA NO. 16 IN C MAJOR, K. 545

Clip 1.5.7

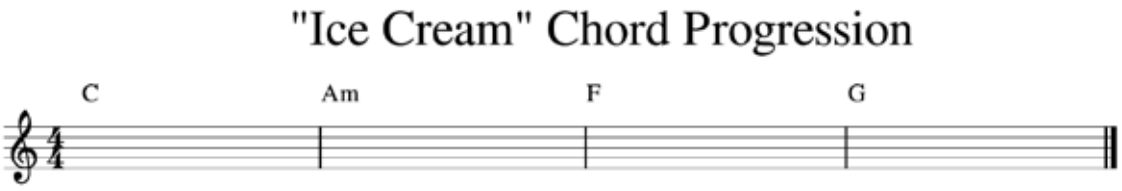
Performed by Rousseau (listen to the left hand which uses Alberti bass, block chords, and more straightforward arpeggios)

TIP

Many of the example given so far are not improvised. With harmonic accompaniment in particular, there is a lot of crossover between composed and improvised musical techniques. Be sure to look everywhere for inspiration with your improvisation.

EXERCISE

Arpeggiate the following chord progression. Begin with constant eighth notes in a root, third, fifth, root pattern and then try each of the examples described earlier. This can be made a group exercise by having one or more people improvise over it or play block chords at the same time.

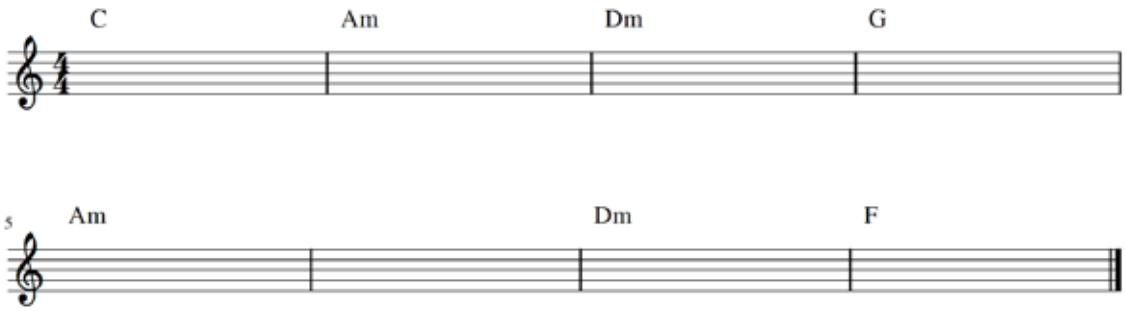


EXERCISE

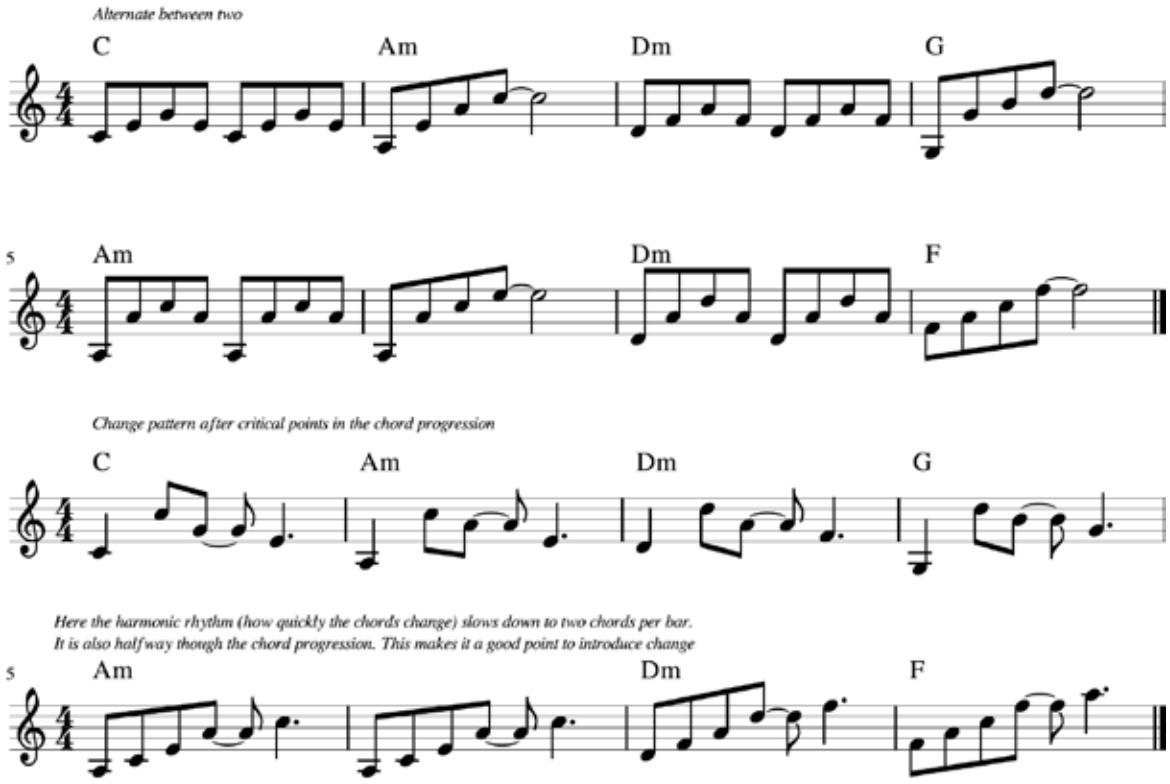
Once again arpeggiate the above chord progression but this time try creating your own arpeggio pattern. Be sure to experiment with different rhythms and order the notes in different ways to see what you can come up with.

EXERCISE

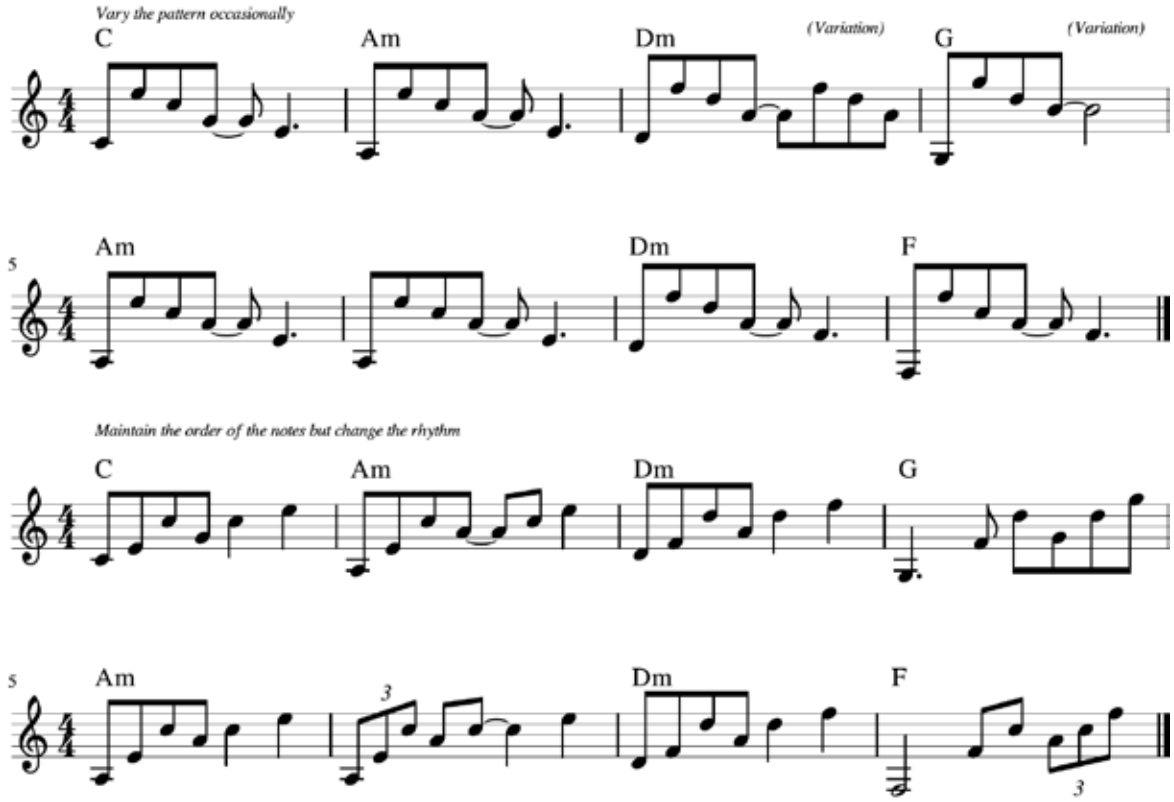
Arpeggiate the following more complicated chord progression. Try both the given examples and try your own arpeggio patterns. Like the previous two exercises, this can be done as a group by having each person take different roles (arpeggios, block chords, soloing).



Remember that you do not have to play the same arpeggio pattern throughout the entirety of the improvisation. Whilst some form of repetition is good, playing exactly the same thing for an entire piece can become repetitive. Look at some of the below ways to vary your arpeggio patterns in the same piece of music:

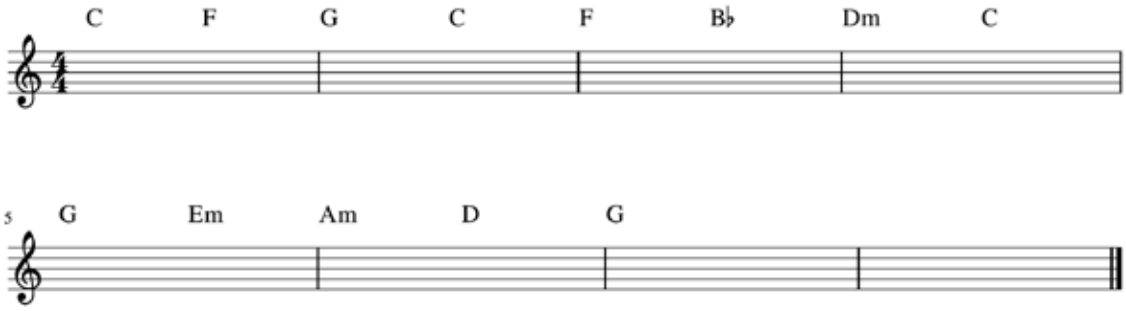


Soundbites 5.24



EXERCISE

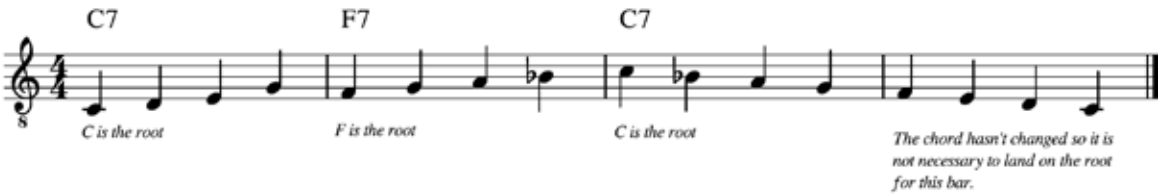
Arpeggiate this chord progression that goes through different keys and uses more chords. Make your own arpeggio patterns and try changing them during the progression in some of the ways shown above.



WALKING BASSLINE

A walking bassline is a critical component in many genres of Jazz, Blues, and Rock. It serves the function of both harmonic accompaniment (it outlines the chords) and rhythmic accompaniment (it outlines the pulse) and is vital knowledge for Jazz bassists (and very helpful for Jazz musicians in general). It is particularly useful for pianists and guitarists to know in case a bass player isn't present or as a way to vary their accompaniment pattern.

Walking basslines are based on the notes of the chords. Generally, when the chord changes, the bassist will play the root or bass note of that chord on the beat that it changes. Other notes from the chord are also used in the walking bassline. Look and listen to this example to see the emphasis on hitting the root note:

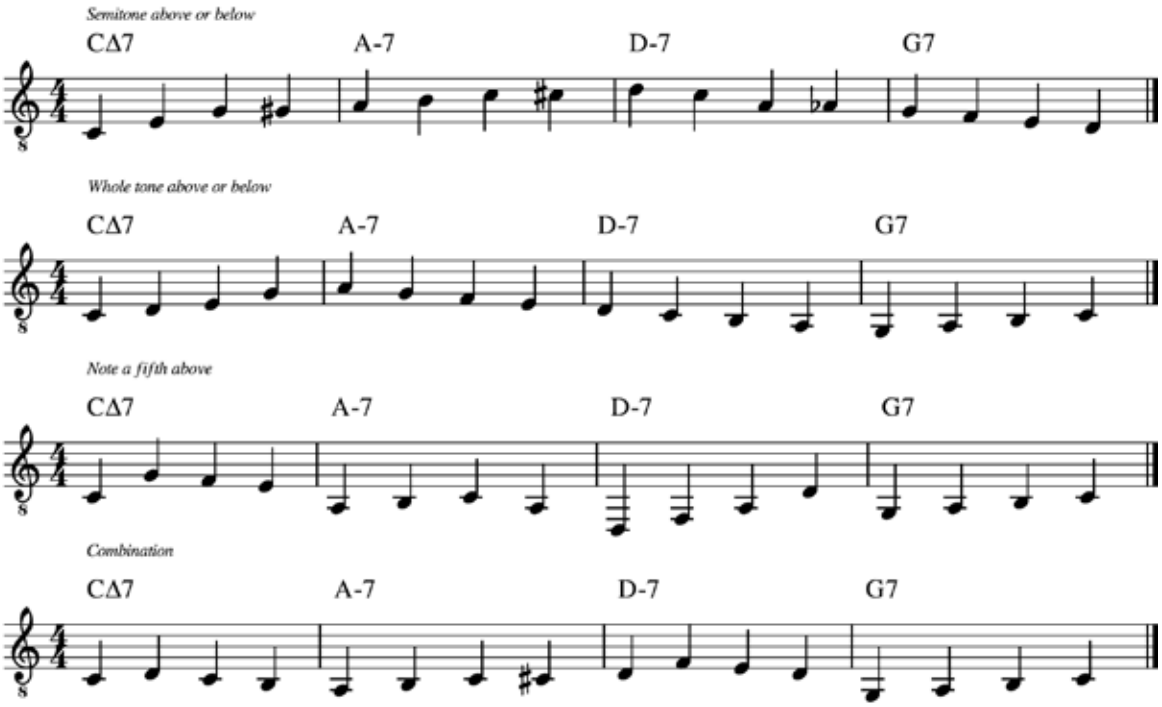


Soundbite 5.25

In addition to hitting the root on the beat that the chord changes, the note just before each of these root notes needs to be chosen carefully as well. The note before the root should lead strongly into it so that the walking bassline feels like it wants to move through each of these chords. There are many ways to do this, but the most common are:

- Using notes a semitone above or below the root note (don't worry if these notes are out of key)
- Using notes a tone above or below the root note (these are not as strong as semitones though)
- Using notes a fifth above the targeted root note

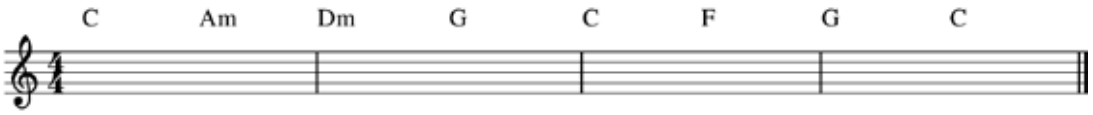
Often, all three will be used in the same performance. See these examples below and be sure to listen to the soundbites to hear how each approach creates a sense of motion towards the root notes.



Soundbites 5.26

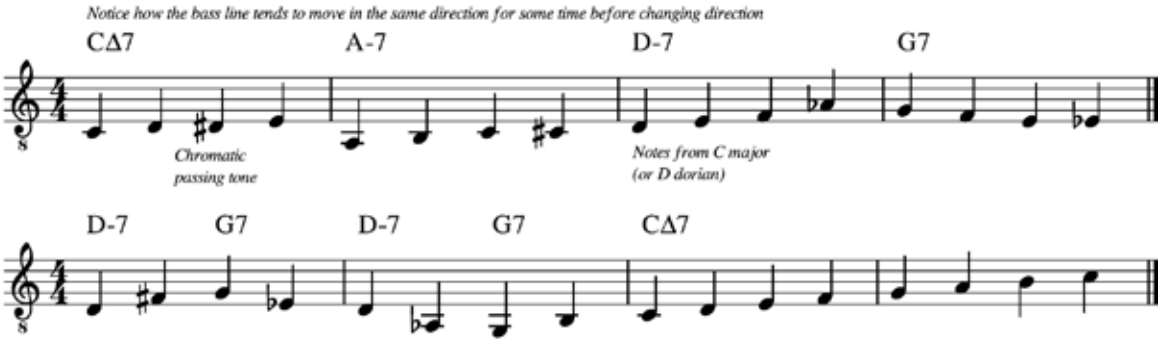
EXERCISE

Play a walking bassline for the following chord progression. Hit the root notes on the beat that each chord changes. Practice using each of the three methods for choosing the note that leads into the root. Do them individually at first, and once you are reasonably confident with each on their own, try mixing them together.



We have so far discussed what notes to hit when the chord changes and what notes to use to lead into these root notes, but we have not yet discussed all the notes in between. A bassline should smoothly lead the listener through the chords, and the notes of the bassline should be chosen with this in mind. As a result, you should aim for basslines that incorporate a smooth linear melodic contour and use mainly steps as opposed to one that is angular or quickly changes direction. The notes that you add to create this are drawn from whatever key the piece is in at that point, although chromatic notes are frequently used as well. Look and listen to the below example to see how an improviser can maintain a smooth walking bassline:

Soundbite 5.27



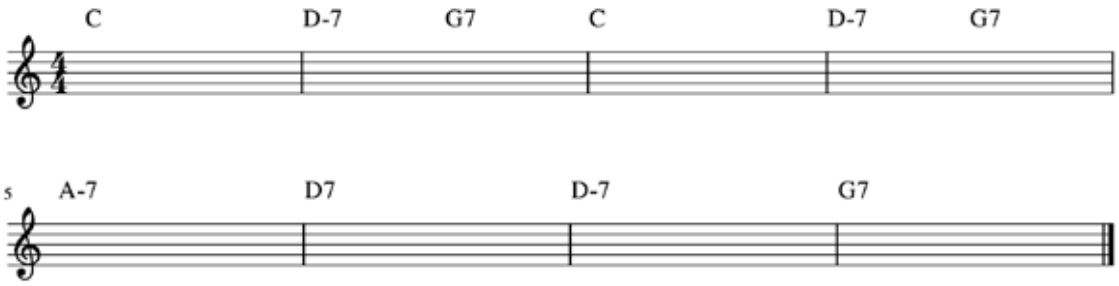
A great example of a walking bass line can be heard on this performance of 'On the Sunny Side of the Street' performed by Joshua Redman and Christian McBride on the album Joshua Redman (listen to the double bass from 1:04)

'ON THE SUNNY SIDE OF THE STREET' BY JOSHUA REDMAN AND CHRISTIAN MCBRIDE

Clip 1.5.8

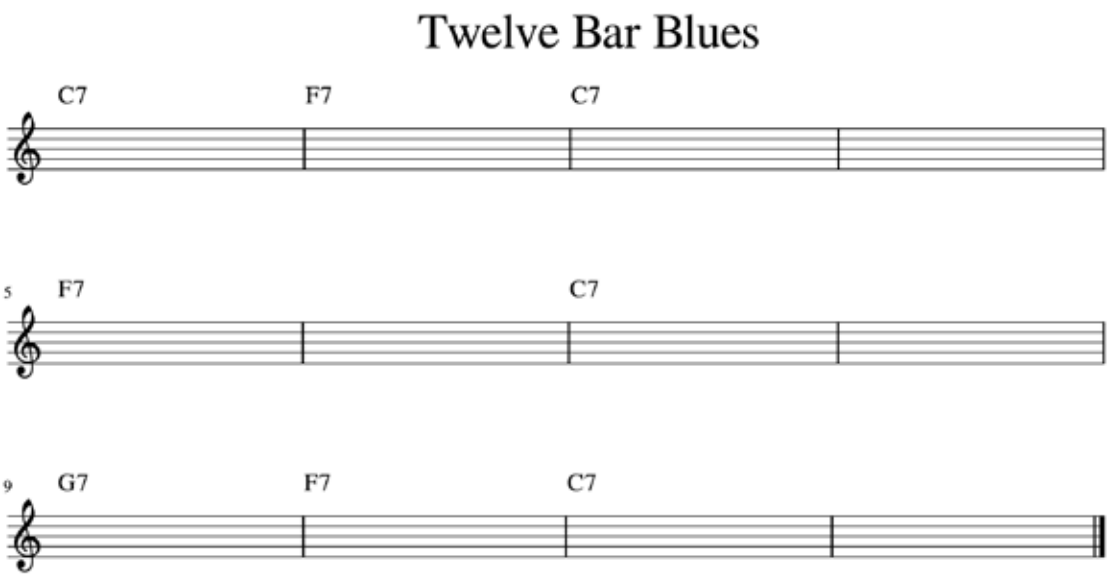
EXERCISE

Using all of the above advice, improvise a walking bassline for the following C major chord progression. Try to ensure the bassline is smooth and creates a sense of momentum towards each root note.



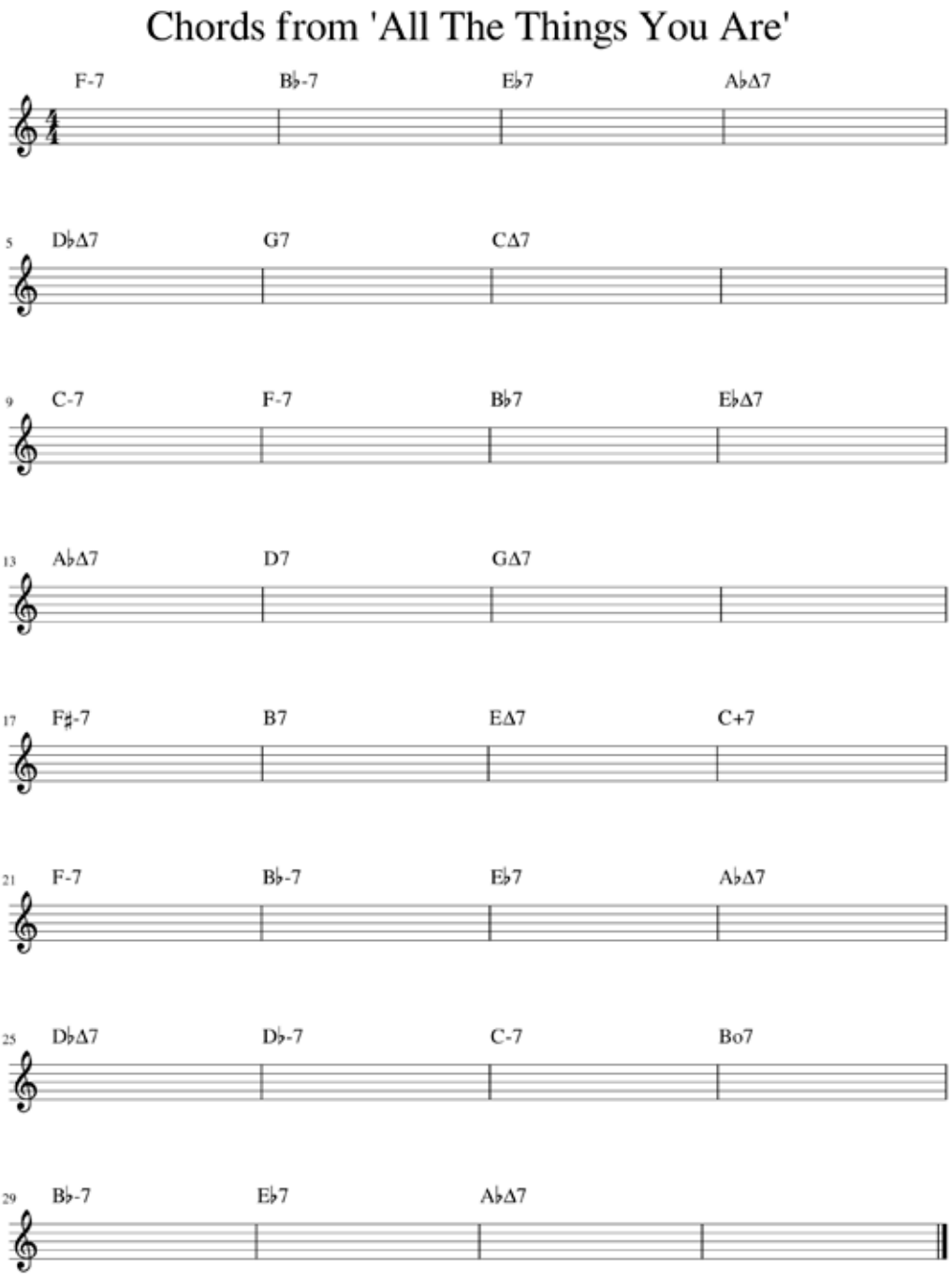
EXERCISE

Once again, improvise a walking bassline, this time for the following twelve bar Blues progression. Consider a mixolydian scale based on each chord as being the consonant notes while that chord is being played (i.e. use C mixolydian over C7, F mixolydian over F7, and G mixolydian over G7).

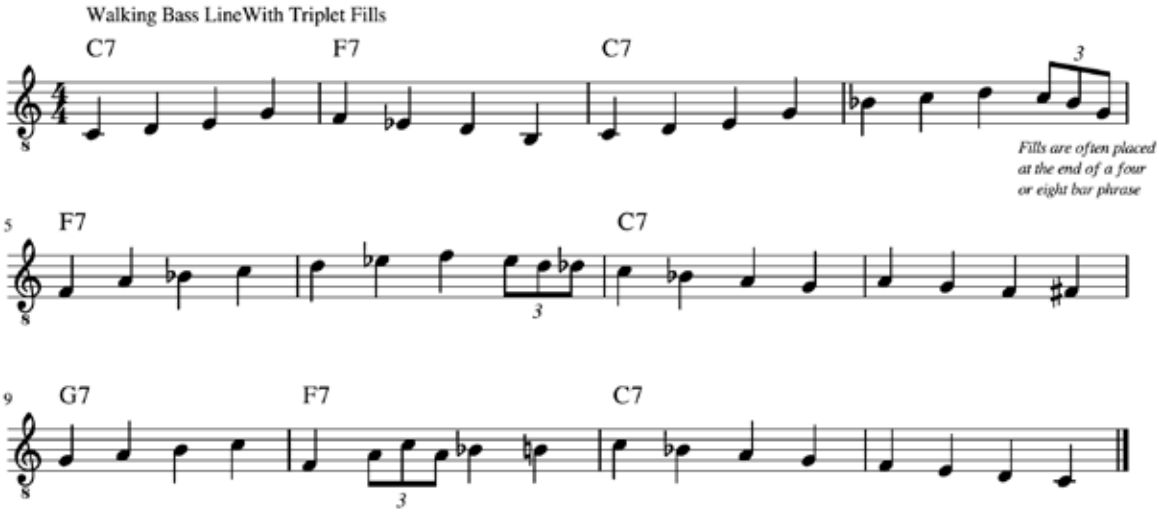


EXERCISE

Improvise a walking bassline over the chords for the Popular Jazz standard 'All the Things You Are.'



A walking bassline does more than just keep time and outline the chord progression. It is also possible to interact with the soloist and contribute to the performance more actively. A simple and reasonably unintrusive way to do this is to add fills in the gaps between what the soloist and other musicians are playing. A really common fill is the triplet fill, where the performer playing the walking bassline occasionally interjects using a short lick with a triplet rhythm. See this in practice below:



Soundbite 5.28

Triplet fills run the risk of breaking the momentum of the bassline, so try not to use them too often. Also, the fill can and should still lead to the next note the way that any walking line does. Try to incorporate the techniques discussed earlier in this section to your fills to maintain a sense of movement between the chords.

EXERCISE

Improvise a walking bassline over the twelve bar blues again (the score was given earlier). This time though, incorporate triplets fills as well. Once you have spent some time practising on your own, try this with a group, having the others solo over your bassline or play block chords. Alternatively you can practice over the supplied backing track. Try to place these triplet fills in the gaps between what the others are playing and ensure that the fills do not break the bassline's forward momentum. You should also place these fills during transitions and just before repeats.

Soundbite 5.29

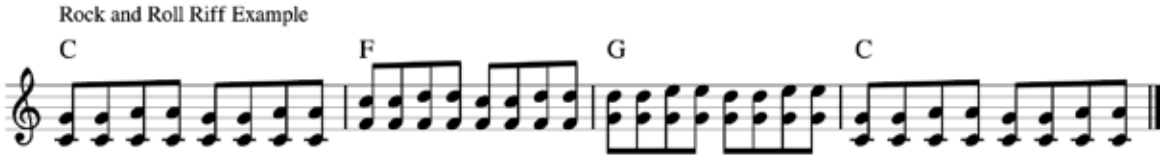
EXERCISE

Repeat the above exercise, but with the more difficult chords of 'All The Things You Are.'

RIFFS/OSTINATI

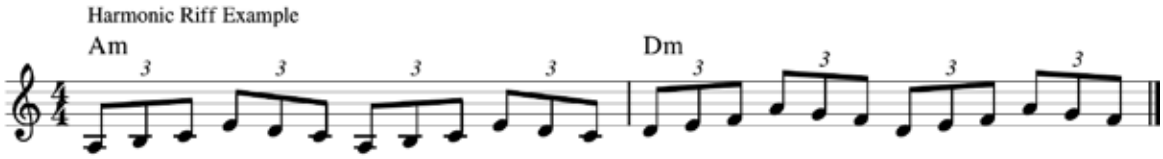
Riffs and ostinati are present in music from around the world and can be rhythmic, melodic, or harmonic. Generally, in Western music, they will imply a chord or a key centre. This is done by using important notes of the chord or key that is being implied. Take this simple Blues/early Rock and Roll riff for example.

Soundbite 5.30



This riff uses the root and the fifth of the chord extensively. While this doesn't suggest the quality of the chord (we do not know if it is major or minor as the third isn't present), it nevertheless outlines the chord progression. As another example, see how harmony is further implied in the following ostinato:

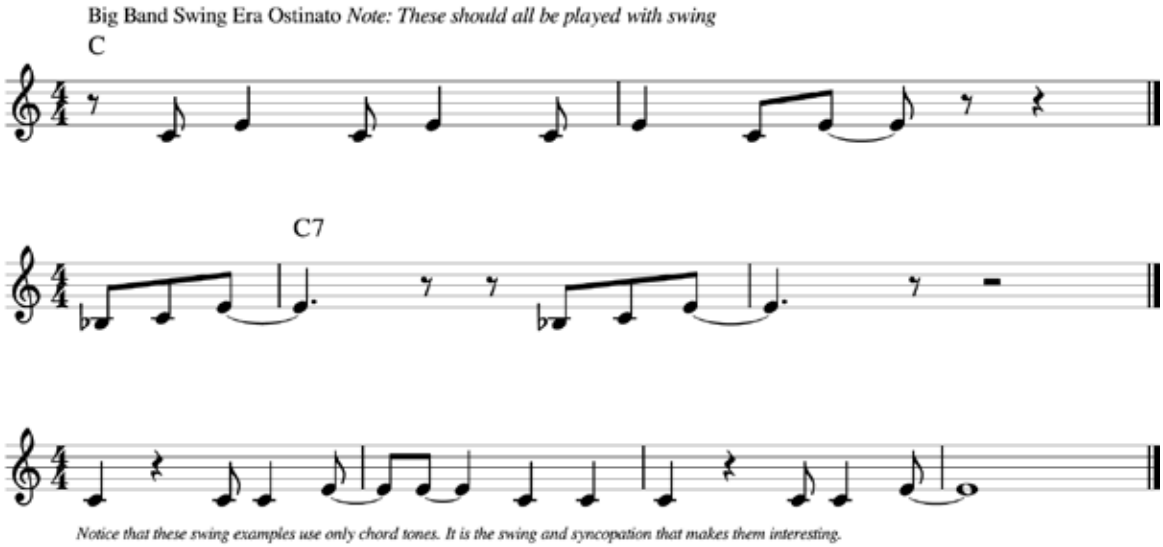
Soundbites 5.31



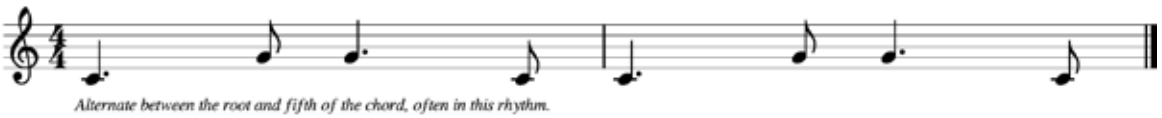
In this repeated pattern, the thirds of the chords being implied are also used. Notice that the root and fifth occur on the stronger beats of the bar to further clarify the chord being outlined.

Now that it is clear how a riff or ostinato can imply the harmony or tonal centre of a piece, let's look at some specific kinds of riffs and ostinati. Different styles of music will have different expectations for the rhythm of the ostinato and exactly how it will outline the chord. Here are some typical examples.

Soundbites 5.32



Bossa Nova

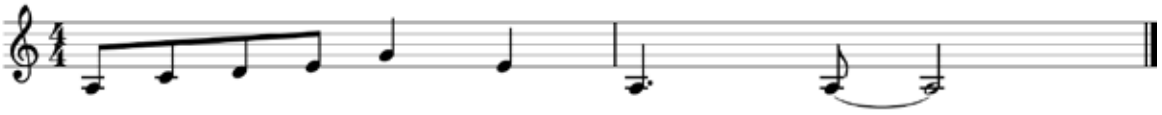


Alternate between the root and fifth of the chord, often in this rhythm.

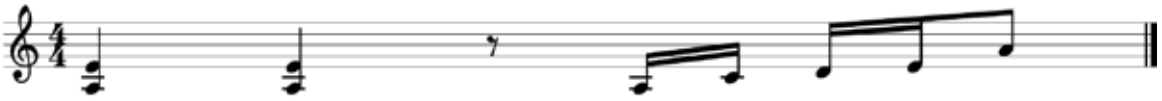
Soundbites 5.33

Rock

Am



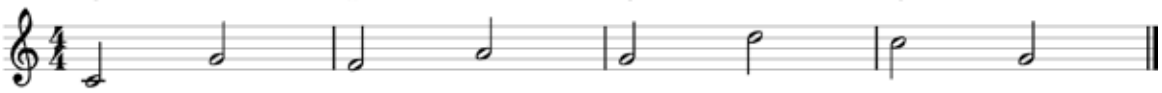
Am



Rock riffs often incoporate power chords (the root and fifth) and use notes of the pentatonic scale

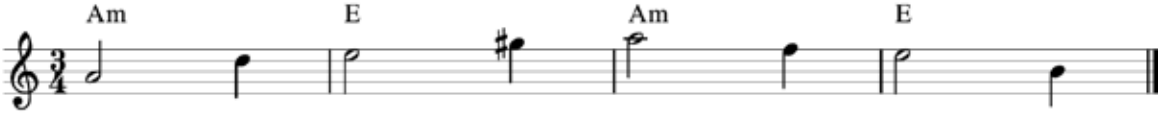
Baroque/Renaissance

C F G C



Soundbites 5.34

Am E Am E



Soundbites 5.35

Baroque and renaissnce music would often contain a repeated ostinato over which the other instruments or parts would create variations over. This compositional technique is called ground bass. The length of this ostinato can range from only one bar to eight or more bars!

Some more examples of riffs/ostinati can be heard below:

BIG BAND JAZZ: 'ONE O'CLOCK JUMP' BY THE COUNT BASIE ORCHESTRA

Clip 1.5.9
(listen to how the brass and woodwinds accompany the main melody from 0:44)

FUSION: 'OPEN COUNTRY JOY' BY THE MAHAVISHNU ORCHESTRA

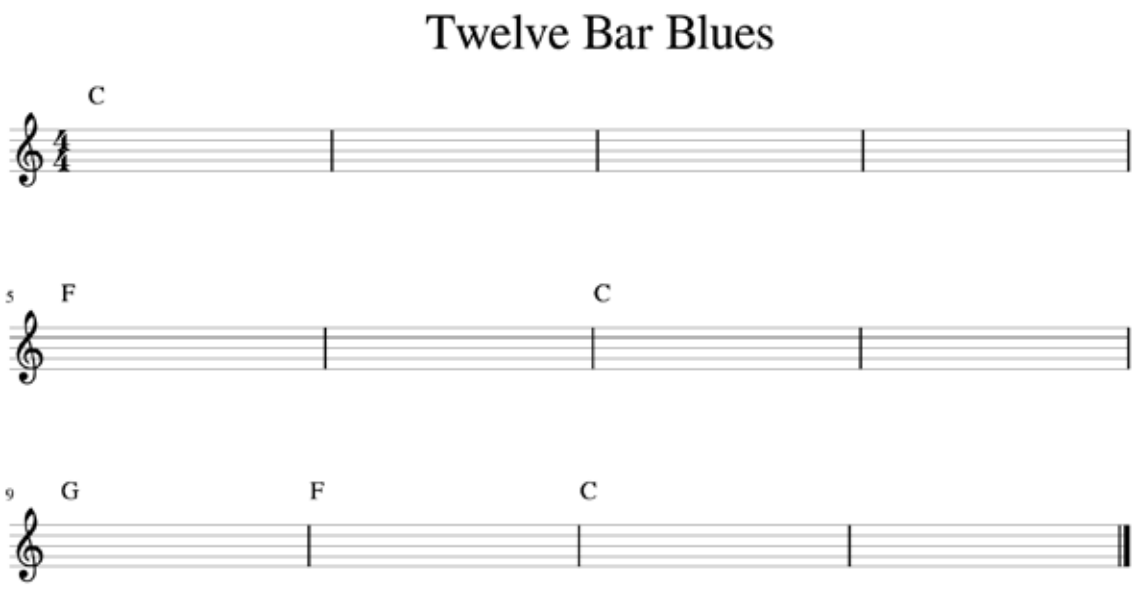
Clip 1.5.10
from the album Birds of Fire (listen to the bass during the solos from 1:11)

EXERCISE

Choose a single chord and practice creating riffs/ostinati in various styles over that chord. Ensure you are clearly outlining the chord by playing chord tones, particularly the root and fifth, on strong beats of the bar. Try this with a group and have them solo over the top of your ostinati.

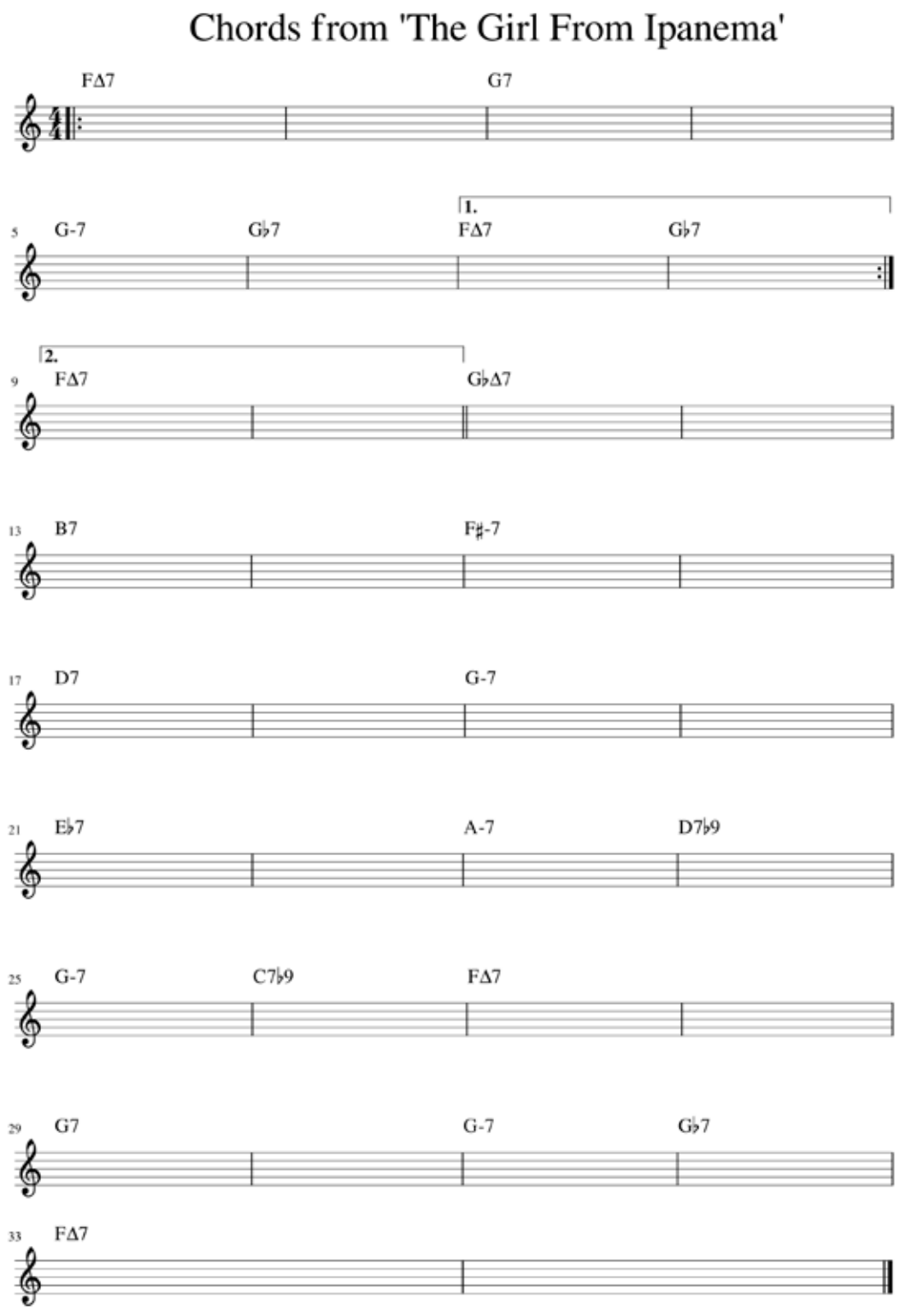
EXERCISE

Improvise riffs/ostinati over the following twelve bar Blues progression in each of the above styles. Try with a friend or teacher improvising over your accompaniment.



EXERCISE

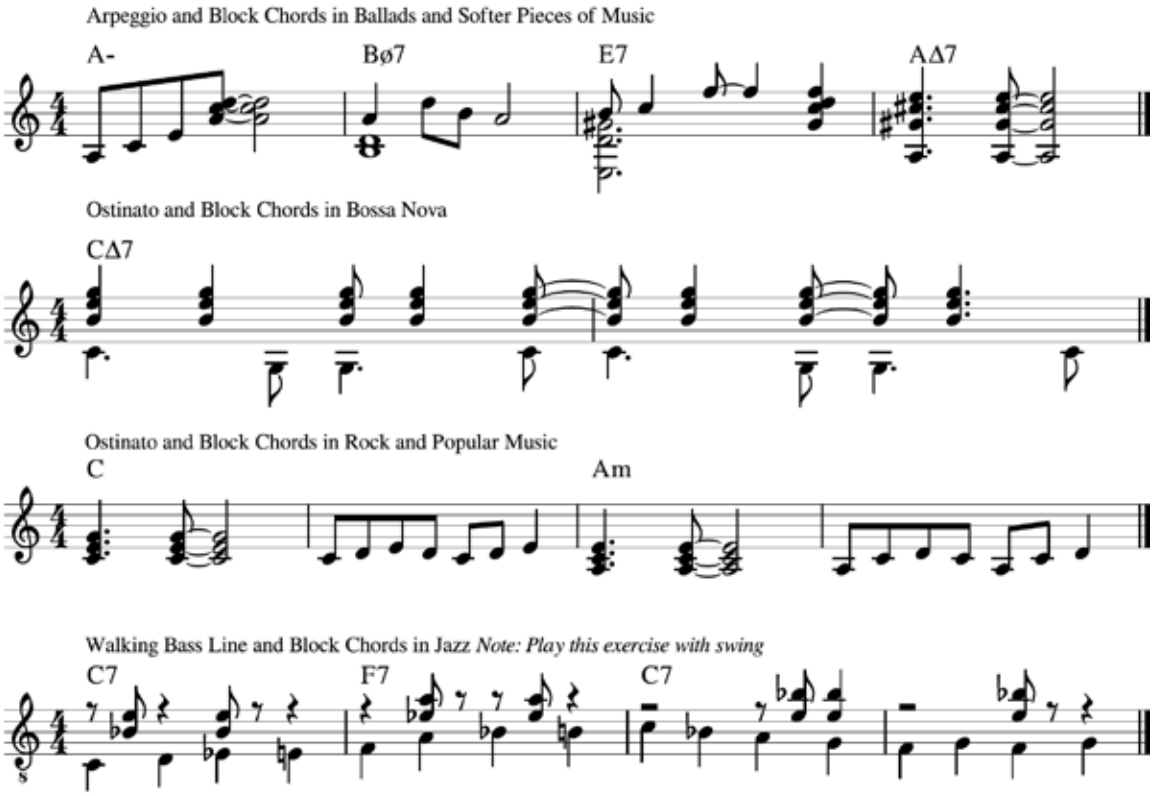
Once again improvise a variety of riffs/ostinati, this time over the chords for 'The Girl From Ipanema' by Carlos Jobim. Do this in a variety of styles and once again have a friend or teacher improvise over this.



COMBINATION

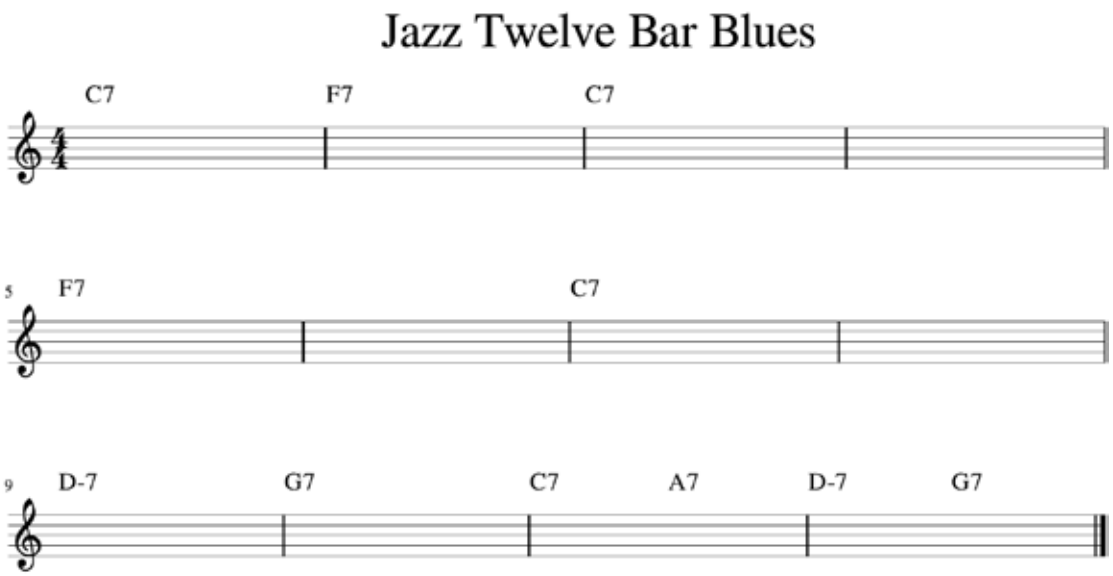
Like many of the techniques we discuss, it is possible and common to combine different forms of accompaniment. Being able to do this is especially useful if you are the only accompanist, as these combined patterns will often fill out the music more than if just a single approach is used. Like all of the accompaniment textures we have explored, what is and isn't appropriate will depend on the style. Some common ways of combining approaches are described below:

Soundbites 5.36



EXERCISE

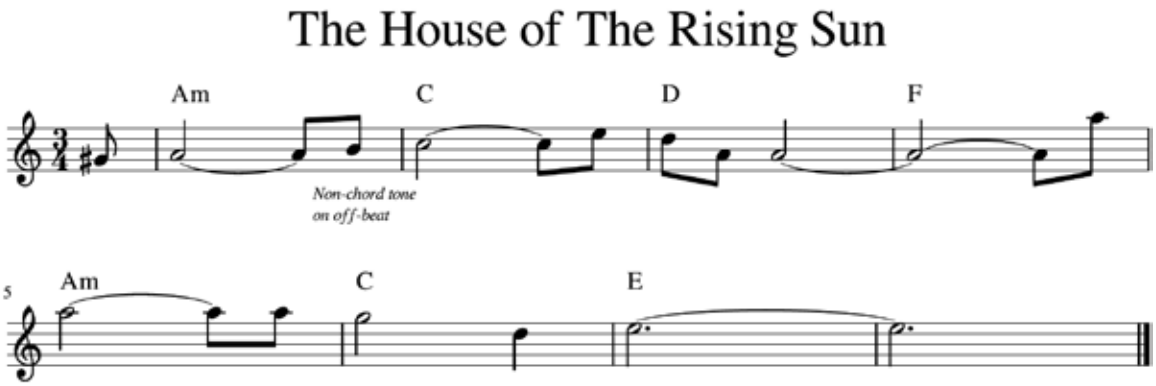
Try all of the above combinations over the following twelve bar Blues progression. Experiment with your own ways of combining the different forms of accompaniment yourself. Make this a group exercise by having a friend or teacher solo over your accompaniment.



IMPROVISING OVER CHORDS

Because the use of harmony is so prevalent in Western music, most Western styles of improvisation require the performer to be able to improvise melodies that work well with the accompanying chords. To understand this, we need to understand the concepts of consonance and dissonance. Consonance is associated with a pleasant sound and it refers to when the melody note is also present in the corresponding chord. Dissonance is the opposite and refers to when the melody note is not a part of the chord. Depending on how much the melody contrasts with the harmony, dissonance may evoke anything from strong emotions and expressivity to intense unpleasantness. There are many conventions for how to deal with consonance and dissonance when writing melodies, but let's start with a simple one. Here is the score for part of the folk tune 'The House of The Rising Sun.'

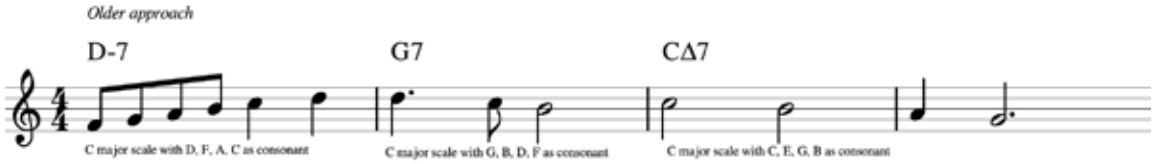
Soundbite 6.1



Notice how the consonant notes tend to occur on the stronger beats of the bar, such as beat one, and the dissonances tend to occur on the weaker beats of the bar, such as the off-beats or beat three. Whilst it doesn't occur here, generally, when dissonances occur on the beat, they usually resolve to a consonance quickly, often by a step. Later genres of Classical music and other genres like Jazz tend to allow for more freedom when using dissonance (such as the chord extensions discussed on page 57). Nevertheless, the concept that consonance creates stability and dissonance creates instability remains for these styles, and composers and improvisers will use this understanding to achieve whatever effect they are trying to create with their melodies.

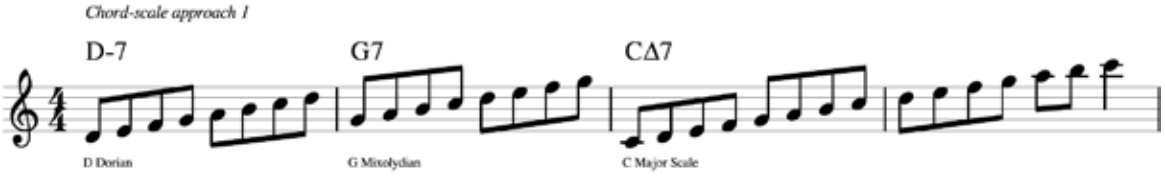
CHORD-SCALE SYSTEM

The chord-scale system is the most common (and often considered the easiest) way of teaching and thinking about Jazz improvisation. Early Jazz musicians and improvisers in other kinds of music often improvise by thinking about their melodies as being in a certain key and the notes they use as being consonant or dissonant depending on the chord they are playing over (as described above). The chord-scale system, on the other hand, has improvisers matching each chord to one or more appropriate scales. For example, if the chords of the piece are D-7, G7, and then CΔ7, the melody-based approach would think of the whole sequence as being in C major.

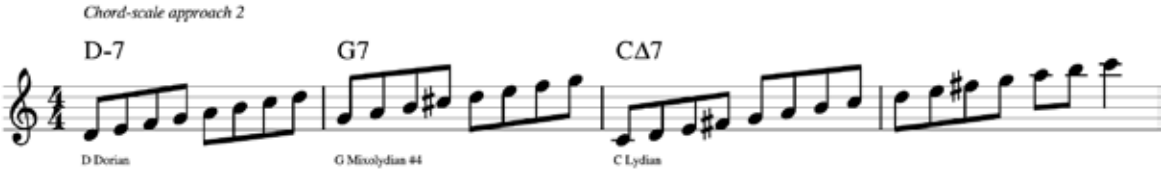


Soundbite 6.2.1

In the chord-scale system though, each chord would be assigned its own scale. The most conventional scales to use would be the D dorian mode for D-7, the G mixolydian mode for G7, and the C major scale for CΔ7, however, it is not the only way to play over those chords. An alternative approach might be to use the D dorian mode for D-7, the G mixolydian #4 scale for G7, and the C lydian scale for CΔ7. Melodies improvised via this second interpretation will still work with the chords but will create a completely different sound. (See the scale compendium on page 103 to see how to play these scales). You can see this in the examples below:

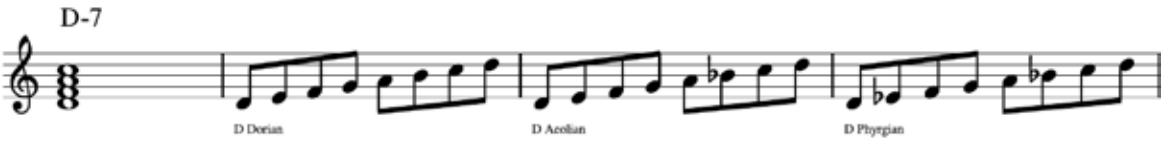


Soundbite 6.2.2



Soundbite 6.2.3

Whether a scale is appropriate or not is determined by whether the notes of the chord are present in that scale. D-7, which is made up of D, F, A, and C, could be matched with the dorian mode, the natural minor scale, or the phrygian scale because they all contain the notes D, F, A, and C when D is set as the tonic. CΔ7#11 includes the notes C, E, G, B, D, and F#, so the lydian mode is the best fit because it contains those notes when C is the tonic.



EXERCISE

Try out the chord-scale system on the following chord progression. Look at the scale compendium on page 103 to page 116 to see the many scales that could work over these chords. Try a few different scales and see how each creates a different sound. This can be made a group exercise by having one or more people play the chords of this improvisation or you can solo over the backing track.

Soundbite 6.3

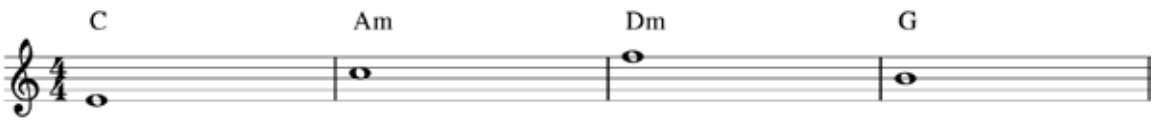
TIP

The more you practice the chord-scale approach the more quickly you will be able to remember which scales are going to work over which chord.

In practice, many improvisers today will think about the chords using a variety of methods. In some cases, the performers will prefer to use the chord-scale system, and in other cases, they may prefer to use the melody-based approach. Both, however, are frequently combined with additional techniques to help improviser's play. One of the most common of these is guide tones.

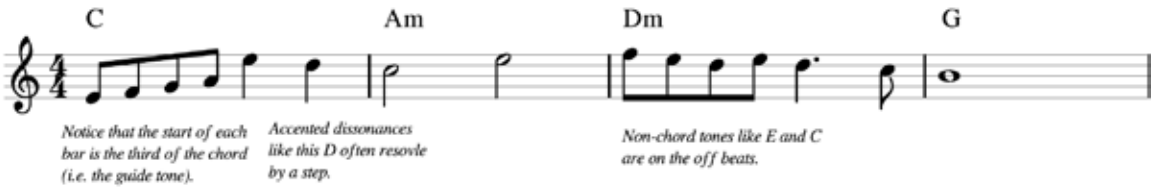
GUIDE TONES

Guide tones are a way to help an improviser choose notes for their melody that will work well with the chords they are playing along to. It is used most frequently in Jazz but can be applied to other styles of music as well. A guide tone is a specific note from a chord that the improviser decides they are going to play on the beat that the chord changes. For example, if the improviser decides their guide tones will be the thirds of each chord, then they would make sure they play the third of the chord whenever the chord changes (or soon after):



Soundbite 6.4.1

From there, the improviser fills out the rest of the solo by making these guide tones into full melodies. The point of guide tones are to ensure that the strong beats of each bar are consonant. Here is an example of a solo that uses guide tones. Notice how the melody often uses notes from the chord (consonant notes) on strong beats and notes not from the chord (dissonant notes) on weaker beats:



Soundbite 6.4.2

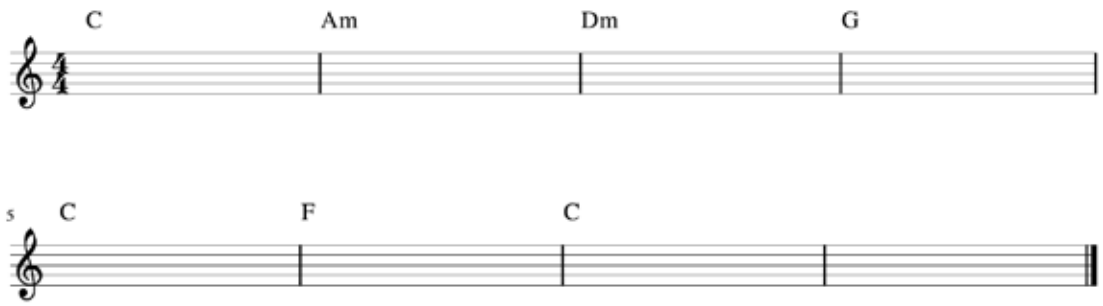
EXERCISE

Try this for yourself over the following chord progressions.

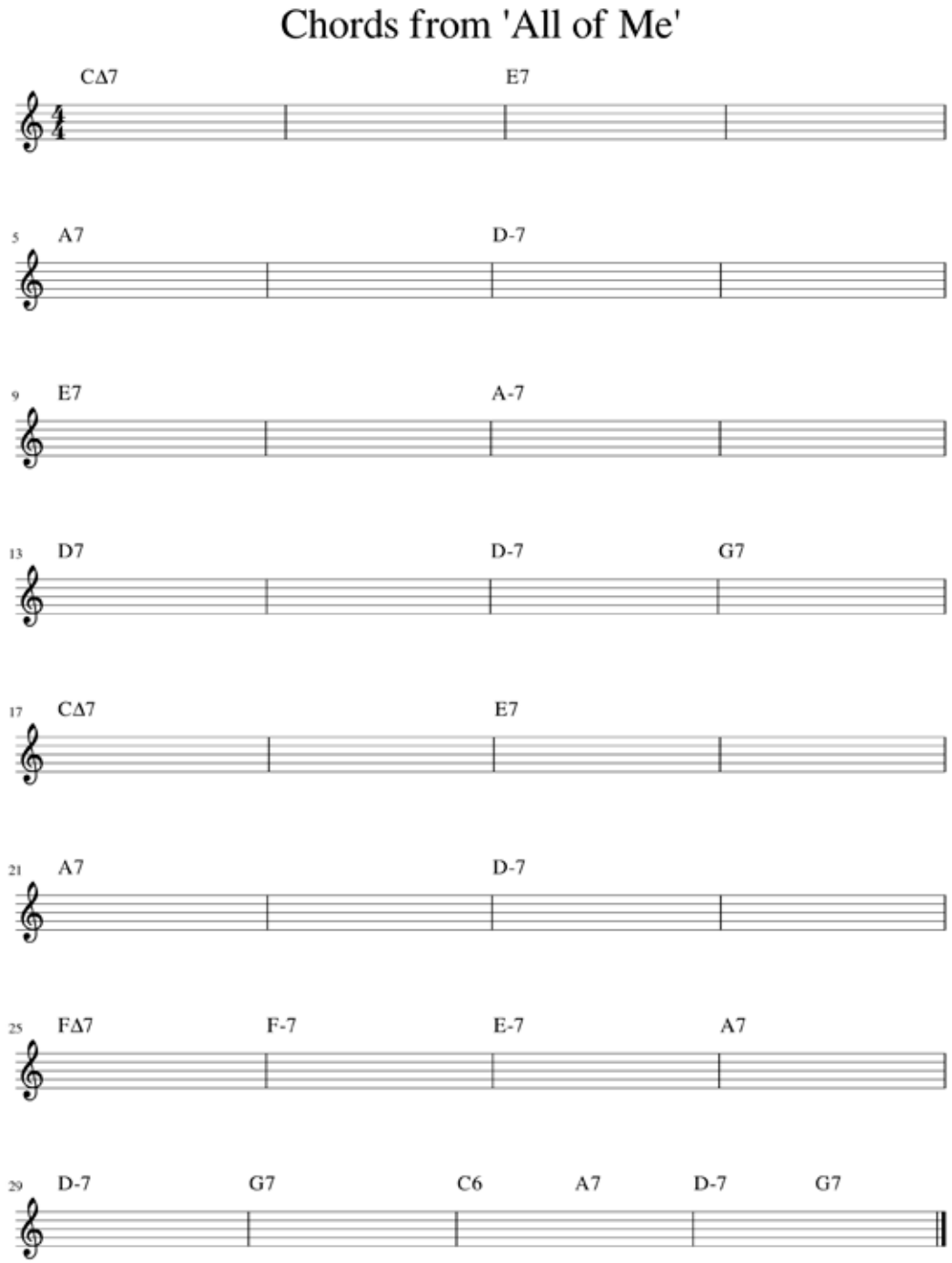
- *Start by just playing the thirds of each chord on the beat that chord starts.*
- *Once you are confident with this, fill out the melody with other notes so that you are actually improvising a solo.*
- *You can use the techniques learnt in the Ornamentation section (page 34 to page 45) and the chord-scale system (page 93 to page 94) to help you with this.*

You can have a friend or teacher accompany you as you are playing to make this a group exercise or you can just play over the backing track. If you do this with a partner or group, try swapping roles every play-through of the chords. Listen to your playing and notice how your melodies still blend with the chords, but in a colourful way.

Soundbite 6.5



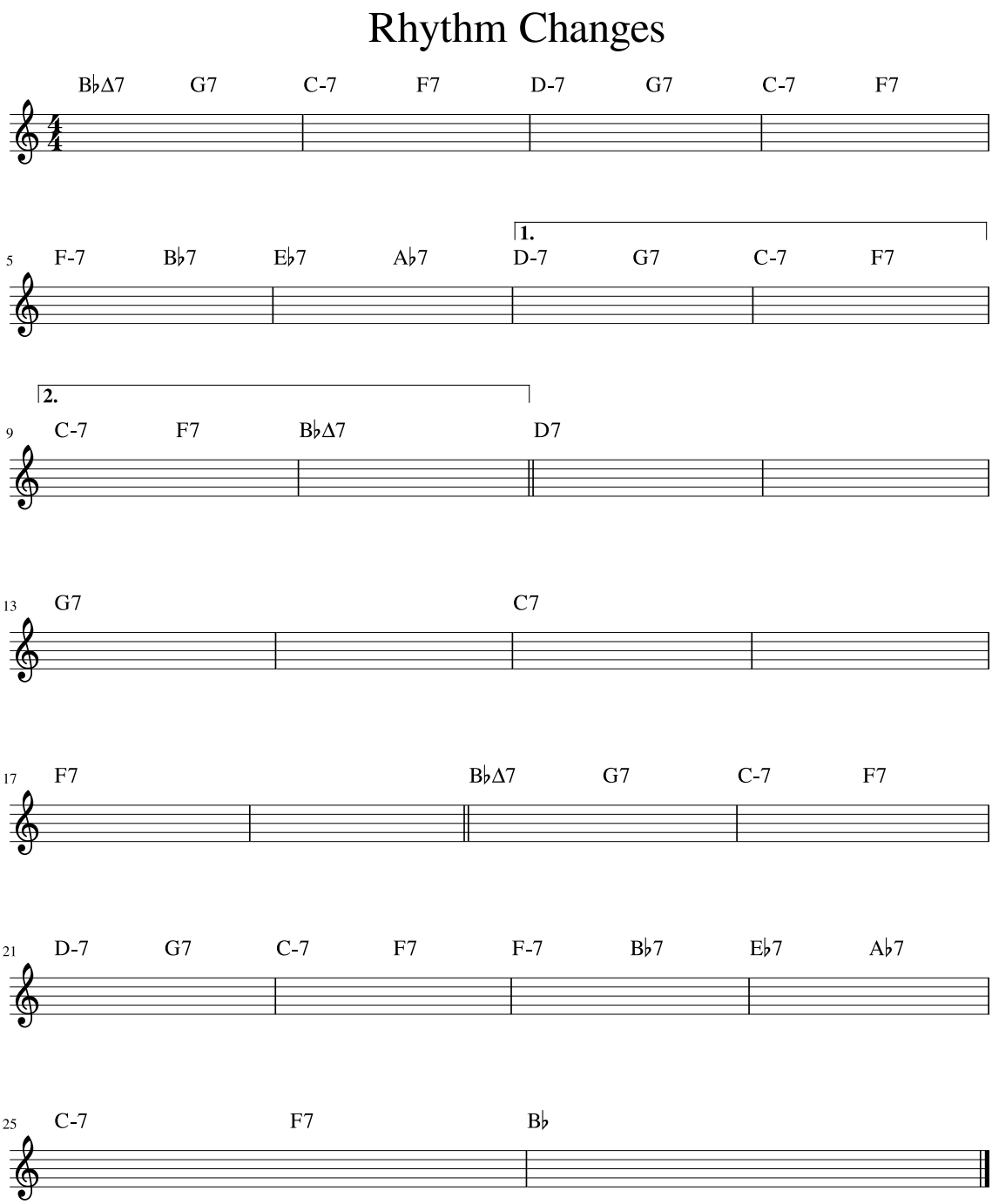
EXERCISE (CONT.)



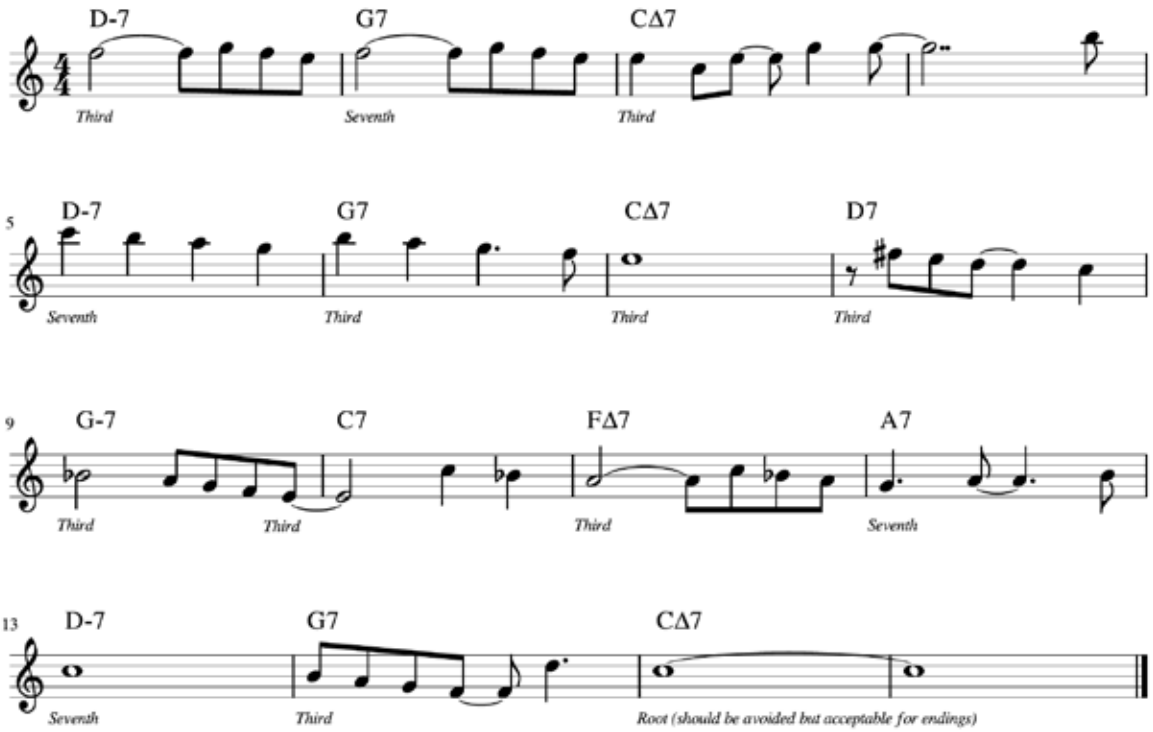
Soundbite 6.6

EXERCISE (CONT.)

Soundbite 6.7



The third of the chord isn't the only possible guide tone though; any note of the chord can be used. In Jazz, the preferred guide tones are the thirds and sevenths because they add the most colour to the chord and are the notes that best outline the quality of the chord (e.g. major vs. minor or major seventh vs. dominant seventh). A common approach is to start on either the third or seventh of the first chord, and then move to the next closest guide tone. Here is an example of an improvisation that does this:



Soundbite 6.8

In the above example, the guide tones used for the first four bars are F for D-7, F for G7, and E for CΔ7. Notice how, like smooth voice leading, the guide tone changes by the smallest interval possible (no interval for F to F and a semitone for F to E).

Soundbite 6.9.1

The next four bars use C for D-7, B for G7, and E for CΔ7. This starts off smoothly, moving from C to B by a semitone, but then jumps to E for the CΔ7 chord. The actual melody still sounds smooth though because of the way these guide tones are connected.

Soundbite 6.9.2

Bars nine to twelve do not use smooth guide tones except for between the A of FΔ7 and the G of A7. Listen to the effect this creates. The melody is still smooth because of how the notes are connected, but there is less of a sense of momentum or movement towards FΔ7 as there was towards CΔ7 in the two previous bars.

Soundbite 6.9.3

The final four bars once again demonstrate smooth guide tone movement. Listen to each group of four bars on their own and notice the different sounds that are created.

Soundbite 6.9.4

Smooth guide tone changes tend to create a stronger sense of momentum or movement through the chords. This does not mean that you need to improvise this way all the time, in fact, improvising the same way all of the time can make your improvisation repetitive. It is, however, important to keep in mind the sound that this approach can create.

EXERCISE

Play just the guide tones of the three chord progressions from the previous exercise (Guide Tones Progression, chords from 'All of Me,' and Rhythm Changes), this time using either the third or seventh. Think about how you move from one to the other and try using the smooth guide tone movement described above. Do this for each progression a few times, trying out different paths through the chords each time.

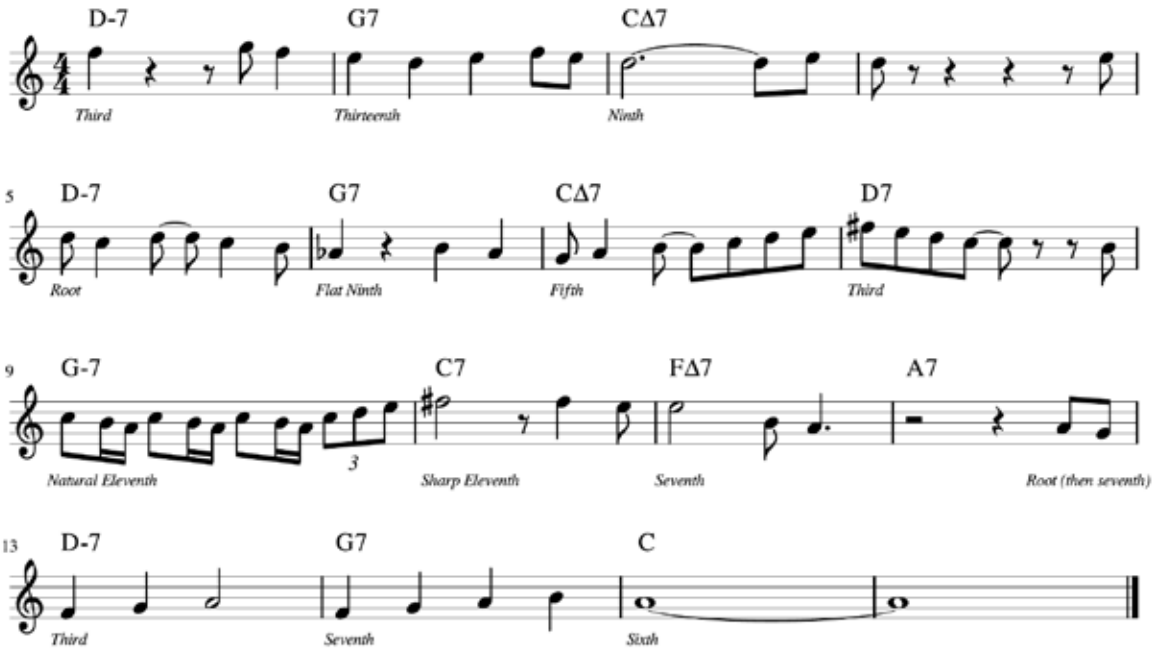
EXERCISE

Play the guide tones of the three chord progressions again, this time filling out the notes so that they become full melodies. Make this a group exercise by having someone accompany you as you do this or play over the backing tracks on your own.

Whilst the third and seventh are the most common notes to use as guide tones, they are not the only ones:

- The root or fifth can be used, but they do not create as much as colour. In Jazz, these notes are often seen as less interesting, but this depends on the style you play and your personal preferences.
- The ninth of a chord is an excellent choice for creating more colour than thirds or sevenths. It is a particularly good guide tone to use when ending phrases, especially over major seventh chords.
- The natural eleventh is generally only used over minor chords and dominant chords as it clashes with the major seventh in a major seventh chord. It adds extra colour to these minor chords.
- The sharp eleventh/flat fifth is often used over dominant chords and major seventh chords to create tension and excitement during the climax of the solo. Flat fifths also work well over minor chords when they serve as chord ii. This gives the chord a diminished sound but also creates a feeling of momentum towards the root of chord V.
- The natural thirteenth/sixth is a good guide tone to use at the end of the phrase if the final chord is major. Over a minor chord, these are much less effective, however. Thirteenths are often used over dominant chords to create a "modern Jazz" sound. They are especially effective over dominant chords if a ninth is used over whatever chord the dominant resolves to.
- The flat thirteenth and flat ninth are often used over dominant chords, particularly when they resolve to a minor chord. On the surface, they create a minor sound, but they also create a strong sense movement to the chord they resolve to because of the way they descend by a semitone. .

Soundbite 6.10



EXERCISE

Solo over the same progressions, this time using any extension as a guide tone. Listen to the effect you are creating and try to use specific guide tones with the intent of creating a certain effect. Experiment until you can create a few different sounds that you like. As always, you can have a friend or teacher accompany you as you are playing or use the provided backing track. Try swapping roles every play-through of the chords if you do this with a partner.

Guide tones are an effective and easy way to make the melodies you improvise match the chords you are improvising over. The guide tone approach can produce many different kinds of melodies that create many different sounds for the listener. At the same time though, it does limit what is possible. In part two, we will look at various other ways to improvise melodies with chords and the different sounds that are possible.

SCALE COMPENDIUM

The following section is a list of some of the most common (and some less common) scales used throughout Western music. Accompanying each scale is advice on which styles use the scale, the sound it creates, and how it is usually used. Each scale will be notated fully, and how the notes of each scale compare to a major scale will be shown, as well as the order of intervals in the scale. Although each example will be notated with C as the root, using this information, you should be able to transpose the scale to have any tonic you want. You do not have to read through and use this entire section right away, it is a list of scales to be continuously referenced throughout this book. Practice these scales with the same exercises used for the C major scale at the start of this book (ascending/descending, 1-2-3, 2-3-4…, etc.) to get more comfortable with them. Feel free to try improvising with scales you like and see what sounds you can create.

NOTE

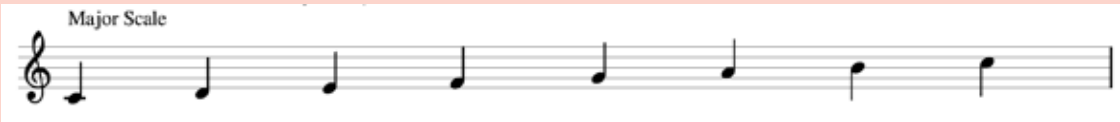
T=tone, S=semitone, m3=minor thirds, and As=augmented second

BASIC SCALES

The major scale and the three minor scales are the scales most commonly used in the common practice era of Classical Music.

MAJOR SALE (IONIAN MODE)

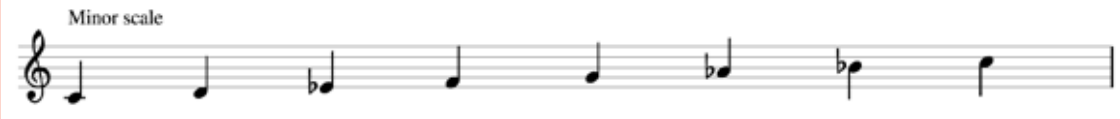
SCALE DEGREES	*1, 2, 3, 4, 5, 6, 7*
INTERVAL ORDER	*T-T-S-T-T-T-S*
STYLES USED IN	*The major scale used is found in basically every style of Western music. It is also found in music around the world, although different cultures give it different names.*
CHORDS THIS SCALE WORKS WITH	*Maj, maj7, maj9, maj11, maj13, sus2, sus4, 6, 69*
THE SOUND OF THE SCALE	*As discussed above, the major scale creates a variety of sounds and evokes a variety of emotions depending on the context. I will not list them all here, but the major scale is generally associated more with happiness and positive emotions than negative ones.*



Soundbite 7.1

NATURAL MINOR SCALE (AEOLIAN MODE)

SCALE DEGREES	*1, 2, b3, 4, 5, b6, b7*
INTERVAL ORDER	*T-S-T-T-S-T-T*
STYLES USED IN	*Like the major scale, the minor scale is used in basically every style of Western music and a variety of music from around the world, although it is not as ubiquitous as the major scale.*
CHORDS THIS SCALE WORKS WITH	*min, min7, min9, min11, min7b13, sus2, sus4*
THE SOUND OF THE SCALE	*If the major scale is associated with happiness and positive emotions, the minor scale is generally associated with sadness and negative emotions. Like the major scale though, a large variety of sounds and emotions can be evoked from the minor scale depending on context.*

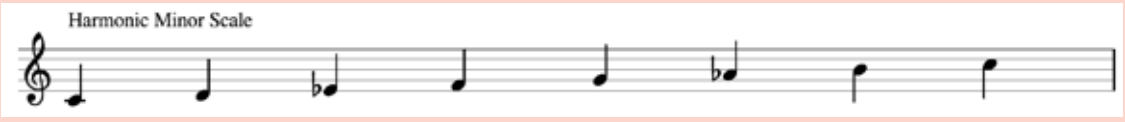


Soundbite 7.2

HARMONIC MINOR SCALE

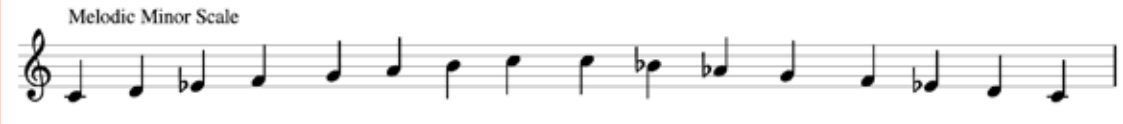
SCALE DEGREES	*1, 2, b3, 4, 5, b6, 7*
INTERVAL ORDER	*T-S-T-T-S-As-S*
STYLES USED IN	*The harmonic minor scale is a version of the minor scale which creates a stronger sense of resolution to the tonic. It is used to derive the harmony for minor keys in Classical music, Jazz and some kinds of popular music.*
CHORDS THIS SCALE WORKS WITH	*min, minb6 min(maj7)*
THE SOUND OF THE SCALE	*As mentioned above, the harmonic minor scale was created to create a stronger resolution to the tonic in minor keys. Aside from this though, the augmented second (an interval of a major second raised by a semitone), which is the interval between the sixth and seventh degrees of this scale, is often used to evoke a sense of otherness or to represent certain non-Western countries. As a result, when this scale is used melodically it can evoke a sense of foreignness for listeners that have been socialised to associate the harmonic minor scale this way. The scale is also often used to create a sense of mystery, especially in film music.*

Soundbite 7.3



MELODIC MINOR SCALE

SCALE DEGREES	*(Ascending) 1, 2, b3, 4, 5, 6, 7, (Descending) 1, 2, b3, 4, 5, b6, b7*
INTERVAL ORDER	*(Ascending) T-S-T-T-T-T-S (Descending) T-S-T-T-S-T-T**
STYLES USED IN	*The melodic minor scale is mostly used in music from the common practice era of Classical music, although the ascending form of the melodic minor scale is used in Jazz over certain chords.*
CHORDS THIS SCALE WORKS WITH	*min, min6, min(maj7)*
THE SOUND OF THE SCALE	*The melodic minor scale features the raised seventh of the harmonic minor scale, however, it removes the augmented second between the sixth and seventh by raising the sixth in the ascending version and lowering the seventh in the descending version. Melodies that use this scale therefore have the semitone resolution to the tonic when approaching from below, without the larger skip from the sixth to the seventh. The melodic minor scale was most often used to write melodies for compositions in a minor key in common practice era Classical music and therefore can evoke a Classical sound. Because the scale changes depending on whether the melody is ascending or descending, the scale can also be evoke a sense of expression because chromaticism is often associated with emotional expression in Western culture.*



Soundbite 7.4.1

Soundbite 7.4.2

**The interval order given for the descending scale still refers to the intervals from scale degree one to scale degree eight.*

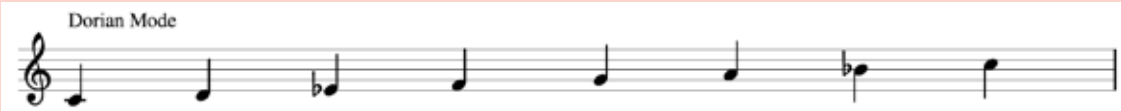
MODES OF THE MAJOR SCALE

Like many musical terms, mode has a variety of meanings depending on the way it is used. Here it refers to the scales that are created when you maintain the interval order of another scale, but choose a different note of that scale as the tonic. What people are generally referring to when they discuss "modes" or "the seven modes" are the seven modes of the major scale. The Ionian mode is the same as the major scale and the Aeolian mode is the same as the natural minor scale so they will not be covered here.

DORIAN MODE

SCALE DEGREES	*1, 2, b3, 4, 5, 6, b7*
INTERVAL ORDER	*T-S-T-T-T-S-T*
STYLES USED IN	*The dorian mode is used in a variety of Western styles of music, however, it is mostly associated with Pre-Classical European music and Jazz.*
CHORDS THIS SCALE WORKS WITH	*min, min7, min6, min9, min11, especially when these chords are serving as chord ii*
THE SOUND OF THE SCALE	*The dorian mode is very similar to a minor scale, with the only difference being the natural sixth. Because of its similarity to the minor scale the dorian scale is often associated with sadness. The natural sixth allows it to be used more joyfully, however. It can also be used to evoke Pre-Classical Western music.*

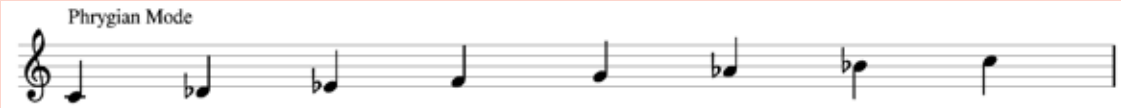
Soundbite 7.5



PHRYGIAN MODE

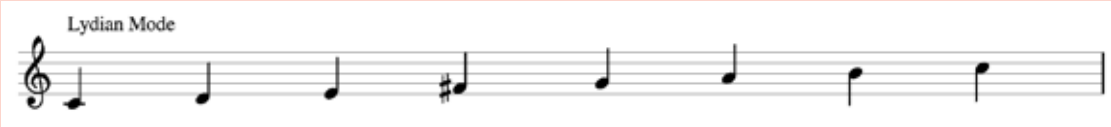
SCALE DEGREES	*1, b2, b3, 4, 5, b6, b7*
INTERVAL ORDER	*S-T-T-T-S-T-T*
STYLES USED IN	*JThe phrygian scale is used occasionally in Jazz and film music in certain contexts. A version of the phrygian scale is used in flamenco*
CHORDS THIS SCALE WORKS WITH	*min, min7, minb6 especially when the chord is serving as chord iii*
THE SOUND OF THE SCALE	*Because of the b2, the phrygian scale is often used to represent a sense of otherness to those with western ears.*

Soundbite 7.6



LYDIAN MODE

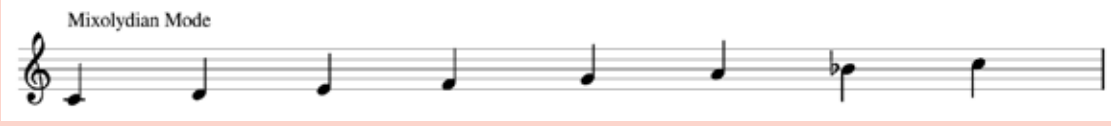
SCALE DEGREES	*1, 2, 3, #4, 5, 6, 7*
INTERVAL ORDER	*T-T-T-S-T-T-S*
STYLES USED IN	*Like many modes, the lydian mode is associated with Pre-Classical European music. It is also employed extensively in Jazz.*
CHORDS THIS SCALE WORKS WITH	*maj, maj7, maj9, maj7#11, maj13, 6, 69, especially when the chord is serving as chord IV or bII*
THE SOUND OF THE SCALE	*The lydian mode evokes happiness like the major scale, however, the #4 creates some ambiguity. The mode is often associated with a "modern Jazz sound".*



Soundbite 7.7

MIXOLYDIAN MODE

SCALE DEGREES	*1, 2, 3, 4, 5, 6, b7*
INTERVAL ORDER	*T-T-S-T-T-S-T*
STYLES USED IN	*The mixoldyian scale is used in a variety of styles. Whilst it is used in pre-classical European music, it is also employed extensively in Jazz and occasionally in Popular Music.*
CHORDS THIS SCALE WORKS WITH	*maj, dom7, dom9, dom11, sus2, sus4, particularly when the chord is functioning as a V chord*
THE SOUND OF THE SCALE	*Like the lydian scale, mixolydian's similarity to the major scale gives it a happy sound. The b7 reduces this somewhat though. It is typically a bit more neutral than the major scale in terms of what emotion it evokes.*

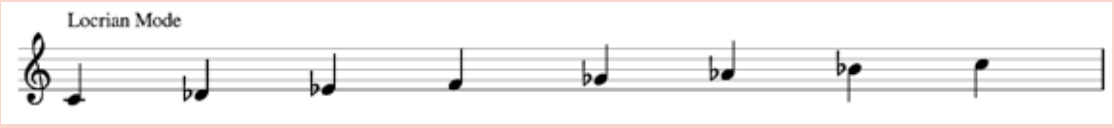


Soundbite 7.8

LOCRIAN MODE

SCALE DEGREES	*1, b2, b3, 4, b5, b6, b7*
INTERVAL ORDER	*S-T-T-S-T-T-T*
STYLES USED IN	*Jazz and film music.*
CHORDS THIS SCALE WORKS WITH	*dim, ø7*
THE SOUND OF THE SCALE	*Because of the many flattened intervals, the locrian mode has a very dark and dissonant sound. It is often used to evoke evil or to create tension.*

Soundbite 7.9

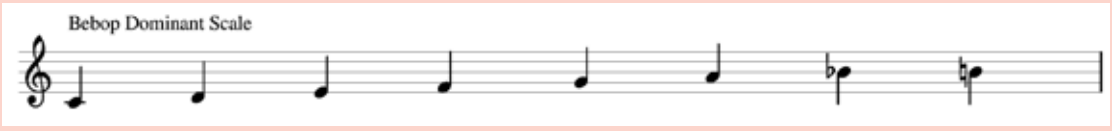


BEBOP SCALES

When Bebop emerged in the 50s and 60s, the musicians would often employ a greater amount of chromaticism than previous styles of Jazz. Whilst this can be heard in the harmonies of the pieces they composed, it is also present in the scales themselves. The various Bebop scales are the same as already existing scales, except with an additional note. This additional note can be heard as a chromatic passing tone, a note from outside the scale that is usually played on an unaccented part of the bar to connect two notes from the scale that are a step apart. Because Jazz is generally in 4/4 and there are only seven notes in a regular scale, the additional note of the Bebop scales allow improvisers to play stepwise quaver melodies that perfectly fit the four beats of each bar.

BEBOP DOMINANT SCALE (BEBOP SCALE)

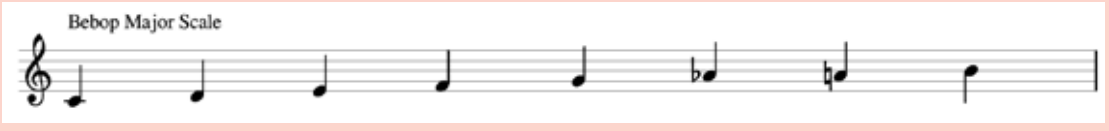
SCALE DEGREES	*1, 2, 3, 4, 5, 6, b7, 7*
INTERVAL ORDER	*T-T-S-T-T-S-S-S*
STYLES USED IN	*The scale is employed frequently in Bebop and is also used in other later styles of jazz.*
CHORDS THIS SCALE WORKS WITH	*maj, dom7, chords with a V chord function*
THE SOUND OF THE SCALE	*Because of this scales frequent use in Bebop, it is strongly associated with a Jazzy sound. Within the genre of Jazz it is a way of adding a bit of extra colour and to smooth out melodic lines*



Soundbite 7.10

BEBOP MAJOR SCALE

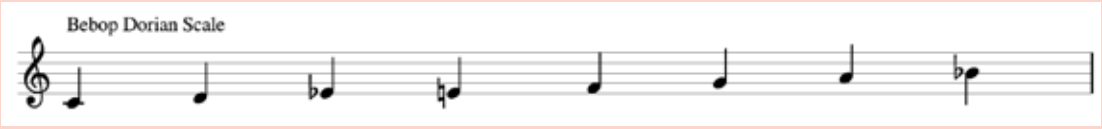
SCALE DEGREES	*1, 2, 3, 4, 5, b6, 6, 7*
INTERVAL ORDER	*T-T-S-T-S-S-T-S*
STYLES USED IN	*Like the dominant Bebop scale, the Bebop major scale is employed frequently in Bebop and in other later styles of Jazz.*
CHORDS THIS SCALE WORKS WITH	*maj, maj7, 6, 69, chords that function as chord I*
THE SOUND OF THE SCALE	*This scale is also strongly associated with a "jazzy" sound. Because the chromatic note is the flat sixth of the chord, this scale can be more dissonant sounding than the Bebop dominant scale.*



Soundbite 7.11

BEBOP DORIAN SCALE

SCALE DEGREES	*1, 2, b3, 3, 4, 5, 6, b7*
INTERVAL ORDER	*T-S-S-S-T-T-S-T*
STYLES USED IN	*Like the other Bebop scales, the Bebop dorian scale is employed frequently in Bebop and in other later styles of Jazz.*
CHORDS THIS SCALE WORKS WITH	*min, min7, min11, min6, minor chords functioning as chord ii*
THE SOUND OF THE SCALE	*Like all of the Bebop scales, the chromatic passing tone is associated with a "Jazzy" sound. This scale is the same as the Bebop dominant scale except with the tonic as the fifth of that scale. As a result, using this scale over the ii and the Bebop dominant scale over the V in a ii-V-I progression will create the same effect.*



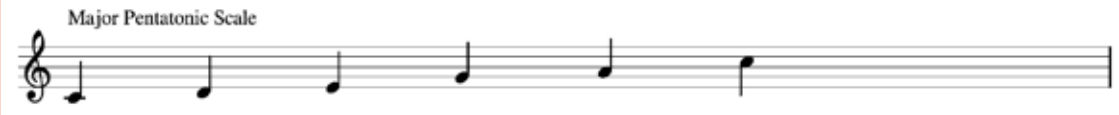
Soundbite 7.12

PENTATONIC SCALES AND BLUE SCALE

Pentatonic scales are scales containing only five notes. They are found throughout the world and are used frequently in various styles of Western music.

MAJOR PENTATONIC SCALE

SCALE DEGREES	*1, 2, 3, 5, 6*
INTERVAL ORDER	*T-T-m3-T-m3*
STYLES USED IN	*The major pentatonic scale is found in a variety of musics from around the world. In the west it is used in Folk Music, Popular music, and some styles of Jazz.*
CHORDS THIS SCALE WORKS WITH	*maj, maj7, maj9, maj11, maj#11, maj13, dom7, dom9, dom11, dom13, 6, 69, sus2, sus4. Because there is no fourth or seventh in this scale it works over a variety of different chords and for chords serving a variety of functions.*
THE SOUND OF THE SCALE	*Because of the lower number of notes, the major pentatonic scale has a bit less colour than the seven and eight note examples previously explored. Because of its use in various kinds of Asian music, it can be used to evoke associations with that region. It is also employed frequently in popular Music and some styles of Jazz when a simpler or clearer sound is desired. The major pentatonic scale also evokes a "folky" sound. Because of the major third in this scale, it is generally more evocative of positive or neutral emotions.*

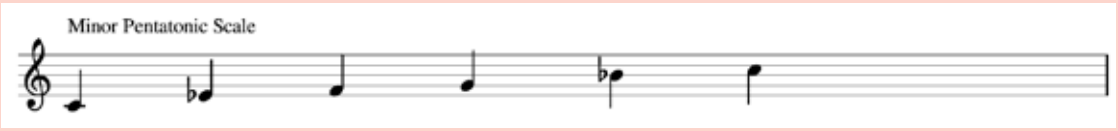


Soundbite 7.13

MINOR PENTATONIC SCALE

SCALE DEGREES	*1, b3, 4, 5, b7*
INTERVAL ORDER	*m3-T-T-m3-T*
STYLES USED IN	*The minor pentatonic scale is similarly used in a variety of musical styles around the world. One Western style it used in frequently is Rock, particularly heavier genres of Rock from the second half of the twentieth century. The minor pentatonic scale is also employed in Jazz and other genres of Popular Music*
CHORDS THIS SCALE WORKS WITH	*min, min7, min9, min11, min13, dom7, like the major pentatonic scale, the vagueness of this scale means that it works over a variety of chords serving various functions.*
THE SOUND OF THE SCALE	*In Jazz, the scale (as well as the blues scale) is frequently employed over dominant seven chords to create a "bluesy" sound. Aside from this, the minor pentatonic scale tends to evoke sadder or neutral emotional qualities.*

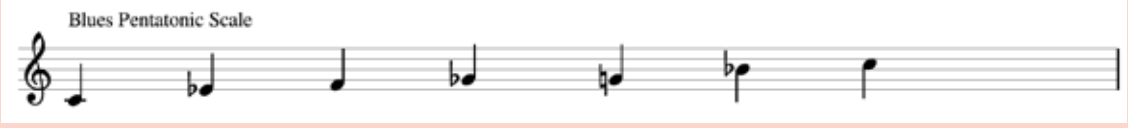
Soundbite 7.14



BLUES PENTATONIC SCALE (BLUES SCALE)

SCALE DEGREES	*1, b3, 4, b5, 5, b7*
INTERVAL ORDER	*m3-T-S-S-m3-T*
STYLES USED IN	*Blues, Jazz, Rock*
CHORDS THIS SCALE WORKS WITH	*dom7, dom9, dom11, min, min7, min9, min11*
THE SOUND OF THE SCALE	*The blues pentatonic scale is the same as the minor pentatonic scale aside from an additional note between the fourth and fifth of the scale. This additional note, often called the "blue note", evokes a very characteristic sound associated with Blues and Jazz. The blue note itself can also be added to other minor scales for a similar effect.*

Soundbite 7.15

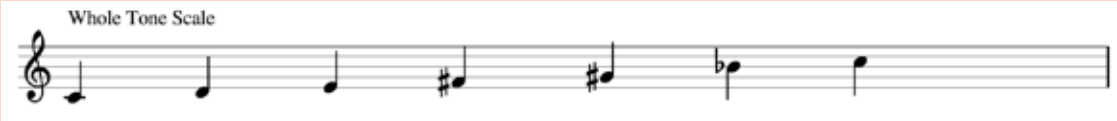


WHOLE TONE AND DIMINISHED SCALES

The whole tone and diminished scales are both symmetrical scales. This means that there is at least one mode of this scale that is the same as the regular scale. In the case of the whole tone scale (which is simply a series of whole tones), you only have to transpose the scale up or down a whole-tone before it is replicated. Both diminished scales (also called the octatonic scales) replicate every minor third. The result is a sound that is neither major nor minor and that sounds like no other scale in the diatonic system.

WHOLE-TONE SCALE

SCALE DEGREES	*1, 2, 3, #4, #5, b7*
INTERVAL ORDER	*T-T-T-T-T-T*
STYLES USED IN	*The whole-tone scale is found in Classical music from the nineteenth century, however, it is more commonly associated with music from the first half of the twentieth century, with its use by musicians such as Debussy and Stravinsky. It is used in film music and very occasionally in Jazz.*
CHORDS THIS SCALE WORKS WITH	*aug, dom7#5*
THE SOUND OF THE SCALE	*Because of the scales symmetrical structure, its sound is particularly dissonant and strange to Western audiences. Although it can be combined with traditional harmony, on its own its symmetrical nature makes it a particularly static sound to use, avoiding the need for certain notes to resolve in certain ways (as is the case in diatonic scales). In Classical music and in film music it is used to represent "strangeness" or mystery, such as to accompany a supernatural character or location. In Jazz it may be used to create a dissonant or static sound during a solo.*

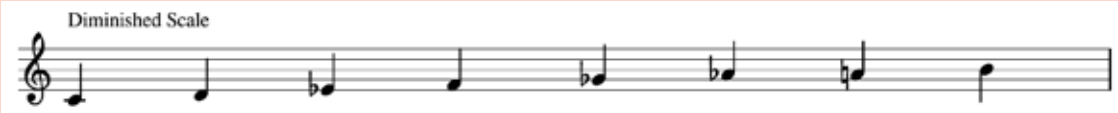


Soundbite 7.16

DIMINISHED SCALE (WHOLE-STEP HALF-STEP SCALE)

SCALE DEGREES	*1, 2, b3, 4, b5, b6, 6, 7*
INTERVAL ORDER	*T-S-T-S-T-S-T-S*
STYLES USED IN	*The diminished scale is used in Classical music from the early-twentieth century. It also has its uses in film music and is used in many styles of Jazz.*
CHORDS THIS SCALE WORKS WITH	*dim, dim7*
THE SOUND OF THE SCALE	*Like the whole-tone scale, the diminished scales symmetry gives it a dissonant and unusual sound. It is particularly dissonant because of the amount of tritones and minor thirds inherently present in the scale. As a result, the scale is employed when a large amount of dissonance is required, such as to score evil in films, or to create tension at structural points in a composition or improvisation. In Jazz, the scale is one common way of adding tension to your solo. Unlike the whole-tone scale, the diminished scale fairly easily fits into traditional harmony and composition as a way of creating more intense tension that resolves back into consonance.*

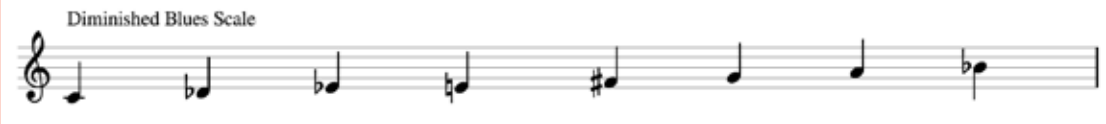
Soundbite 7.17



DIMINISHED BLUES SCALE (HALF-STEP WHOLE-STEP SCALE)

SCALE DEGREES	*1, b2, b3, 3, #4, 5, 6, b7*
INTERVAL ORDER	*S-T-S-T-S-T-S-T*
STYLES USED IN	*The diminished blues scale is used in a very similar way to the diminished scale and is mainly associated with early-twentieth century Classical Music, Film Music, and Jazz.*
CHORDS THIS SCALE WORKS WITH	*dim, dim7, dom7*
THE SOUND OF THE SCALE	*The diminished blues scale has a sound and function very similar to that of the diminished scale. It is used to create high levels of dissonance for the various reasons given in regards to the diminished scale.*

Soundbite 7.18

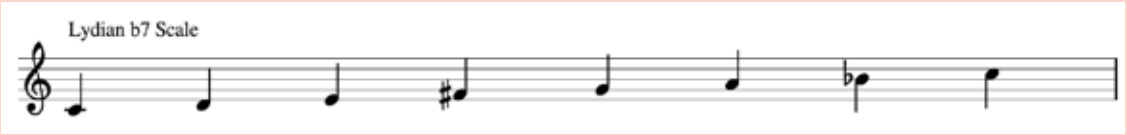


MODES OF THE MELODIC AND HARMONIC MINOR SCALES

These scales are generally used in Jazz to play over chords with unusual or altered upper structures (the upper structure of a chord are the various extension placed onto a chord beyond its triad; see page 57). They are all modes of either the ascending melodic minor scale or the harmonic minor scale. Not every mode of these two scales is covered here, only those that are particularly common.

LYDIAN B7 SCALE (DOMINANT #4)

SCALE DEGREES	*1, 2, 3, #4, 5, 6, b7*
INTERVAL ORDER	*T-T-T-S-T-S-T*
STYLES USED IN	*Used predominantly in Jazz, particularly styles from the 60s onwards.*
CHORDS THIS SCALE WORKS WITH	*maj, dom7, dom7b5 (dom7#4), is often used when a dominant seven chord is used as II or bII of the key*
THE SOUND OF THE SCALE	*This scale has a fairly dark sound, though not as much as some of the other scales in this section. It is a good scale to use to create colour and intensity without sounding too dissonant.*

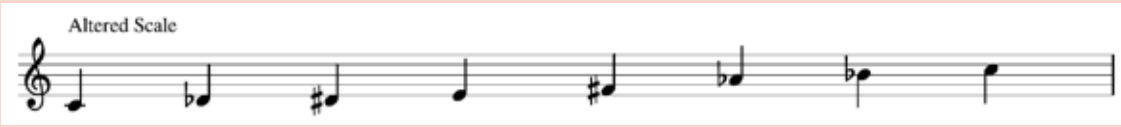


Soundbite 7.19

ALTERED SCALE (SUPER LOCRIAN SCALE)

SCALE DEGREES	*1, b2, b3, 3 (b4), #4 (b5), #5 (b6), b7*
INTERVAL ORDER	*S-T-S-T-T-T-T*
STYLES USED IN	*Mainly used in Jazz.*
CHORDS THIS SCALE WORKS WITH	*dom7, dom7alt, dom7b9, dom7#9, dom7b5, dom7b13, dom7b9b13, dom7#9b13, chords serving a V function (including tritone substitutions, especially chords with altered upper structures (e.g. dom7#9, dom7#9b13)*
THE SOUND OF THE SCALE	*The altered scale has a dissonant sound, and as a result is often used to create tension before resolving to the tonic of a key. This dissonances may not always immediately resolve, however, and instead be used for an extended period of time.*

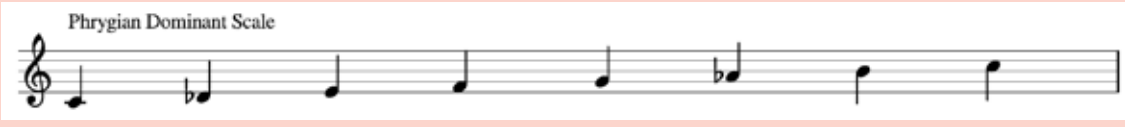
Soundbite 7.20



PHRYGIAN DOMINANT SCALE (MIXOLYDIAN FLAT TWO FLAT SIX)

SCALE DEGREES	*1, b2, 3, 4, 5, b6, b7*
INTERVAL ORDER	*S-As-S-T-S-T-T*
STYLES USED IN	*Under the name "phrygian dominant scale", this is mostly used in Jazz. Under other names, however, this scale appears in various kinds of music from Eastern Europe and the Middle East.*
CHORDS THIS SCALE WORKS WITH	*dom7, dom7b9, dom7b9b13, is often used over dominant chords that resolve to a minor chord*
THE SOUND OF THE SCALE	*Because the augmented second between the second and third degree, this scale is often used to represent otherness for Western listeners. In Jazz contexts, it often adds colour and/or tension to V chords.*

Soundbite 7.21



REFERENCES

Overduin, Jan. *Making Music: Improvisation for Organists.*

Andrews, H.K. 2001 "Whole-tone scale." Grove Music Online. 23 Aug. 2018

Fridburg, Anders and Sundström, Andreas. 1997. "Preferred swing ratio in Jazz as a function of tempo." *Speech, Music, and Hearing: Quarterly Progress and Status Report* 38.4 (1997): 19-27.

'Appoggiatura.' *Grove Music Online.* 2001. 17 Oct. 2018. **https://doi.org/10.1093/gmo/9781561592630.article.01118**

Webster, G., Kelly, F. Voorhes, J. 'Embouchure.' Grove Music Online. 17 Oct. 2018.

Wilson, Charles. 2001 "Octatonic." Grove Music Online. 23 Aug. 2018.

PART TWO
GAINING MOMENTUM

PART TWO
GAINING MOMENTUM

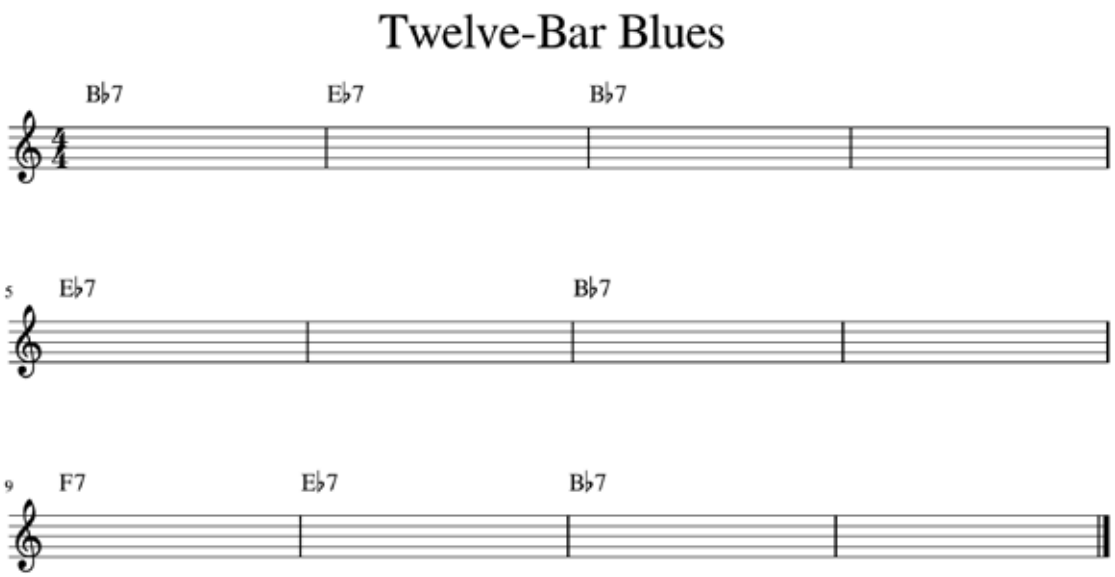
IMPROVISING OVER CHORDS: PART TWO

ARPEGGIOS

We discussed what arpeggios are and how they can be used as harmonic accompaniment earlier in the **Improvising Harmonic Accompaniment** section (page 76). However, arpeggios can also be used to improvise melodies. Melodies devised this way will work well over the chords the arpeggios are based on and can even imply those chords without any harmonic accompaniment. As discussed earlier, an arpeggio occurs when the notes of a chord are played individually instead of at the same time. Depending on how it is played, this will usually sound like an accompaniment pattern and not the main melody that the ear should follow. As a result, improvisers using arpeggios to create melodies will often embellish the arpeggios of the chord progression to make them sound more melodious (many of these embellishments are discussed in the **Ornamentation** section on page 34). Even without any harmonic accompaniment, playing in this arpeggio-based way can still evoke the harmonies they are based on. Before we get to that though, let's start simple.

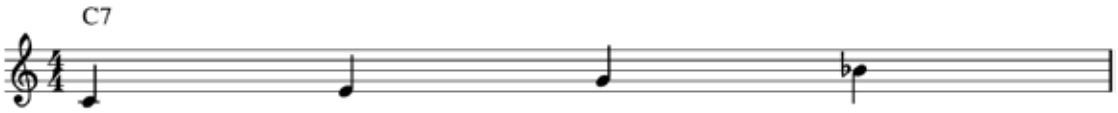
EXERCISE

Go through the following twelve-bar blues progression playing the arpeggios of each chord:



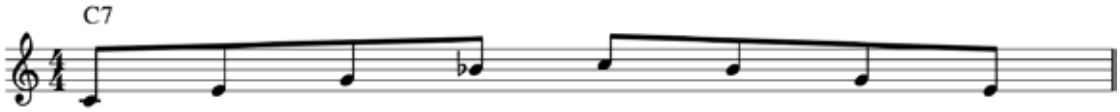
Soundbite 1.1

Start by playing the root, third, fifth, and seventh of the chord in that order and as crotchets. For example:



Soundbite 1.2

Once you are confident with this, try playing the arpeggios as quavers by playing the root, third, fifth, seventh, root (octave up), seventh, fifth, and third. For example:



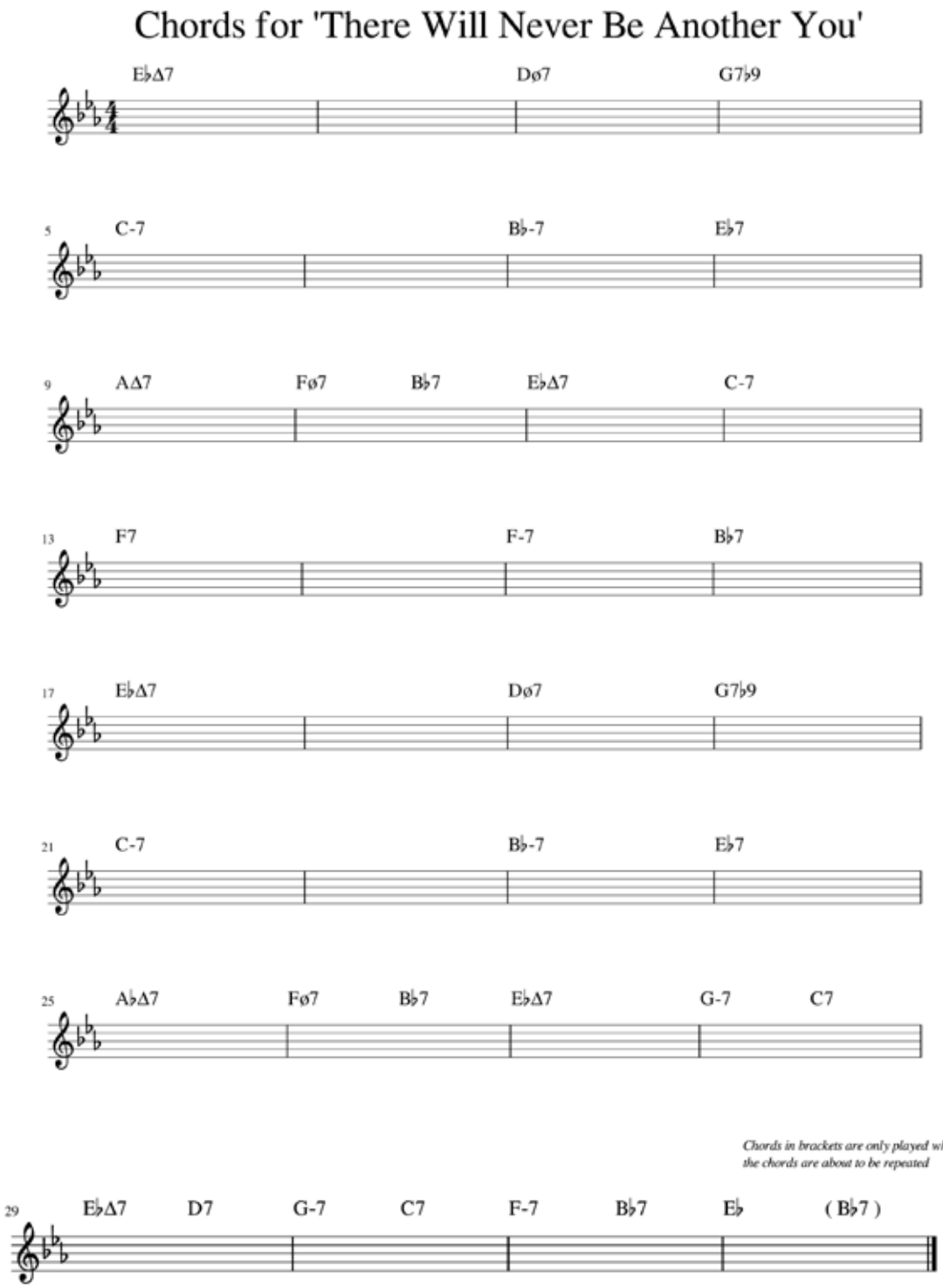
Soundbite 1.3

This can be made a group exercise by adding harmonic and rhythmic accompaniment.

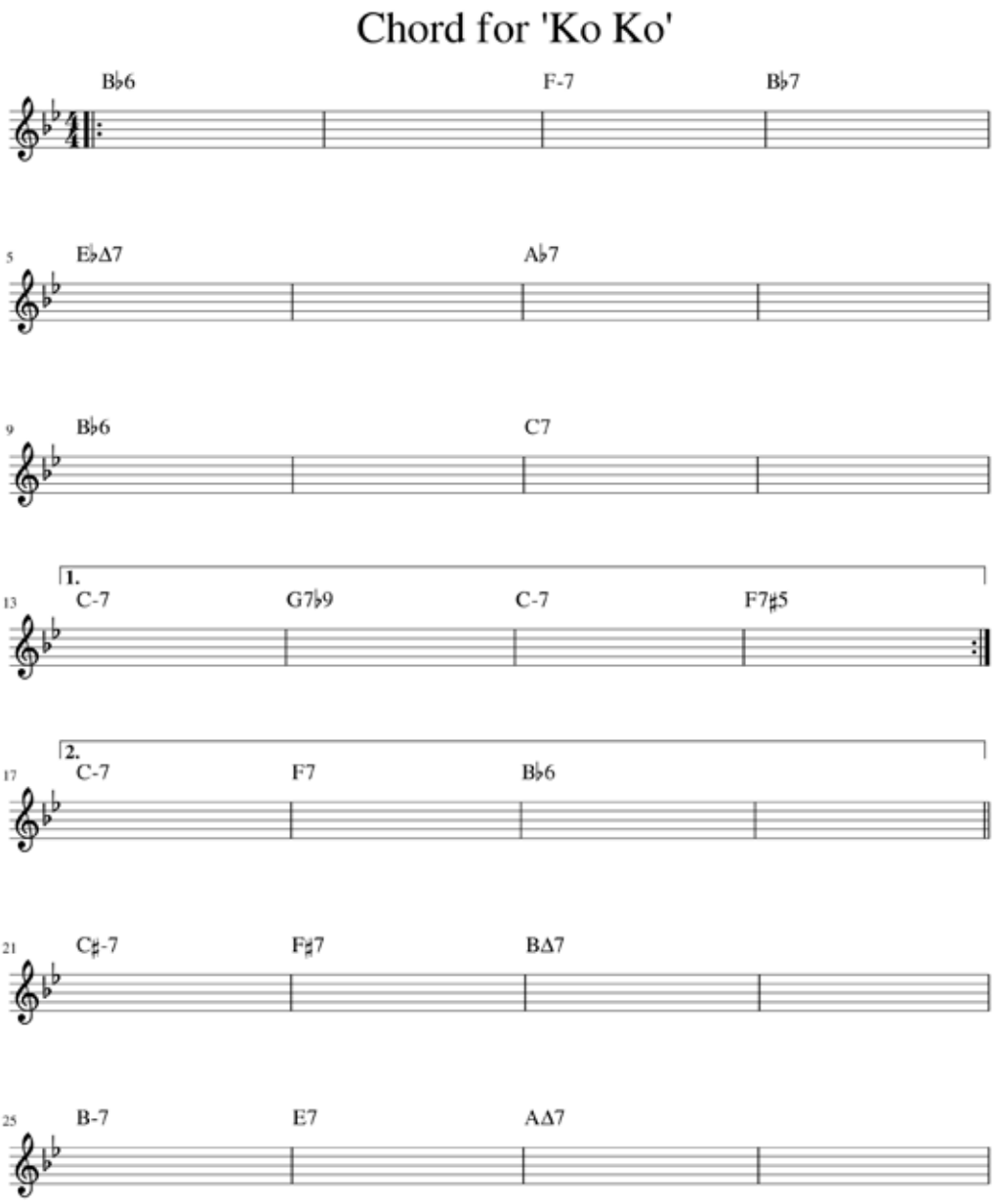
EXERCISE

Repeat both versions of the above exercise, this time over the chords to 'There Will Never Be Another You' and 'Ko Ko'

Soundbite 1.4

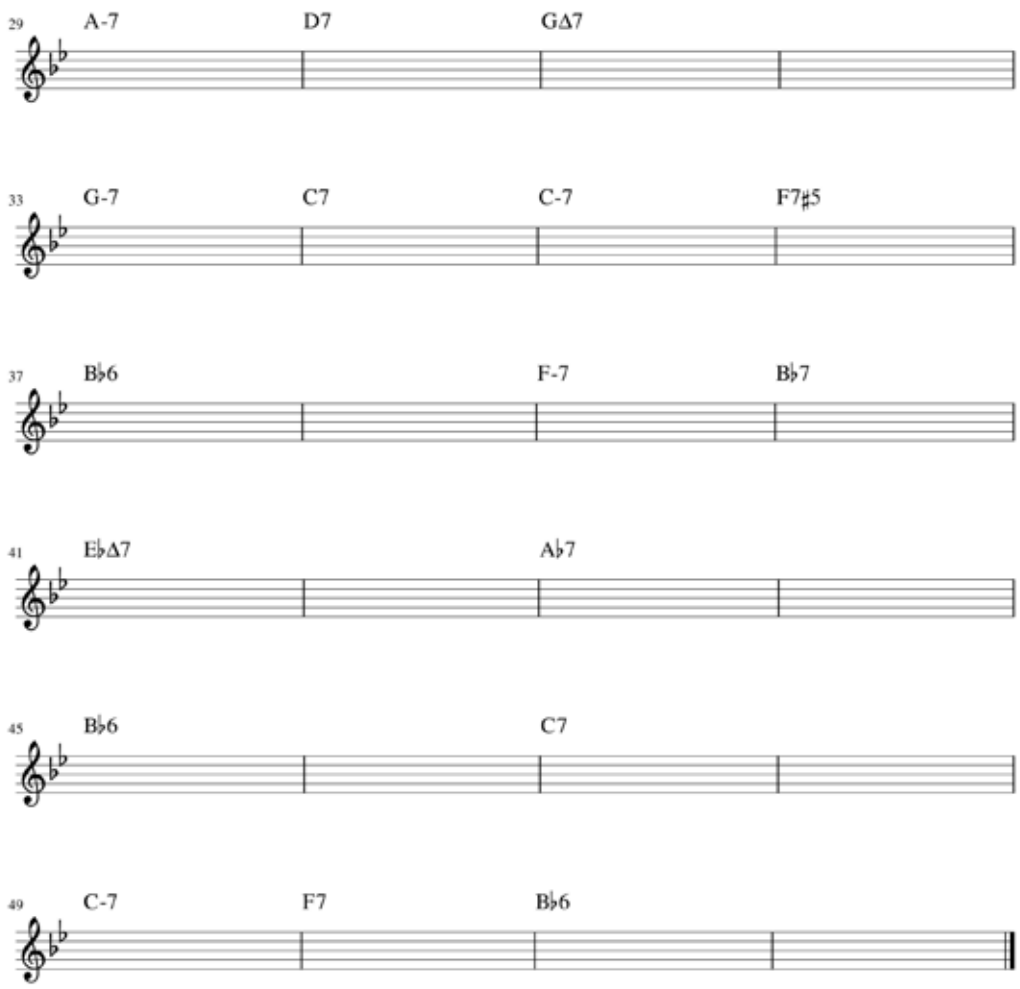


EXERCISE (CONT.)



Soundbite 1.5

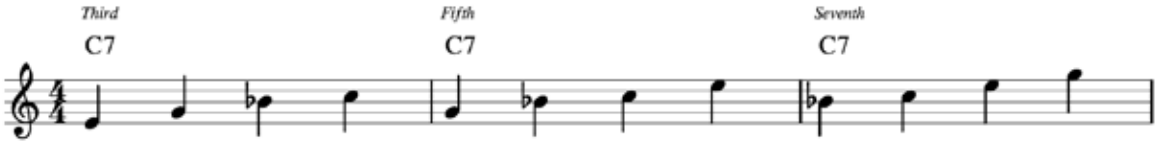
EXERCISE (CONT.)



TIP

The arpeggios for the first few bars of each chord progression have been given for you to help you out.

As discussed in part one, arpeggios do not always have to start on the root or bass note. This is particularly true when using arpeggios to create melodies. Melodies can be made smoother and flow better depending on what note of the arpeggio you choose to start on, so it is important to be able to improvise arpeggios starting on any note.



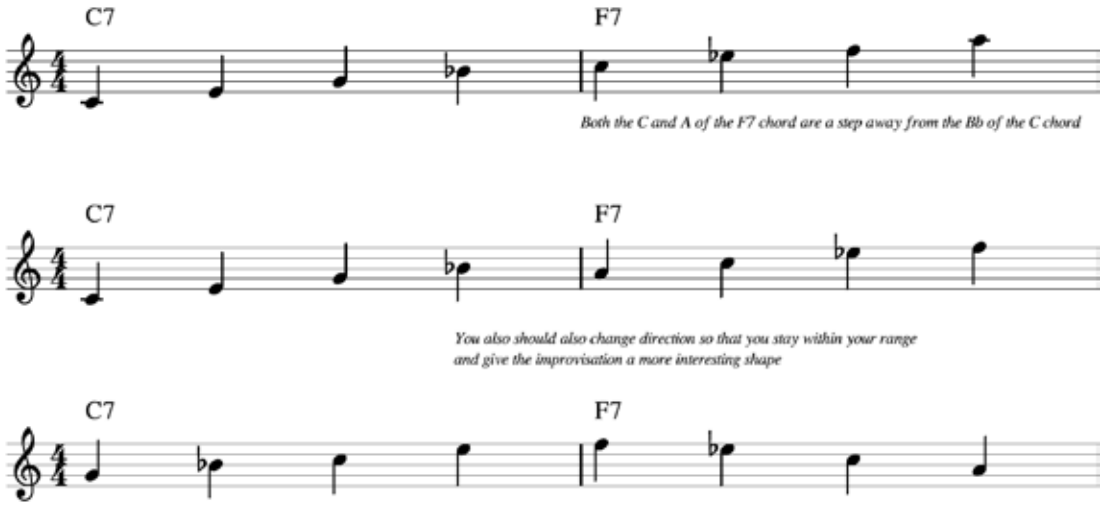
Soundbite 1.6

EXERCISE

Play the arpeggios over the twelve-bar blues progression again, but this time start your arpeggios on the third, fifth, or seventh of the chord. This can be made a group exercise by having friends or a teacher accompany you, or you can use accompanying backing track.

EXERCISE

Repeat the above exercise, but this time, whenever the chord changes, start the arpeggio of the next chord from the closest possible note. If there are two notes equally close, go to either of them. For example:



Soundbite 1.7

Practice this multiple times to see the many ways you can smoothly transition from one arpeggio to the next. You can see an example of how to do this over a twelve-bar blues at the start of the next section.

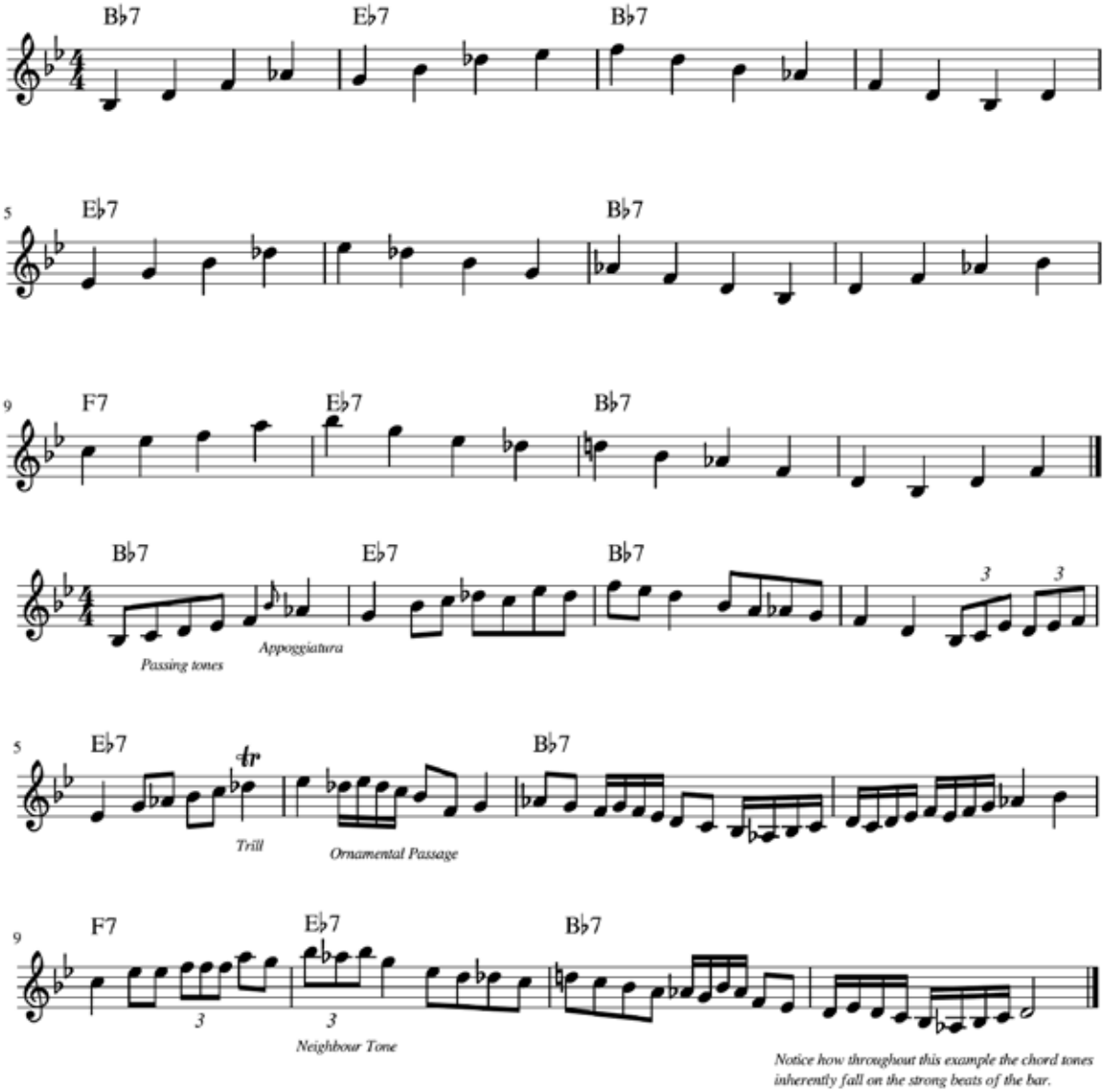
EXERCISE

Repeat the above exercise with the chords for 'There Will Never Be Another You' and 'Ko Ko.'

CREATING MELODIES FROM ARPEGGIOS

As discussed at the start of this chapter, arpeggios can be embellished to turn them into full melodies. When adding notes to arpeggios to create melodies, improvisers will often use the "the melody is still somewhat recognisable, but the new version has been made into your own" or the "the original melody is a basis for your improvisation but no longer recognisable" approaches discussed in the previous chapter (page 43 and page 44).
They will often add passing tones, neighbour tones, appoggiatura, and the various other kinds of ornaments to the arpeggio until it sounds like a melody and not an accompaniment pattern. See an example of this below:

Soundbite 1.8.1



Soundbite 1.8.2

Often, turning arpeggios into full melodies in this way will cause these melodies to retain the feeling of the original chord progression. This is often referred to as implying the harmony. Being able to suggest certain harmonies with your melody is useful both when improvising or composing a solo melody and when the chords you are implying are being played as harmonic accompaniment.

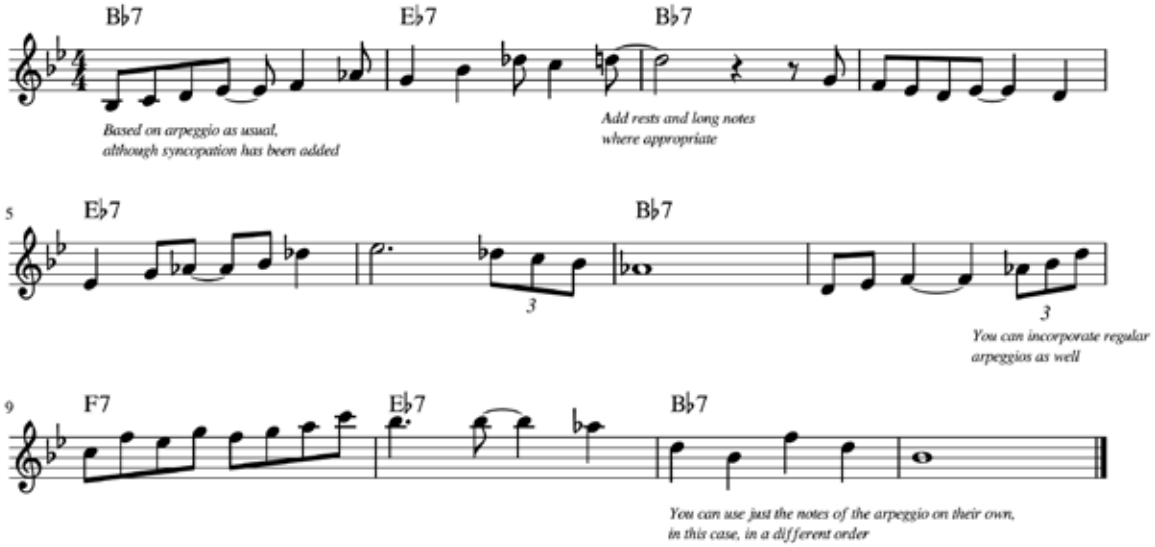
EXERCISE

Over the previously shown twelve-bar blues progression, arpeggiate the chords but embellish them in the way described above. Start by embellishing the straight forward arpeggios starting on the root, third, fifth, or seventh. Once confident with that, try moving to the next closest note at each chord change as in the previous exercise. This can be made a group exercise by adding harmonic and/or rhythmic accompaniment.

EXERCISE

Repeat the above exercise with the chords for 'There Will Never Be Another You' and 'Ko Ko.'

In some forms of music such as Baroque music, Classical music, Rock, and Heavy Metal, this constant stream of notes based on the arpeggios of the chord is very appropriate. However, other forms of music such as Jazz, Blues, and Ballads value space and more clearly differentiated phrases in their improvisations. These improvisations can still use the arpeggio-based method, the improviser just needs to separate musical phrases using rests or sustained notes. Look at the example below.



Soundbite 1.8.3

EXERCISE

Once again improvise over the twelve-bar blues progression, this time using space and longer notes to better define musical phrases. Revise the Phrasing section on page 24 for assistance with this. You should still base your melodies on the arpeggios, and you can still use the different approaches to arpeggiating described throughout this section. This can be made a group exercise by having friends or a teacher play the chords or accompany you rhythmically.

EXERCISE

Repeat the above exercise with the chords for 'There Will Never Be Another You' and 'Ko Ko.'

EXERCISE

Improvise over the three chord progressions again, but this time combine this arpeggio-based approach with the previously discussed chord-scale system and guide tone approach. Change between them freely and listen out for what effect each one creates. When improvising over chords, improvisers will often use a variety of strategies depending on their personal preference and what they think sounds most appropriate in the specific context. As always, this exercise can be made a group exercise with harmonic or rhythmic accompaniment.

GROUP IMPROVISATION

So far we have been discussing strategies and techniques for improvising as an individual. However, so much improvisation around the world occurs as part of a group, and these group members interact with each other in various ways. In Jazz, the chord player will improvise the rhythms and voicings of their chords based on what the soloist is playing. In some genres of Indian classical music, the violinist is expected to imitate the phrases being improvised by the vocalist. In free improvisation, the entire performance unfolds based on how the individual improvisers interact with each other.

There are many ways that improvisers interact with each other, but they do not just happen out of nowhere. These improvisers can communicate with each other so effectively because they have developed the skills necessary to understand, anticipate, and react to the other members of their group. They also, through experience or training, have obtained the knowledge that allows them to interact with their ensemble members in a way appropriate for the style. In the following section, we will explore these basic skills and examine some of the style-specific knowledge necessary for these spontaneous interactions.

ACTIVE LISTENING

As obvious as it sounds, listening is a vital part of group improvisation. It may seem trivial or like something that everyone does, but there is a difference between hearing the music and actively listening to it. The more an improviser practices their listening skills, the better they get at noticing the finer details of what other people are doing. It also becomes easier to listen out for what multiple people are playing as opposed to just focusing on one person all the time. This higher level of listening inevitably comes through experience, but it is also possible to train it specifically.

EXERCISE

Get into groups of three to six performers.

- *After a signal (this can be a head nod, hand signal, or anything else), each performer will begin improvising.*
- *Everyone must improvise something that is very easy to play and that can be played with very little thought. It can even be as simple as a single note!*
- *Once the signal has been given and everyone is improvising, each member of the group needs to focus their listening on a single member of the ensemble.*
- *Spend at least ten seconds or so focusing on one person before moving onto the next one.*
- *Repeat this until you have focused on everyone in the ensemble.*
- *Organise someone to make a second signal to end the exercise.*

Once you are confident with this, try repeating the exercise, this time focusing intensely on two people at once. If you do not have enough people for a full group, this exercise can also be done with this pre-recorded track. You will notice that when you focus your listening on one person you pick up a lot more detail about what they are playing. This skill is essential for most kinds of group improvisation.

EXERCISE

Repeat the above exercise, this time with a variation. At any time after everyone has started playing after the signal if anyone stops playing for more than one second or so then everyone else must also stop. Consider it the equivalent of the end signal in the previous exercise. Ensure that you are still listening deeply to the performer or performers you choose throughout the exercise. The point is to be able to listen intently to one ensemble member whilst still being aware of what is happening as a group. This exercise works best if everyone waits well into the exercise before someone stops playing. Repeat this exercise many times and try to improve the speed with which everyone notices that the exercise is ending.

Soundbite 2.1

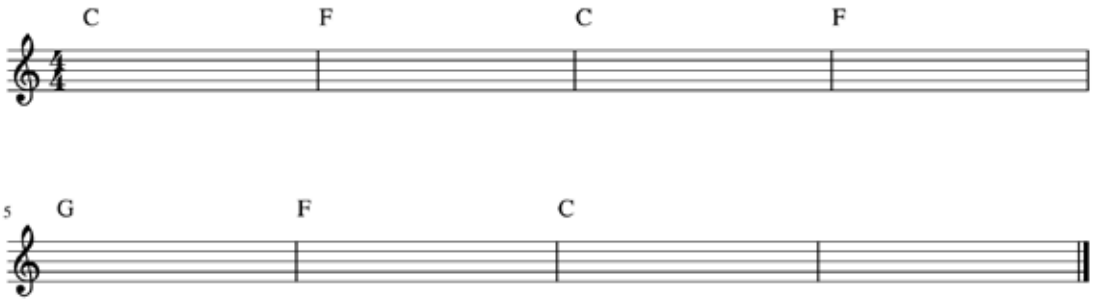
EXERCISE

Finally, repeat the exercise one more time. This time, as you listen intently to each person, try and change your own playing to interact with them in some way. This might be playing in rhythmic unison with them or filling in the spaces between what they're playing. The trick here is to get good at alternating your attention between yourself and the person/people you are focusing on. As before, whenever anyone stops playing for more than a second, everyone has to stop.

So far we have explored active listening by having every performer play something that is very easy for them. In a real performance though, improvisers have to use their active listening skills whilst actually playing difficult music. This may require the improviser to constantly juggle their focus between different members of the ensemble and their own playing.

EXERCISE

Get into groups of three. Choose one person to be a soloist who improvises a melody, one to be a harmonic accompanist who plays the chords (use the ***Improvising Harmonic Accompaniment*** *section on page 56 to help), and one to be a rhythmic accompanist who keeps the beat (this can be with percussion or by playing a bassline). Improvise over the following chord progression:*



As much as possible, listen deeply to one or both of your ensemble members. Do not allow your own playing to suffer though. Ensure you balance listening to others and being able to continue improvising yourself. Simplify what you are playing if you need to. Like before, as soon as one of you stops playing for more than a second then everyone must stop. Repeat this exercise a few times and work on balancing actively listening to your ensemble members with continuing your own improvisation.

ROLES OF PERFORMERS

Group improvisations almost always have the performers fulfilling different roles. These roles may stay the same for the whole performance, but they can also change over time. There can be (and often there is) various people performing the same role in a single performance.

At the most basic level, improvisers generally serve as *timekeepers, harmonic accompaniment, active accompaniment*, or *soloists*. Each style of music will have its own specific expectations for what improvisers must do when serving these roles. In addition, many ways of improvising don't always fit neatly into these four categories. Nevertheless, this is just a start for thinking about the different functions each performer might serve while improvising. The duties of the four roles are:

Timekeeper	*To outline the pulse and metre of the current performance. E.g. a drummer who is laying out a beat.*
Harmonic accompaniment	*To outline the harmony or key centre of the music, e.g. a pianist playing chords or a keyboardist sustaining a note as a drone.*
Active accompaniment	*To actively interact with and support the soloist. This can be with both pitched and unpitched material. E.g. a drummer playing a drum fill in one of the gaps in the soloist's melody.*
Soloist	*To play the "main" part of the song or the part that receives the most focus from the listener, usually the melody. E.g. a saxophone player taking a solo.*

Improvisers may serve multiple roles at once and can change roles throughout a performance, sometimes very quickly. For example, in many kinds of music, the bass player will often be both outlining the pulse (timekeeper) and playing the root notes of the chord progression (harmonic accompaniment). Later in the performance, this same bass player may improvise a solo (soloist). In many styles of Jazz, the person playing the chords is expected to place these chords in between the improvised phrases of the soloist, making them both harmonic accompaniment and active accompaniment. In some instrumental genres of Indian Classical music, the instrument that plays the "soloist" role for most of the performance will become harmonic accompaniment by repeating the main melody of the piece while the drummer improvises a solo. It should also be noted that not every role will be

present in every performance. A string quartet playing with a flexible pulse may not have anyone functioning as a timekeeper.

Listen to this example recording of a Jazz improvisation. Notice how most of the time the bass is just keeping time and outlining the chords, but occasionally adds a fill. Notice how the piano is accompanying with chords but often also directly interacting with the soloist. Notice how the guitar solos for the first half of the recording then switches to harmonic accompaniment.

Soundbite 2.2

EXERCISE

Get into a group of at least three. Have each person choose a role for themselves from the four described earlier. Choose a key and a metre, then begin improvising, trying to fulfil your role as best as possible throughout this improvisation. Repeat the exercise a few times, changing your role each time. Try and choose a role that is unconventional for your instrument (e.g. avoid having drums as timekeeper all the time).

EXERCISE

Repeat the above exercise, but this time make it so that some people are performing the same role. As a group, see if you can find ways of having multiple people perform the same role in different and interesting ways. Try and ensure the music you make stays interesting despite these restrictions.

EXERCISE

Once again choose roles for yourselves and improvise in a chosen key and metre. This time though, change your role midway through the performance. Ensure your transition between roles is as smooth and musical as possible.

EXERCISE

Once again improvise in a chosen key and metre, but do not choose roles beforehand. Begin improvising however you feel, and then gradually settle into a role based on what you think is going to sound interesting. Repeat the exercise a few times, making sure you try out different combinations of roles amongst the group. Like the previous exercise, switch roles throughout the performance based on what you think is going to sound interesting musically.

It is important when thinking about your role in an improvisation not to let it limit what you are doing. If you believe changing your role or temporarily branching away from that role will enhance the music then you should definitely do so. The point of thinking about each performer's role is to understand where each performer fits into the group dynamic so that everyone can anticipate and make sense of what everyone else is doing. Use these roles to make interacting with your fellow performers easier, but do not let it hold back your improvisation.

NON-VERBAL COMMUNICATION AND STAGING

The ability to communicate with each other non-verbally is important for many kinds of improvisation. In small ensemble Jazz, for example, the improvised solos often don't have a pre-determined length, instead lasting as long as the soloist wants. Nodding to the other performers, taking your hands or mouth off of your instrument, stepping away from the front of the stage, sitting down, and many other physical gestures are all very effective ways to communicate when you have finished a solo. This is of course just one example of using physical gestures to communicate the end of a section. Physical signals can also be used to signify the end of the performance when it is not pre-determined, clarify where you are up to in the music if someone gets lost, and much more.

Body language, eye contact, and physical gestures are also important for other kinds of interaction between performers. Having eye contact or being able to read your bandmates body language often makes it easier to understand what they are currently doing musically. For example, if you are interacting really intently with another improviser, perhaps having a sort of dialogue (discussed on page 248), then maintaining eye contact with that person makes it easier to predict when they are going to play and helps you keep your focus on them. Breaking this eye contact can also be a way of communicating that this period of intense interaction is over..

How easily you can use non-verbal communication will depend on how you are arranged on stage. Usually, the performers will face the audience, but this doesn't mean that there can't be ways of seeing each other. Organising yourselves in a semicircle shape (see below) means that you can always see each other and still be facing the audience.

AUDIENCE

Whilst a lot rarer, in some situations the audience might be seated around the performers, and so the improviser may want to arrange themselves in a circle (as below).

Often the staging is not something the performers can control, but by doing your best to ensure everyone can see everyone else, it will undoubtedly make improvising and interacting with each other easier. There are far too many ways that non-verbal communication is used to list them all here. As you move through the book and continue improvising, however, look out for moments were you think non-verbal communication and staging will be useful.

EXERCISE

Get into groups of at least three. Choose a key/scale and a metre and begin improvising. As you play, use non-verbal communication like eye contact, a physical signal, and/or body language to communicate some of the following:

- *The end of a solo*
- *The end of the performance*
- *Changing roles (as described in the previous section)*
- *Intense interaction with another band member*
- *Any other changes in the music you can come up with*

Start by deciding beforehand which of the above you are going to be signalling. Once you have repeated the exercise a few times, though, see if you can signal some of the above changes in the music without any pre-performance discussion. After doing this for a while you will find that you will be able to understand what the body language and physical gestures of your other performers mean. Remember to ensure that your non-verbal communication is clear and visible to everyone in the ensemble.

DYNAMICS

Dynamics are how loud or soft someone is playing, and can refer to an individual performer, a few performers in the group, or the entire ensemble. Dynamics can also refer to how loud or soft performers are compared to each other and how the loudness or softness changes over time. Each instrument will have its own way of changing dynamics, however, it generally involves applying more force as you play (e.g. hitting a drum harder or blowing more air in a woodwind/brass instrument).

In improvised music, there are two major issues to think about in terms of dynamics: balancing dynamics among the ensemble and using dynamics for effect.

It is important, especially when you playing with a large number of people, to think about how loud or soft you are compared to everyone else. Different styles of music will value different instruments, roles, or parts of the music, and so these various aspects will be louder or softer depending on how clearly they are meant to be heard. For example, the vocals in a Pop song should definitely stand out. As a result, the keyboard, bass, and drums might play at a softer dynamic to make this happen. This being said, there is rarely a situation where it is appropriate for any part of the music to be overpowered completely.

EXERCISE

Play the accompanying soundbite (or any recording of a sustained sound) on a set of speakers in the room you are practicing in. It should be loud enough that you can hear it easily, but it should not be overpowering your speech or other sounds in the environment. Choose a key/scale and metre, then, in groups of at least three, improvise. As a group, do not allow yourselves to overpower the recording. If the sound recording no longer becomes audible for more than two seconds, then stop the exercise and try again. This can be made progressively harder by lowering the volume of the recording. See if you can make it to the end of the recording!

Soundbite 2.3

EXERCISE

Repeat the above exercise, but this time also listen out for the other members of your ensemble. Not only must the recording stay audible at all times, but every member of the group must also remain audible. If either the recording or an ensemble member is overpowered for two seconds, you must stop the exercise and try again.

EXERCISE

Assign roles to each other (as described earlier) and decide as a group which ones should be louder and which should be softer. Improvise in a chosen key/scale and metre, emphasising your chosen roles, while also ensuring everyone is still audible. If someone is overpowered for too long or the chosen roles are not loud enough, stop the exercise and try again. Repeat this a few times, varying who performs each role and which roles are louder or softer each time.

TIP

It is good to have a teacher or band member not participating in the exercises so they can listen out for when the group is being to overpowering. Don't forget to use you active listening skills!

Dynamics can also be used for effect. This happens all the time in pre-composed music, but we will be exploring some improvised ways of doing it. Improvised changes in dynamics are a great way to add variety to the improvisation, make it sound more expressive, and give the performance structure (as will be discussed on page 266) These changes can occur gradually or suddenly, but both require listening skills and coordination.

Changes in dynamics should feel appropriate for the musical context. You will start to learn what is and isn't appropriate the more you listen and play music, but some common situations are: to emphasise the appearance of a new section, to increase or decrease the intensity of the music, or when a specific dynamic is more appropriate for the material being improvised.

But how do you actually perform these improvised changes in dynamics? Two things to consider are who will lead the change (there may not always be a clear leader) and how to have everyone change together. Usually, one person will initiate the change in dynamics, either by simply playing louder or softer or by giving some non-verbal cue. Whenever you are improvising, you should balance your attention between specific performers and the ensemble as a whole. If you hear one or more band members start to change their dynamics, then you should most likely do the same. Non-verbal communication can come in the form of physical gestures (e.g. pointing down for a lower volume) or eye-contact and body language (looking to everyone to communicate you are doing something). When it comes to changing dynamics together, you have to constantly monitor how loud or soft the rest of your ensemble is playing and match that yourself. The more you practice this the easier it will get.

EXERCISE

In groups of at least three, choose a key/scale and metre, then improvise. As you do, practice improvising the following kinds of dynamic changes:

- *Gradually getting louder*
- *Gradually getting softer*
- *Suddenly getting louder*
- *Suddenly getting softer*

Focus on one type of dynamic change at a time and remember the techniques discussed above (following a leader, active listening, and non-verbal communication). Repeat this exercise until you can confidently change dynamics as a group.

EXERCISE

Once again improvise in your chosen key/scale and metre. Using any of the four kinds of dynamic changes from the previous exercises, practice achieving the following effects:

- *Changing dynamics to emphasise a change of section (for example when people change roles or when someone introduces new material)*
- *To create the sense that the music is "going somewhere" (this is discussed further on page 261 in the next chapter)*
- *To make the material you are playing more expressive (e.g. using dynamics to reinforce the phrasing of the melody or to emphasise important notes in the material)*
- *Changing dynamics within the group to emphasise a particular instrument or group of instruments within your ensemble (e.g. if two players are interacting with each other in an interesting way)*
- *Any other effects you can think of (agree what this will be as a group)*

The effects given in this exercise are just some examples. In practice, how you improvise changes in dynamics will depend on your musical style and personal preferences.

Soundbite 2.4.1

Soundbite 2.4.2

Soundbite 2.4.3

Soundbite 2.4.4

NOTE

Most of the accompanying soundbites are performed solo to keep the demonstrations simple

EXERCISE

Repeat the above exercise, this time implementing multiple effects in the one performance. Listen to what you are playing and see if you can use what you have learnt in this section to improvise changes in dynamics that are satisfying and interesting.

You can hear the use of improvised changes in 'Free Pieces: Sad' by The NOISE String Quartet from their album STREAM.

'FREE PIECES: SAD' BY THE NOISE

Clip 2.2.1

Listen to how the changes in dynamics emphasise movement to new sections, enhance the expressiveness of the melodies, and give the performance shape.

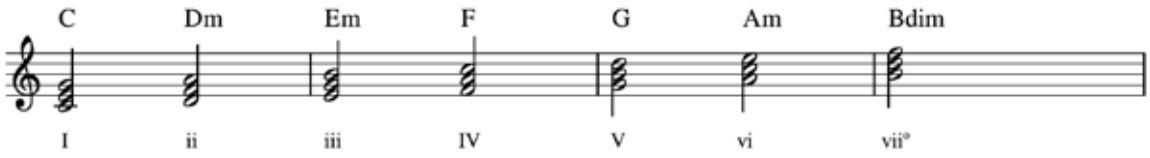
IMPROVISING HARMONIES

We have so far discussed how to improvise melodies over chords (page 92) and how to turn chord symbols into accompaniment patterns, but we have not yet explained how to improvise these chord progressions themselves. Being able to compose and improvise chord progressions has many practical uses, such as playing new chords for an existing piece of music, creating chords for a melody when none are composed, or adding harmonies to a free improvisation. Whenever people write chord progressions, they will be following the conventions of whatever style they are writing in. What this means is that through their experience playing the style or learning about the style they will have come to know which chords work well together in which order and what sounds are created by these different combinations.

Each style of music will have different rules, but we will cover some of the basics that are common across many kinds of Western music. First, let's begin with which chords will work well together. In chapter one we discussed how chords can be built on a scale (page 58). by adding notes in thirds on top of each scale degree. When creating a chord progression in a particular key, these are the chords you will mostly be using. This being said, the same chords will result in different sounds and affect the listener differently depending on the order they are put in. For many kinds of Western music, different chords will have different *functions* depending on what key the music is in. This is called functional harmony. It is the logic that the various forms of Classical music are composed with and it inspires probably all Western in some form.

BASIC CHORD PROGRESSION IN MAJOR KEYS

Let's look at the different chords of the major scale and their "names". We name chords by the scale degree they are built on (i.e. if a chord is based on the first note of the scale it will be named after the Roman numeral for one, which is I) and categorise their function as being either tonic, pre-dominant, or dominant.



Note: Uppercase numbers mean the chord is major and lowercase numbers mean the chord is minor

Soundbite 3.1

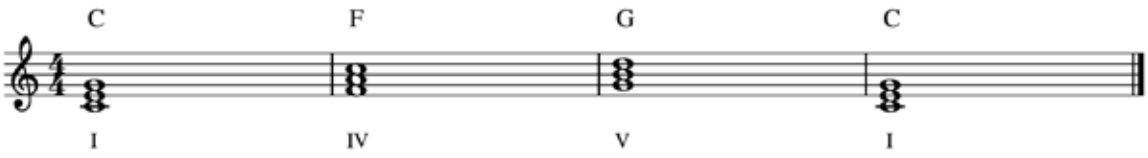
The chords fit into the following categories:

Tonic	*I, iii, and vi*
Pre-dominant	*ii and IV*
Dominant	*V and vii°*

NOTE

The chords used in the examples throughout this whole ***Improvising Harmonies*** *section will be notated in root position. In real life though, composers and improvisers would use voice leading and various different voicings, as discussed in* ***Improvising Harmonic Accompaniment*** *on page 39.*

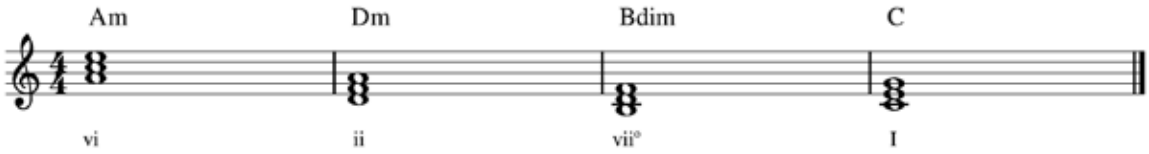
Generally speaking, tonic chords will sound fairly stable, pre-dominant chords will sound somewhat tense and make the music feel like it has gone somewhere, and dominant chords are tense and will make the music want to return to a more stable chord, usually a tonic chord. Listen to or play the following chord progression to hear this.



Soundbite 3.2.1

Notice how this example sounds like it is going somewhere? Listen a few times and focus particularly on the different qualities of each chord and the sound it creates as it moves to the next. Notice how the tonic chord (C/I) is stable, the pre-dominant chord (F/IV) sounds like a movement somewhere else, the dominant chord (G/V) wants to return to the tonic chord C, and a return to the tonic chord (C/I) sounds like a tension that has been resolved. Let's do this again but using different chords with the same functions:

Soundbite 3.2.2



Compare this example to the first. It has a similar sense of progression even though it sounds quite different. It is important to remember that while chords can serve the same function they can still create a very different sound to one another. Additionally, not every chord will fulfil the same function equally as well. Chord I is a much more stable tonic chord than chord iii, for example.

EXERCISE

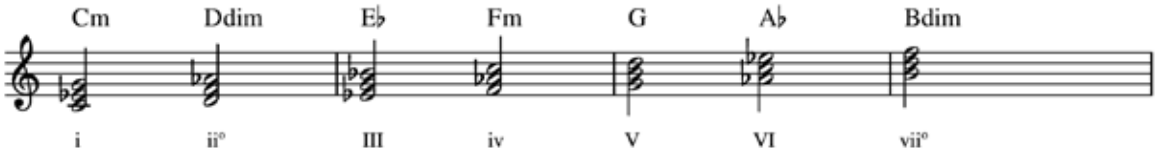
Using any of the types of accompaniment discussed in ***Improvising Harmonic Accompaniment*** *(page 56) create some chord progressions of your own. Have them follow the tonic—pre-dominant—dominant—tonic movement and experiment with the different combinations you can make. Practice in keys other than just C major.*

TIP

Start by planning each chord progression before you play it and gradually move to improvising them completely.

BASIC CHORD PROGRESSION IN MINOR KEYS

So far we have only looked at chords based on the major scale. Let's look at minor keys now. Minor keys traditionally use the harmonic minor scale to determine their chords, however, a lot of popular music will use the chords of the natural minor scale for minor keys. For now, let's stick to harmonic minor:



Note: The B♭ is used for chord III (E♭) because using a B natural creates a dissonant augmented chord)

Soundbite 3.3

Even though the qualities of the chords have changed, they still have the same functions:

Tonic	*i, III, and VI*
Pre-dominant	*iv and ii°*
Dominant	*V and vii°*

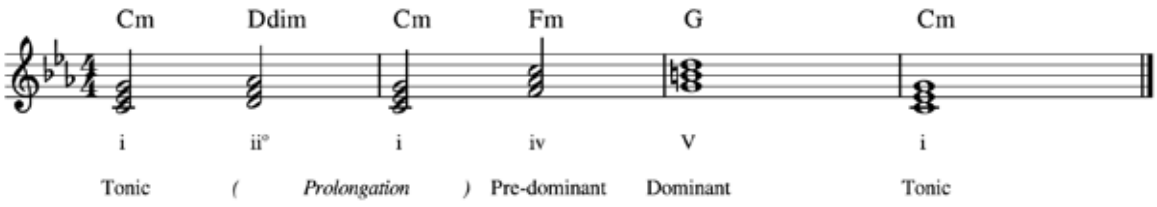
EXERCISE

Like before, improvise different chord progressions that follow the order tonic—pre-dominant—dominant—tonic this time with the chords of the minor key. Experiment with the different sounds you can make and listen out for the way that one chord moves to the next. Use many different keys other than just C minor.

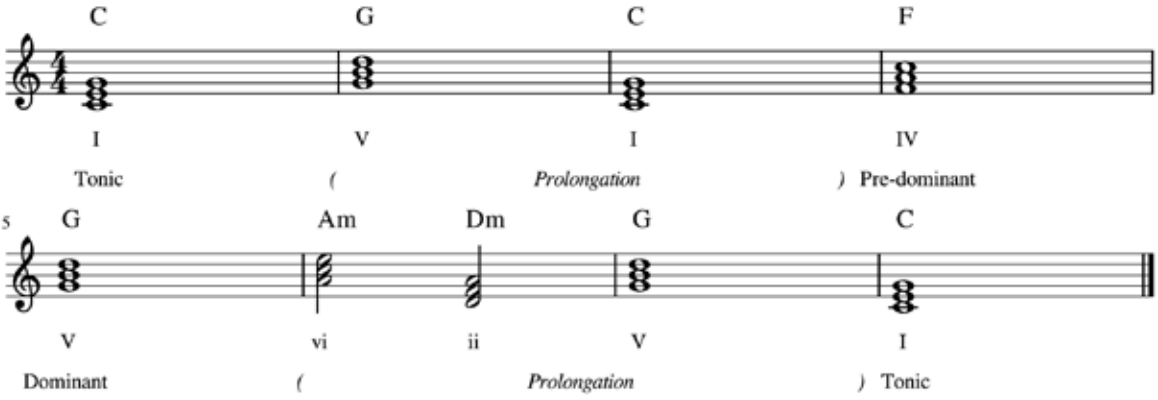
MORE INTERESTING CHORD PROGRESSIONS

The chord progressions we have improvised so far have followed the same progression of tonic, pre-dominant, dominant, tonic. While this is fairly common and is a particularly strong chord progression, there are many more ways to order your chords. One effective approach is to maintain the tonic—pre-dominant—dominant—tonic order, but "prolong" any of these functions by adding harmonies in between. See the examples below:

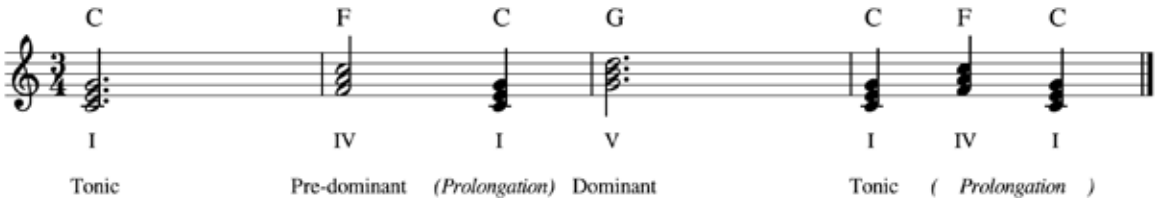
Soundbite 3.4.1



Soundbite 3.4.2



Soundbite 3.4.3



They still move from the tonic to pre-dominant, pre-dominant to dominant, and dominant to tonic, there are just some detours along the way.

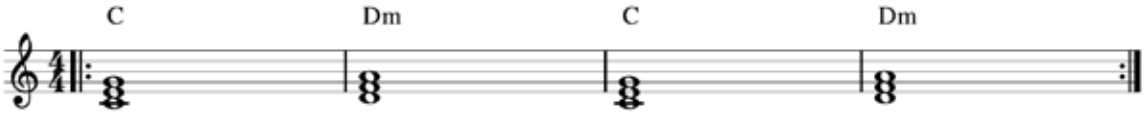
EXERCISE

Complete the following chord progressions using the prolongation idea discussed above (they are written as roman numerals so that you can choose any key you want):

- *I—IV— …*
- *vi—ii— …*
- *i—iio— …*
- *III—iv— … —i*
- *I— … iii*

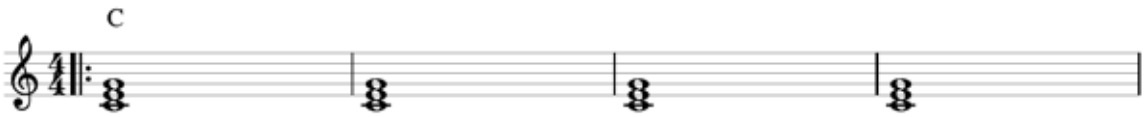
It is is not always necessary to have the chords move through the tonic—pre-dominant—dominant—tonic progression. While creating chord progressions in that way will create a sense of motion associated with functional harmony, it might not be the effect you are trying to achieve or it might not suit the music you are playing. Here are some examples of other kinds of chord progressions:

Soundbite 3.5.1

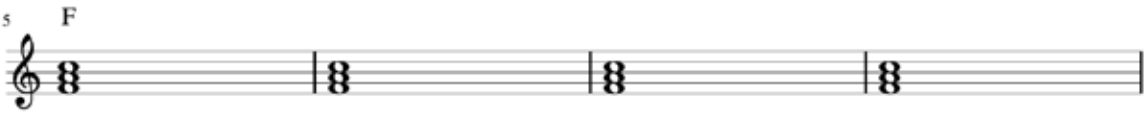


A vamp or harmonic ostinato is when a small number of chords, usually two, are repeated over and over. Because of this repitiion, you can feel free to use more adventurous or chromatic chords.

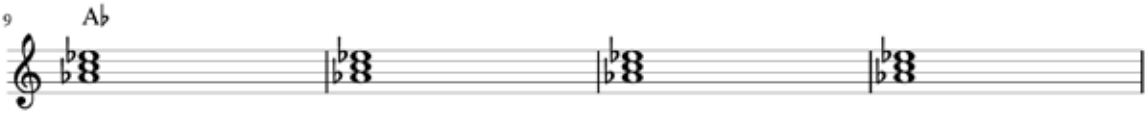
Soundbite 3.5.2



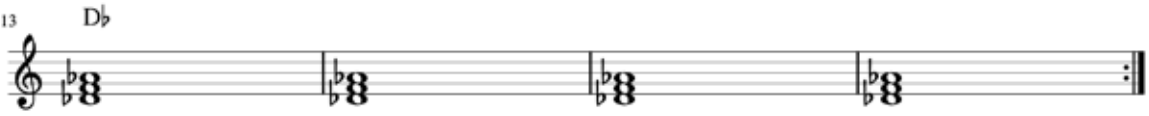
Soundbite 3.5.3

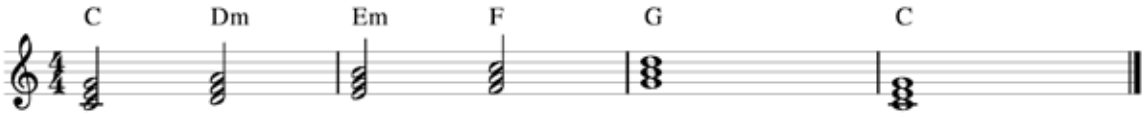


Soundbite 3.5.4

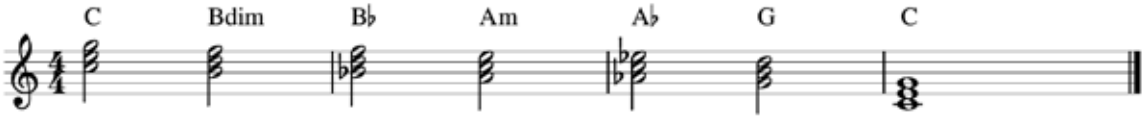


Because the chords change so slowly, chromatic chords are often used to make the progression more interesting. In some cases, like in modal jazz, slow chord progressions are seen not as different chords, but as different modes or scales to improvise over.





In ascending and descending chord progressions the functions of each chord is less important than the constant movement in one direction.



Ascending and descending chord progression are often done chromatically as well as just in one key. Both chormatic and diatonic ascending and descending chord progressions can be placed into more conventional chord progression. They are often used at transition points, when leading back to the tonic, or moments of excitement.

EXERCISE

Once again improvise a chord progression, this time moving between chords in a much freer order. Try out all of the different approaches described above. As always, practice this in many different major and minor keys. Be sure to improvise some chord progressions in metres other than 4/4. Use the section on ***Rhythm*** *(page 18) to help with this.*

SPECIFIC CHORD MOVEMENTS

As mentioned earlier, even if two chords have the same function it does not mean they have exactly the same sound or create the same effect. Even though chord I and vi are both tonic chords in a major key, chord I sounds strongly like the "home" of the music when chord vi, while still stable, does not. If you ended on chord vi it would sound more like the end of a section or phrase than an entire piece of music. While thinking of chords as tonic, pre-dominant, and dominant is extremely useful, it is also important to know how each specific chord sounds in each key.

Let's look at some of the specific sounds and effects created when using certain chords or moving between certain chords (as always this is not an exhaustive list but just a description of some common examples).

I to V (or i to V)	*Going from chord I to chord V is a move from stability to tension. This chord move in particular sets up a lot of tension to move back to the tonic and moving to I after this is an excellent way of clearly establishing the tonic. This also means that moving to a chord other than I after a I to V chord movement will really defy expectation.*
V to I (or V to i)	*Going from chord V to I is generally the strongest ending possible. This is true for both major and minor keys. There are many ways to maximise this strong ending even further. Adding the seventh to chord V or ensuring that both chords are in root position (no inversions) and that the leading tone (the third of the V chord) is in the melody are two ways of doing this. A very common ending in Classical music called the cadential 6/4 involves going from a I chord in second inversion (i.e. with the fifth in the bass) to the V chord and then back to I.*
vii° to I (or vii° to i)	*Because diminished chords are so tense, this chord movement is also a powerful ending. This is particularly true when the leading tone (the seventh note of the scale) is in the bass or in the melody, as it emphasises the resolution to the tonic. Note that because the diminished chord has a dissonant and tense sound, it might not be appropriate for every situation.*
IV to I (or iv to i)	*This chord movement is very commonly used as a vamp (when two chords are repeated over and over). It still has the sound of going from instability to stability but not so intense as when moving from a dominant chord to chord I. It can also be used as a reasonably strong ending in certain styles.*
IV to V (or iv to V)	*This chord progression is a great way to prepare for a strong move back to a tonic chord. The IV (or iv) chord creates a lot of movement towards chord V.*
V to a tonic function chord other than I	*Because the V chord so often resolves to I, resolving to a different chord (such as vi, III, VI, etc.) can create the perfect amount of surprise. It is also a good way to delay the resolution back to chord I, so often this kind of movement will be used to prolong a chord progression for longer than the listener might expect. The more you use this chord movement, the more predictable it becomes though, so avoid overusing this if surprise is your goal.*
V to a pre-dominant function chord	*Like moving to a tonic function chord other than I, moving to a pre-dominant chord will surprise the listener and defy their expectations. Unlike a tonic chord though, moving to a chord with a pre-dominant function will have a lot less resolution. It is sometimes better placing a chord movement like this in the middle of a phrase and not on a strong point in the phrase (as discussed on page 147)*
iii to vi to V to I	*This is a typical example of a cycle of fifths progressions. A cycle of fifths progression (also called the cycle of fourths) is one where each individual chord movement is by a fifth. It is a very satisfying chord progression for Western listeners and creates a lot of momentum through the music, however, it can sound cliche at times.*
Moving to a chord a third away	*Chords movements by a third (e.g. I to iii, vi to IV, i to VI, etc.) usually won't create much momentum in the music. This is because whenever you move by a third, at least two of the notes will be exactly the same. This does not make these chord movements bad though. They are useful if you want a less intense mood, are important routes to take when getting to certain chords, and can be a way of changing from a major chord to a minor chord (or vice versa) without having the music move with too much momentum.*
Moving to a chord with the same function	*Moving to a chord with the same function (e.g. iii to vi, V to vii°) often won't create as much momentum in the music as when moving from one function to another. This is because the overall tension in the music tends not to change as drastically. Like moving to a chord a third away, this is not bad, and there are ways to create momentum beyond the choice of chord (such as the inversion, the voicing of the chord, other parts of the music, etc.).*
Ascending or descending by a step more than once	*When a chord moves up or down by step more than once, the chord progression begins to lose its sense of being functional. Instead of the momentum in the music being lead by the different functions of the chords, the momentum is lead by the fact the chords are constantly moving in the same direction. An ascending or descending sequence of chords is a great way of creating momentum towards a particular chord in a different and interesting way, however, it usually doesn't have as strong of a resolution as a V to I movement.*

EXERCISE

Complete the following chord progressions using some of the chord movements described above:

- *I—IV—...—V*
- *i—iii—...*
- *V—...—I*
- *i—iv—V—...*
- *IV—...—vi*
- *III—i—...*

As usual, start by writing them out then move onto improvising these chord progressions completely.

TIP

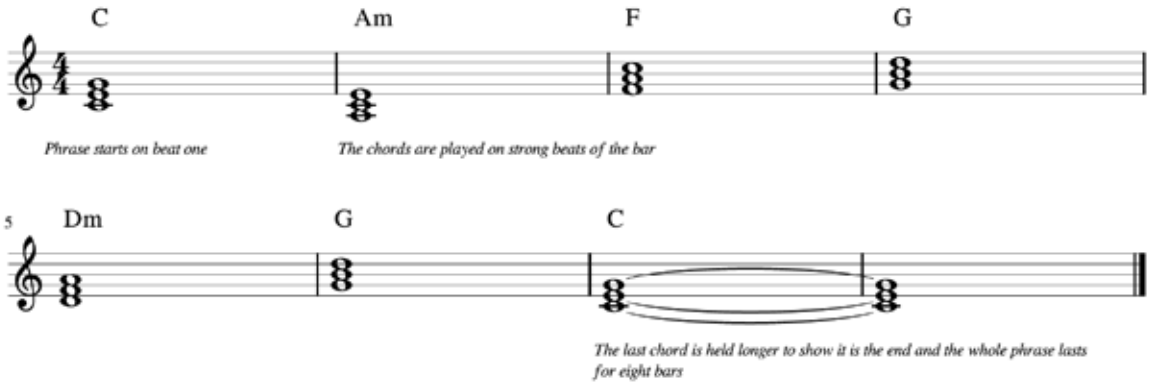
The above chord movements sound this way to Western listeners because so much Western music uses them this way. Many musics from other cultures and some kinds of Western music do not use chords in this way. Remember that these are conventions and not applicable to all styles of music.

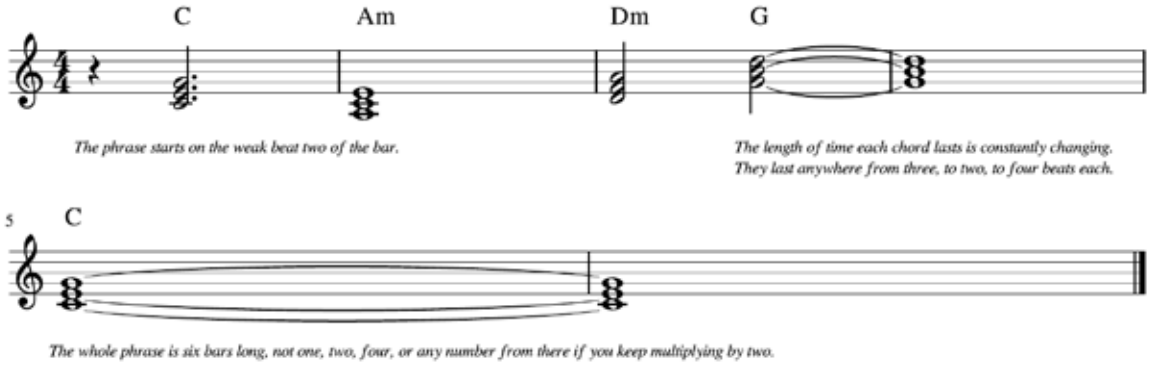
PHRASING IN CHORDS

Just like melodies, it is also important to think about the phrasing of chord progressions. Just like a phrase in the melody, the end of a phrase for chords still occurs when the music comes to a point of temporary rest. This is done by making a chord last longer than the other chords or by using functional harmony to bring the music to a point of stability. Phrases that start and end on strong beats and that last for a number of bars equal to one, two, four, or any other number you get when you keep multiplying by two are going to sound even and easy to predict. Just like with melodies, intentionally using uneven and asymmetrical phrasing can make the music more interesting and exciting if used well and used in the right style of music. See an example of an even and uneven chord progression below:

Soundbite 3.6.1

Soundbite 3.6.2





EXERCISE

Improvise some chord progressions that are four, eight, sixteen, and thirty-two bars long. Work on making them sound even by using stable chords of a longer length at cadence points. Revise ***Even Phrasing*** *on page 25 for help with this.*

EXERCISE

Once again improvise some chord progressions of various lengths but aim to incorporate some asymmetrical phrases.. Use your ears and revise Asymmetrical Phrases on page 26 for help making these asymmetrical phrases sound satisfying.

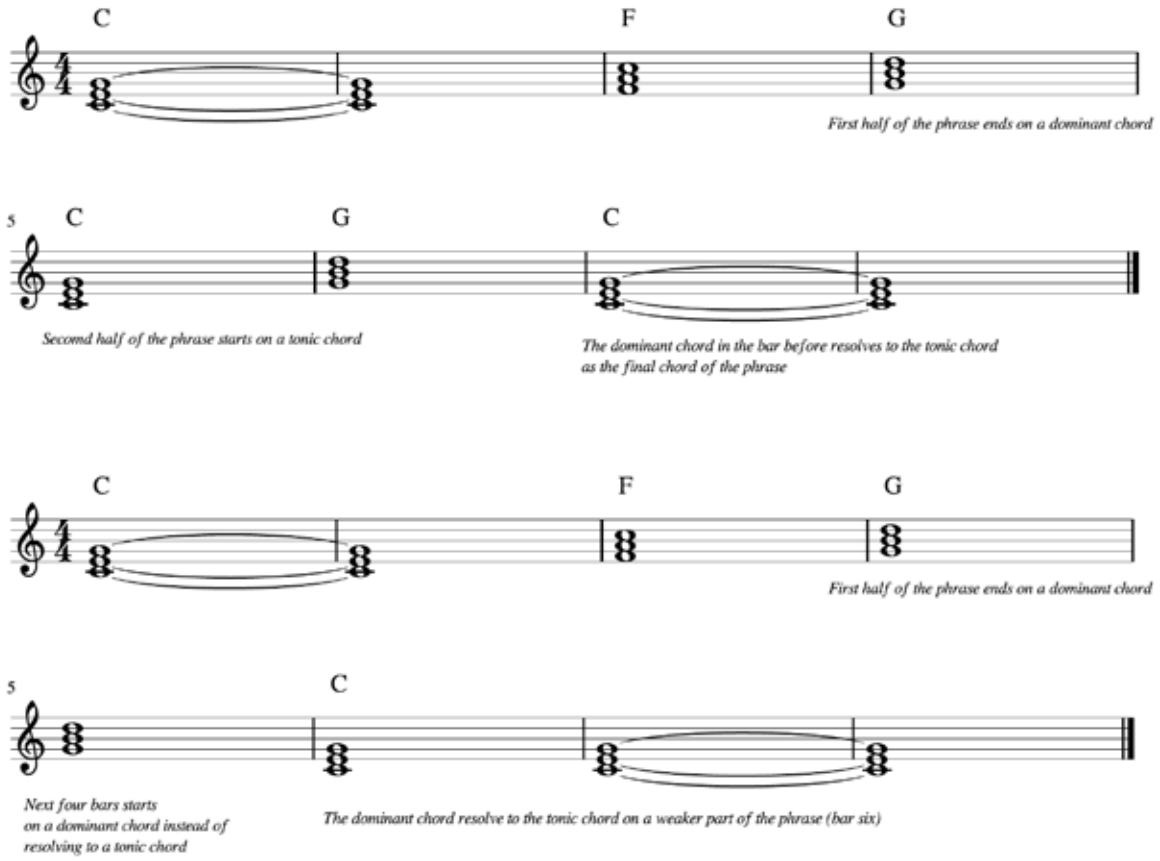
TIP

Practice with short phrases until you are confident and then work your way up to the longer ones.

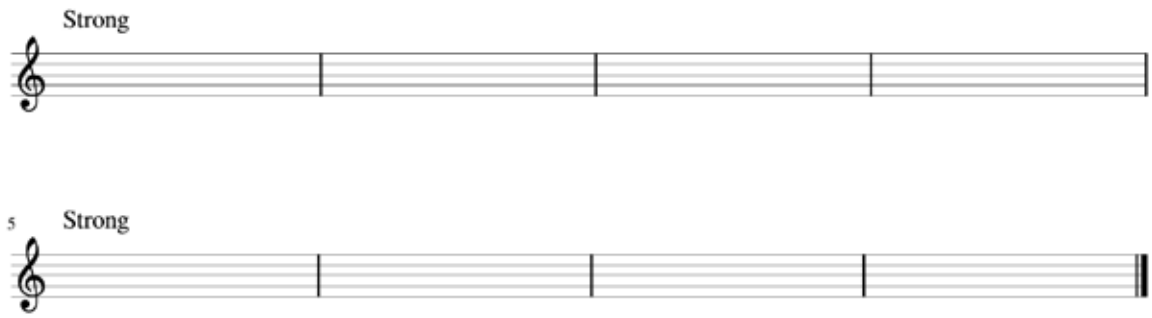
Shaping the phrasing of a chord progression is not exactly the same as with melodies though, because the kinds of chords you use will have a big effect on how the phrase will sound. We discussed already how different chords can have different effects on the music and make the music move in different ways (e.g. tonic chords tend to be stable and dominant chords tend to be tense and want to move to tonic chords). As a result, a set of phrases that should sound really even because they're four bars long, symmetrical, and start on strong beats, might not sound even because of the chords used. Listen and compare these two examples:

Soundbite 3.7.1

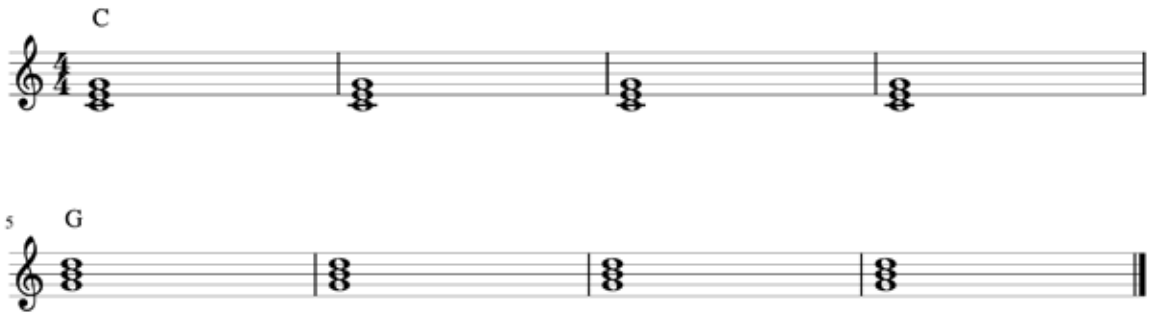
Soundbite 3.7.2



Notice how the second example doesn't sound as even. This is because it starts the second half of the phrase with a dominant chord (even though the first one also ended with a dominant) and it resolves to the tonic chord not in bar seven but in bar six. This sounds uneven because not only does each individual bar have strong points, but entire phrases also have strong beats, but so do entire phrases. Look at the diagram below:

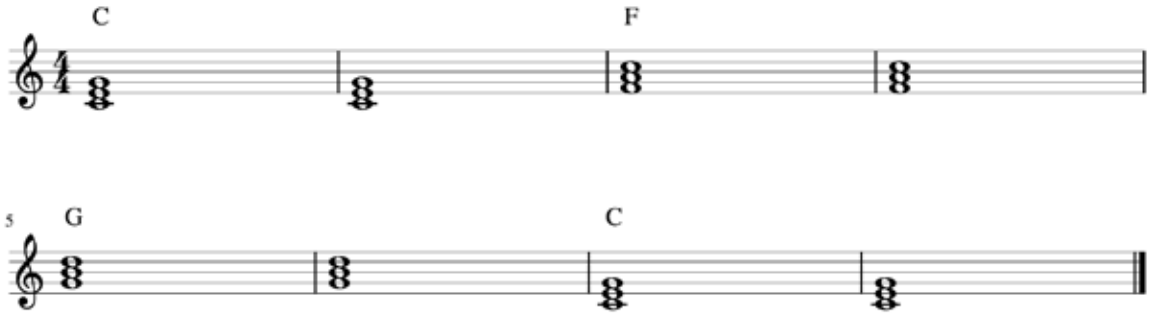


If we split the eight-bar phrase into halves, we get two "strong points" in the phrase, each lasting four bars. If we make the chords change at these points, the phrase will sound particularly even. See and hear this below:



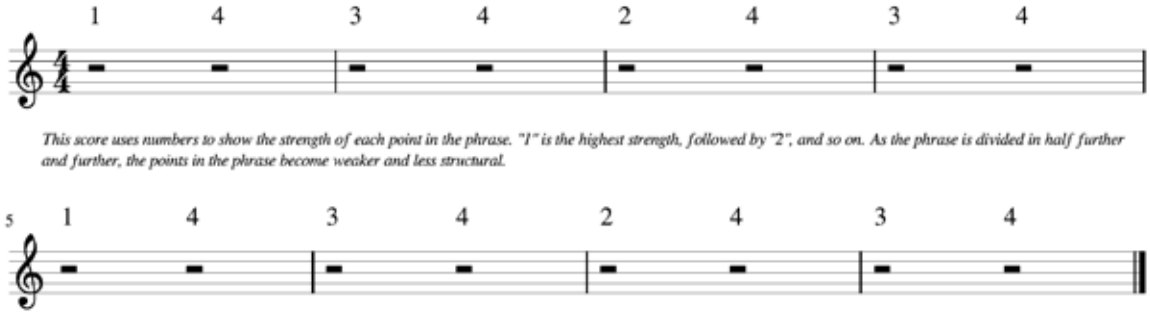
Soundbite 3.8.1

If we split these halves in half again we get four strong points, each two bars apart. Making the chords change at these points will also maintain the evenness.



Soundbite 3.8.2

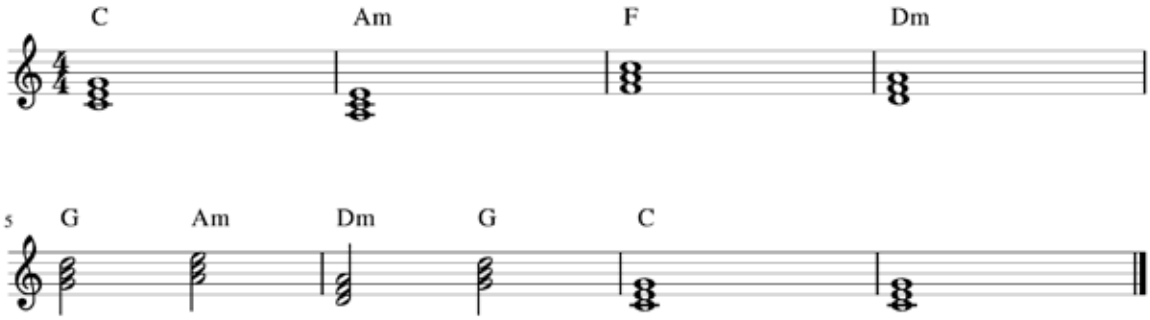
We can continue this process of halving the distance between "strong points" and adding chords there. The more the phrase is halved, the weaker and less structural these strong points become. This leaves us with a hierarchy of strong points in the phrase, with every four bars being the strongest, every two bars the next, every bar after that, and so on. See this below:



This score uses numbers to show the strength of each point in the phrase. "1" is the highest strength, followed by "2", and so on. As the phrase is divided in half further and further, the points in the phrase become weaker and less structural.

The harmonic rhythm (how fast the chords change) does not have to stay the same throughout. Listening to the below example, when the chords start changing every two beats it doesn't sound uneven, it just sounds like the chords are changing faster. This is because even at a faster harmonic rhythm the chords are still changing on fairly strong points and they still all last for the same amount of time (in this case two beats):

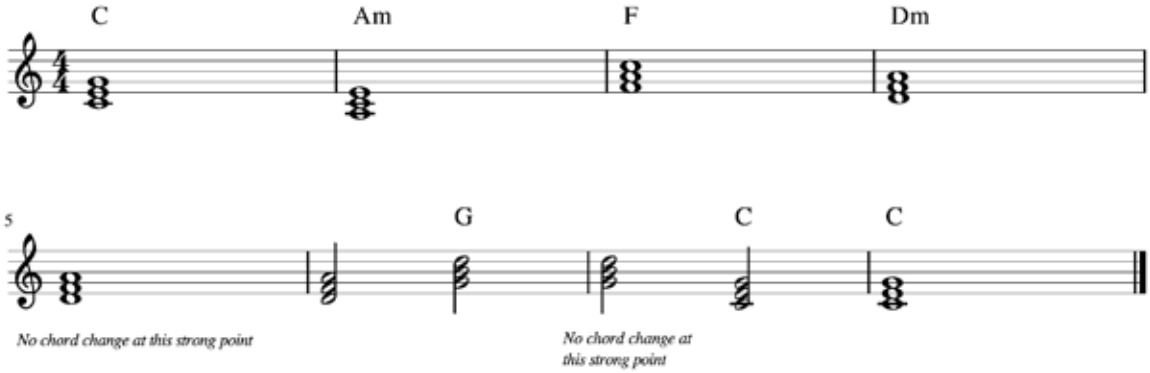
Soundbite 3.9



The harmonic rhythm speeds up here, but, because there are chord changes on the higher levels of strong points it does not sound uneven.

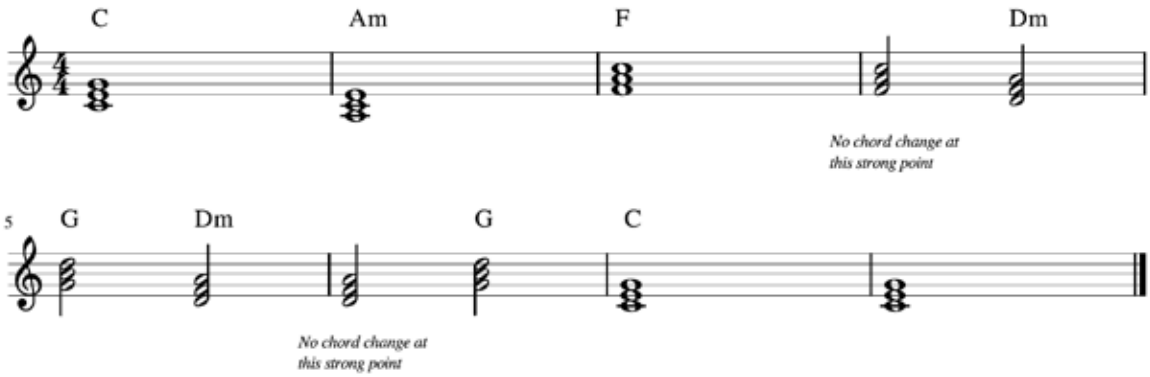
Now, listen to an example that does not follow these rules:

Soundbite 3.10



The chord progression is the same here, but the D minor chord in bar four now changes halfway through bar six, and the chord progression resolves to chord I halfway through bar seven. The strong points at the start of bar five and the start of bar seven are not accompanied with chord changes. Because these are particularly strong parts of the phrase, not changing chords here sounds somewhat uneven. Look and listen to an example where the weaker strong points are absent of a chord change:

Soundbite 3.11



Notice how when the weaker of the strong points (in this case the start of bar four and the start of bar six) are missing a chord change, the sense of unevenness isn't as intense.

It is important to remember that in both of these examples, the music isn't automatically unpleasant just because it is less even. Music that is perfectly square all the time can become boring, and having the chords change at unexpected times can make the music more exciting and give some extra momentum. Music that is too uneven though can become hard to listen to for many people. Notice as well that in all of the uneven examples the chords are still *played* at points that make it sound even (i.e. on beat one or three of each bar). What makes it uneven is when the chord changes on weak points within the phrase as a whole. This means that often you can balance out uneven *chord changes* by playing the *chord itself* in a way that sounds very even.

EXERCISE

Improvise an eight-bar chord progression. Using the techniques described above, make it sound as even as possible. Ensure that the strong points of the phrase have chord changes occurring on them.

EXERCISE

When you are confident with the previous exercise, once again improvise an eight-bar chord progression, this time relaxing the rules. This time, don't change chords on some of the strong points to see what sounds you can make. Use your ears and find ways of doing this that sound good to you. Remember the hierarchy of strong points and use other aspects of the music, such as how the chords are actually played and how the chords move from function to function to ensure the progression still sounds satisfying despite the uneven placement of chord changes.

EXERCISE

Try thinking about longer phrases this way. Start with a sixteen-bar chord progression and move onto a thirty-two bar progression when you are ready. Remember that you get the different strong points in the phrase by dividing the phrase in half repeatedly. Start out by trying to make the chord changes sound even with this method, and then move on to experimenting with different levels of evenness as in the exercise above.

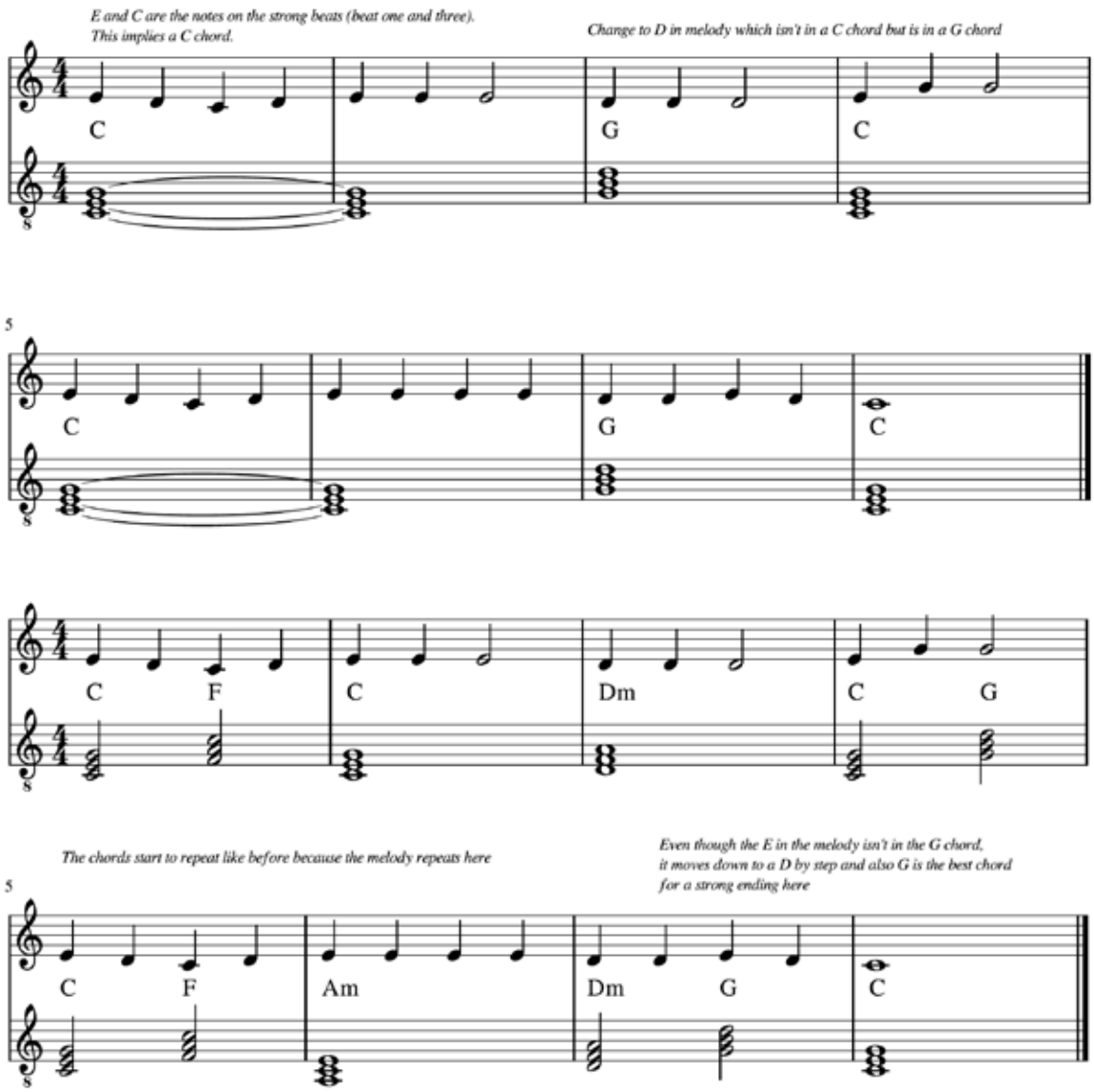
HARMONISING EXISTING MELODIES

Now that we have discussed the basics of improvising chord progressions, let's look at one of its most common uses. Many melodies, particularly old or previously undocumented ones (like nursery rhymes, hymns, and folk songs), don't have one correct chord progression that goes with it. As a result, there is a lot of freedom for performers to make their own chord progressions to go with these tunes. The act of creating chords to go with a melody is called harmonisation. We already looked at this idea when we discussed **Two-Part Harmony** (page 46), but harmonisation can also mean adding chords to a melody, not just a second melody. Performers might also use this skill to create a different chord progression for music that already has specific chords accompanying it. This is called re-harmonisation.

When harmonising a melody, it is generally important to make sure that the chords and melody are going to blend with each other. In the Improvising Over Chords section on page 94, we discussed how a melody can interact with a set of chords in a way that is pleasant to listen to. We talked about using notes from the chord on the strong beats, using certain guide tones to create satisfying melodies, and using the appropriate scale over certain chords. Harmonisation is the same thing but in reverse. Let's look at some different ways to harmonise 'Mary Had a Little Lamb'.

Soundbite 3.12.1

Soundbite 3.12.2



Both of these harmonisations work in the following ways to harmonise this chord progression:

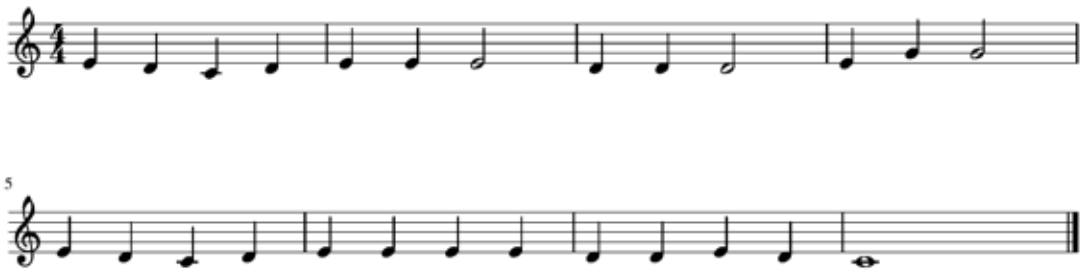
- Both are satisfying chord progressions in general
- The melody uses the notes of C major, so the chords are also in the key of C major
- The chords are made up of the notes that occur on the strong beats in that part of the music (e.g. bar one has an E on beat one and C on beat three, so the chord chosen has those two notes in it)
- Where a note in the melody isn't from the chord but is played on the beat that the chord changes, (like over the G chord in bar seven of the second example) it moves up or down by step to a note from the chord
- The phrases of the chords match the phrases of the melody (e.g. the chords repeating when the melody repeats in bar five or making a strong ending to the C chord when the melody ends on a C note)

These two examples are, of course, also different. The chords of the second example change a lot quicker, moving to a new chord either every two beats or every bar. It also uses a greater variety of chords, incorporating more than just chord I, IV, and V. There are so many other ways of harmonising this melody that will still sound just as good, it really depends on personal preference and musical style. The reason why these different chord progressions all sound good though is because the melody and chords compliment each other, and the reason the melody and chords compliment each other, is because of the five reasons above.

EXERCISE

Improvise your own chord progression for 'Mary Had a Little Lamb' over a friend playing the melody or the provided soundbite.

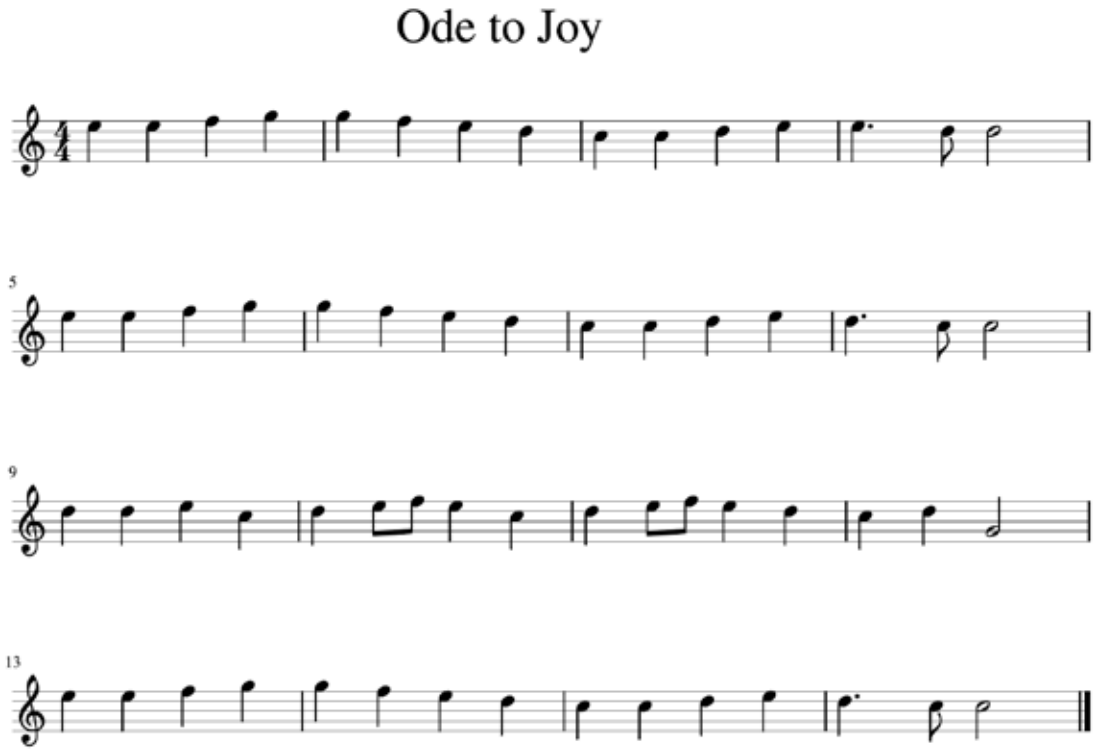
- *Start simple, have the chord change every one or two bars and only use simple chords like I, IV, or V (as in the first example).*
- *Once you are more comfortable, try creating chord progressions that change twice in a bar and start using other chords.*



Soundbite 3.13.1

EXERCISE

Let's do the same with a longer melody now. Harmonise the chords over the melody to 'Ode to Joy'. Once again, start simple and then move on to using more chords.



Soundbite 3.13.2

Often when learning how to harmonise melodies, people focus far too much on making the chords perfectly match the melody and forget about the fourth point: "Where a note in the melody isn't from the chord but is played on the beat that the chord changes, it moves up or down by step to a note from the chord". Including this light dissonance can be a great addition to the music and can often inspire you to create chord progression you might otherwise not think of if you are just trying to make the chord and melody match perfectly.

EXERCISE

Once again harmonise the melody of 'Ode to Joy', this time including more moments where the first note of the chord change is not actually from the chord. Remember to try and make sure this note moves up or down by a step. As you are harmonising, look out for moments where the melody moves by step and choose a chord that works well with the second note, but still play it on the first note.

Before we move on from harmonising, it is important to note that not all musical styles necessarily need the chords and melody to match so intensely. In Jazz, for example, the melody will often use multiple notes not from the chord before resolving to a note from the chord, or they might not even resolve to a note from the chord at all. Remember that the strategies in this section are useful for making the melody and chords match, but that having the melody and chords match may not always be the best option for the kind of music you're playing.

EXERCISE

Once again harmonise the melody of 'Ode to Joy,' this time, diverging from the restrictions. The more of the five reasons above that you include, the more that the chords and melody will match. Experiment with harmonising melodies in a way that do not completely match.

Hear improvised harmonies in Olivier Latry's version of 'Happy Birthday' (listen from 13:01 and hear how the chords he plays changes on the second time through the melody)

'HAPPY BIRTHDAY' BY OLIVIER LATRY

Clip 2.3.1

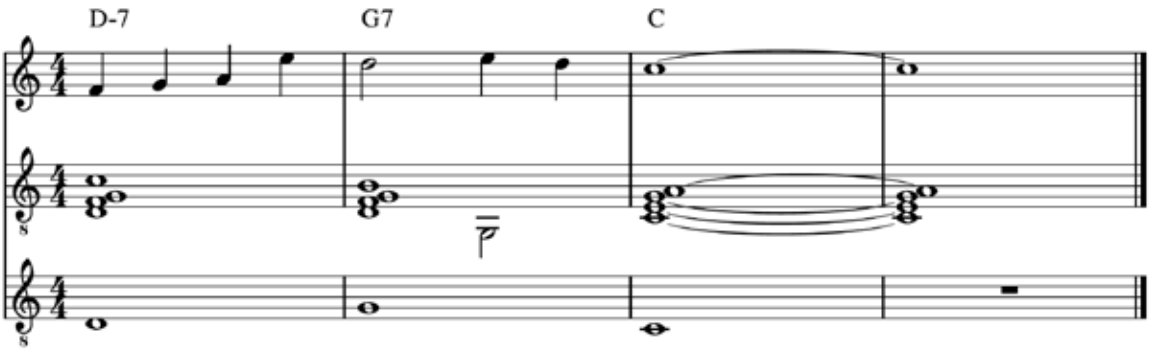
IMPROVISED ENDINGS

There are many reasons why a group of performers may need to improvise all or part of a performance's ending. An obvious example is when no ending that has been written, such as in a free improvisation. Some other examples include if the ensemble did not have time to rehearse every detail, when a group is asked to play a song they all know but have not played together, or when the exact way of ending the song is not clearly defined. These situations are relatively common for cover bands playing popular music or Jazz bands that play jazz standards. In some styles of music, it is expected that the musicians improvise the ending of the piece, different sections within the piece, or strong cadence points in the piece. For example, musicians of the Baroque and Classical eras were often expected to improvise cadenzas on the second last chord of a composition and Indian Classical musicians often emphasise cadential points in their improvisations with tihais (both cadenzas and tihais are explained later on). Given the various situations where an improvised ending might be necessary, knowing how to satisfyingly end a piece or section on the spot is a vital skill for any improviser.

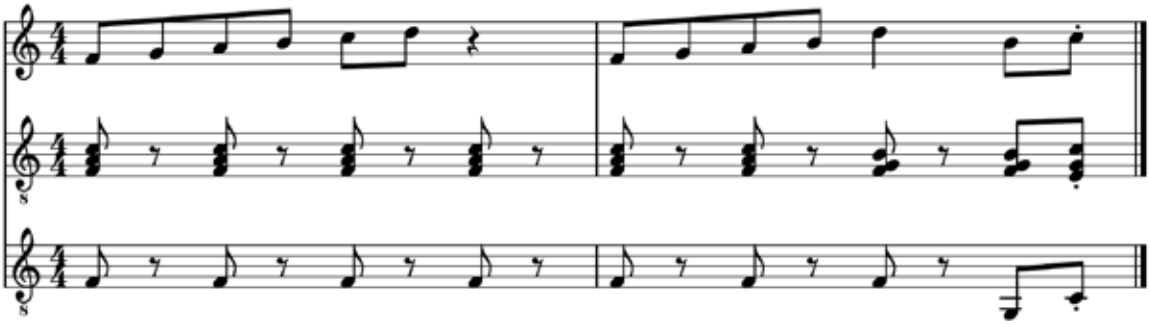
FINAL HIT

At some point, every performance has to end on a final note or chord. This inevitable final sound is what I am calling the "final hit". In reality, all of the other kinds of improvised endings also end on a final hit eventually. This section focuses specifically on how to play this final sound itself.

The final note or chord may be played by everyone at the same time, by part of the ensemble, or a single performer. The length of this last hit can vary and will often depend on the style, tempo, and character of the composition. Some final hits may be sustained and ring out naturally, like at the end of a ballad. Alternatively, a fast piece with a joyful mood may have the final hit staccato (short and sharp). There are of course also many different lengths between these two extremes. Look and listen to some examples below, focusing specifically on how the final note or chord is played in each:

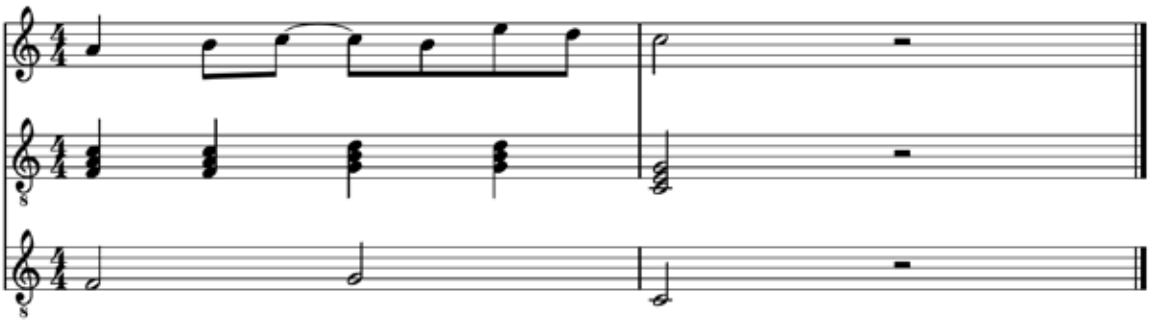


Soundbite 4.1

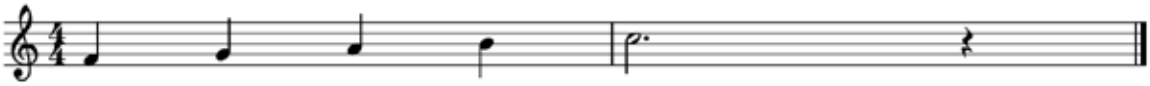


Soundbite 4.2

The final hit does not always have to be really long or really short. Choose a length that sounds best for the song:



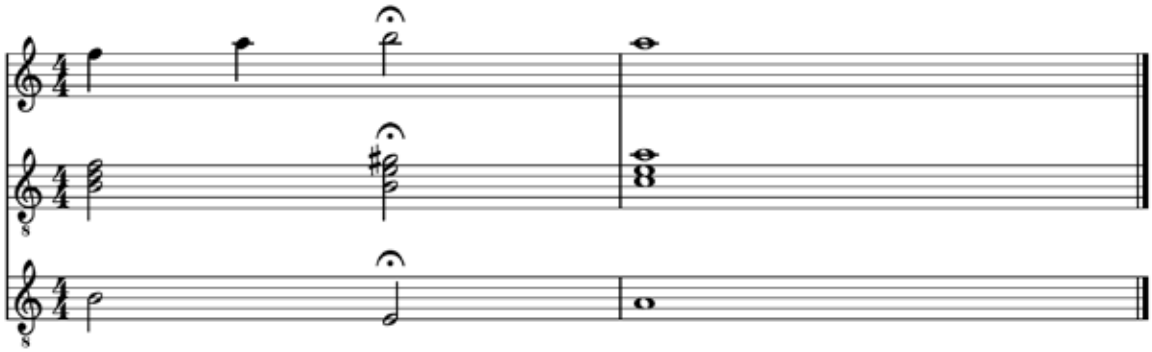
Soundbite 4.3



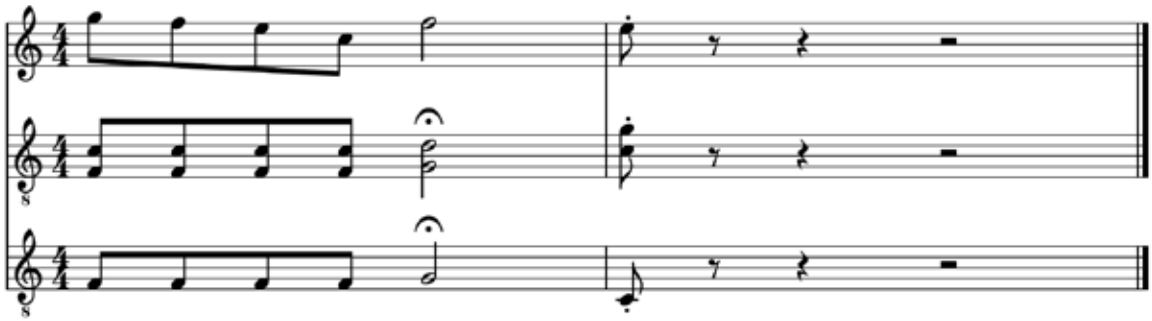
Soundbite 4.4

A common approach in many styles of music is to hold the second last chord or note of the piece for longer than usual before playing the final hit. This is called a fermata:

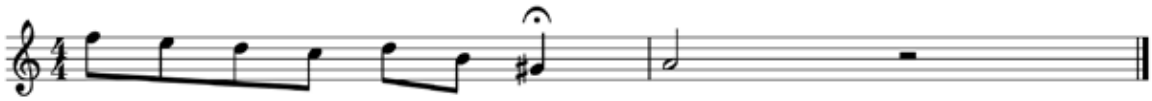
Soundbite 4.5



Soundbite 4.6

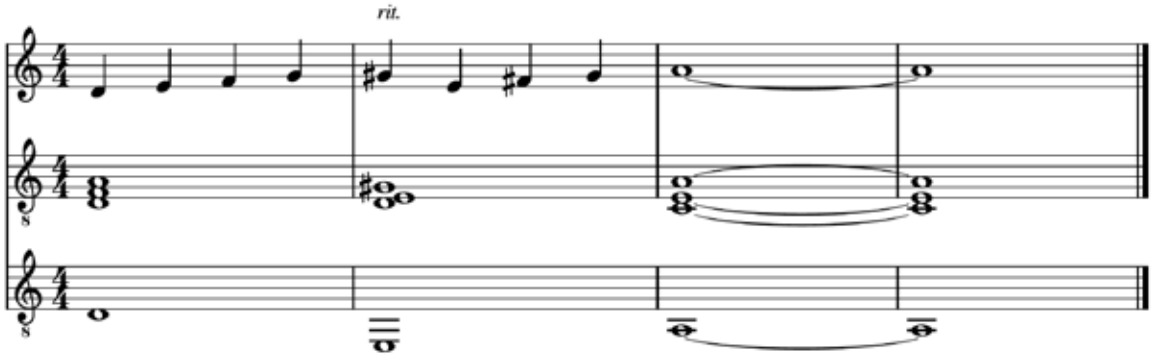


Soundbite 4.7



A particularly expressive way of ending a piece of music is to employ a ritardando as the performance is coming to an end. A ritardando involves a gradual decrease in tempo leading up to the end of the piece and is often combined with a fermata on the second last note or chord. Like the fermata on the second last note or chord, the final hit itself can be of whatever length is appropriate for the piece and the effect you are creating.

Soundbite 4.8



How you play the final hit will create different effects for the listener. A slow and expressive Ballad may end better with a ritardando and fermata, while a fast Punk song might be more suited to a staccato final hit as the ending. Think about how some of your favourite pieces of music end and how those endings suit the musical style.

Listen to the below tracks from Reinier Baas's album More Socially Relevant Jazz Music to hear how the same artist on the same album will use different kinds of final hits depending on the tempo and style of each piece.

'EYJAFJALLAJÖKULL'

Clip 2.4.1
Long final hit

'TJAPKO'

Clip 2.4.2
Ritardando into long final hit

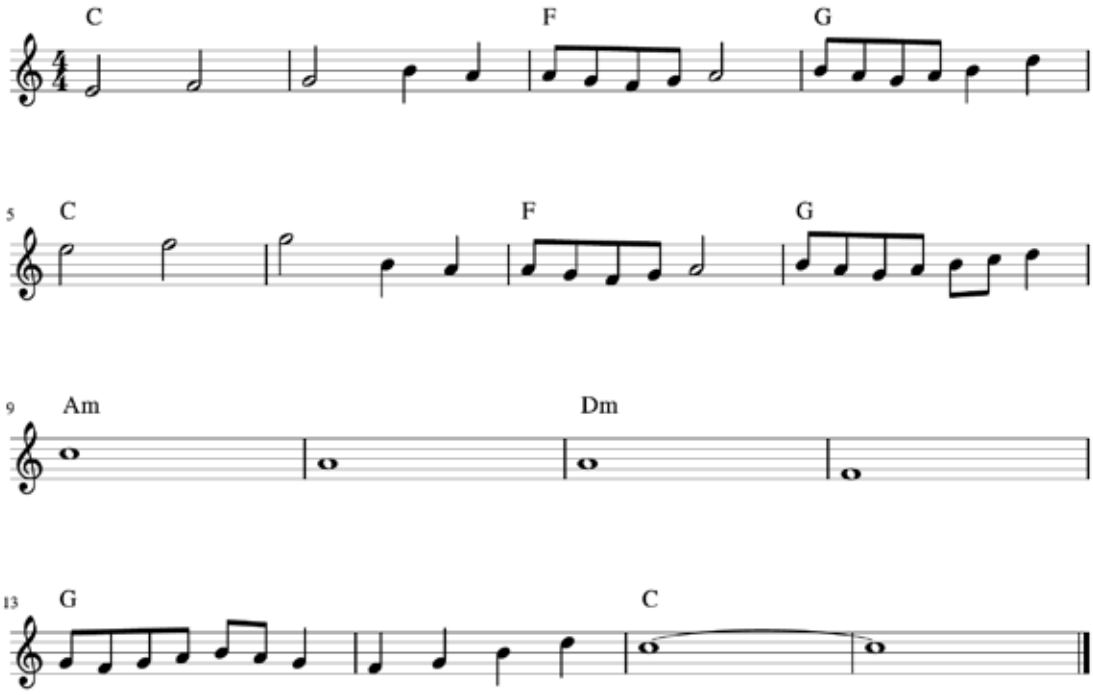
'HOMONCULUS'

Clip 2.4.3
Staccato final hit

EXERCISE

Play the following composition as an individual or as a group:

- *With a sustained final hit*
- *With a short and sharp final hit*
- *With a final hit that is somewhere in between these two extremes*
- *With a sustained final hit but the second last chord or note is held for longer*
- *With a short and sharp final hit but the second last chord or note is held for longer*
- *With a medium length final hit but the second last chord or note is held for longer*
- *With a sustained final hit but it is preceded by a ritardando*
- *With a short and sharp final hit but it is preceded by a ritardando*
- *With a medium length final hit but it is preceded by a ritardando*



Play the tune at slower tempos (<80bpm), medium tempos (80-160bpm) and faster tempos (>160bpm) and decide for yourself which kind of final hit suits which tempo. ***Because this exercise requires you to end the performance yourself, there is no backing track.***

EXERCISE

In groups of at least two, improvise over the chords of the previous exercise. Feel free to assign yourselves different roles. Each time you get to the end of the chord progression, improvise a final hit, but do not arrange beforehand what kind of final hit. You will need to listen to your fellow performers and use your knowledge of music to agree on an appropriate ending in the moment. Practice this exercise at different tempos. Be sure to repeat the exercise until you can confidently produce satisfying final hit endings as a group.

All performances have to end with a final hit at some point. For the rest of this chapter we will explore some conventional ways that improvisers and composers lead up to the final sound of a piece of music.

CADENZAS

A cadenza is a virtuosic passage of music played leading up to the final note or chord of a piece of music. It is almost always played by a single instrument unaccompanied. Cadenzas are used in many types of music including Classical music, Jazz, and popular music. While there are similarities across styles, each implements cadenzas in different ways.

In the Baroque and Classical eras, cadenzas were often improvised and often occurred over the second last chord of the piece. For most Classical musicians these days, however, the cadenza will be written out. In Jazz and popular music, cadenzas are not as frequent but are generally used to demonstrate virtuosity or personal expression. They are more common at slower tempos (such as in ballads), and they tend to be used in pieces that aim to be expressive. The length of a cadenza can vary greatly, ranging from a few seconds to multiple minutes. In general, a cadenza will last long enough that it intensifies the ending and adds to the performance without dragging on for too long. This, of course, depends on the style of music and the effect you are trying to create.

It is essential to know how cadenzas work in the particular style you are playing. As usual, there are far too many intricacies to cover in full, but we will look generally at some of the most common styles that employ cadenzas. First, let's listen to examples from Classical music, Jazz, and popular music:

BEETHOVEN'S VIOLIN CONCERTO IN D MAJOR, OP. 61 (CLASSICAL)

Clip 2.4.4

The cadenza starts at 45:07 and ends at about 46:15 with the rest of the orchestra coming back in. It does not actually return to the main theme until 47:09 though. Between 46:15 and 47:09 is a transition section where the violin continues to play in a cadenza-like style.

'A NIGHT IN TUNISIA' BY DIZZY GILLESPIE ON LEGENDS MASTERPIECES: BEST TRACKS REMASTERED (JAZZ)

Clip 2.4.5

The outro starts at 6:19. The cadenza starts at 6:45 and ends with a sustained final hit from the band at 6:59. Dizzy also adds a short melody after this.

'MERRY CHRISTMAS, BABY' BY CHRISTINA AGUILERA ON MY KIND OF CHRISTMAS (POPULAR)

Clip 2.4.6

The cadenza starts at 5:00 and ends at 5:39. This cadenza contains piano accompaniment, with the piano eventually joining in with vocals and playing some cadenza-like passages.

Let's start with what is similar about these three cadenzas:

- **Virtuosity:** The Beethoven and Dizzy Gillespie examples use fast and difficult to play runs and the Christina Aguilera example features sustained high pitch notes and large melodic leaps to demonstrate virtuosity.
- **A flexible sense of pulse, tempo, and/or metre:** The Classical and Jazz examples employ rubato (the expressive speeding or slowing of tempo mid-performance), while the Pop example lacks a clear sense of metre.
- **Tension throughout the cadenza:** All of the examples do this through constantly moving rhythms and a lack of melodic or harmonic cadence (i.e. neither the melody nor harmony come to a point of rest on the tonic note or tonic chord). Listen to the examples again and you will notice that the cadenza never sounds like it fully comes to a stop.

These three qualities are distinctive of cadenzas regardless of the style being played. Nevertheless, the specifics of cadenzas vary from style to style. Here are some ways Classical, Jazz, and Pop cadenzas vary:

- **Location in the performance:** In the Jazz and Pop examples, the cadenza occurs before the last chord and functions as a long and elaborate way of leading to the final hit. In the Classical example, however, the cadenza occurs earlier. While cadenzas in the Baroque era mostly functioned in the same way as Jazz and Pop, by the time of Beethoven, cadenzas were a structural part of the performance that lead back into the final repeat of the main theme of the piece.
- **Length:** You will notice that both the Jazz and Pop examples have much shorter cadenzas than the Classical one. Jazz and Pop cadenzas usually range between a few seconds to at most a minute, while Classical cadenzas last between one and a few minutes. Consider how the length of the cadenza relates to the length of the overall performance. Longer performances can usually get away with longer cadenzas.
- **Solo vs. accompanied:** The traditional idea of a cadenza is an instrument playing solo with the accompaniment returning on the final chord. In the Christina Aguilera example, however, we hear a piano joining her for the duration of the cadenza. This addition of accompaniment is more common in Pop cadenzas, although it isn't completely forbidden in the other styles.

Probably the biggest difference between each cadenza is how they approach the music itself. Let's compare what is actually being played in each style

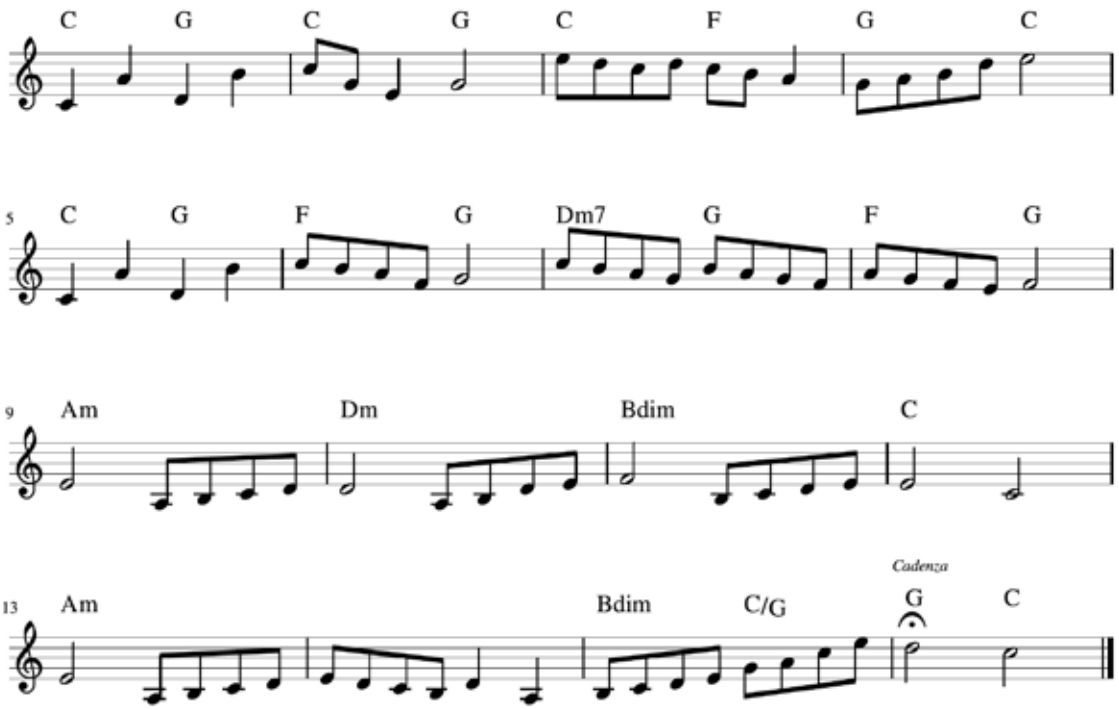
- **Classical:** Classical cadenzas will often use material from the rest of the performance in a transformed way. For help with this, look ahead to Transforming Existing Material or revise our discussion of ornaments in Part One. To demonstrate the virtuosity that is critical to cadenzas in all styles, Classical cadenzas often employ techniques that show off the intricacies of the instrument that is playing, such as double stops on violin or fast arpeggios on piano. The material being played will also often imply an exciting chord progression. See the Improvising Harmonies section earlier for advice on this. Finally, it is common to end a Classical cadenza with a trill (as that is what cadenzas originally started out as in the Baroque era).
- **Jazz:** Jazz cadenzas tend to demonstrate their virtuosity with fast quaver and semiquaver runs. Interesting manipulations of the phrasing (such as asymmetrical phrasing) or chromaticism in the melody are ways to make the music being improvised more tense and virtuosic. This also depends on the type of piece being played, however. The cadenza at the end of a ballad may be short and simple rather than the virtuosic kind described here.
- **Pop:** Virtuosity in Pop cadenzas tends to be demonstrated through ornamental and expressive techniques rather than fast passages of notes. Listen to the way slides, vibrato, turns, and other ornaments are used by Christiana Aguilera to create excitement. Often the melodies being played or sung are quite tuneful also.

TIP

Listen to and compare each audio example, focusing on the similarities and differences described above

EXERCISE

Play through the following piece of music, either as an individual or as a group:



On the second last note, where it says cadenza, play a cadenza evoking one of the styles we discussed (Classical, Jazz, and Pop music). Use the dot point summary above, the recordings given, and any other recordings you can find to assist you in this. Be sure to try out all three styles a few times until you feel confident with each of them.

Soundbite 4.9

EXERCISE

Repeat the above exercise, but this time don't restrict yourself to one of the given styles. Mix and match musical features and find a way of playing cadenzas that is interesting to you. You can even try unusual ideas like having multiple people play the cadenza at once.

EXERCISE

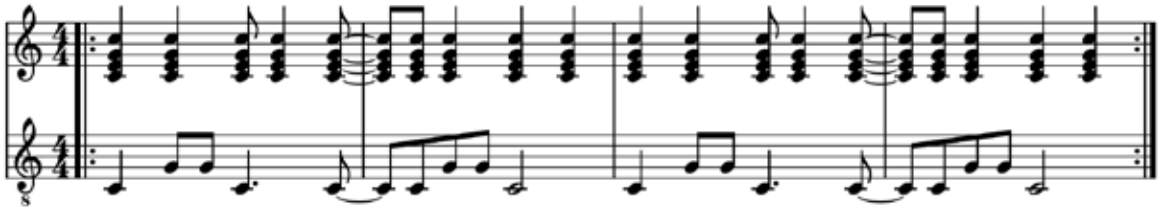
Think of a song that you know which has a simple ending. Maybe it ends on a single hit or the recording just fades out. Try adding a cadenza ending to it and notice the difference that it makes. Ensure that you adjust the kind of cadenza you play to be appropriate for the song and its style.

FADE-OUT

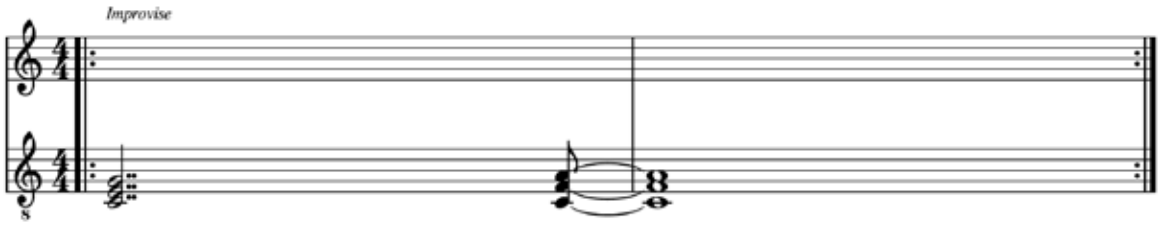
While a fade-out is common on many recordings of music, it isn't used in live performance very often. Nevertheless, it is an option that is there if the music suits it. One example where a live fade out is useful is in free improvisation. Because there is no musical material to designate a clear ending, the gradual ending of a fade out is easier to coordinate and less risky than suddenly stopping. Look and listen to two examples:

Live Fade Out on an Ostinato

Soundbite 4.10



Live Fade Out on a Static Improvisation



There are two main challenges when performing a live fade-out: fading out together and stopping at the same time. For the first point, you need to juggle your focus between your own playing and everyone else's playing. It is important that as you decrease dynamics you still maintain a balance between each instrument. This requires constant active listening and monitoring of how loud or soft each person is.

The second point is stopping at the same time. Use your active listening skills. As soon as one person stops playing ensure that you do also. You should also use non-verbal communication like eye contact or a gesture to coordinate this final note. Like with changes in dynamics in general, it can be helpful to follow the lead of a single person. Finally, this issue can be avoided all together if you make it sound intentional that each instrument gradually stops playing.

Soundbite 4.11

You can hear an improvised fade-out in the track 'Drone Bone' from The NOISE String Quartet on the album STREAM

'DRONE BONE' BY THE NOISE STRING QUARTET

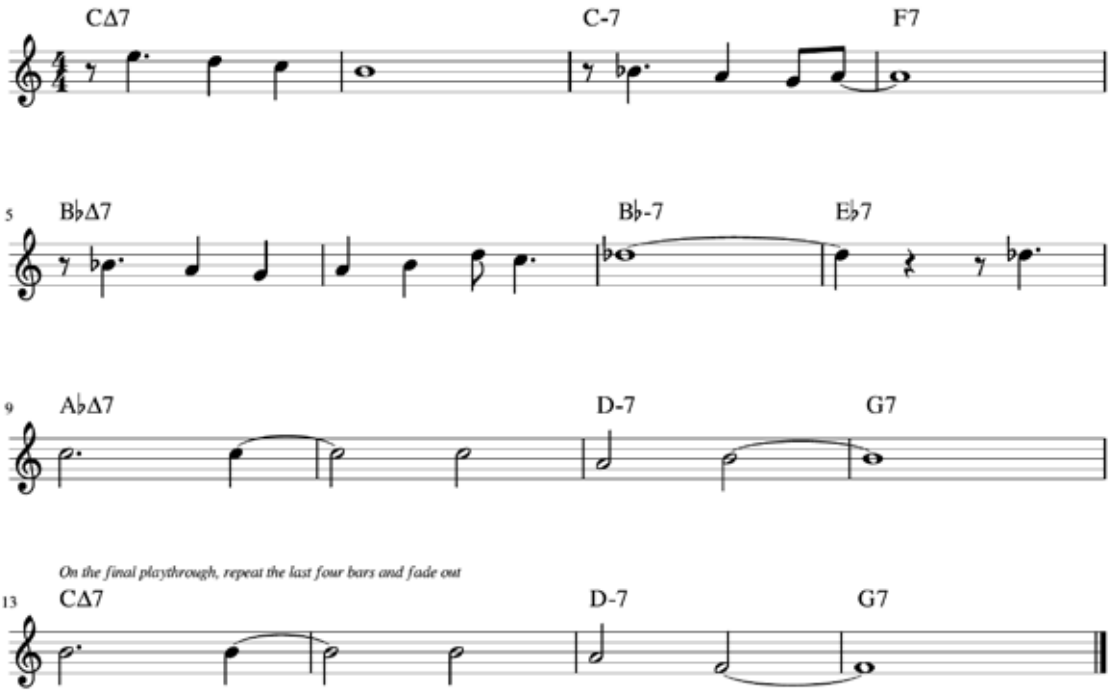
Clip 2.4.7

EXERCISE

In groups of at least three, try the "Live Fade Out on a Static Improvisation" example for yourself. Use active listening and non-verbal communication to ensure the group fades out together and stops playing at the same time. You can also try the other suggested tactics of following one person's lead or having each person intentionally stop at different points.

EXERCISE

In groups, play the following piece of music in the standard Jazz format (play through the written melody, take turns soloing over the chords, and then play the melody as written to the end). Assign yourselves roles with at least one soloist, one harmonic accompaniment, and one timekeeper. When it gets to the ending of the performance, repeat the last four bars over and over, slowly fading out



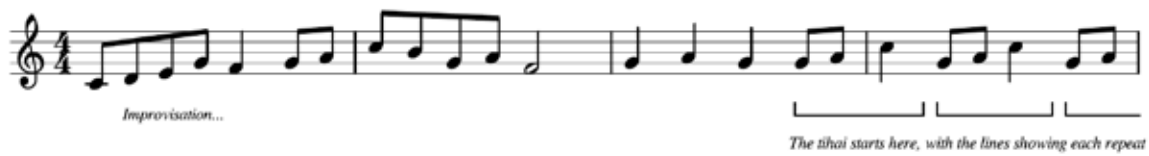
Soundbite 4.12

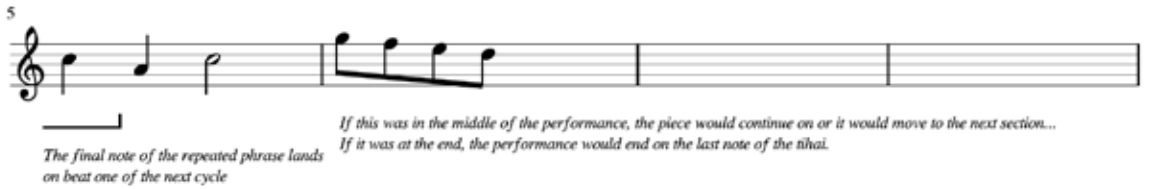
TIHAIS

In Indian Classical music, a tihai is when a phrase is repeated three times before ending on (usually) beat one of the rhythmic cycle. Western music classifies the metre by how many beats are in a single measure. For example, 4/4 when there are four beats in a bar or 3/4 when there are three beats in a bar. Indian Classical music classifies the rhythmic cycle differently, with usually much longer repeating cycles divided into smaller sections. For example, the rhythmic cycle tintal has sixteen beats in one cycle, but divided into four groups of four beats each. This ends up being pretty similar to four bars of 4/4. What this means is that landing on beat one isn't just landing on the first beat of the bar, but beat one of the entire sixteen beat cycle.

Tihais are used at cadences, either to end sections of a piece or the performance as a whole. If the next section of the music starts before first beat of the cycle (what we would call an anacrusis or a pick up), then the tihai might end on the the start of that anacrusis instead of beat one. Tihais are often very exciting as they create anticipation in the audience and build momentum towards cadence points. Often the musicians will choose musical material that, when repeated three times, distorts the audience's perception of where beat one is. This makes it more exciting when the performer/s eventually land on beat one. Look and listen to some examples below:

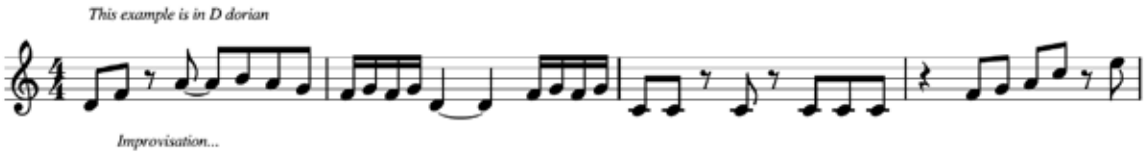
Soundbite 4.13.1

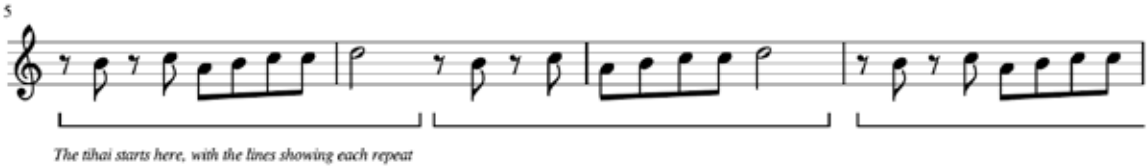


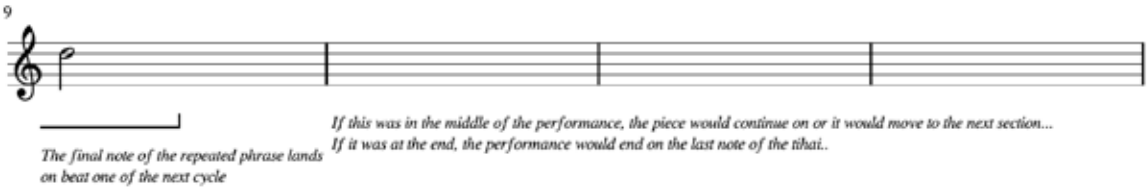


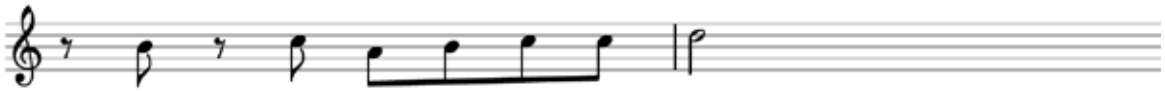
Soundbite 4.13.2

Soundbite 4.13.3



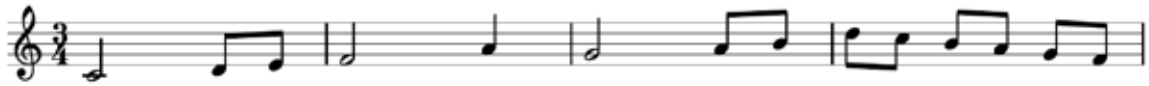






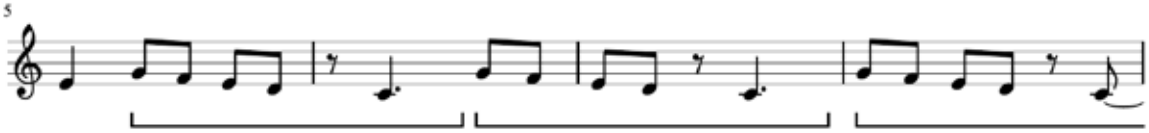
This six-beat sub-phrase is the material being repeated in the above tihai

Soundbite 4.13.4

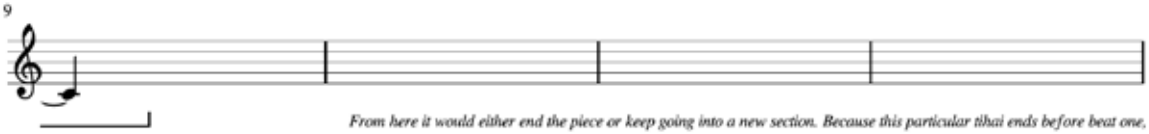


Improvisation...

Soundbite 4.13.5

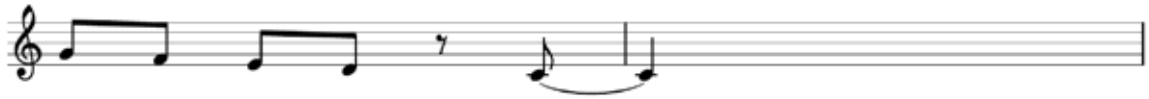


The tihai starts here, with the lines showing each repeat



Is this case the tihai actually ends half a beat before beat one of the next cycle.

From here it would either end the piece or keep going into a new section. Because this particular tihai ends before beat one, it would probably work better as the end of a section than the end of the whole performance. It would also work better in styles of music that use a lot of syncopation, like jazz for example.



This four-beat sub-phrase is the material being repeated in the above tihai

Soundbite 4.13.6

These examples demonstrate what a tihai looks like, but how do you actually play one? To start, let's get used to playing and hearing tihais.

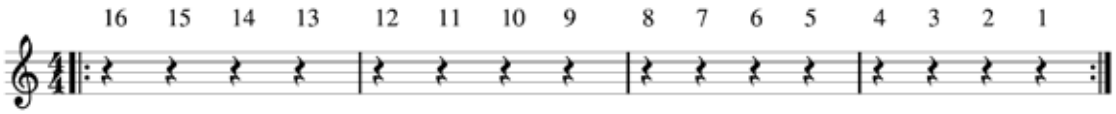
EXERCISE

Begin improvising in C major. Throughout the improvisation, occasionally play the tihai examples given above. Listen to where in the four-bar cycle each tihai starts and get comfortable with landing on beat one of the next cycle. Play this exercise in different keys and try playing different notes but the same rhythms for the given tihais. This can be made a group exercise by adding rhythmic or harmonic accompaniment (since there are no chords, the harmonic accompaniment should just outline the key centre).

To properly use tihais, you need to be able to improvise them on the spot instead of playing a pre-memorised pattern. The first skill you need is to be able to recognise where you are in the repeating rhythmic cycle.

EXERCISE

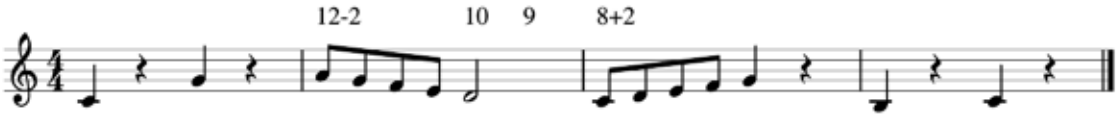
Play a slow improvisation, at about 80bpm, in 4/4 time, in whatever key or scale you feel most comfortable with. As you improvise, on each beat, count aloud the number of beats left in the current four-bar cycle. This means, count sixteen on beat one of bar one, fifteen on beat two of bar one, and so on:



This will get you used to knowing how many beats are left in the current four-bar cycle. Make the improvisation simple enough that you can count at the same time, but don't make it so easy that it isn't a realistic improvisation. Try this as a group and see who can go the longest without messing up their counting!

EXERCISE

Improvise again in a scale you are comfortable with and 4/4 time, but this time note how many beats are left every bar instead of every beat (i.e. sixteen beats at the start of the cycle, twelve beats at the start of bar two, etc.). Whenever you finish a sub-phrase in your improvisation, say out loud how many beats are left in the cycle. If you are keeping track as each bar goes on, this shouldn't be too hard, just think of how many beats are left from the nearest bar and then add or subtract where you are in the bar from that:



1. End of sub-phrase, think about how many beats are left
2. You know that there are eight beats left from the start of bar three and that there were twelve beats left from the start of bar two
3. By adding two to eight, or subtracting two from twelve, you find out there are ten beats from the last note of the sub-phrase to the end of the cycle, and nine beats from the next beat after that final note

Repeat this exercise until you are confident at working out how many beats are left in your current four-bar cycle.

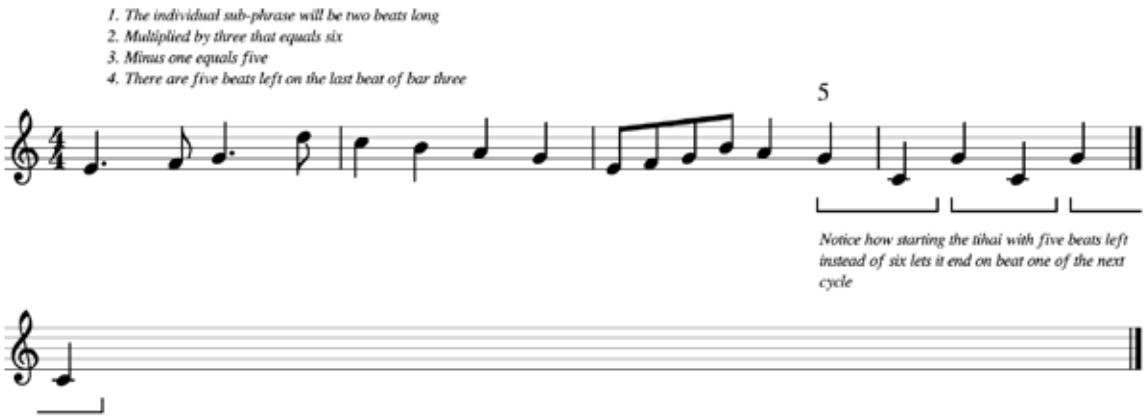
The ability to work out how far away you are from the start of the next cycle is extremely important because you will be improvising your tihai so that it lands on beat one. In practice, you either need to adapt your tihai based on how many beats are left or decide how long you want your tihai to be and start it in the right spot.

EXERCISE

Improvise in whatever key is most comfortable for you at a slow tempo in 4/4 time. Throughout this improvisation, when you want to play a tihai:

1. *Choose how long you want the individual sub-phrase to be, (e.g. two beats)*
2. *Multiply that number by three (e.g. six beats)*
3. *Subtract one from the number, this will make sure the tihai ends on beat one (e.g. five beats)*
4. *Start playing the tihai from the point in the cycle where there is that number of beats left (e.g. beat four of bar three)*

See this method in action below:



TIP

This method will probably take a little while to get your head around. Keep practicing it until you feel comfortable playing simple tihais. As always, start slow and work your way up to faster tempos.

NOTE

Tihais can be longer than one rhythmic cycle. Just minus the number of beats in the tihai by the number of beats in the whole phrase to get your start point. For example, if you want seven beats in each sub-phrase, you would multiply seven by three to get twenty-one and minus that by one to get twenty. If you are playing a four-bar phrase of 4/4, you would need to minus twenty by sixteen to get four. So, you would start a tihai with a seven beat sub-phrase when there are four beats left in the phrase to eventually land on beat one.

What determines which notes you actually use for your tihai will depend on the specific style you are playing in and what the purpose of the tihai is. If you are ending the whole performance, for example, you probably want to have the last note be the tonic. If the performance is still going, choose a less stable note so that the music maintains its momentum. It should also be noted that the melody does not always need to be repeated exactly. Sometimes the melody will be sequenced or simply use a different melody for each repeat of the sub-phrase.

You can hear this sequencing of the melody in this performance by Ali Akbar Khan on the track 'Rag Sindhu Bhairavi' from the album Then and Now

'RAG SINDHU BHAIRAVI' BY ALI AKBAR KHAN

Clip 2.4.8

(the tihai starts at 19:37 so listen from slightly before then)

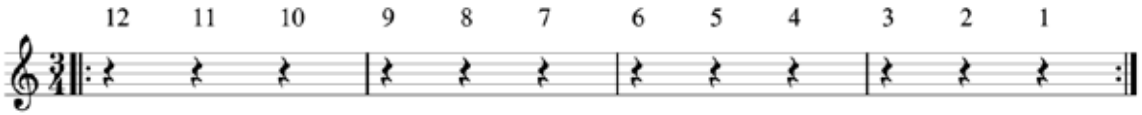
So far we have only practised tihais in four-bar cycles in 4/4 time. While this is very common both in Western music and Indian Classical music, it is not the only metre used.

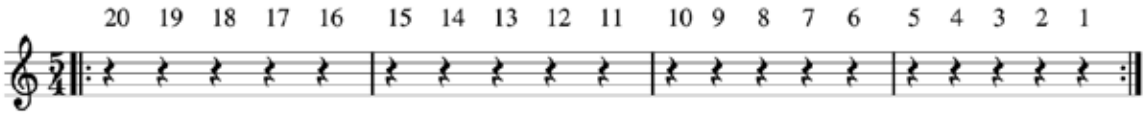
EXERCISE

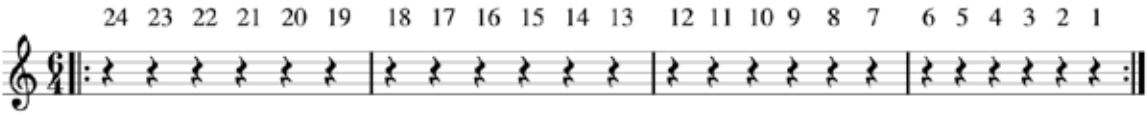
Improvise slowly in a key or scale you are comfortable with in the following ways:

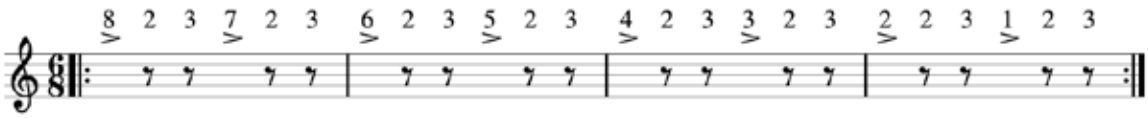
- *3/4 time*
- *5/4 time*
- *6/4 time*
- *6/8 time*
- *7/8 time*
- *9/8 time*
- *4/4 time but with six bar cycles*
- *4/4 time but with seven bar cycles*
- *Any metre with any length of rhythmic cycle*

Here are some diagrams to help you count in each of these types of rhythmic cycles:

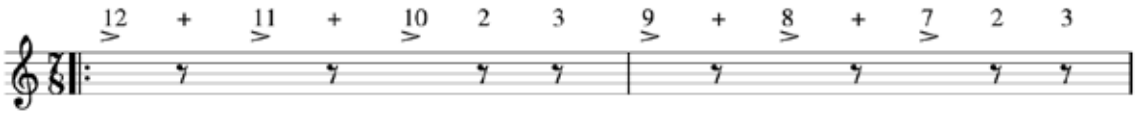


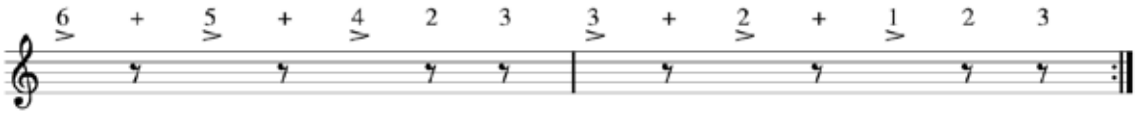




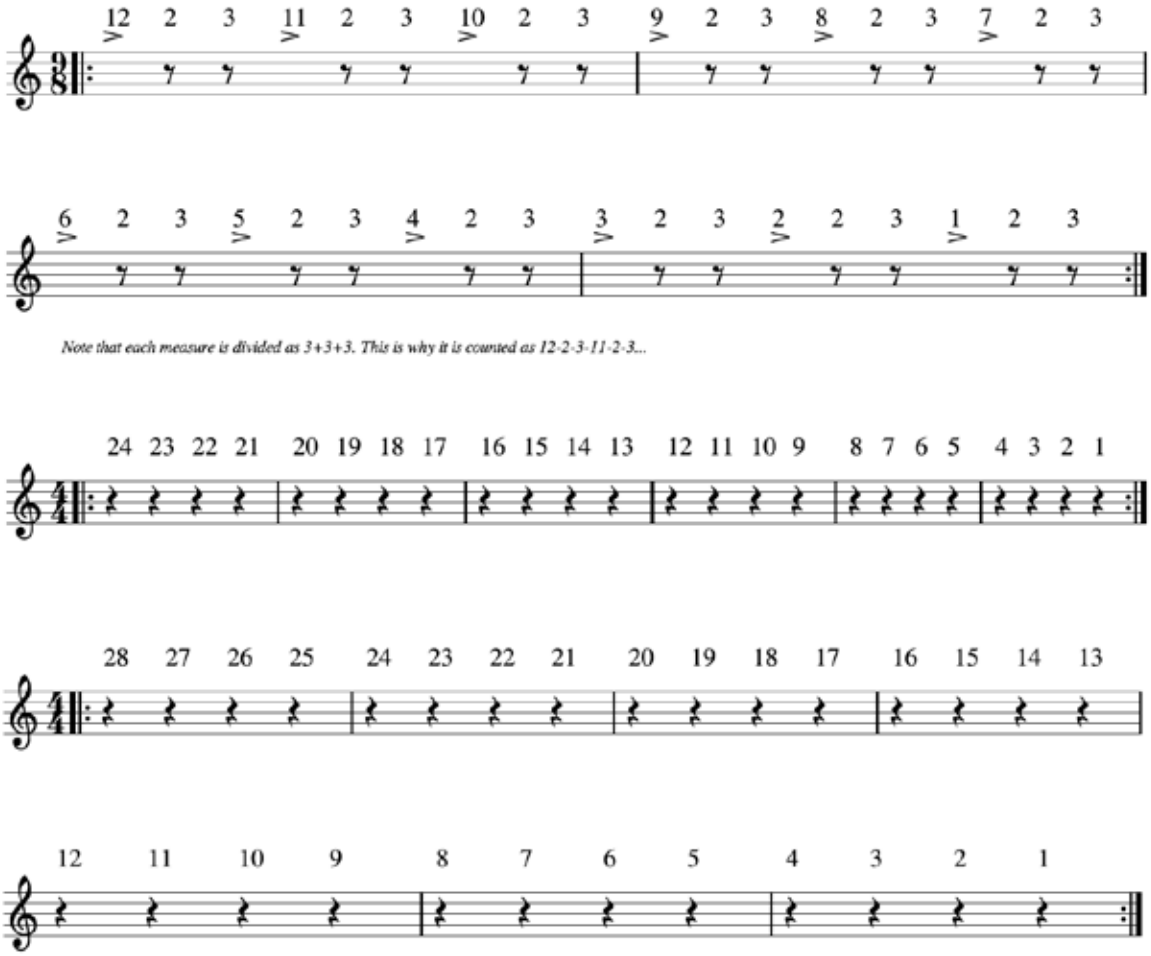


Note that the eight main beats of this phrase are divided into three quaver beats to get six.
This is why it is counted as 8-2-3-7-2-3...





Note that each measure is divided as 2+2+3. This is why it is counted as 12-and-11-and-10-2-3... (+ = and)
You can divide each measure however you want, 2+2+3 is just used in this example.



Note that each measure is divided as 3+3+3. This is why it is counted as 12-2-3-11-2-3...

TIP

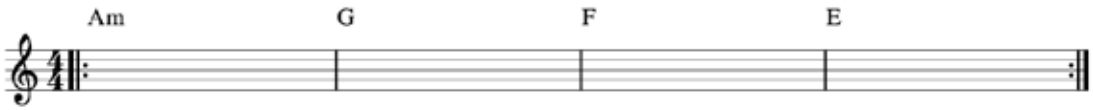
Have a metronome or other person clearly outline the rhythmic cycle for you as you practice.

The sub-phrase of the tihai can also include half or quarter beats (e.g. a sub-phrase that lasts two and a half beats). The calculation here is the same as before, it is just that you might have to start on the "and" of a beat instead of on the beat exactly. For example, two and half multiplied by three is seven and a half, minus one and it is six and half. If the rhythmic cycle is four bars of 4/4, you have to play on the "and" of beat two in the third bar.

In Indian classical music, the percussionist accompanying the soloist is expected to pick up on the tihai as it is being played and play it in unison with the soloist. This intensifies the sense of anticipation in the listener as the original sense of metre is continued, but not actually played by any instrument. While the same process does not necessarily need to be enacted when this technique is applied to other kinds of music, having the whole band notice and join in with a tihai can be immensely exciting and satisfying.

EXERCISE

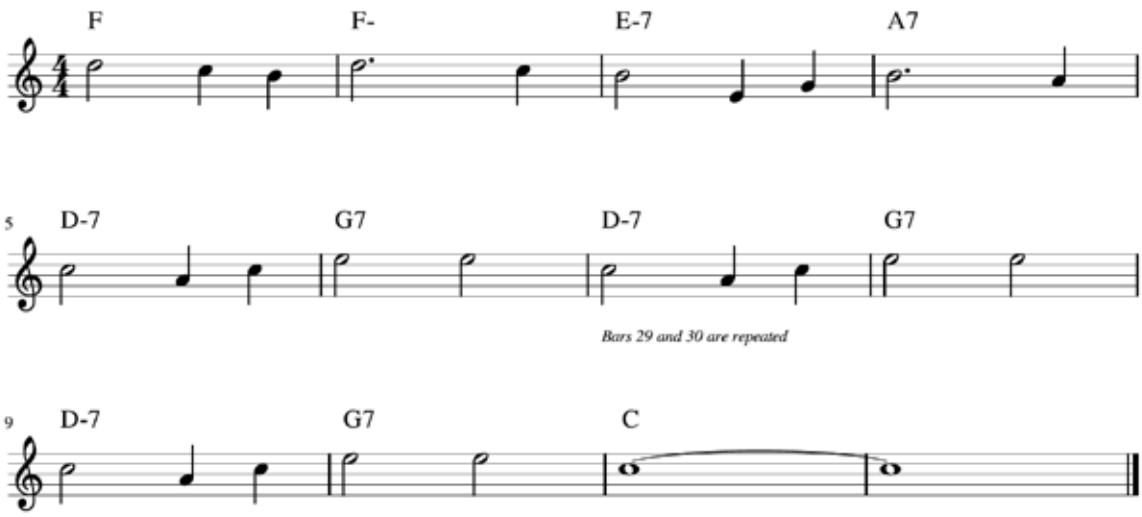
In a group of at least two, improvise over the following chord progression:



Take turns soloing over this chord progression and provide rhythmic or harmonic accompaniment when you are not soloing. Signify the end of your solo with a tihai. Whenever the soloist plays the tihai, the rest of the ensemble will join them in rhythmic unison. It is not always necessary to mimic the rhythm of the soloist's tihai exactly. It can also be interesting to accent the first beat of each repeat or to emphasise the rhythm of the tihai in some other way.

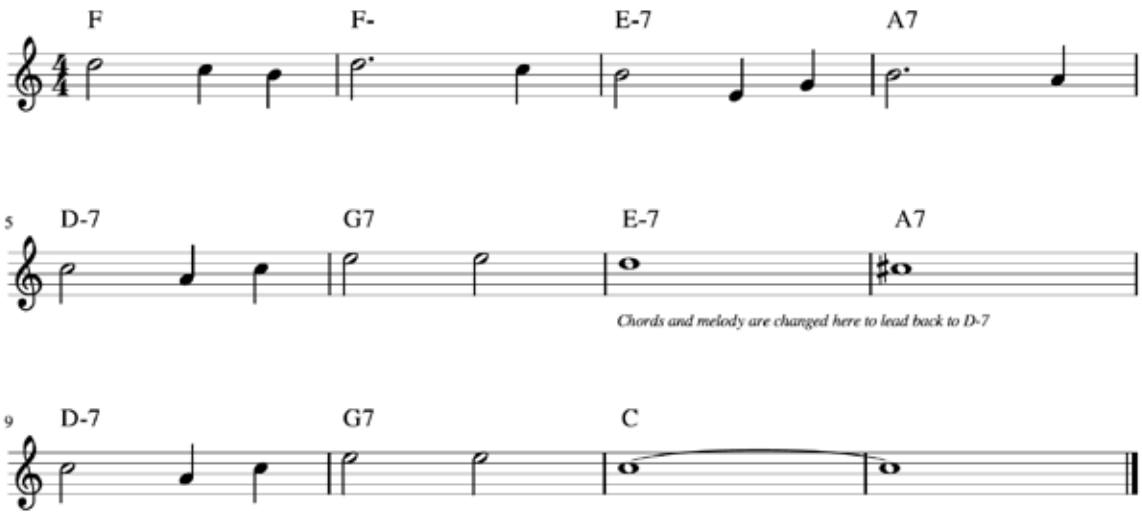
TAGS

A tag is a device sometimes used to end a performance in Jazz. It involves repeating the end of a composition (usually) three times before ending on a final hit. The part of the tune that is actually repeated will depend on each specific piece, but it is usually the last two or four bars. In many cases, this section of music will need to be either chosen carefully or changed in some way to ensure it has a sense of movement back to the start of each repeat. Examine how one might "tag" the tune 'All of Me':



Soundbite 4.14.1

This example repeats bars 29 and 30 three times before finally ending as it is written on a C chord. This works because the G7 is a dominant chord. Dominant chords inherently sound tense, and this tension is usually only relieved when it goes to a tonic chord. By constantly moving to D-7, which is not a tonic chord, it maintains the tension in the music. It isn't until we end on the C chord that this tension is finally fully released, creating a sense of an ending. Listen to the soundbite a few times and see if you can hear this tension. Choosing a part of the music that moves from the dominant straight to a chord that isn't the tonic on each repeat, before finally moving to the tonic during the true ending of the performance will create a satisfying and interesting tag. Look and listen to another way to "tag" the ending of 'All of Me':

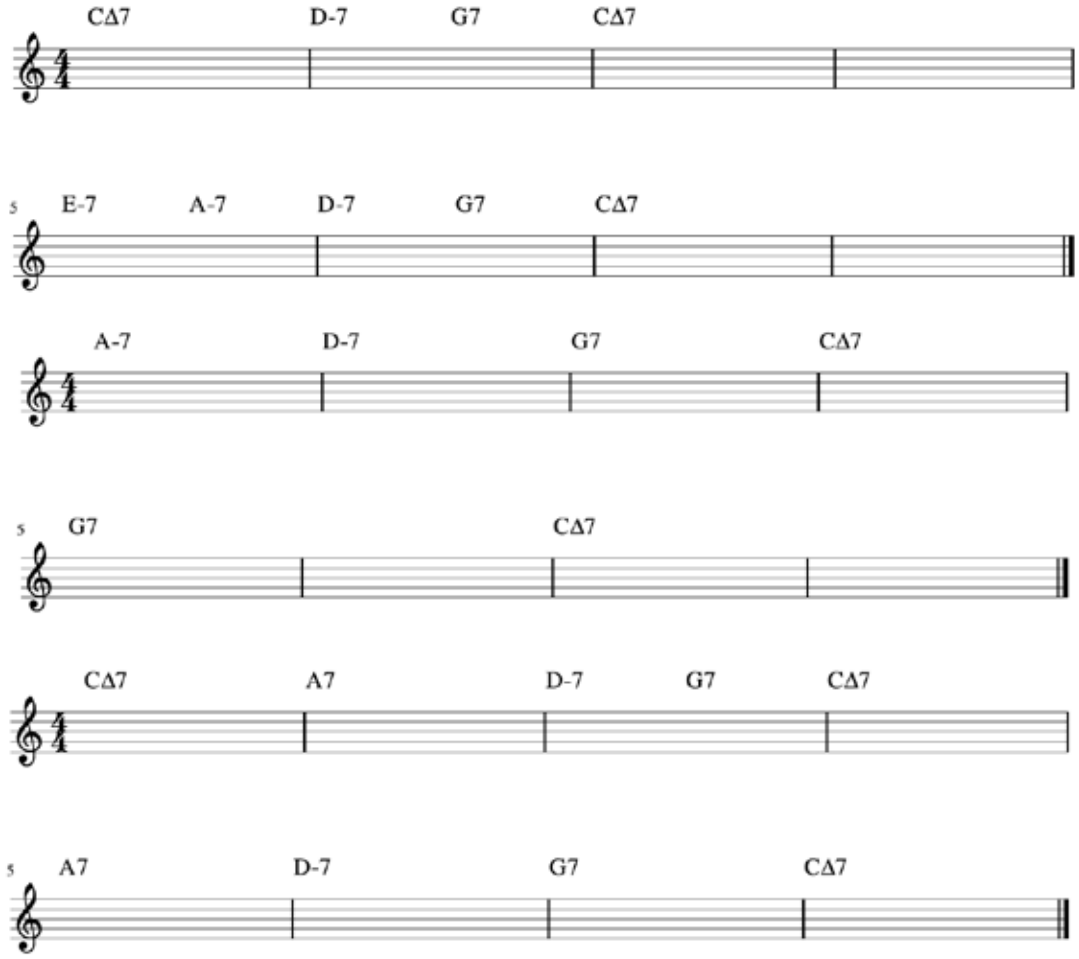


Soundbite 4.14.2

In this example, the last four bars instead of just two are repeated twice instead of three times. Notice how the chords of the second half (E-7 and A7) lead nicely back to the D-7 chord. There are many different chords you could put into the last two bars here, as long as the chord/s you use lead back to the first chord of your repeat it will be a great tag ending. The melody in this example is also changed. It can be a simple variation on the actual melody like in this example or it can be a completely different improvised melody, the point is that it also leads back to the start of the repeat.

EXERCISE

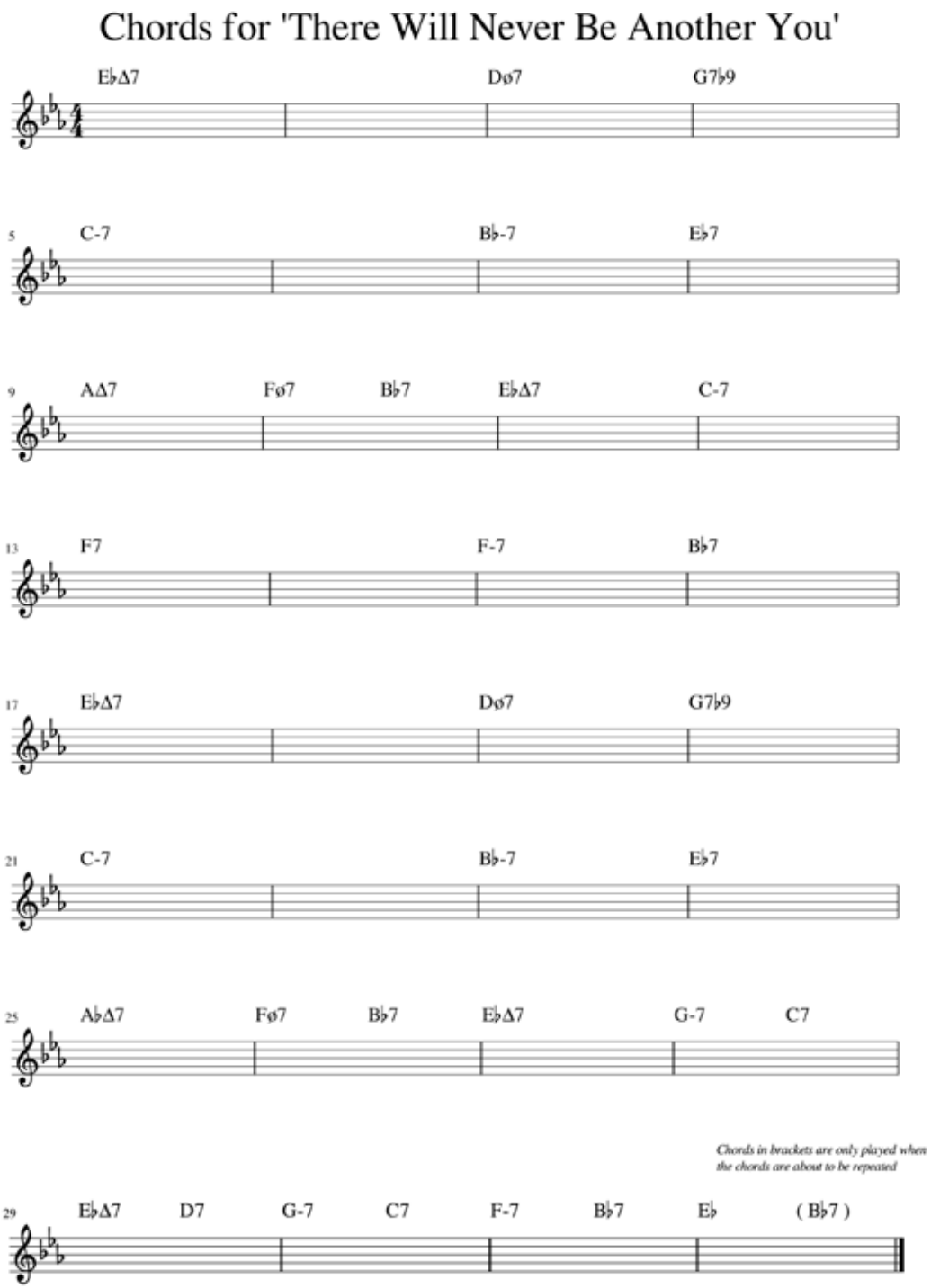
Imagine that the following eight bar excerpts are the last eight bars of a piece:



As an individual or in groups, practice "tagging" the endings in the different ways described earlier. Try out many different variations on the tag, experimenting with the length of bars used for the repeat and the chords or melody added to lead back to the repeat. Listen carefully to the sound created by each of these approaches. Try to work out which method you think sounds best for each excerpt.

EXERCISE

Either as an individual or a group, improvise over the chords for 'There Will Never Be Another You.' When you come to the end of the chord progression, tag the ending in whatever way you find most appropriate. If you are doing this exercise as a group, ensure everyone has a chance to solo. Once you are confident in this, repeat the exercise again, but this time do not pre-plan how you will do the tag (e.g. don't decide which bars you will repeat or what chords you will play). Listen to each other and improvise the tag ending completely.



ENDING A FREE IMPROVISATION

The ending of a free improvisation is of particular interest as not only do you have to consider how to end it, but also when to end it. There are many ways to determine when the improvisation will stop, and this moment can be communicated by signalling to the ensemble that it is time to end or by implying that this is the ending musically. Let's start with non-verbal signals though.

EXERCISE

Play a short free improvisation in groups of at least two. You can choose a specific key, scale, chord progression, metre, or other aspect of the performance before-hand if you want. After about a minute or two, use non-verbal communication to signify to the other performer/s that it is time to end. The specific ending is up to you, and it will help to use the different endings we have been discussing. Repeat exercise until you can confidently end together in a satisfying way.

As useful as non-verbal communication is, you should also be able to make the music sound like it is coming to an end. This is important both for giving the music a strong finish and for communicating to the other members of the ensemble that this is the ending. There are far too many ways to do this to detail all of them here. What makes a piece of music sound like it is coming to an end will depend on the style of music and culture that it is from. Be sure to listen carefully to the kinds of music you are playing and hear what aspects of the music make it sound like it is coming to an end.

While there are far too many ways of signifying an ending in music to detail them all here, we can still discuss some basic and common ones:

- Emphasising a dominant chord before moving to a tonic chord (as discussed on page 143).
- Emphasising the leading tone (the note one semitone below the tonic) or the second note of the scale before moving to the tonic.
- Playing a melody that ascends or descends in steps to the tonic.
- Gradually slowing down the tempo as you approach the final note (i.e. a ritardando).
- Repeating the ending phrase multiple times (the same approach as tags and tihais).
- Using any of the above ending types (final hit, cadenza, fade out, tihai, or tag) or any other conventional ending the rest of the ensemble is likely to pick up on.
- You can confirm the ending by really emphasising the final note or chord

Often the improviser or composer will combine many of these strategies to ensure that an ending is strongly implied, and because these strategies are used so often, your fellow ensemble members and audience members will know instinctively that the ending is near.

EXERCISE

In a group of at least two, freely improvise. You can place some restrictions if you like, such as a key, mode, metre, or some roles. Improvise for at least a minute or so, then implement the various strategies described above to come to an ending as a group.

EXERCISE

If you used restrictions last time, repeat the exercise as a completely free improvisation.

TIP

If someone attempts to end the performance but the other members don't pick up on it, make it seem like this "mistake" was actually intentional. Part of the beauty of improvisation is that there are no mistakes, so when things go wrong just make the best of the situation

REFERENCES

Khan, A 1998, *The Classical Music of North India: The Music of the Baba Allauddin Gharana as taught by Ali Akbar Khan at the Ali Akbar College of Music by Ali Akbar,* Munshiram Manoharlal Publishers Pvt. Ltd., New Delhi

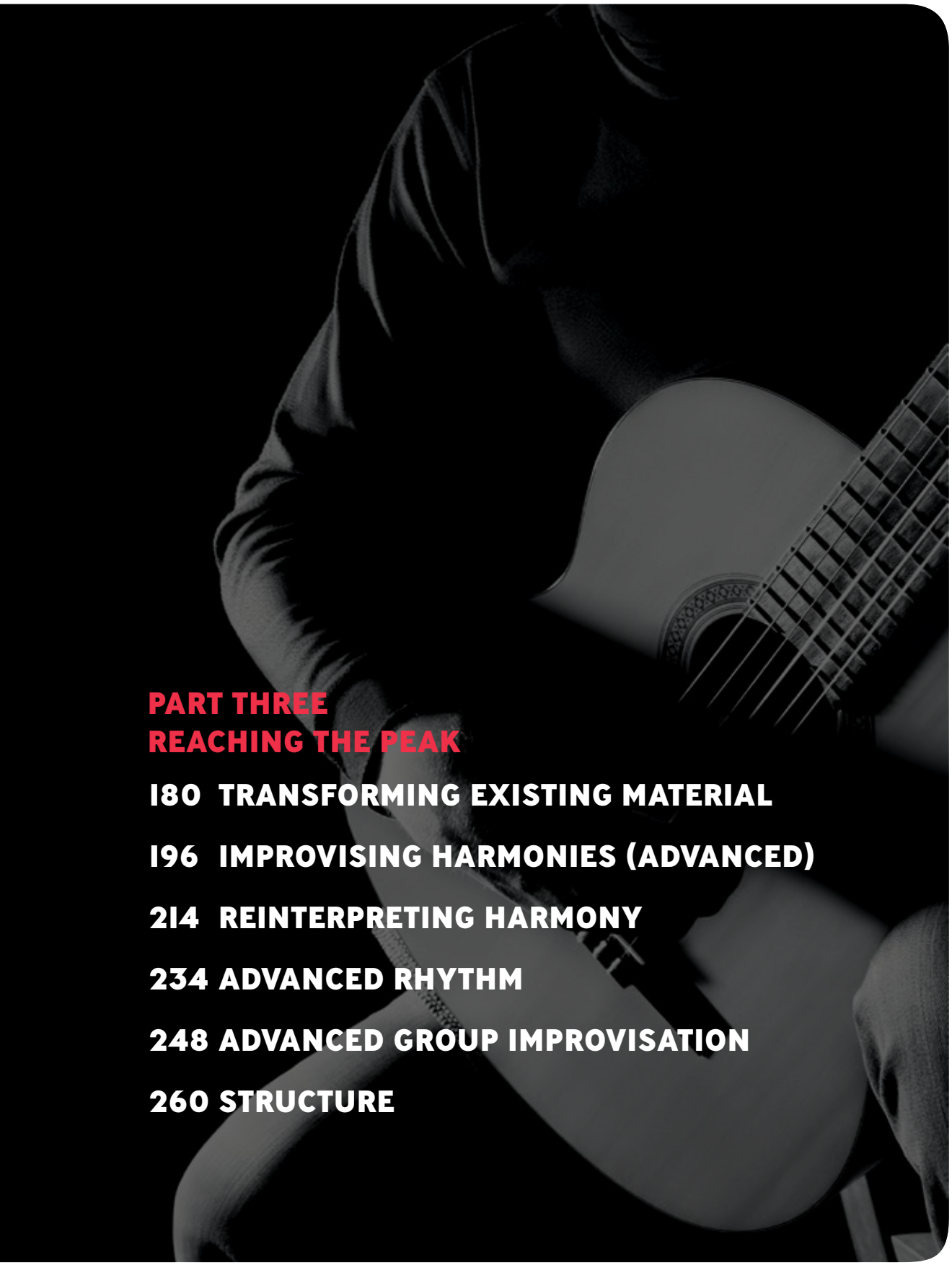
Badura-Skoda, E, Jones, A, and Drabkin, W 2001, 'Cadenza', Grove *Music Online* accessed 19 of December 2018 from Oxford Music Online **https://doi.org/10.1093/gmo/9781561592630.article.43023**

Clendinning, J.P. and Marvin, E.P. 2011, *Theory and Analysis: Second Edition,* W. W. Norton & Company, New York

Swain, J 1988, *'Form and Function of the Classical Cadence', The Journal of Musicology,* Vol. 6, No. 1, pp. 27-59

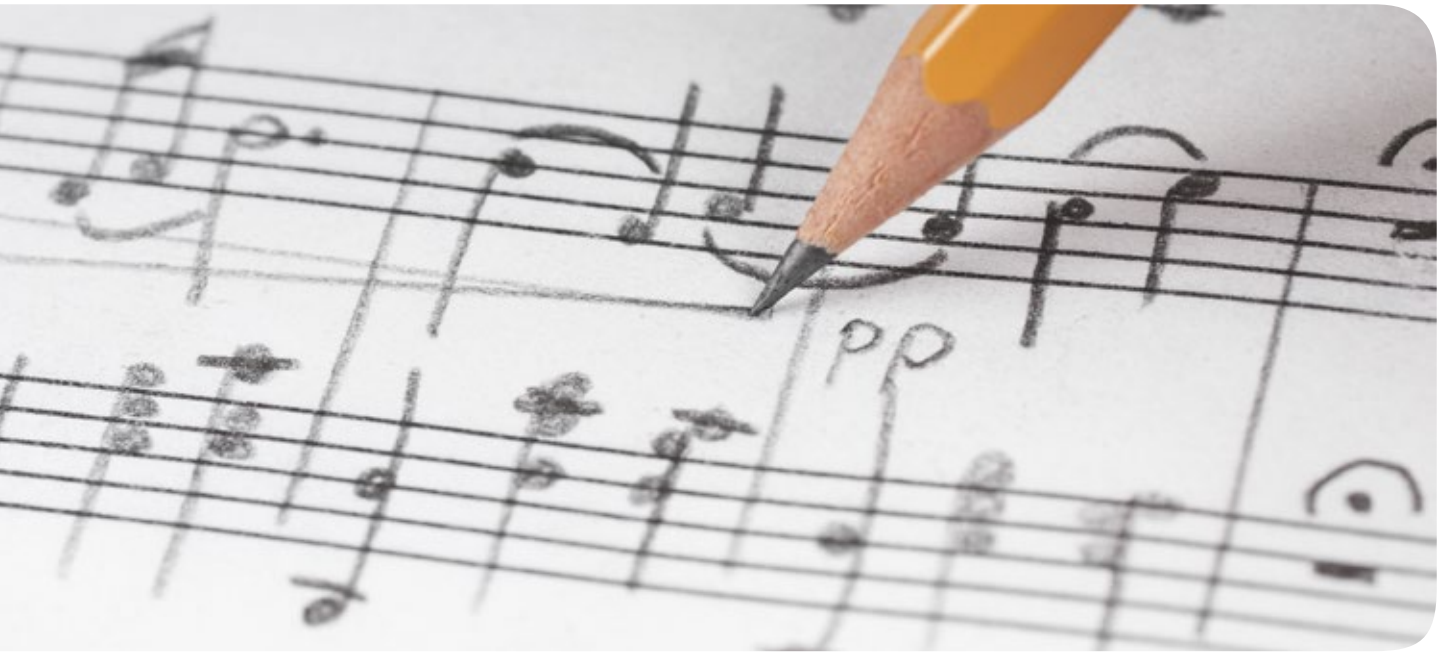
Wade, B 1979 *Music in India: The Classical Traditions* Manohar Publishers and Distributors, New Delhi

PART THREE
REACHING THE PEAK



PART THREE
REACHING THE PEAK

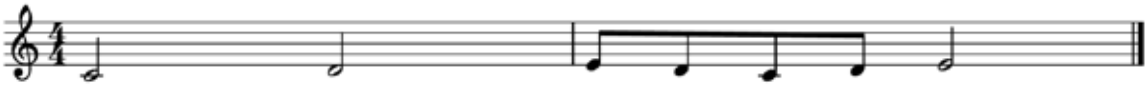
TRANSFORMING EXISTING MATERIAL



The ability to improvise with an otherwise pre-composed piece of music is vital for most improvisers around the world. There is one group in history that takes improvising with existing material to another level of complexity, and that is Baroque and Classical era musicians. Composition and improvisation in this era were barely distinguished apart from the fact that one occurred during performance and the other did not. Many of the greats of this era are said to be master improvisers. Bach, for example, once improvised a three-voice fugue over the difficult to work with King's theme and Beethoven's improvisations were said to be greater than his pre-written works. There are many techniques and processes used by these improvisers to be able to generate an entire performance from such a small bit of musical material. One of the most fundamental of these is the different ways they transformed the theme.

TRANSFORMING A THEME

We have already looked at how improvisers and composers from different styles ornament existing musical material. Ornamentation involves adding something to what is already there, meaning that the original notes are still within the music somewhere. It is also possible, however, to not just ornament a melody but transform that melody into completely new material. Below is an example of a simple melody:



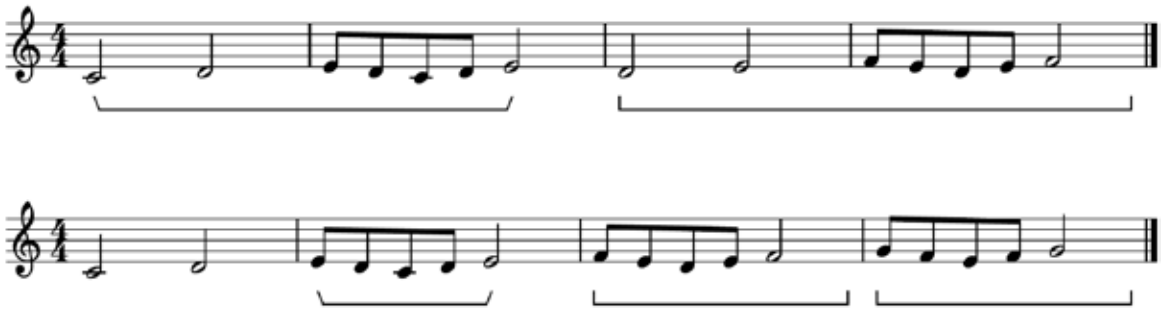
Soundbite 1.1

Some basic transformation in terms of pitch are sequences, retrograde, and inversions:

NOTE

Each example involves the simple melody from above being played once, then one or more transformations of that melody. The lines underneath each show what part of the melody has been taken and where that fragment appears in the transformed version.

Sequencing is when the improviser or composer takes a melody and moves it up or down in pitch. The intervals in the theme can stay exactly as they are (i.e. a transposition) or the quality of the intervals can be changed so that it stays in the same key (e.g. changing F#-E to F-E to remain in the key of C). A sequence can be an entire melody, but usually, it is only a fragment that is a few notes long. Sequencing is an extremely common way of transforming melodic material and will often ensure the new melody created has a pretty close connection to the original music.



The major second (E to D) at the start of the sequence becomes a minor second (F to E) to stay in the key

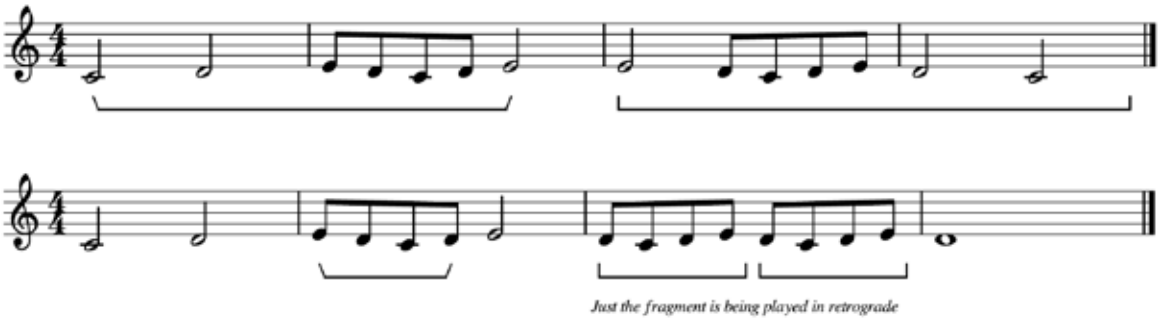
Soundbite 1.2.1

Soundbite 1.2.2

Soundbite 1.2.3

Soundbite 1.2.4

To play the melody in *retrograde* means to play it as it is but backwards. Playing the melody or part of it in retrograde usually has a strong sense of recognisability, but this can sometimes mean that the new material is not different enough to be considered something new. As a result, playing in retrograde is often combined with other techniques.



Just the fragment is being played in retrograde

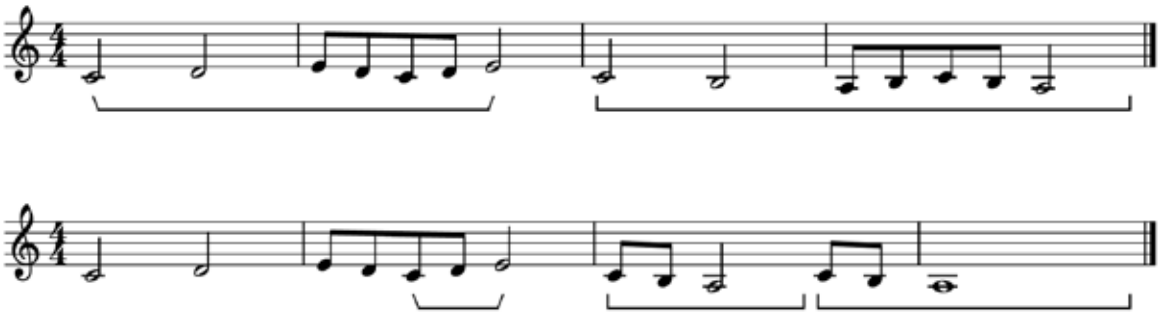
Soundbite 1.3.1

Soundbite 1.3.2

Inverting a melody involves flipping (or inverting) the direction of each interval in that melody. For example, if the original ascends by a step, the inversion will descend by a step. If the original descends by a fifth, the inversion will ascend by a fifth. Like sequences, the quality of the intervals in the inversion can be changed to ensure that it remains in the key or they can preserve the interval as it is. Inversions do not sound as familiar or recognisable as the two above techniques, but there is still a strong sense of unity. Even though the notes are entirely different, because the rhythm is the same and the melodic contour is just in reverse, the inversion of the melody will still work very well with the original.

Soundbite 1.4.1

Soundbite 1.4.2



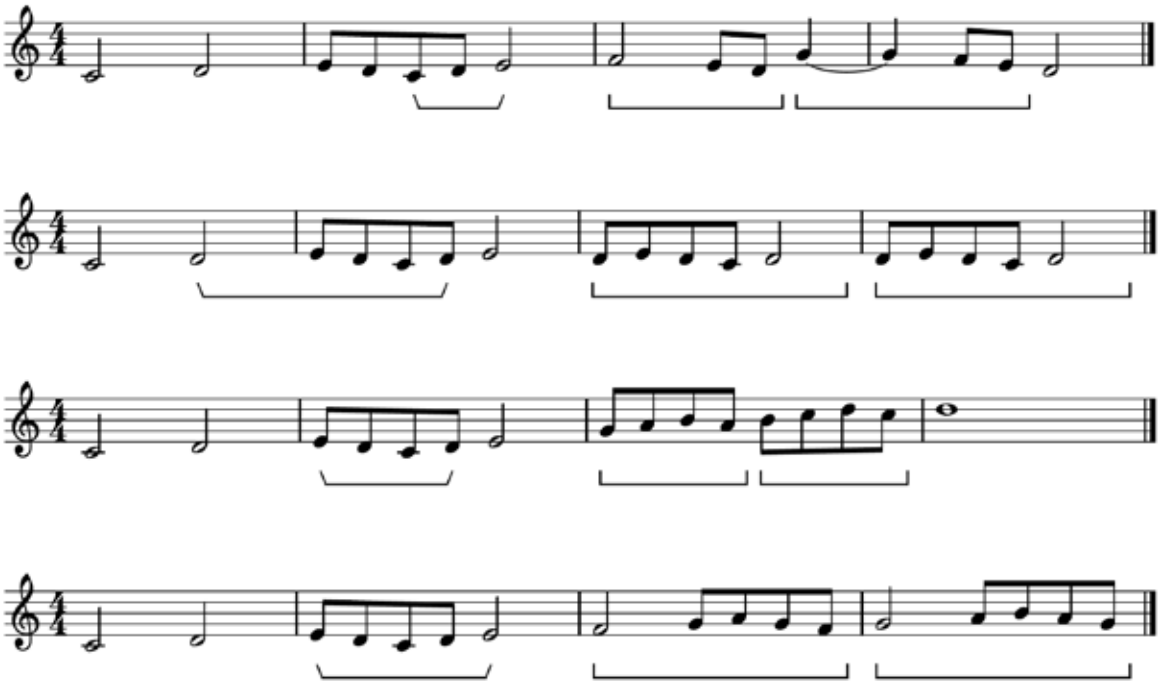
Sequencing, playing in retrograde, and inverting the melody are three of the most basic kinds of transformations. The transformed versions and the originals will tend to work well and compliment each other, and these three techniques are frequently combined. See some examples of this below:

Soundbite 1.5.1

Soundbite 1.5.2

Soundbite 1.5.3

Soundbite 1.5.4



As you can see from the various examples above, a short melody can be transformed into a longer one by adding transformations of what is already there. These techniques tend to ensure that the transformed material retains a connection to the original. This means that the transformed melody ends up feeling like it compliments and works with the original material, creating a sense of unified identity for the final piece of music.

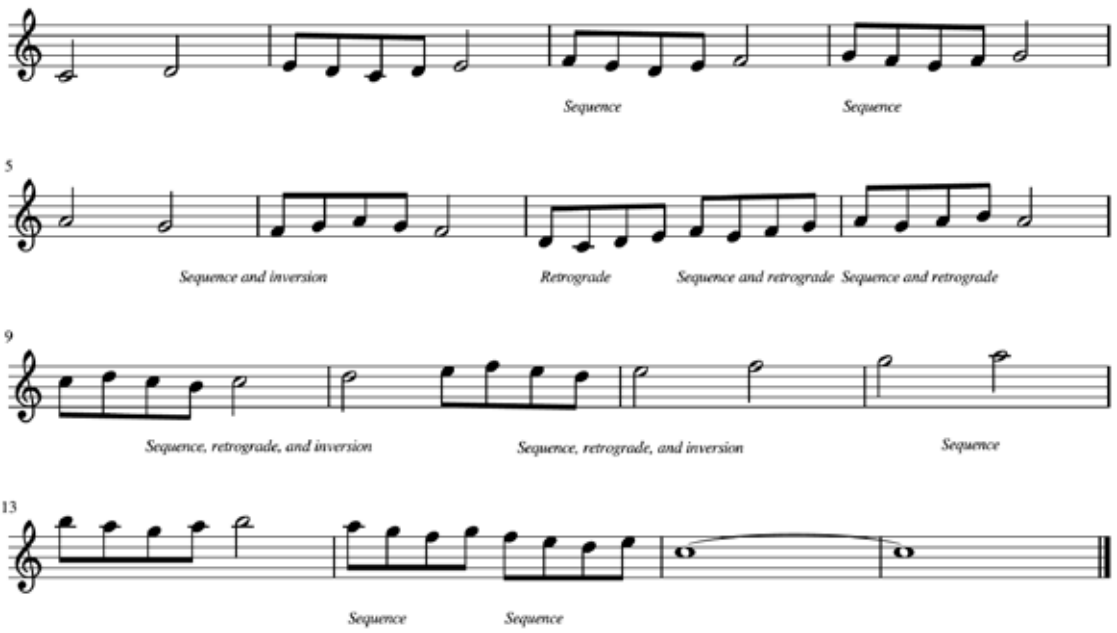
EXERCISE

Over the simple melody given at the start of this section, practice the following transformations:

- *Sequence the entire melody*
- *Sequence part of the melody*
- *Play the whole melody in retrograde*
- *Play part of the melody in retrograde*
- *Invert the entire melody*
- *Invert part of the melody*
- *Apply a combination of these to the entire melody*
- *Apply a combination of these to part of the melody*

EXERCISE

Now that you are confident at uses sequences, retrograde melodies, and inversions, take the simple melody and generate a sixteen bar piece of music from it. All of the new material must be a transformation of the original melody. You can see an example of this below for inspiration:



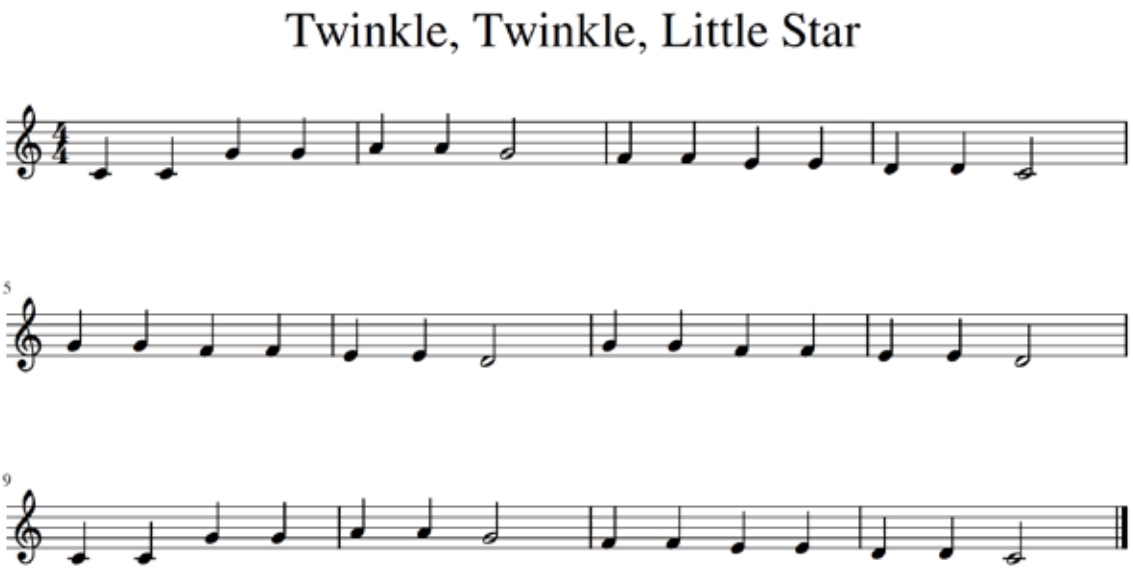
Soundbite 1.6

TIP

You can start by planning out some of these transformations, but repeat the exercise until you can improvise the entire sixteen bar performance. This tip applies to all of the upcoming exercises too!

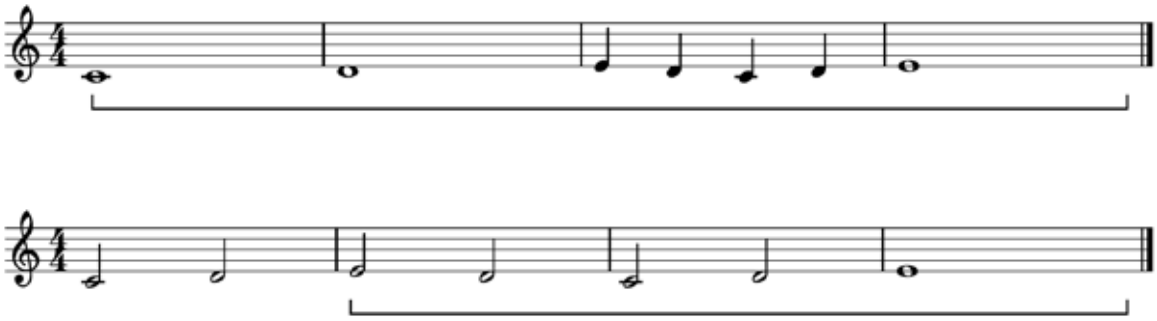
EXERCISE

Improvise over the melody of 'Twinkle, Twinkle Little Star,' using the pitch-based methods of transformation. Experiment with combining the different techniques in different ways and be sure to apply the transformations to both large chunks of the melody and smaller fragments.



We have now discussed three fundamental ways of transforming pitch, but pitch is only one quality of music. There are also various ways of transforming a melody's rhythm.

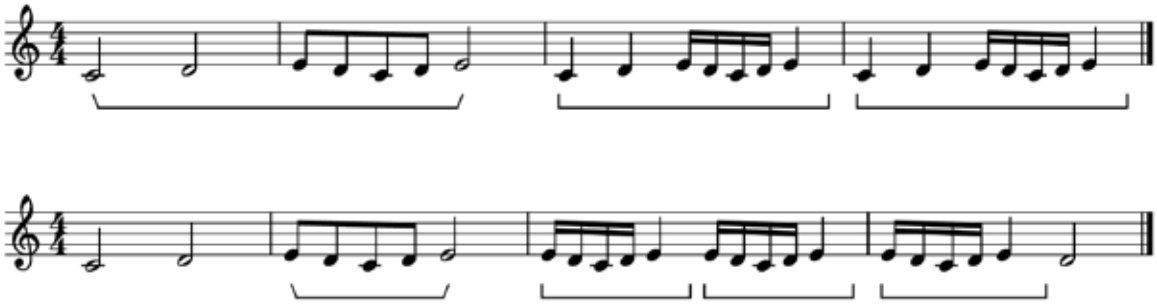
Rhythmic augmentation (usually just called augmentation) involves increasing the length of the notes in a melody or parts of a melody. The transformed material will remain recognisable because the pitch is the same; it will just sound slower.



Soundbite 1.7.1

Soundbite 1.7.2

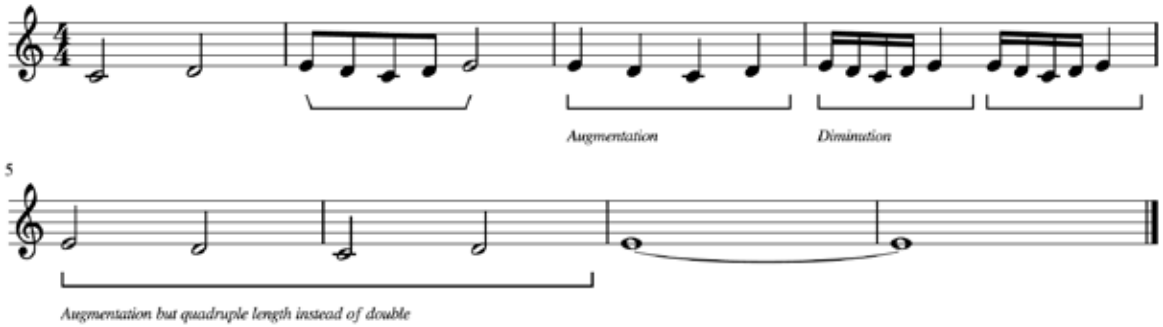
The opposite of rhythmic augmentation is rhythmic diminution (also usually just diminution) and involves shortening the length of the notes in all or part of the melody. Instead of slowing the melody down, it will speed it up, also usually increasing the intensity of the music.



Soundbite 1.8.1

Soundbite 1.8.2

It is also possible to combine augmentation and diminution or to increase/decrease the note values by different amounts in the same piece. For example:

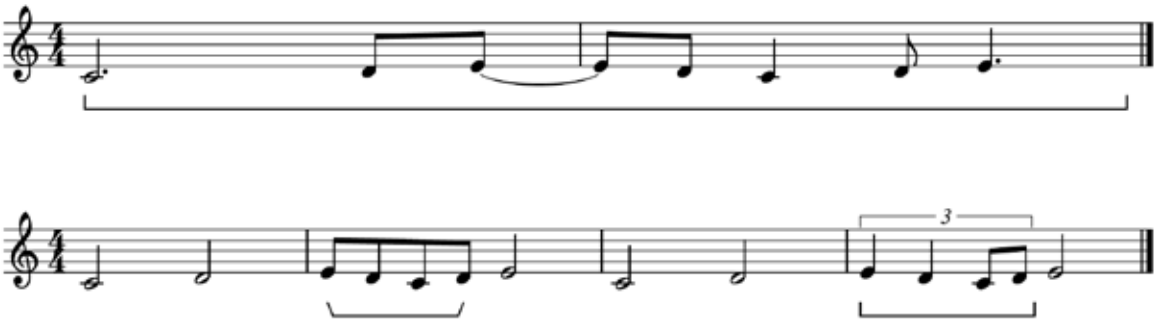


Soundbite 1.9

While augmentation and diminution are some common ways of manipulating a melody's rhythm, your rhythmic transformations do not always have to be so specific. Simply *using the same notes with a new rhythm* is an effective form of transformation. This new rhythm may only slightly deviate from the original or it can be completely different. In addition, this technique might be applied to part or all of the given melody. If the goal is to maintain the identity and recognisability of the melody, then making the rhythm similar to the original and only transforming part of the material is preferred.

Soundbite 1.10.1

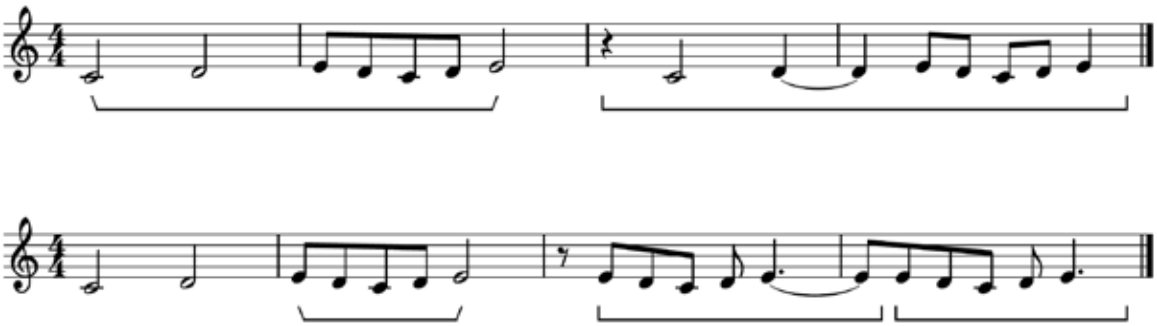
Soundbite 1.10.2



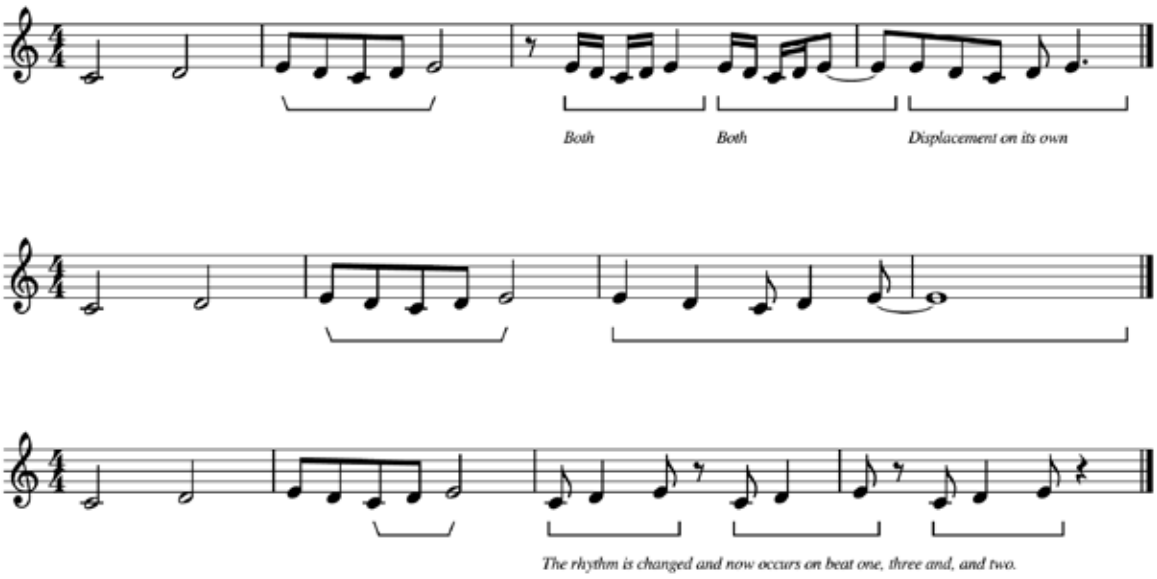
Changing the duration of notes in the melody is not always even necessary. Another common device for rhythmic transformation is *rhythmic displacement*. This involves keeping the rhythm and pitch the same but changing its location in the bar. Simply displacing a melody or part of a melody can change how it sounds by a surprising amount.

Soundbite 1.11.1

Soundbite 1.11.2



Of course, these rhythmic techniques can also be combined.



Soundbite 1.12.1

Soundbite 1.12.2

Soundbite 1.12.3

EXERCISE

Over the simple melody used in each of these examples, practice the following transformations:

- *Augmentation of the whole melody*
- *Augmentation of part of the melody*
- *Diminution of the whole melody*
- *Diminution of part of the melody*
- *Changing the rhythm of the whole melody*
- *Changing the rhythm of part of the melody*
- *Rhythmically displacing the whole melody*
- *Rhythmically displacing part of the melody*
- *A combination of these techniques on the whole melody*
- *A combination of these techniques on part of the melody.*

EXERCISE

Improvise a sixteen bar melody, generating all the material from the simple melody used in the examples. All of the new musical material must be a rhythmic transformation of this given melody.

EXERCISE

Repeat the above exercise, this time using the pitch-based transformations too. Feel free to combine the pitch-based and rhythmic techniques together.

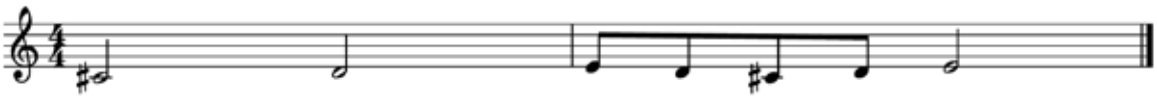
EXERCISE

Improvise over the melody of 'Twinkle, Twinkle Little Star,' using both the pitch-based and rhythmic methods of transformation. Experiment with combining the different techniques in different ways and be sure to use both large chunks of the melody and smaller motifs.

All of the transformations we have discussed so far tend to affect a small part of the composition. There are, however, transformations that can occur on a more global scale.

Transposition can mean moving an entire melody up or down, as discussed on page 181 with sequencing. However, transposition can also mean keeping the melody as it is, but changing the accidentals (sharps and flats) to suit the new key. This might be done to make older material fit into a new context, for the sake of variation, or to change the mood of the original (a typical example is transposing a melody to its parallel minor and vice versa).

Soundbite 1.13

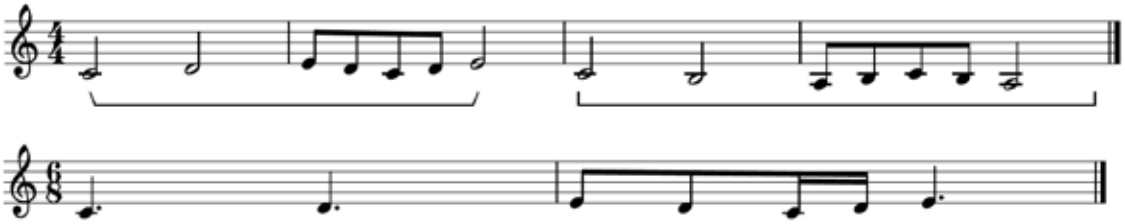


The C♯s suggest we are probably now in D major or A major

Another form of global transformation is *changing the musical material's metre*. When you take a theme that is in one metre and move it to another, you are going to have to shorten or lengthen certain notes. You should ensure that the bar lines still occur at the same points in the melody and you should change note lengths in a way that emphasises the strong beats of the new metre (revise page 19 for more on this).

Soundbite 1.14.1

Soundbite 1.14.2



The notes that are on the strong beats of 4/4 are now on the strong beats in 6/8

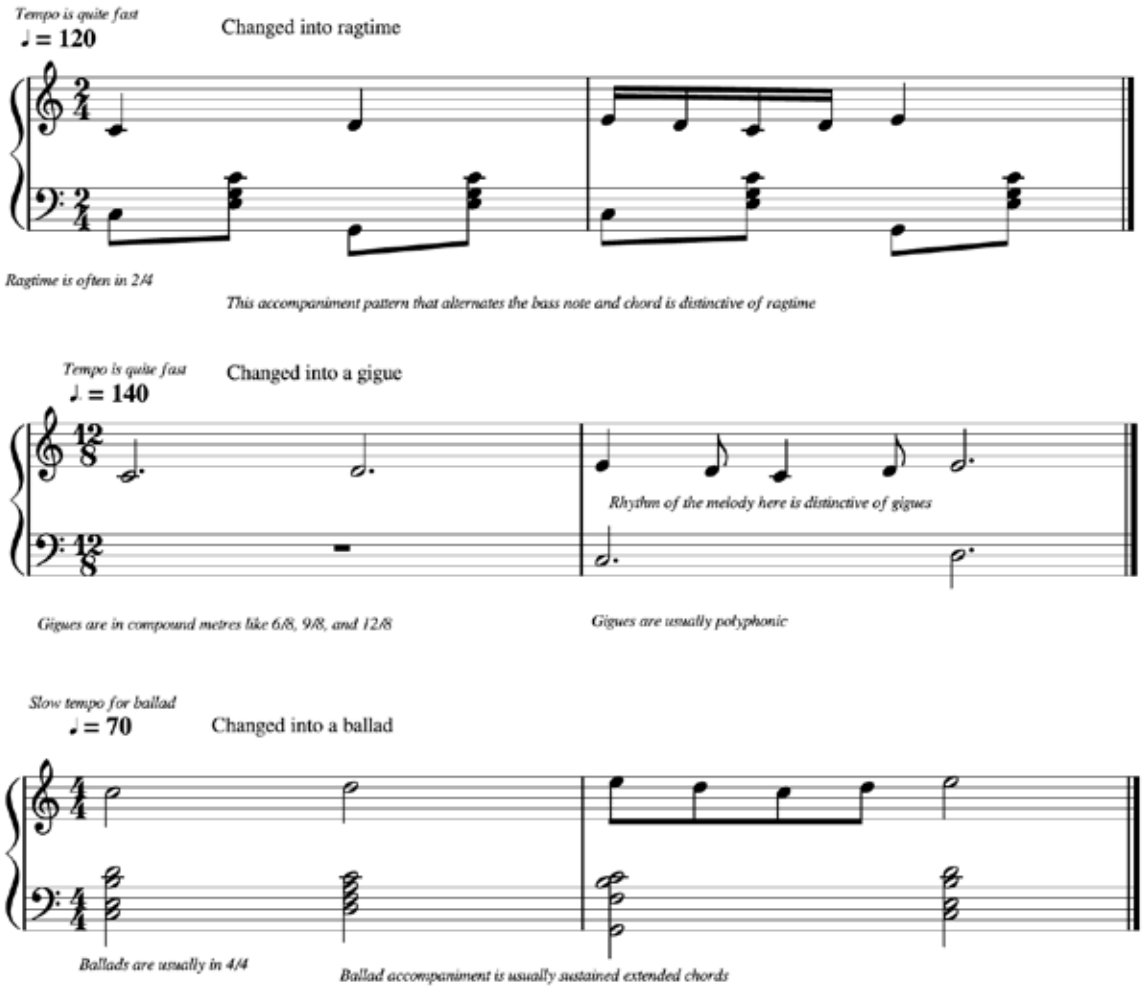
The C and D needed to be shortened so that the E lands on a strong beat

One global transformation that considers many features of the music is playing the same melody in a different style. To do this, you will need to identify the characteristic features of that style and alter your music so it encompasses those features. The distinct features are often aspects like the accompaniment pattern, metre, tempo, distinctive rhythms, distinctive melodic features, and specific instruments or timbres. While you usually won't have the luxury of switching instruments mid-performance, the various other features are definitely within your control during an improvisation. You will have to use your own research and knowledge to identify what features make your required style distinct and how you can change a melody so it suits that intended style.

Soundbite 1.15.1

Soundbite 1.15.2

Soundbite 1.15.3



Transposition, changing metre, and *changing style* are all transformations that tend to happen over a larger section of music as opposed to a motif or individual phrase. Constantly changing metres, keys, and styles tends to make the music feel confused or jumbled, and these are qualities that are usually undesirable. Global transformations are great ways of bringing previous material back but varying it enough so that it sounds new. These skills are also useful as sometimes the context you are improvising in might require specific keys, metres, or styles and you will need to change the material to suit those qualities on the spot (an audience member might request that you play a song in their favourite style for example).

EXERCISE

Take the simple melody used in the examples and experiment with:

- *Transposing it to different keys*
- *Changing its metre*
- *Changing its style*

EXERCISE

Improvise over the melody of 'Twinkle, Twinkle Little Star,' using both the pitch-based and rhythm-based transformations. Throughout the improvisation, introduce a change in key, metre, or style to help differentiate sections and create variety. Avoid using the global transformations too often, though.

Our exploration of how to transform a melody has so far been relatively restrictive. In practice, improvisers and composers usually combine these strategies with other methods like Ornamentation (discussed on page 34), and will often combine this transformed material with completely new music.

You can hear the organist Olivier Latry using many of these techniques of transformation in practice in the following video:

OLIVIER LATRY

Clip 3.1.1

The clip starts with Latry playing the theme normally, then goes into him playing his improvisation over it. As the improvisation goes on, compare the original theme to the various later parts and see if you can pick up how parts of the theme are being transformed and used.

EXERCISE

Once again improvise over 'Twinkle, Twinkle Little Star.' This time though, do not worry about only drawing from the original material. Feel free to improvise new melodies from scratch and combine them with the transformations. Use the various ornamentations we discussed on page 34 to further vary and colour your improvisation. The point of the exercise is to find ways of combining the different methods of transformation with your personal style of improvisation.

EXERCISE

Instead of improvising over 'Twinkle, Twinkle Little Star,' compose your own theme and improvise over that. Like in the previous exercise, combine transformations of the theme with new material and ornamentations.

EXERCISE

Once you are confident with improvising over a theme that you have composed yourself, improvise a short idea and then immediately go into an improvisation that incorporates transformations and variations of that idea, returning to the original material intermittingly. Practice this for a while until you are adept at being able to remember the original theme even after it has been transformed and varied many times.

EXERCISE

Once you are confident with being able to remember one improvised theme, see if you can memorise two! Start by improvising and transforming a melody like in the exercise above, then, after a short while, improvise a completely new melody and go about transforming that. Throughout this performance, switch back and forth between improvising over each of the themes and make sure you can remember both of them as best as possible. Once again, play the theme in its original form at different points throughout the improvisation. Another approach is to intersperse fragments of the original melodies throughout the performance.

EXERCISE

As a group of at least two, improvise in a chosen key and metre, alternating with each other every four bars. For the person who starts, improvise a short, simple, repeatable melody for two bars and then improvise transformations of that melody with the methods described in this section. The next person will use their ears to imitate the melody as close as possible in the first two bars, then improvise their own transformation in the second two bars. If you have more than two people, continue this process throughout the group. Keep going until you feel that you have exhausted all the interesting ways to transform the melody. Once this has happened, choose a new person to start and repeat the process

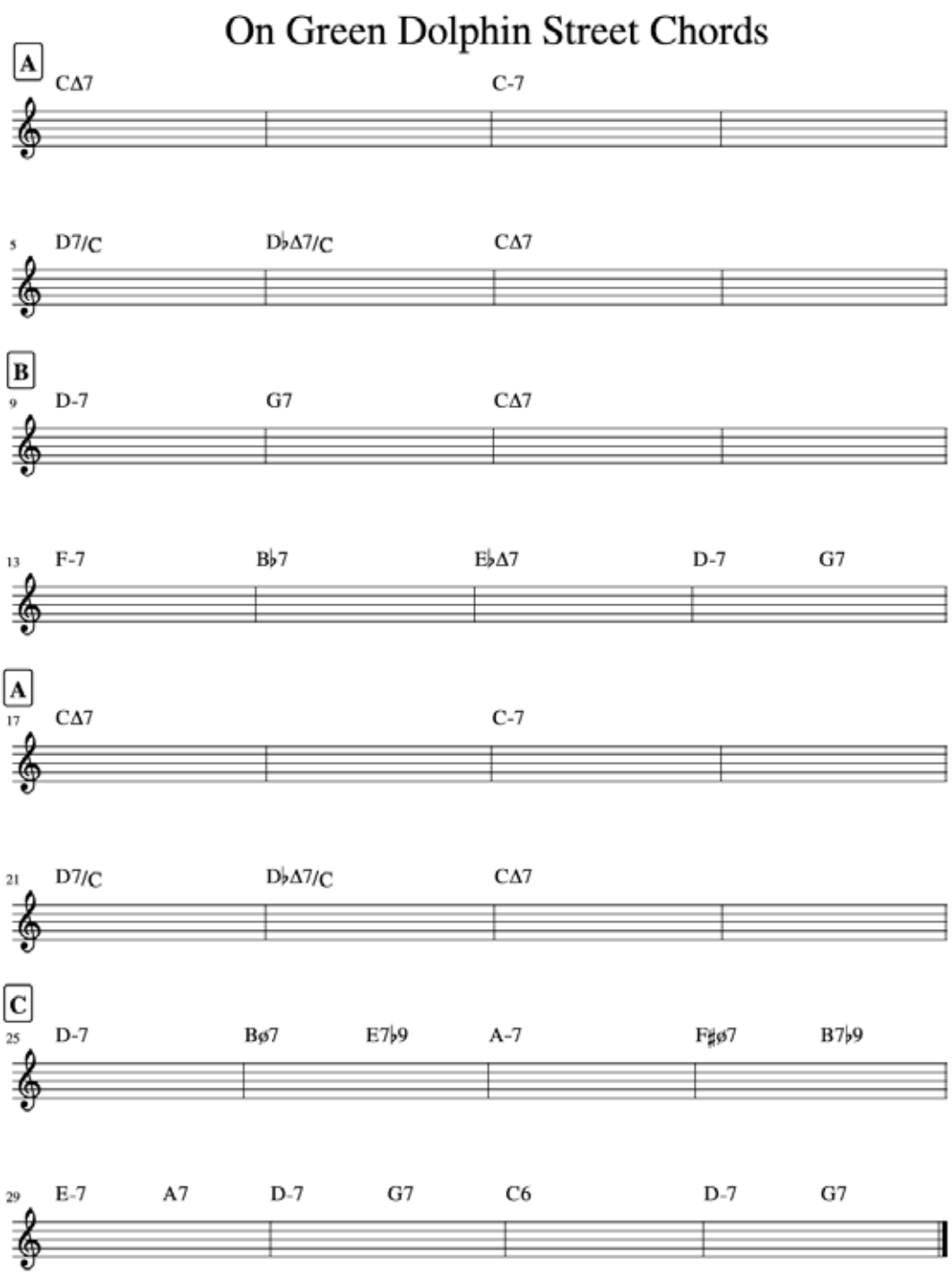
TIP

You can make this exercise more difficult by playing at a faster tempo, having the initial melody last for longer (e.g. four bars instead of two), or by having the improvised section last for longer.

Soundbite 1.16

EXERCISE

In groups of at least three, take turns soloing over the following chord progression (with performers accompanying when they aren't soloing):

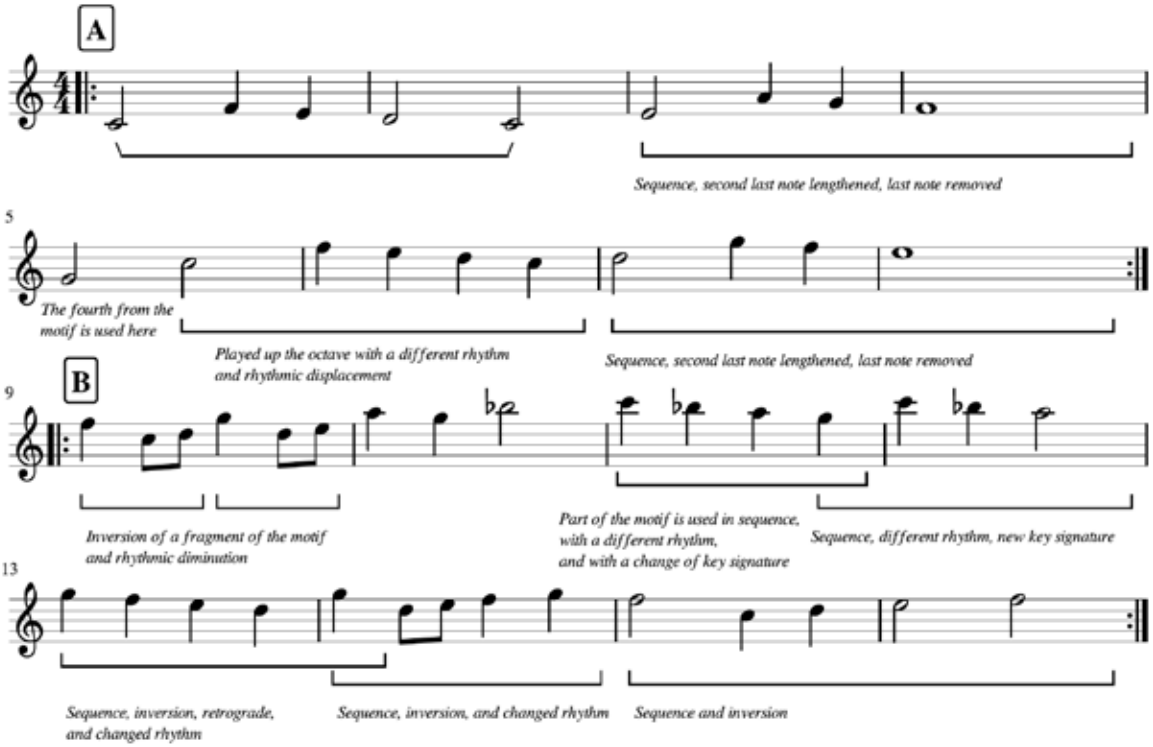


Solo for one chorus each (one play-through each) and listen to the other soloists while you are accompanying. Work out parts of their solo by ear and include them in your own solo, followed by some transformations of that material. Repeat this process until you can confidently incorporate transformed fragments of your bandmates' solos into your own.

HOW TO USE THESE TECHNIQUES EFFECTIVELY

Although we have touched on it, we have not explicitly discussed why you would want to transform melodies in this way. Some of the reasons you would want to use these techniques are:

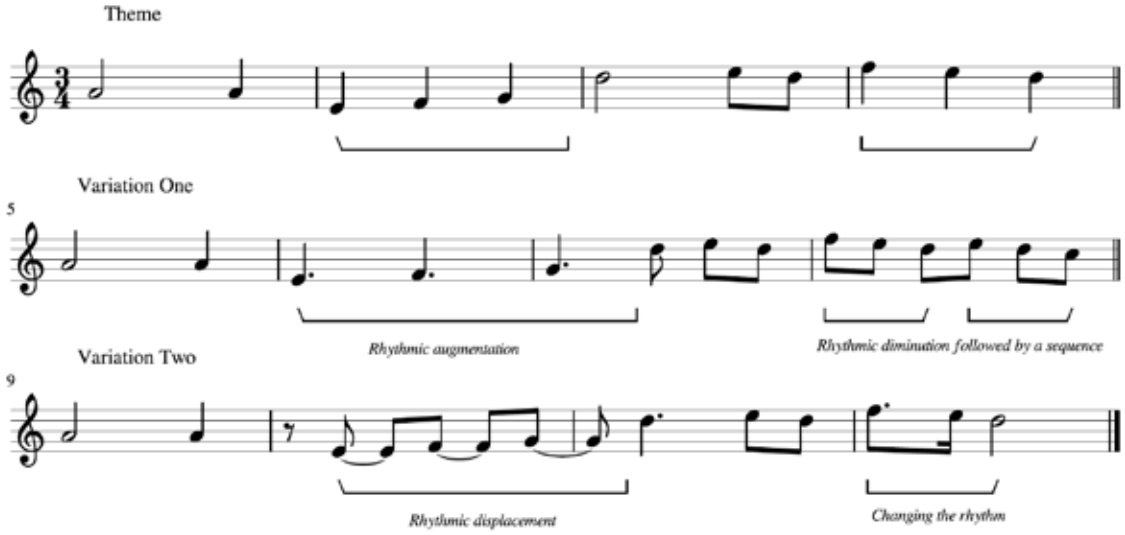
- The use of transformations make it easier to improvise because you are not constantly thinking of new melodies, you are just altering ones that already exist.
- Generally, when you create new music via these methods, the new material will compliment and work with the original. This can bring a greater sense of unity or cohesion across the performance and different sections. A great approach for doing this is to use a limited number of fragments from the original material transformed in various ways. Using this approach throughout your improvising will help you create melodies that sound like they are related to and flow into one another.



Soundbite 1.17.1

- These techniques can be great ways of varying the material in a way that is more substantial than just adding ornamentation. Assuming you don't transform the material too heavily, the listener should still be able to hear how your transformations relates to the original melody and hear it as a variation, not something entirely new.

Soundbite 1.17.2

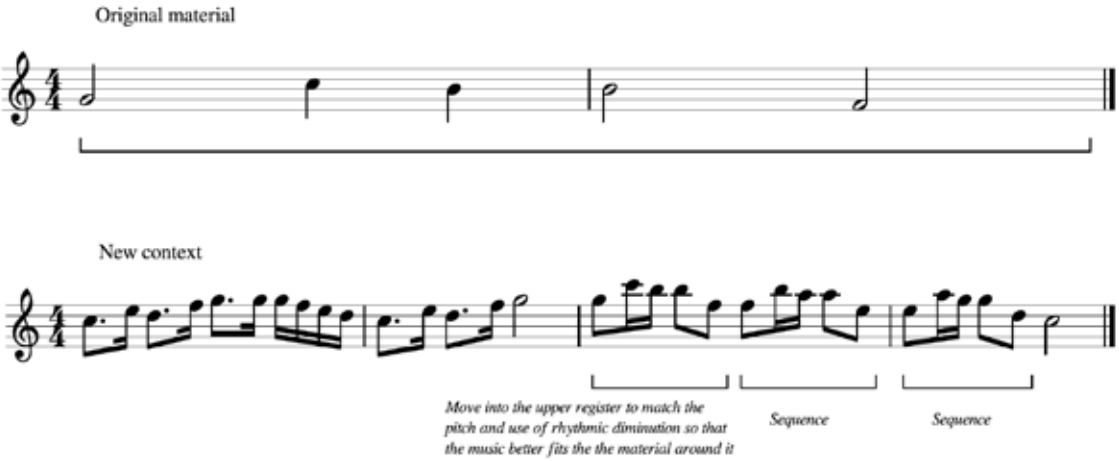


Notice how the transformations are mostly rhythmic and how much of the original theme is still present? This helps maintain a connection to original theme.

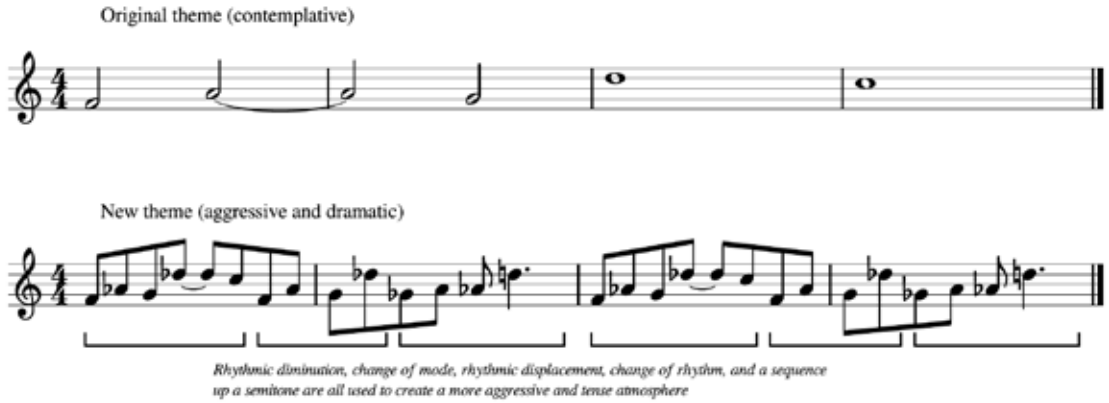
- Many of the transformations allow the music to be adapted to many different contexts. This might be the key, metre, or style transformations (as discussed earlier), but the pitch-based techniques can also help bring old material into a new register or fit it into a different melodic contour, and the rhythm-based transformations can be used to bring previous into a new level of intensity or a different rhythmic environment.

Soundbite 1.17.3

Soundbite 1.17.4



- Transformations allow you to take a theme and change its intended mood or emotional impact. A common example is transforming the music into a minor key (and vice versa), but all of the transformations techniques can be used for this with a variety of different possible effects.



Rhythmic diminution, change of mode, rhythmic displacement, change of rhythm, and a sequence up a semitone are all used to create a more aggressive and tense atmosphere

Soundbite 1.17.5

Soundbite 1.17.6

- From a practical point of view, the ability to vary and transform material can be useful for filling in time where contrasting music would not be appropriate. This often occurs for church organists, where the length of proceedings can vary, and the musician needs to adapt, but it is useful in many other contexts as well. You may need to continue playing music while someone has technical difficulties, you may be playing music for an event and have to fill in time while someone is walking on stage, and you may even need to fill in time if a fellow performer loses their place in the music.
- Improvisation is often portrayed as mysterious, skilful, and impressive. Telling your listeners you are going to improvise an entire piece of music from a short melody can be exciting and awe-inspiring.

EXERCISE

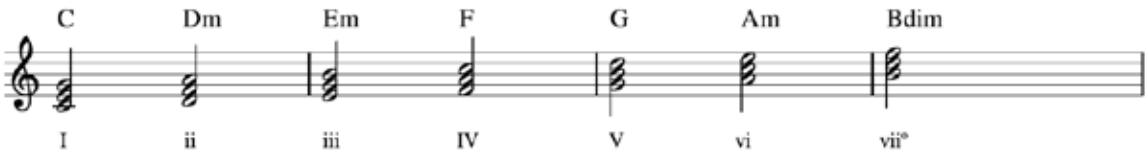
On your own, improvise or write a theme and transform it in each of the ways mentioned above. Pay particular attention to the second purpose (using transformation to make the new material connect to the old material), as it is an excellent way of giving your performance a sense of unity, structure, and individual identity. Be sure to repeat this exercise until you are confident with achieving all of the listed goals.

IMPROVISING HARMONIES — ADVANCED

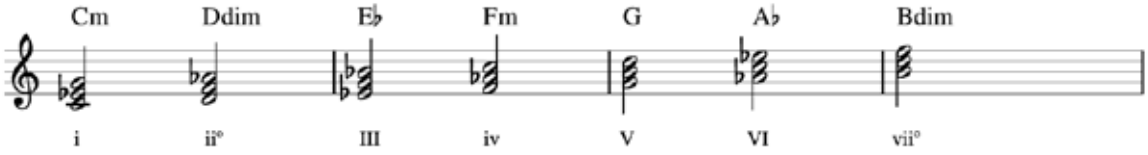
In part two we looked at improvising chord progressions in one key at a time (page 136), but it is extremely common for music in multiple genres to move between different keys. There are three main ways a piece of music might use chords from a different key. Modulation is when the music moves to a new key and stays in that key. Tonicisation is when the music temporarily moves to a new key for a short amount of time but immediately moves back to the original. Modal mixture is when the music temporarily borrows a chord or chords from a scale that has the same tonic as the current key (e.g. being in C major but using a chord based on C harmonic minor) without permanently moving to that mode. All of these techniques are useful for making the chord progression more interesting, emotional, and expressive.

MODAL MIXTURE

Let's start with modal mixture. The chords of both C major and C minor are:

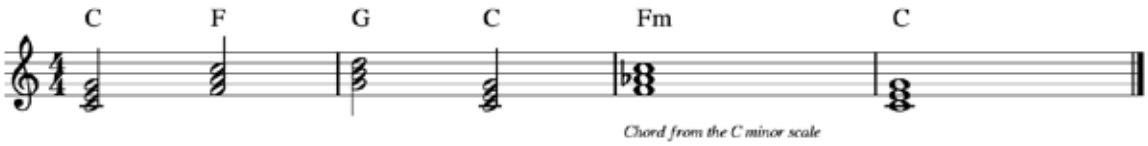


Note: Uppercase numbers mean the chord is major and lowercase numbers mean the chord is minor



Note: The Bb is used for chord III (Eb) because using a B natural creates a dissonant augmented chord)

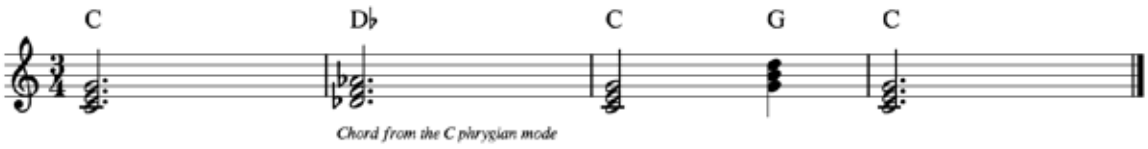
Now look and listen to the following progression:



Chord from the C minor scale

Soundbite 2.1

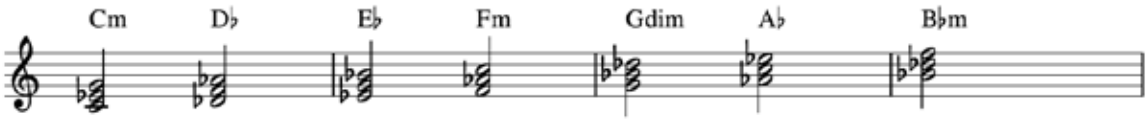
The F minor chord is not a chord from the C major scale, but it is from the C minor scale (both the natural minor and harmonic minor). Let's look at another example, this time using a different scale:



Chord from the C phrygian mode

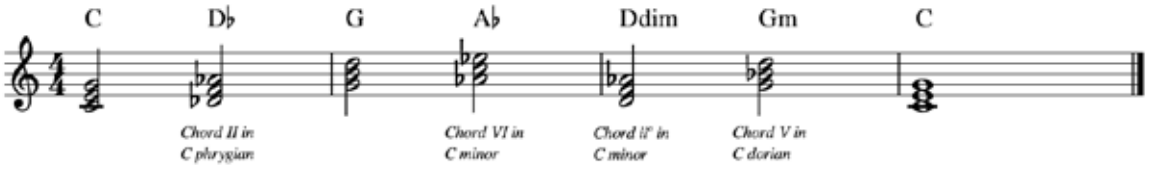
Soundbite 2.2

The Db chord in the second bar is not from either the C major or C minor scale, but it is from the C phrygian mode. Here are the chords based on the C phrygian mode:



In both of the above examples, the chord progressions mostly create the sound you expect from C major, but also include other emotions and moods because of the borrowed chords. Additionally, using chromatic chords (chords from outside the key) will make the music sound more colourful in general. However, borrowing too many chords from too many different parallel modes, especially when done in a row, can make the chord progression sound unstable and dissonant. Listen to the below example to hear this:

Soundbite 2.3



Notice how this chord progression starts to sound like a sequence of random chords in a row. This does not mean you should never use this approach if it is the sound you are trying to create, but, in general, you should use modal mixture sparsely.

Here are some particularly common and effective chords to borrow when in a major key (remember uppercase Roman numerals are major chords, lowercase Roman numerals are minor chords, and lowercase Roman numerals with an "o" are diminished chords):

- *ii° from parallel minor*
- *iv from parallel minor*
- *bVI from parallel minor*
- *bIII from parallel minor*
- *VII from parallel mixolydian*
- *bII from parallel* phrygian

Some particularly common and effective chords to borrow when in a minor key are::

- ii from *parallel major*
- *vi from parallel major*
- *IV from parallel major*
- *bII from p*arallel phrygian

The added seventh and other extensions (e.g. ninth, eleventh, etc.) can also be applied to borrowed chords if appropriate for your music.

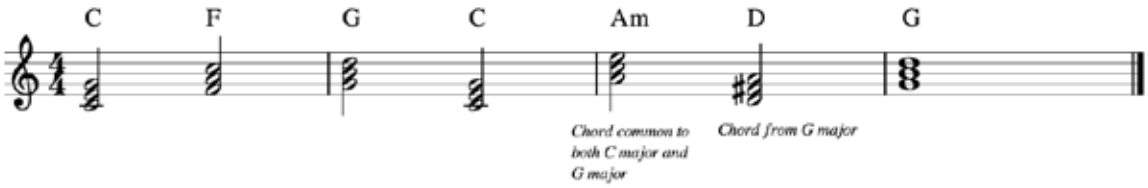
EXERCISE

Improvise some four, eight, sixteen, and thirty-two bar chord progressions in both major and minor keys, this time incorporating modal mixture. Start by experimenting with the suggested chords, but feel free to experiment with chords from any parallel mode. As discussed above, be conservative with how much you use this device. Stick to one or two borrowed chords in a short amount of time and avoiding using borrowed chords in a row unless you want the music to drift away from the sound of the key you are using.

TONICISATION

As discussed earlier, tonicisation is the process of temporarily moving to a new key. Like modal mixture, it involves using chords from other keys, but they do not have to be from parallel modes like with modal mixture. To start, let's look at this chord progression:

Soundbite 2.4



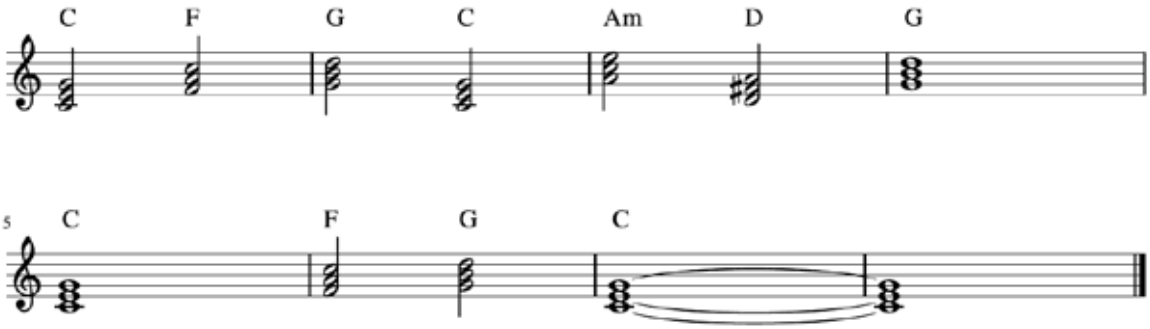
The first two bars are a I—IV—V—I progression in C major but the second half is a bit different. The A minor chord exists in both C major and G major. This is called the pivot chord. The D chord after it does not exist in the key of C major, meaning we must be in a different key. The fact that the next chord is G confirms that the new key is G major, at least at this point in the music. It is particularly true because D is a dominant chord in G major and so it has a strong sense of resolution when it moves to G, a tonic chord in G major.

What happens next though will determine if it is a tonicisation or a modulation. Look at these two examples and see if you can guess which is which:

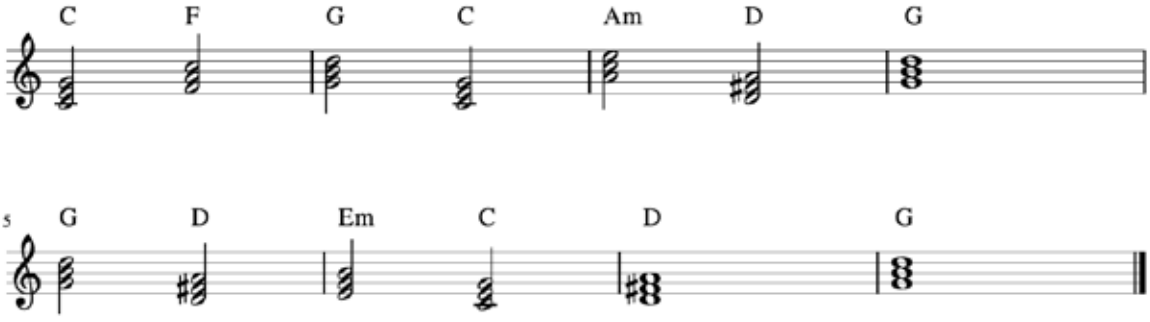
Example One:

Soundbite 2.5.1

Soundbite 2.5.2



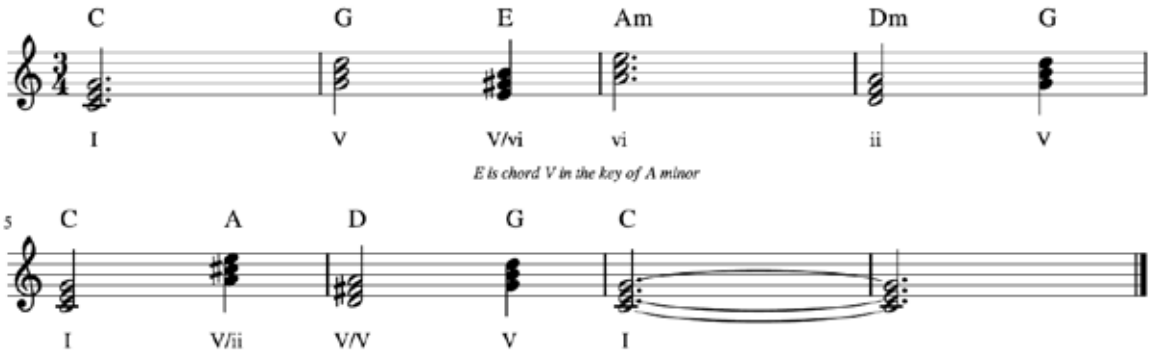
Example Two:



Can you guess? The first example is a tonicisation and the second example is a modulation. This is because the second half of the first example is undoubtedly in C major, meaning the change to G major was very temporary, only lasting a bar and a half. The second example, however, stays in G major, making it a modulation.

The first example is what we call a secondary dominant. This is a type of tonicisation where the V chord of another key is used. For example, in the previous case we used the V chord of G, which was D. As another example, we might use the V chord of D minor, which is A. We label these with a V to the left of a slash and the scale degree that it is V of to the right of the slash. For example, using the V chord of D minor in the key of C major would look like V/ii. Secondary dominants are usually used to create more motion or momentum in the music. The most common secondary dominants are on V, ii, and vi. Here is an example of a chord progression that uses many secondary dominants:

Soundbite 2.6



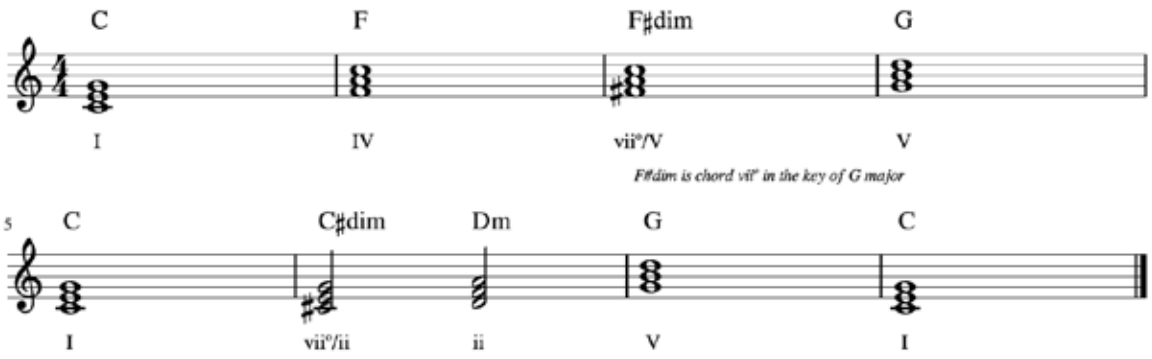
Hopefully, you can hear how it not only makes the music sound brighter and more uplifting but how it creates more movement through the music. It is possible to resolve a secondary dominant into another secondary dominant as in the above example. Secondary dominants can often have pivot chords between the original key and the key being tonicised, but they also often don't. Using a pivot chord will make the transition smoother, however.

EXERCISE

Improvise some chord progressions, this time incorporating secondary dominants into them. Prepare the tonicisation by using a pivot chord common to both keys, then try again without the pivot chord. Compare the sound of with and without the pivot chord to see what you effect they create. Try to use secondary dominants to generate more movement in the music where it sounds appropriate, such as when leading back to chord I. As always, be wary of overusing secondary dominants, and do this exercise in different keys and with different metres.

Another common form of tonicisation is secondary leading-tone chords. This is when the viio chord is used to tonicise a new key instead of V. It functions, however, in the same way. See an example below:

Soundbite 2.7



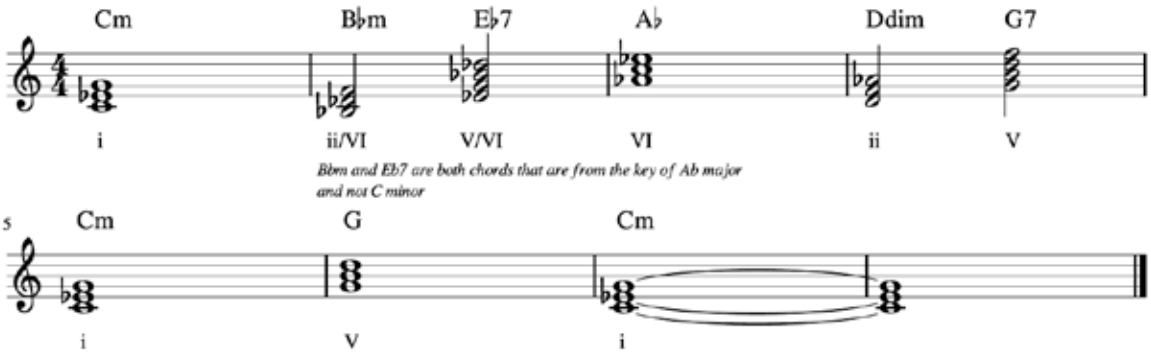
As you can see in the previous example, a common approach is to use secondary leading-tone chords to bridge chords whose roots are a step apart. This is particularly smooth because of the chromatic move in the bassline and the fact the leading-tone chords are very similar to the chords they are coming from (i.e. C is C-E-G and C#dim is C#-E-G, only one note is different and only by a semitone). This does not always have to be the case of course. Secondary leading-tone chords are not used as frequently as secondary dominants, but they are just as useful and achieve the same effect. They do produce a more dissonant sound though, so their use will depend on the style and aesthetic you are trying to create.

EXERCISE

Improvise a chord progression, this time including secondary leading-tone chords. Feel free to also include secondary dominants to compare the sound and effect that the two techniques have. Do this exercise in many different major and minor keys and with various metres.

Secondary dominants and secondary leading-tone chords are probably the most common forms of tonicisation. However, tonicisation doesn't always take just one chord from the new key. Take a look and listen to this example where multiple chords from the tonicised key are used:

Soundbite 2.8



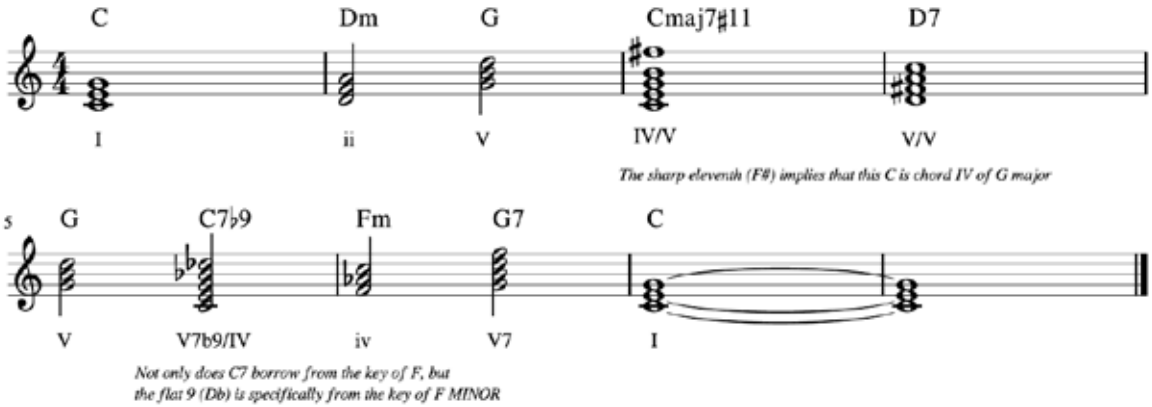
In this example, both the ii and V chord are taken from the key being tonicised, in this case, Ab. It is important to be careful when using multiple chords to tonicise a note as it can make the music sound particularly chromatic if overused. It can sound more like a modulation that doesn't follow through than a tonicisation. On the other hand, it can make the music more expressive and create more motion through the chord progression.

EXERCISE

Improvise a chord progression borrowing more than one chord from a tonicised key. Start with just taking two chords, then progressively use more and more. Listen to the sound created when you borrow multiple chords from the tonicised key. It will be more chromatic and potential more exciting and intense. If not done right though, there is also a risk of it just sounding jumbled. Listen to the effect you are creating and find what works best for you.

Another thing to notice in the previous example is the use of Eb7 in bar two. Adding sevenths to chords, particularly chord V, is a great way of making the tonicisation even stronger because it uses more notes from the tonicised key. For example, in the example above, if only Eb was used it would be hard to tell if it is V/VI or just chord III. The seventh (Db) is not a note in the key of C minor though, so the Eb7 chord has to be tonicising Ab. This works the same when using further extensions like the ninth or eleventh and when used on chords other than chord V. You can see this in the example below:

Soundbite 2.9



There are two times in this example where chord extensions are used to clarify the key being tonicised. The first is in bar three when a Cmaj7#11 chord is used. The extensions of the major seventh (B) and sharp eleventh (F#) over a major triad only occur if it is chord IV. The next case is the C7b9 chord in bar five. The flat ninth (Db) doesn't exist in F major, so it implies that F minor is being tonicised instead. These are two common ways of using chord extensions to tonicise keys, but it is important to note that it will depend on the style of music you are improvising and your personal tastes as to whether these chord extensions are appropriate. For example, in Jazz and some Classical music from the twentieth century, chord extensions like this are common. In earlier forms of Classical music or in Pop music, these extensions are either rare or non-existent.

EXERCISE

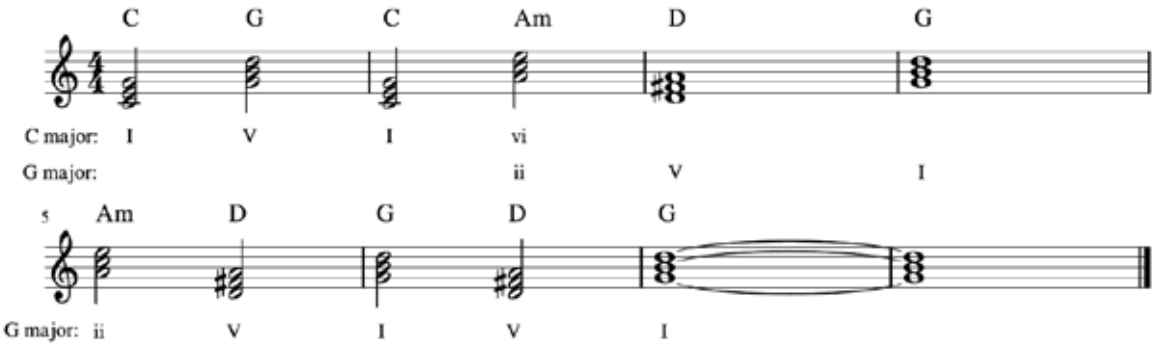
Improvise some chord progressions using chord extensions to tonicise other keys. Start by adding sevenths to the chords you are using to tonicise, then move on to using further extensions. Think about how these further extensions can specify a minor key instead of a major or how they can make clear when a chord other than chord V is borrowed from a different key.

EXERCISE

Improvise some sixteen and thirty-two bar chord progressions that combine all of the different kinds of tonicisations we have discussed. Be sure to combine the different techniques in different ways to see what sounds you can create. As always though, be careful of using the technique too much.

MODULATION

Unlike tonicisation, modulation occurs when the music uses chords from the other key and actually stays in that new key. The challenge here is not only working out ways of moving to the new key but making sure you are now improvising chords from the new key. Let's look at an example of a modulation:



Soundbite 2.10

The first two bars are in C major before moving to a D chord which isn't in C major. The next chord is G, which very much suggests that the D chord is borrowed from the key of G and is chord V of that key. The repetition of D and G (V and I) in the second half confirms that we have moved to G major. This is an example of a pivot chord modulation where a chord (in this case A minor) exists in both keys before moving to a chord definitely from the new key.

EXERCISE

Improvise an eight bar chord progression that starts in one key and then moves to another by a pivot chord modulation. Experiment with different ways of modulating, such as moving from a major key to a minor key, using different pivot chords, or using multiple pivot chords in a row.

TIP

There won't always be chords that are common between the two keys. The more similar the two keys are in terms of accidentals, the more chords they will have in common, and the more chords that can be used as pivot chords

Like tonicisations, modulations do not always need to be prepared with a pivot chord. It will usually sound more abrupt, but that may be the effect you want.

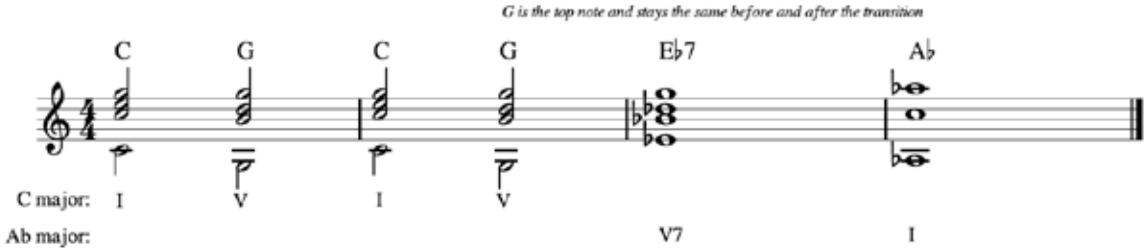
EXERCISE

Once again improvise a chord progression with a modulation, this time not preparing it with a pivot chord. Listen to what you are creating and try to find which chords from the new key sound more abrupt and less abrupt when you suddenly introduce them. As you continue to improvise these modulations, consider the sound that modulation has and whether it is a sound you could use in your music.

Pivot chords make modulations smoother but limit what you can modulate to because it requires a common chord. Modulating without a pivot chord can sound abrupt and sudden though. Luckily, there are a few techniques that allow you to move to more distant keys (keys with less notes in common) that still sound reasonably smooth.

One approach is common-tone modulations. These work like pivot chords, but using a single note that is common to both keys as opposed to an entire chord. This note is often emphasised in some way, such as by placing it in the melody or accenting it specifically. From the perspective of an accompanist, it can be emphasised by making it the highest or lowest note in the chord voicing or by having it be a common tone amongst multiple chords, not just the chords before and after the new key appears. See the below example:

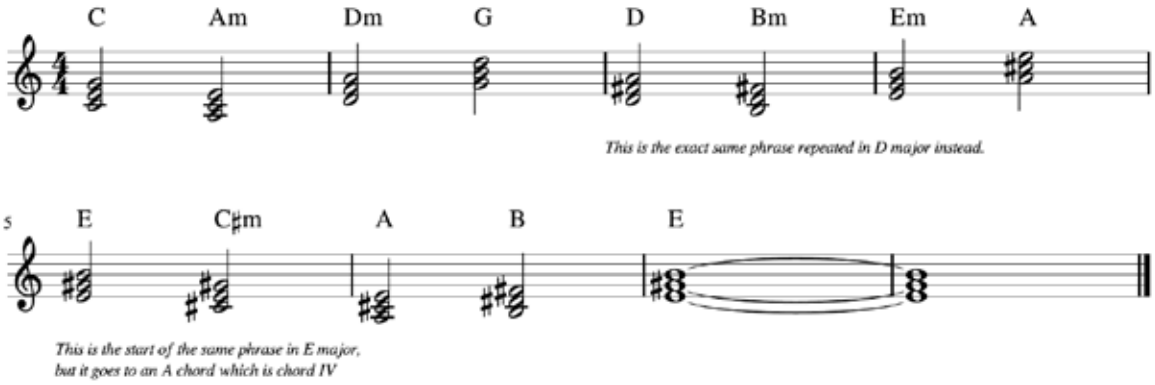
Soundbite 2.11



EXERCISE

Improvise a chord progression that uses a common tone modulation. Voice the chord so that the common tone is the highest or lowest note to make the transition smoother.

Another way of smoothing over an otherwise abrupt modulation is to repeat all or part of the material that comes before the modulation. Because the material will be familiar for the listener, the change to a remote key will not sound so jarring. This repetition can occur in the melody, the chords, or both. See and hear an example of this:

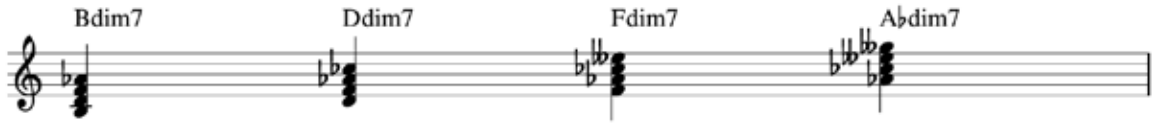


Soundbite 2.12

EXERCISE

Improvise a chord progression with a distant modulation, repeating part or all of the material before the modulation in the new key. Experiment with how much of the phrase needs to be repeated to still smooth over the transition. Ensure that you continue improvising chords for some time after the modulation. This way you are using the technique in context.

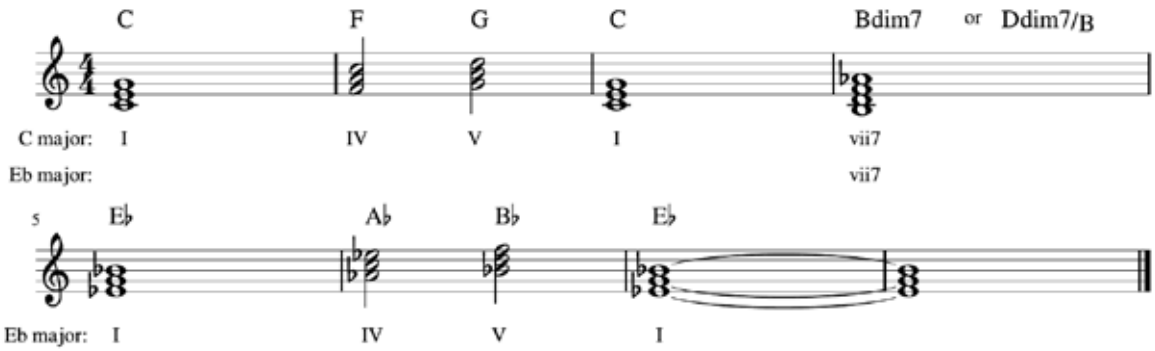
Diminished seventh chords can be used to modulate between distant keys very easily. Let's look at some of the qualities of the diminished seventh chord:



Soundbite 2.13.1

You will notice that these four diminished seventh chords actually all contain the exact same notes, just in different orders and with different names. The D, F, Ab, and Cb in the D diminished seventh chord are the same notes as the B, D, F, and Ab in the B diminished seventh chord, only the Cb is renamed B and the order is changed. The same is true for the F diminished seventh chord and the Ab diminished seventh chord. This is because diminished seventh chords are symmetrical, meaning every note is the same interval apart (in this case a minor third). In other words, a Bdim7 chord, which is usually from the key of C major, could also be a Ddim7, Fdim7, or Abdim7. This also means the Bdim7 could be in the key of Eb major, Gb major, or B major depending on how you interpret it. This means that diminished seventh chords can serve as something similar to a pivot chord all by themselves. Look and listen to this example to see this:

Soundbite 2.13.2



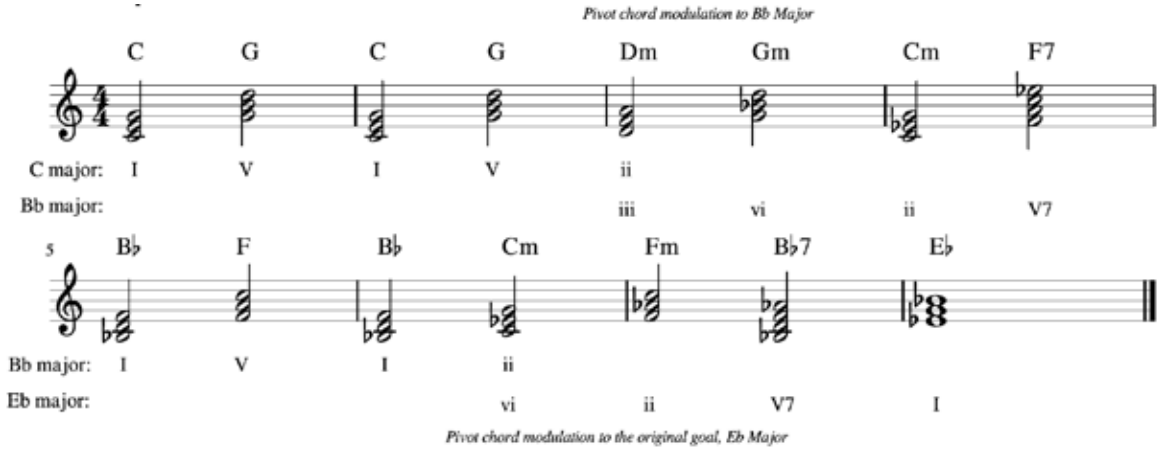
As you can see, the B diminished seventh chord can be reinterpreted as a D diminished seventh chord, serving as a modulation to the key of Eb major. This transition is particularly effective because diminished seventh chords are so dissonant and tense. This makes their resolution to the new key particularly strong.

EXERCISE

Improvise some chord progressions using diminished seventh chords to modulate. Make sure that the chord, when reinterpreted, would be based on scale degree vii in both keys. You can start by pre-planning these modulations but gradually improvise more and more until you can improvise it without any planning.

Sometimes, because of personal taste or the style you are playing, these techniques are still not smooth enough. Another solution, instead of modulating directly to the new key, is to do a pivot chord modulation or tonicisation to a key that is closer to the original key, then to move to your target key. Let's look and listen to the below example of how to modulate from C major to Eb major via this method:

Soundbite 2.14



You can see how the music modulated to Bb major and then to Eb major. You can also go through multiple keys to get to your intended key as well.

EXERCISE

Improvise a chord progression using the above method to modulate to distant keys. Start by working out what key you want to modulate to and what key or keys you are going to go through to get there. Once you are confident with this, start by choosing what distant key you are going to go to but NOT how. Finally, try improvise a chord progression where you are improvising all of this in the moment.

Composers and improvisers will often use multiple techniques for modulating or tonicising in a single piece of music. Each one will create a different sound and will work better in different situations depending on the goal.

EXERCISE

Improvise some chord progressions, freely implementing any of the above methods of tonicisation or modulation throughout.

RESOLVING CHORDS IN UNEXPECTED WAYS

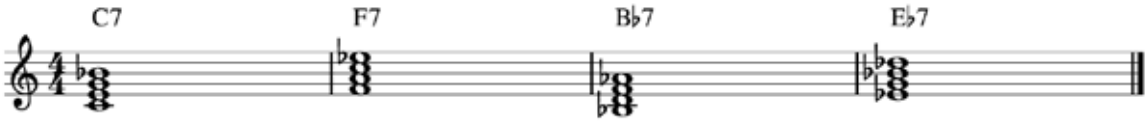
When tonicising, modulating, using modal mixture, or even when staying in one key, chords do not always have to resolve the way you expect. Look and listen to these examples to see this:

Soundbite 2.15.1

Soundbite 2.15.2

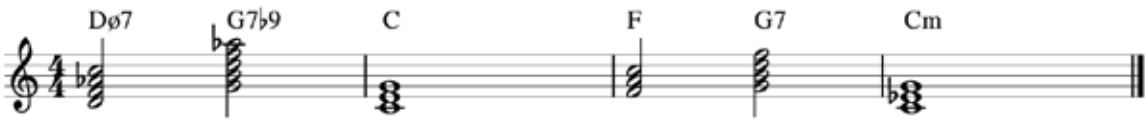
Soundbite 2.15.3

Dominant chords into other dominant chords



Throughout this example, the dominant chords still resolve to the correct triad as if it was chord V going to chord I. Instead of a major seventh chord though, which is what you would expect from chord I, it is a dominant seventh chord.

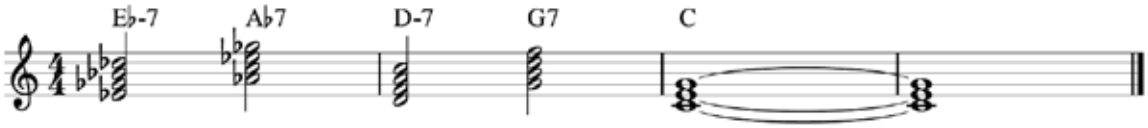
Picardy Thirds (resolving to a major chord instead of minor and vice versa)



The Dø7 and G7♭9 chords imply that this is C minor. When it resolves to chord I though it is major.

The F and G7 chords look like IV and V in C major. When it resolves to chord I though it is minor.

Repeating a ii-V-I down a semitone



A D♭ chord is expected but instead D minor seventh is used. This works because the F and C in D-7 are also in a D♭Δ7 chord and because repition (of the ii-V-I) makes dissonance easier to listen to.

This technique is very useful for making the music more interesting and exciting as it surprises the audience by subverting their expectations. In all of these examples, some of the notes of the chord still resolve properly while others do not. This balance between meeting and subverting expectations is the key to how this technique works, so keep this in mind if you want to try your own unexpected chord resolutions. As is often the case with novel musical devices, overusing this technique will make what was once an unexpected and satisfying surprise predictable. It can also make the music start to sound jumbled and confused if used multiple times in succession. As always, making the music more chromatic can make the music more expressive and interesting but can also make it too dissonant for people's tastes. Think about the style you are playing and the effect you are trying to achieve when implementing this technique.

EXERCISE

Improvise an eight bar chord progression implementing the different examples given above (i.e. dominant chords resolving into dominant chords, picardy thirds, and repeating a ii-V-I a semitone down). Start by just focusing on one at a time, then move onto using two or more of these unexpected resolutions in one chord progression. As discussed above, try not to overuse this technique and maintain an appropriate balance between meeting expectations and subverting them.

EXERCISE

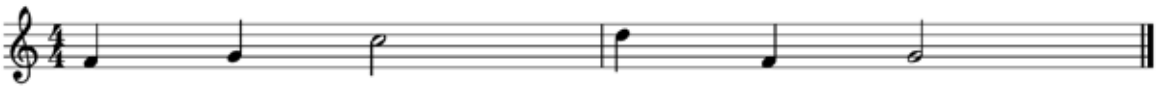
Improvise some chord progression that use your own unexpected resolutions. Follow the principle of meeting some of the expectations while subverting others. This is usually done by resolving some of the notes in the expected way but not others.

HARMONISING A MELODY (ADVANCED)

In the previous discussion on Harmonising a Melody (page 150) we talked about finding out what key the music was in and playing chords in that key. Now that we know how to use tonicisation, modulation, and various other ways of playing out of key, let's look at how to apply them to harmonisation.

Like before, the chords and melody should still interact in a way that sounds good and makes sense. This includes previously discussed techniques like choosing chords that have the melody note in them, resolving melody notes that aren't in the chord to a note from the chord, having the phrasing of the chords reflect the phrasing of the melody, and making the chord progressions satisfying to listen to in their own right. The difference now is that you can also choose chords that reinterpret the key that the melody is in instead of just staying in the same key the whole time.

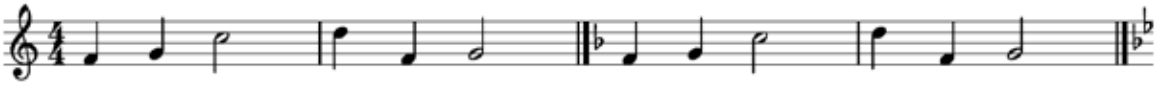
Many different keys and scales will have at least some notes in common. This means that, depending on the specific melody, it might be in many different keys. Look at this short melody below:



Soundbite 2.16.1

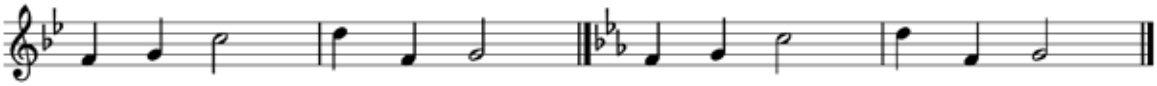
Taken as a whole, this melody could exist in multiple keys:

C major or A minor



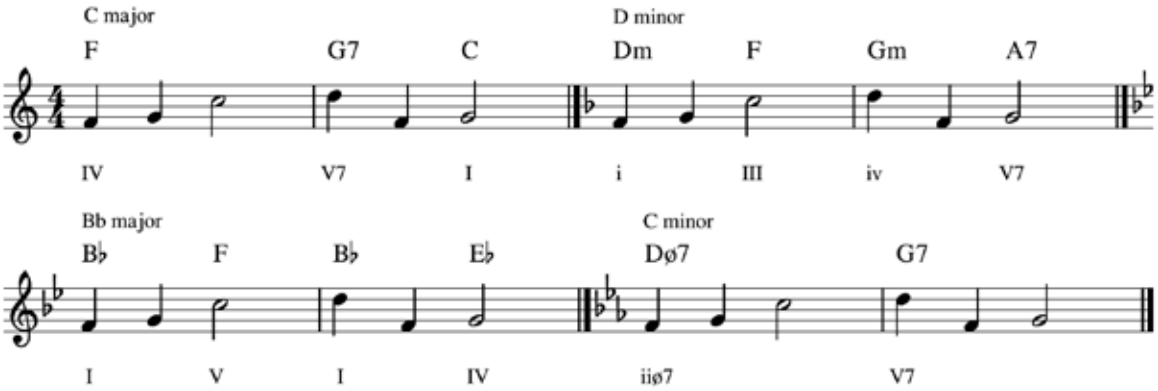
F major or D minor

Bb major or G minor



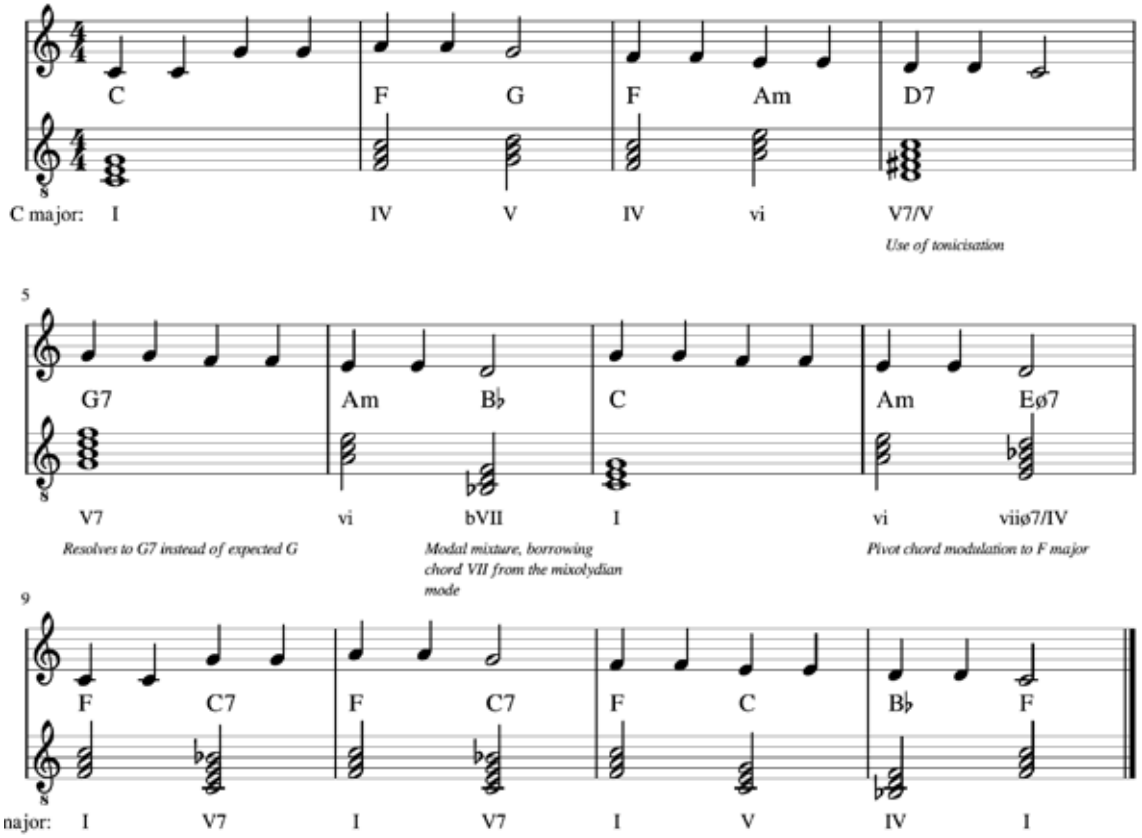
Eb major or C minor

What this means is that this same melody could be harmonised with chords from these alternate keys:



Soundbite 2.16.2

Even if the melody as a whole clearly exists in one key, there will still be parts of the melody that could exist in multiple keys. See this in action below:

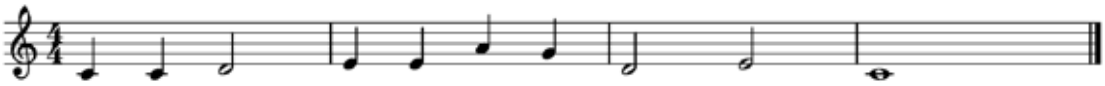


Soundbite 2.17

Throughout this example, segments as small as one bar (e.g. bar four) or even one note (e.g. the D in bar six) are reinterpreted as notes from different keys. The two Ds going to one C in bar four, for example, could be the root and seventh of a D7 chord. This allows for the use of tonicisation. In bars six and eight, the single note D could belong to any chord with a D in it. In bar six this allows us to use a chord borrowed from the mixolydian scale (modal mixture) and in bar eight it allows us to modulate to F major using chord vii from this new key. The last four bars of the example don't use the B of the C major scale. What this means is that as we are harmonising, we get to choose whether this section is in C major or F major. In this case, we have made it F major, modulating from our original key of C major.

EXERCISE

Before harmonising a lengthy melody in this way, let's start small. Let's use the melody below:



Soundbite 2.18

Accompanying the given backing track, accompanying a friend playing the given melody, or accompanying yourself playing the melody (if you have a polyphonic instrument), harmonise the above melody. At first, incorporate only one chord that is out of key. Think about which notes could belong to chords from different keys. Think about the example given earlier where everything from four bars to a single note is reinterpreted in this way. As you do this, make sure that the chord you choose still actually works with the rest of the chord progression you are creating. Experiment with different harmonic rhythms, the chords don't always have to change every bar or ever two beats.

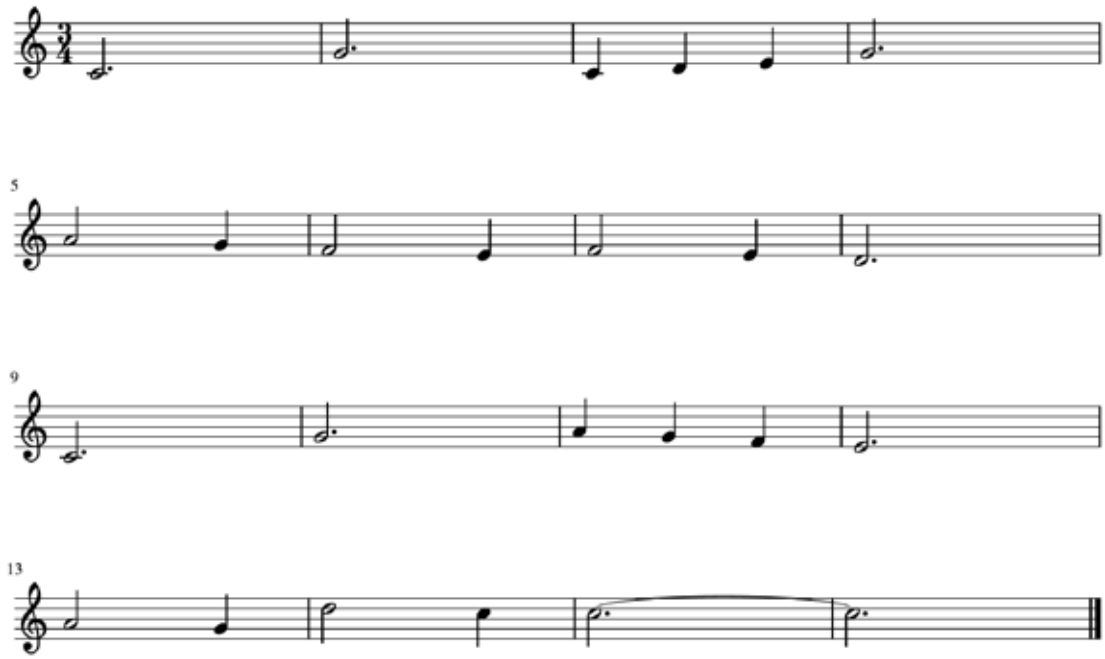
EXERCISE

Once again harmonise the melody from the above exercise, this time using two or three chords from outside of the key. Make sure you are exploring different ways of using tonicisation, modulation, modal mixture, and chords that don't resolve as expected. Try tonicising more unusual keys or borrowing more unusual chords.

EXERCISE

Look and listen to this longer melody:

Soundbite 2.19



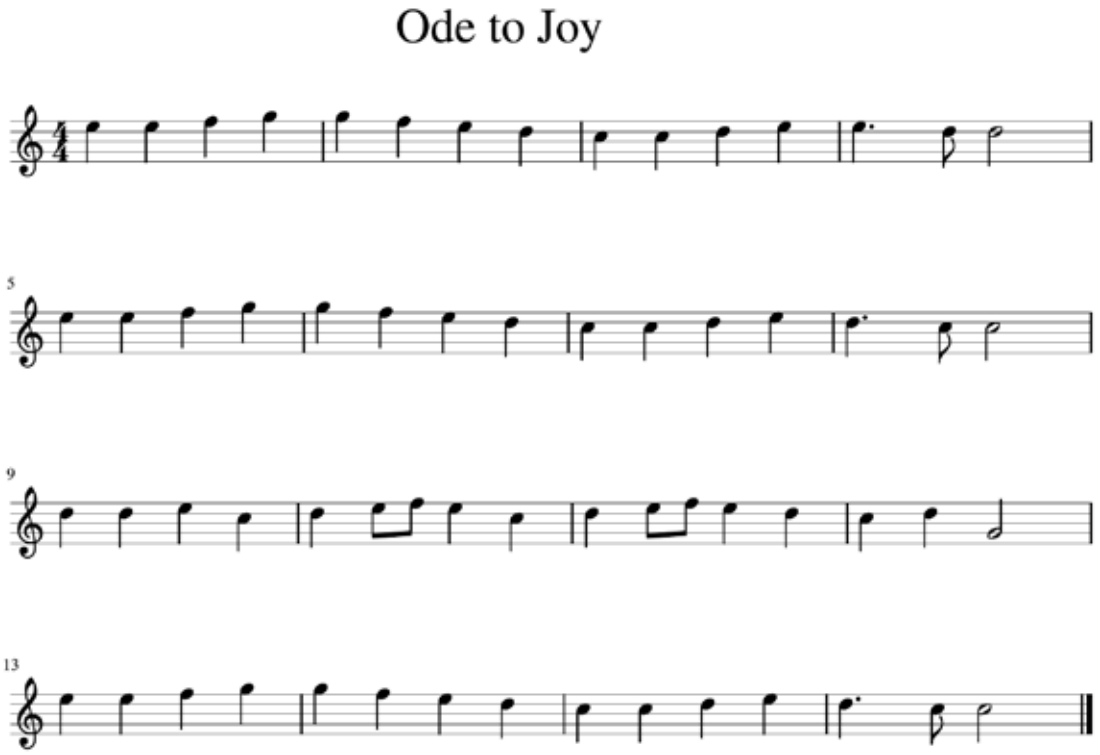
Harmonise this melody, including at least two or three chords from out of the key. Once again, find anything from multiple bars to a single note that you can reinterpret as being from another key.

EXERCISE

Repeat the above exercise and explore some of the different ways you can modulate to a new key. Try having the modulation occur at different parts throughout this melody and use the various kinds of modulations we discussed.

EXERCISE

Harmonise the melody of Ode to Joy. Incorporate all of the methods and devices we have discussed so far to make an interesting and chromatic chord progression.



Soundbite 2.20

There are many reasons why you might want to harmonise a melody with chromatic chords or modulate the music entirely. The most obvious reason is that it allows for more interesting, diverse, and potentially more expressive music. As always though, you should consider what sound is right for the context and style you are playing in and your personal taste. Another reason you may employ these more advanced chords is to vary the musical material as it is repeated, especially if the same material repeats multiple times. Replacing a few chords with something more chromatic can be a great way to make the same old music suddenly sound fresh. This applies to many situations, such as a constantly repeating ostinato, a theme and variations, or when a previous section returns later on in the music. These skills will be useful for both improvising and composing chord progressions.

REINTERPRETING HARMONY

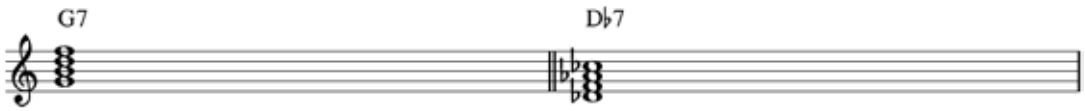
In Jazz, the musicians start by playing a pre-composed melody called the head. Each band member will then take turns soloing over the chords of the head, sometimes going through the chord progression multiple times before moving onto the next player. The performance ends with the band playing the head one last time. What this means is that the listener hears the same chords repeated over and over throughout the performance. It sounds like it might get boring right? Well, usually, to prevent the performance from becoming repetitive the accompanist and soloist will change parts of the chord progression as they go!

As discussed on page 137, different chords can serve the same functions. Because of this, improvisers will often substitute the written chords of a composition with others, with the aim of alleviating repetition and making the music more interesting. The specific effect created by replacing a chord in a chord progression will vary depending on the particular way that it is changed. This strategy is frequently used in Jazz improvisation, but it is also very applicable to other styles as well.

TRITONE SUBSTITUTION

A tritone substitution involves replacing the chord that is written with that same chord a tritone away. For example, the tritone substitution of G7 would be Db7. You can see this below:

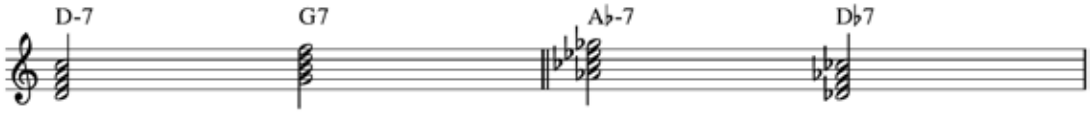
Soundbite 3.1



Tritone Substitution of G7

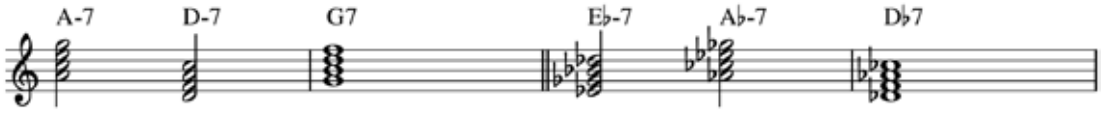
Tritone substitutions are most frequently used for V chords, but they can also be for other chords or for longer sequences of chords. For example, it is common to substitute a ii—V progression for one that is a tritone away, and it is even possible to substitute longer sequences like vi—ii—V, although it is less common. You can see this below:

Soundbite 3.2.1



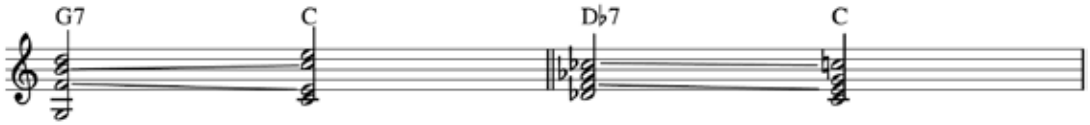
Tritone Substitution of D-7 to G7

Soundbite 3.2.2



Tritone Substitution of A-7 to D-7 to G7

These tritone substitutions work because they still fulfil the same function, which is creating momentum towards the tonic. This is because some of the notes of the tritone substituted chord still move in ways that want to resolve to the tonic chord. You can see this in the diagram below:



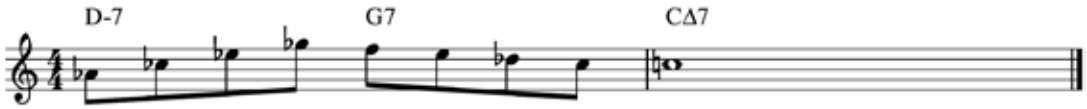
F moves down to E and B moves up to C

F moves down to E and Cb (which is the same as B) moves up to C
In addition, the Db moving down to C is also a strong movement

Part of why tritone substitutions work is because they only stay out of key for a short amount of time. This means that the tritone substitutions don't sound like they're in a different key, they just sound like temporary chromaticism. This last point is important when choosing which chords to tritone substitute. If a long sequence of chords is tritone substituted (e.g. more than four bars), then it starts to sound like the music has modulated to a new key. Consider this when choosing what chords to substitute by a tritone.

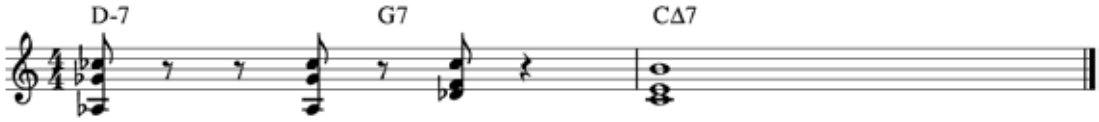
This technique can be easily implemented both as the soloist and as an accompanist. For the soloist, they simply imply the substituted chords instead of the chords that are written (remember the arpeggio-based method on page 76). Accompanists will simply play the tritone substituted chords.

Soundbite 3.3.1



Even though the chords are D-7 and G7, the soloist plays an Ab-7 arpeggio over D-7 and uses the notes of Db7 on the strong beats over G7

Soundbite 3.3.2

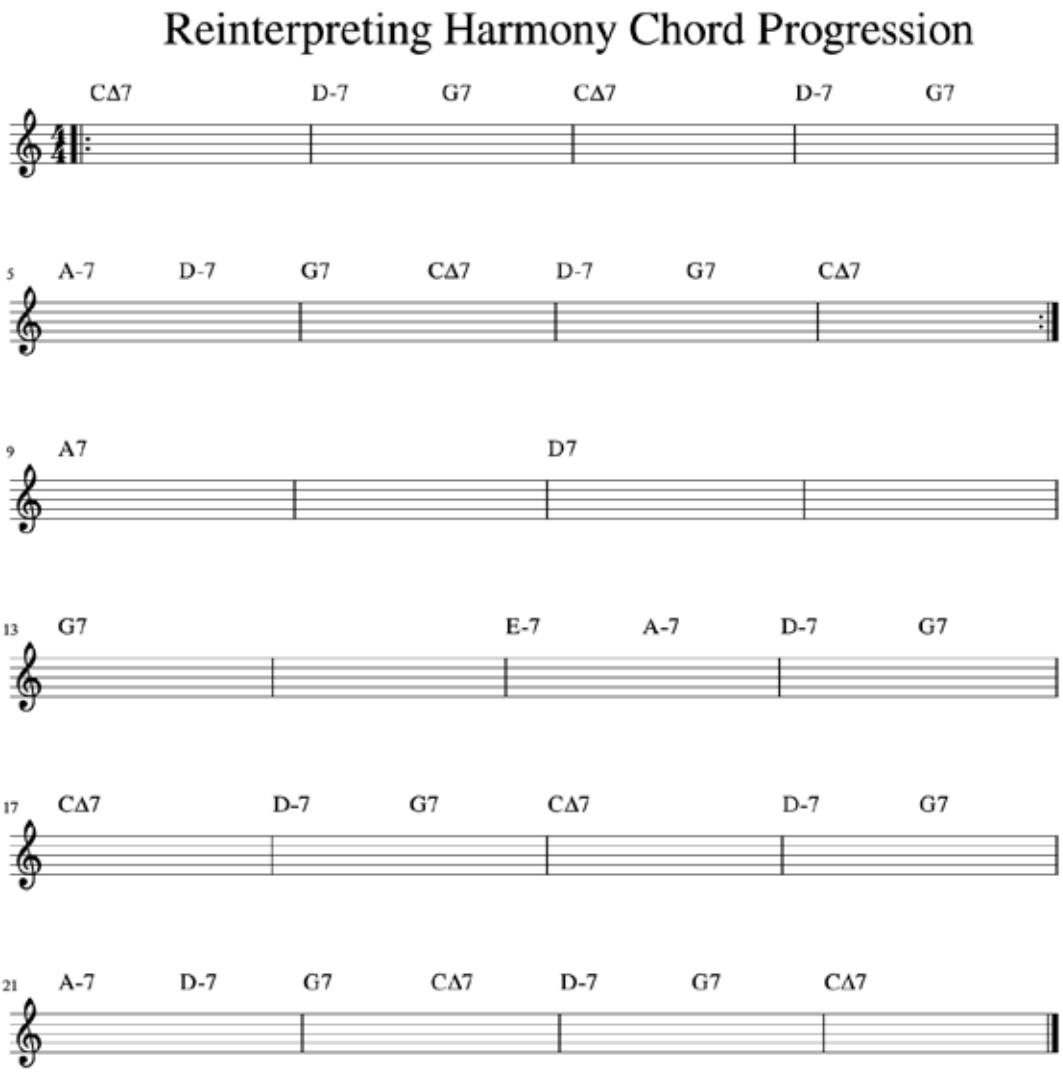


Even though the chords are D-7 and G7, the accompanist plays an Ab-7 and Db7 chord

EXERCISE

Take a look at the following chord progression:

Soundbite 3.4



Solo over the chord progression, occasionally using tritone substitutions. Remember that tritone substitutions are most common over the V chord (in this case G7) but can also happen over a more extended sequence of chords. Revise the various ways of improvising over chords, especially the arpeggio-based method (page 76) for help on how to imply the tritone substituted progression. Listen to yourself playing and don't forget that substituting too long of a sequence may not have the effect you want. This can be made a group exercise by adding harmonic and rhythmic accompaniment, or you can use the given backing track.

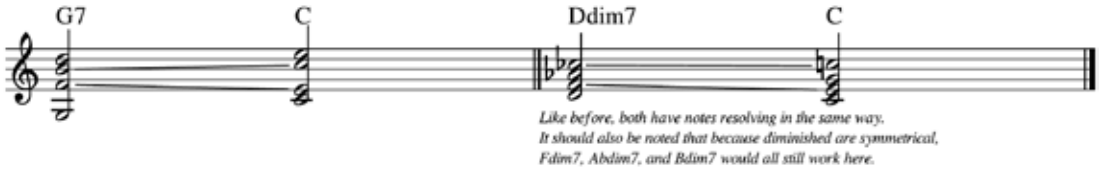
EXERCISE

Once again play through the chord progression, this time as an accompanist. You can accompany someone actually soloing, or you can just play accompaniment patterns by yourself. As you do this, occasionally replace some chords with their tritone substitutions. You can add rhythmic accompaniment to this exercise as well.

DIMINISHED CHORD SUBSTITUTION

Dominant seventh chords can be substituted with certain diminished chords. Just like with a tritone substitution, this is because the notes still move in a way that creates momentum towards the tonic. See this in practice below:

Soundbite 3.5

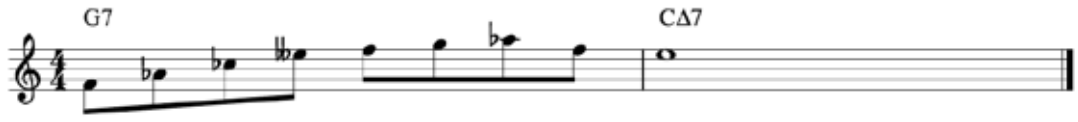


Like before, both have notes resolving in the same way. It should also be noted that because diminished are symmetrical, Fdim7, Abdim7, and Bdim7 would all still work here.

Because diminished chords are symmetrical, four different diminished chords will work over the one dominant seventh chord. This makes it a bit easier to perform this kind of substitution because you have four different choices. An easy way to remember it is that you can make a diminished chord off of the third, fifth, seventh, or flat-ninth of the dominant seven chord.

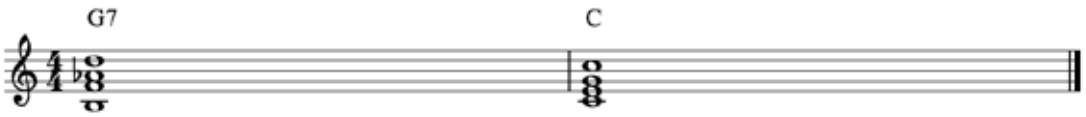
As a soloist, this technique is applied by using the arpeggios of the diminished chord or the notes of the diminished blues scale (page 114) over the root of the dominant seventh chord. As an accompanist, this technique is applied by playing the appropriate diminished chord instead of the dominant seventh chord (don't forget that a diminished chord based on the third, fifth, seventh, or flat-ninth will work). See these in practice below:

Soundbite 3.6.1



This example uses an F diminished arpeggio and the notes of the F diminished scale over G7

Soundbite 3.6.2



Plays a Bdim7 chord instead of G7

EXERCISE

Solo over the chord progression from the previous exercise, this time occasionally implying diminished chords over some of the dominant seventh chords. Once you are confident with this, use both diminished chord and tritone substitutions and compare the different sounds that each achieves. This exercise can be made a group exercise by adding accompaniment.

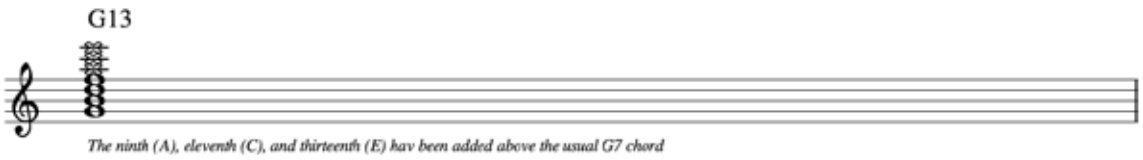
EXERCISE

Play an accompaniment pattern for the given chord progression and occasionally substitute the dominant seventh chords with diminished chords. As above, add tritone substitutions as well once you are confident with diminished chord substitutions. This can be done on your own or while actually accompanying someone's improvisation.

ADDING FURTHER EXTENSIONS

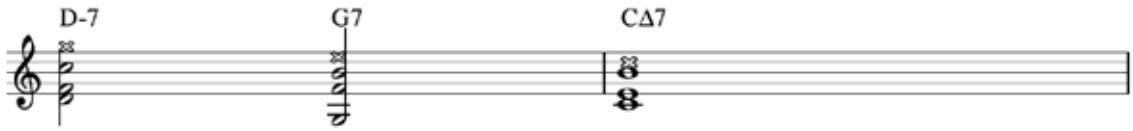
As has already been suggested in the harmonic accompaniment section on page 56, Jazz accompanists will often add extra extensions to chords, even when they aren't specified. The chords of a Jazz composition will almost always be seventh chords, and so any extensions added past the seventh (such as the ninth, eleventh, or thirteenth) are called upper structures. These notes will add more colour to the chord.

Soundbite 3.7

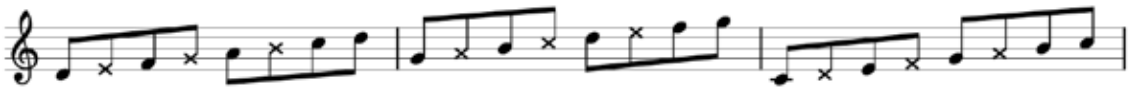


The ninth (A), eleventh (C), and thirteenth (E) hav been added above the usual G7 chord

When adding extensions past the seventh to a chord, you should know which of these notes are actually in key for that particular chord. You can do this by working out which scale is appropriate for the chord (as per the chord-scale system on page 93) and then choosing the extensions from that scale. For example:

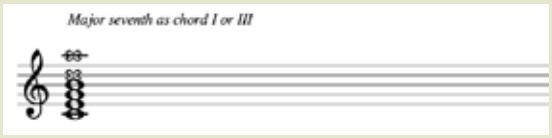
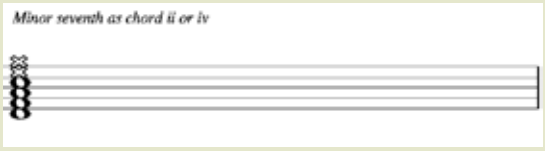
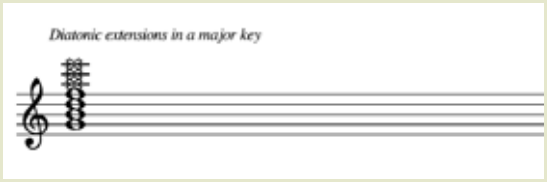
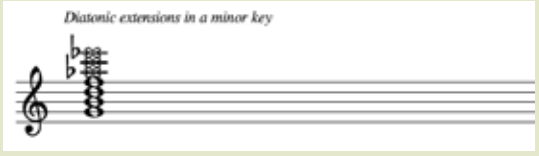
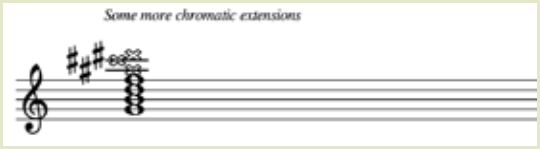


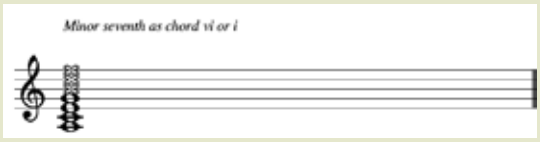
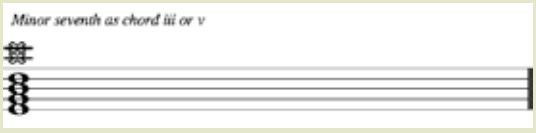
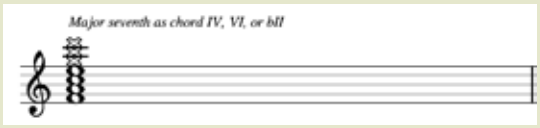
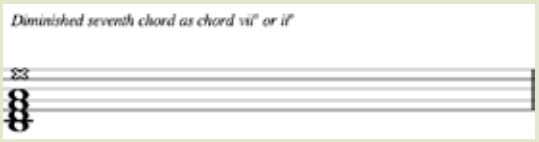
The second, fourth, and sixth note of each scale is marked with an X. When added to a chord they become the ninth, eleventh, and thirteenth respectively and will be in key because they are from the scale appropriate for each chord.



Dorian scale because D-7 is chord ii *Mixolydian scale because G7 is chord V* *Ionian scale because CΔ7 is chord I*

This being said, not every extension will work well with every chord. Let's look at different chords and which extension do and don't work with them.

Major seventh chord as chord I or III	*The extensions over this chord would be drawn from the ionian mode or major scale. The ninth and thirteenth will work well over this chord, and the seventh is often replaced with the sixth, especially to end a performance. The fourth will sound dissonant over this chord as it is a major seventh (or semitone) away from the third of the chord and also forms a tritone with the seventh of the chord.*
	
Minor seventh chord as chord ii or iv	*The extensions over this chord are drawn from the dorian mode. The ninth and the eleventh from this scale work well over a minor seventh chord, however, the thirteenth can clash with the seventh of the chord since it is a major seventh away (or semitone depending on the voicing).*
	
Dominant seventh chord as chord V or bII	*The extensions over this chord would be drawn from the mixolydian scale for major keys and phrygian dominant for minor keys. Basically, every extension will work well with this chord because the chord already functions as a point of tension. This being said, different extensions will create different sounds. Experiment with the extensions over this chord and notice the differences between each.*
	
	
	

Minor seventh chord as chord vi or as chord i	*The extensions over this chord are drawn from the aeolian mode. The ninth and eleventh will work well and are the most common extensions. The thirteenth will also work over the chord but tends to be less common.*
	
Minor seventh chord as chord iii or v	*The extensions over this chord would be drawn from the phrygian mode. Because the second note (or the ninth) of the phrygian mode is a semitone away from the tonic, it sounds dissonant and tends not to be used over this chord. The eleventh and thirteenth work the same as with a minor seventh chord as chord ii or vi.*
	
Major seventh chord as chord IV, VI, or bII	*The extensions over this chord would be drawn from the lydian mode. The ninth, eleventh, and thirteenth all work well over this chord. The eleventh will create a distinct sound and is often used purely for how it stands out.*
	
Half-diminished seventh chord as chord vii^{o} or chord ii^{o}	*The extensions over this chord would be drawn from the locrian mode. This chord usually does not have upper extensions added to it, however, when it does, it tends to be the eleventh.*
	

EXERCISE

Play the chords of 'Reinterpreting Harmony Progression' using whatever accompaniment pattern is appropriate for you. Start by adding extensions to every single chord of the progression. Make sure that you use one of the appropriate extensions as described above. You can work out beforehand which extensions to use if it helps. Repeat this exercise until you can reliably improvise further extensions to the written chords. Once you are confident with this, play through the progression again, but only add upper structures occasionally. Experiment with adding multiple extensions to a single chord to see what sounds you can create. This can be made a group exercise by adding one or more soloists and more harmonic accompaniment, as well as rhythmic accompaniment.

EXERCISE

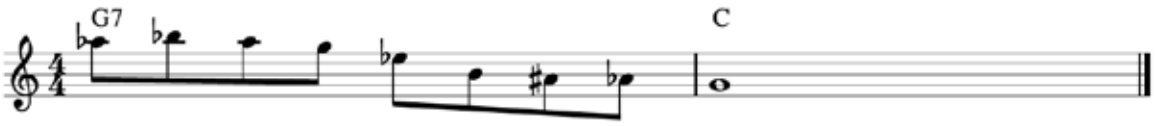
Exercise Soloists can emphasise upper structures in their soloing as well. Solo over the 'Reinterpreting Harmony Progression.' Use the guide-tone method (page 95) but choose a further extension as some of the guide-tones while you are improvising.

ALTERING UPPER STRUCTURES

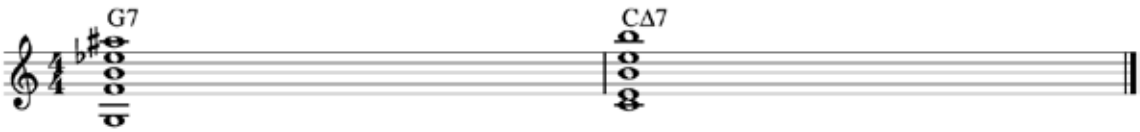
Not only can improvisers add the conventional upper structures, but they can also alter these additional upper structures for effect. Altering an upper structure involves sharpening or flattening it so that it is no longer in the key. We discussed earlier how the upper structures of a chord can imply different key centres, and when improvising over a chord progression, the same technique can be used to create some temporary chromaticism. Usually, this reinterpretation of a chords upper structure is either used to create tension or purely for the sound it creates. Look and listen to this common example below:

Soundbite 3.8.1

Soundbite 3.8.2



The soloist uses the altered scale for this melody and plays altered upper structures (in this case the b9, b13, and #9) on the strong beats of the bar



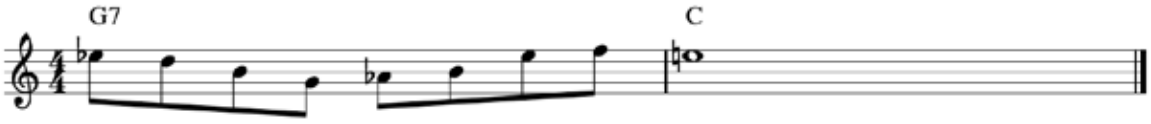
Even though a G7 is written, the accompanist adds the b13 and #9 to the chord, both examples of altered upper structures

Depending on exactly how you alter these upper structures, this technique can be used in a variety of different situations and create a variety of different sounds. The above example demonstrates how a dominant seventh chord can have its upper structures modified using the notes of the altered scale. The ninth, eleventh, and thirteenth can be altered to be b9, #9, #11, or b13, with usually multiple extensions being changed at once. For a soloist, altering these upper extensions usually involves playing them on the stronger beats of the bar to emphasise them even further. Altering the ninth, eleventh, or thirteenth of a dominant seventh chord is very common and is often used over the dominant seventh chord in a tritone substitution. It is not the only way to alter upper structures, however. Here are some other common ways of altering a chord's upper structures:

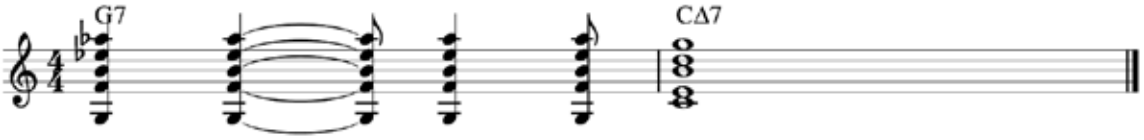
- Adding a flat ninth and flat thirteenth to a dominant seven chord to create a minor sound. A soloist employing this alteration would use the fifth mode of the harmonic minor scale (the phrygian dominant scale from page 116) over the dominant seventh chord (in other words, play the melody as if the dominant seventh chord was chord V in a minor key).

Soundbite 3.9.1

Soundbite 3.9.2



Even though a G7 is written, the soloist plays in the fifth mode of the harmonic minor scale (i.e. they play the C harmonic minor scale) and use the b9 and b13 on the strong beats in the bar

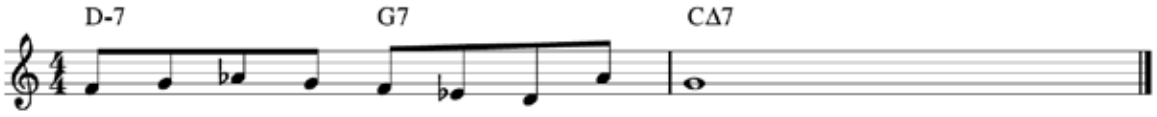


Even though a G7 is written, the accompanist adds a b9 and b13 to the chord

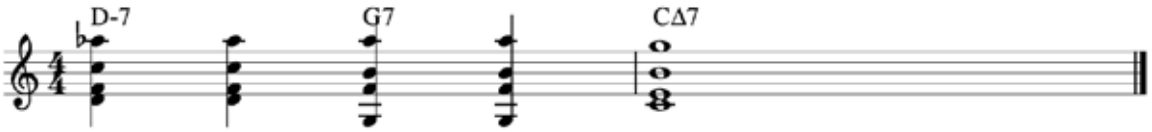
- Playing a flat fifth instead of a natural fifth in a minor seventh chord. This will make it a half-diminished chord. The soloist could either play a locrian scale over the minor seventh chord or just flatten the fifth. This is often combined with the example above to turn a major ii—V—I into a minor one.

Soundbite 3.10.1

Soundbite 3.10.2



The fifth of D-7 is flattened. The melody over the G7 chord also incorporates the b9 and b13 from the previous exercise to create a minor sound

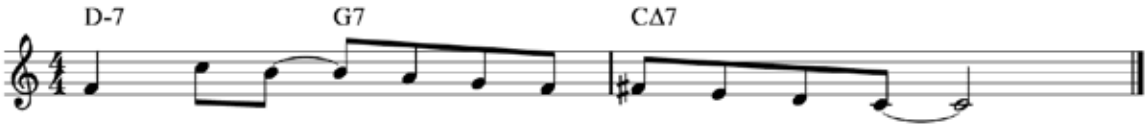


Even though a D-7 to G7 is written, the accompanist flattens the fifth of the D-7 chord and adds a b9 to the G7 chord

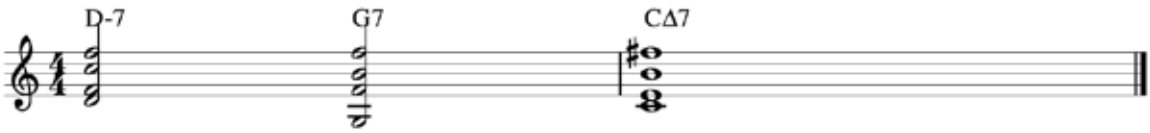
- Adding a sharp fourth to a major seventh chord regardless of whether it is functioning as chord IV. A soloist would do this by using the lydian scale over the major seventh chord. This alteration has a much more contemporary sound and is less common in older styles of Jazz. It tends to work better in Hip-Hop influenced Jazz and is also useful for Latin Jazz.

Soundbite 3.11.1

Soundbite 3.11.2

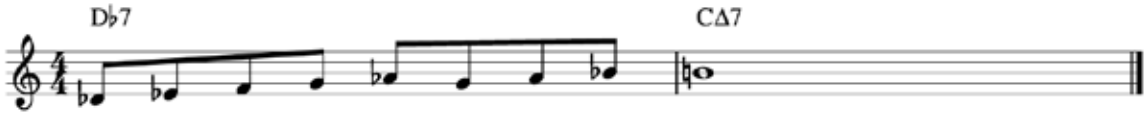


Even though the CΔ7 is clearly chord I, the fourth is still sharpened to achieve the lydian sound



Even though the CΔ7 is clearly chord I, the fourth is still sharpened to achieve the lydian sound

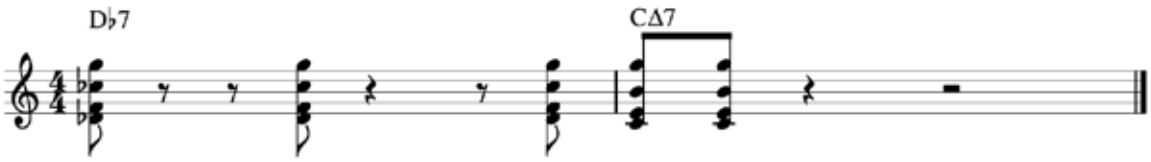
- Adding a sharp fourth (or flat fifth) to a dominant seventh chord. Like many of the improvisational devices discussed throughout this book, altering a chord's upper structures can be combined with other techniques. One way to alter the tritone substitution of a dominant seventh chord, for example, is to add a sharp fourth (or flat fifth). This alteration is also usually used when chord ii is made into a dominant seventh chord or when the dominant seventh chord is a secondary dominant. Both of these examples are shown below.



The soloist uses the lydian b7 scale to get the #4 over the dominant seventh chord

Soundbite 3.12.1

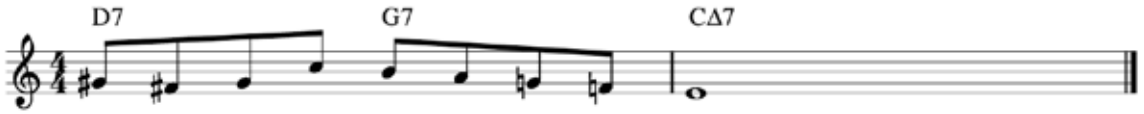
Soundbite 3.12.2



The accompanist adds the #4 (or #11) to the chord

Soundbite 3.12.3

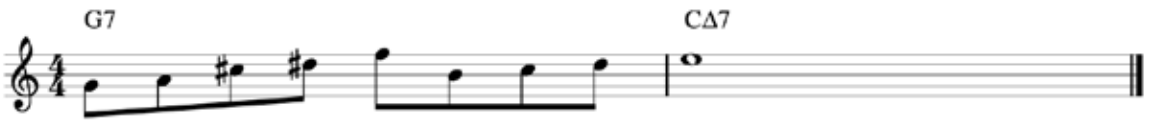
Soundbite 3.12.4



The soloist uses the lydian b7 scale to emphasise the #4 of the secondary dominant

The accompanist sharpens the fourth of the secondary dominant

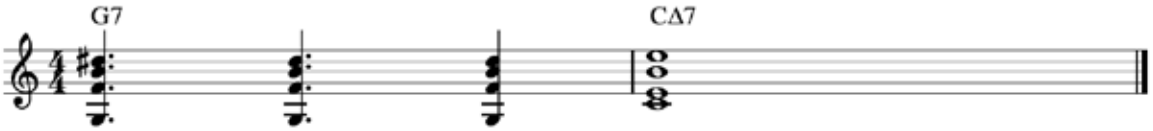
- Adding a sharp fifth to a dominant seventh chord. This alteration is fairly uncommon. If the dominant seventh resolves to a major chord, the sharp fifth can be used to create more momentum towards the third of the major chord. This alteration can also be used purely for the sound that it produces.



A soloist could use the whole tone scale to sharpen the fifth of the chord. This also inherently sharpens the fourth as well.

Soundbite 3.13.1

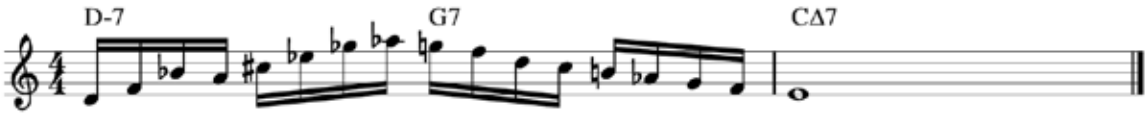
Soundbite 3.13.2



The accompanist adds the sharp fifth to the voicing

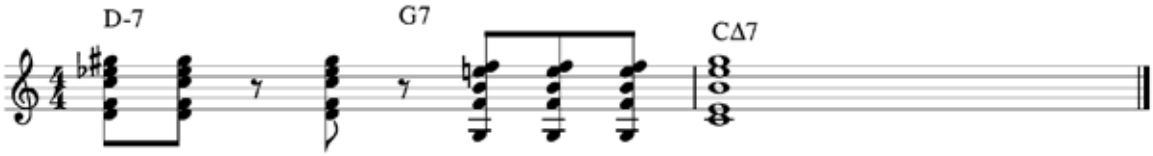
- Altering the upper extension however you want. While uncommon, altering the upper extensions in seemingly random or unstructured ways will create a particularly dissonant and tense sound. If used at the right time (such as at the climax of a solo) and in the right way, then this technique can maximise excitement for the listener.

Soundbite 3.14.1



While most people won't find this pleasant on its own, this free use of alteration can be effective for creating moments of high intensity, like at the climax

Soundbite 3.14.2



While most people won't find this pleasant on its own, this free use of alteration can be effective for creating moments of high intensity, like at the climax

EXERCISE

Solo over the 'Reinterpreting Harmony Chord Progression.' As you do, experiment with altering the upper structures of the various chords. For each play-through of the chord progression, focus on one of the above examples at a time. Repeat this exercise multiple times until you have covered each form of alteration numerous times. Once you are confident with each of the above examples, solo over the chords and implement these altered upper structures more freely. You can also add harmonic and/or rhythmic accompaniment.

EXERCISE

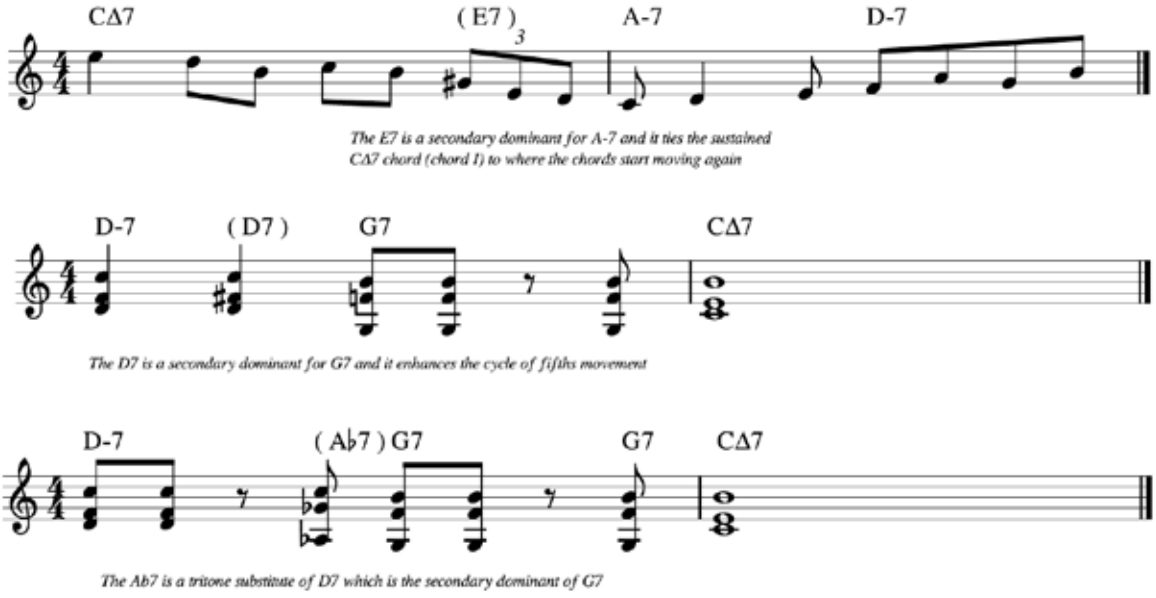
Play the chords of 'Reinterpreting Harmony Chord Progression' using whatever accompaniment pattern is best for you. As you do, experiment with altering the upper structures of the various chords. For each play-through of the chord progression, focus on one of the above examples at a time. Repeat this exercise multiple times. Once you are confident with each of the above examples, play through the chords, altering their upper structures more freely. You can also add one or more soloists and/or harmonic or rhythmic accompaniment.

SUPERIMPOSING CHORD PROGRESSIONS

Jazz musicians don't always just modify some of the pre-existing chords. Sometimes, they create an entirely new set of chords over the top of the existing ones. This process is called superimposing. In general, improvisers tend to add chords that will work with and compliment the pre-written harmonies. Often this means choosing chords that enhance the movement already occurring in the chords and that fit the mood or sound of the piece. This is important because if you are playing as a group then there will be multiple people playing or soloing over the chords. This means that the superimposed chords and the original chords will occur at the same time. If the superimposed harmonies diverge too far from what is written, then they might just sound wrong. At the same time though, extremely chromatic and adventurous superimposed chords can maximise the intensity and excitement of the performance if done right. The following sections describe some of the most frequently superimposed chords and chord progressions.

SECONDARY DOMINANTS

One way to intensify the momentum of the chord progression is to add a secondary dominant to one or some of the chords. As discussed earlier under tonicisation (page 199), secondary dominants are when a dominant chord appears for a chord that isn't I. Aside from strengthening momentum that is already there, the addition of a secondary dominant can often keep the chord progression moving during moments of rest. Secondary dominants can also be played as tritone substitutions.



Soundbite 3.15.1

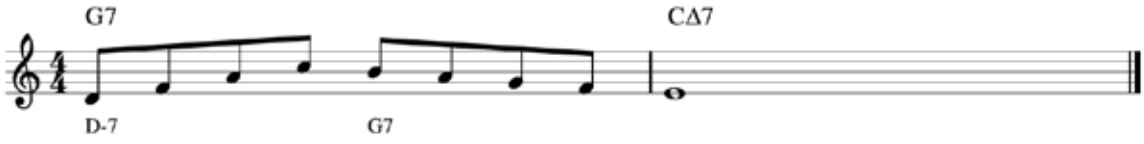
Soundbite 3.15.2

Soundbite 3.15.3

II—V—I AND OTHER CYCLE OF FIFTHS PROGRESSIONS

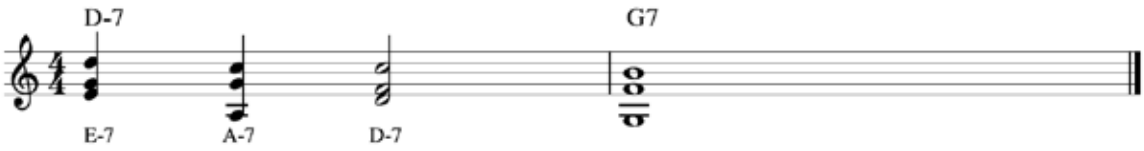
Because the cycle of fifths is so common in Jazz and in Western music in general, it is easy to add a short ii—V—I or other cycle of fifths progression into the written chords. You usually want these progressions to connect to a chord that is actually in the composed chord progression, like adding the ii--V of the already present ii chord or adding iii when it is already a vi--ii--V--I. Like secondary dominants, these quick progressions tend to intensify the momentum of the chord progression. You can also use the tritone substitution of the ii--V--I.

Soundbite 3.16.1



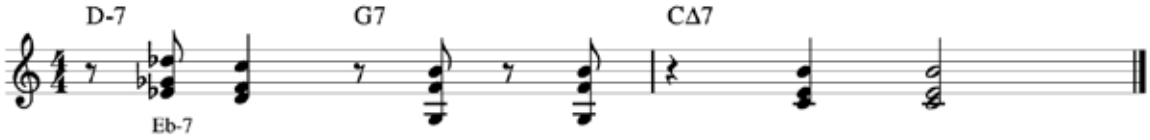
This goes from V-I to ii-V-I

Soundbite 3.16.2



The ii chord (D-7) has more of the cycle of fifths added to it

Soundbite 3.16.3

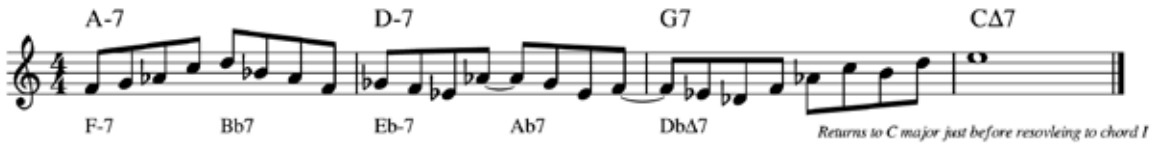


The tritone substitution of A-7, which is Eb-7, is used here

SUPERIMPOSING COMPLETELY CHROMATIC CHORD PROGRESSIONS

If the style of music you are playing allows for chromaticism, then one choice is to just superimpose a chord progression unrelated to the written chords in any way. This tends to work best for the soloist but is also possible with the accompanist if the goal of the music is to sound unstable and intense. To achieve the best results, this superimposed chord progression should have a strong sense of momentum on its own (e.g. cycle of fifths). Because the superimposed chords have a strong sense of motion themselves, the dissonance is more palatable and can be satisfying for the listener's ears. It is important that the improvisers stays out of the key long enough to evoke the new chord progression, but not so long the novelty of the sound wears off or the music becomes too dissonant (unless that's the effect you want). It is also important that the improviser comes back into key at a satisfying point. Often, returning to the written chord progression on or just before it resolves to chord I is a good approach.

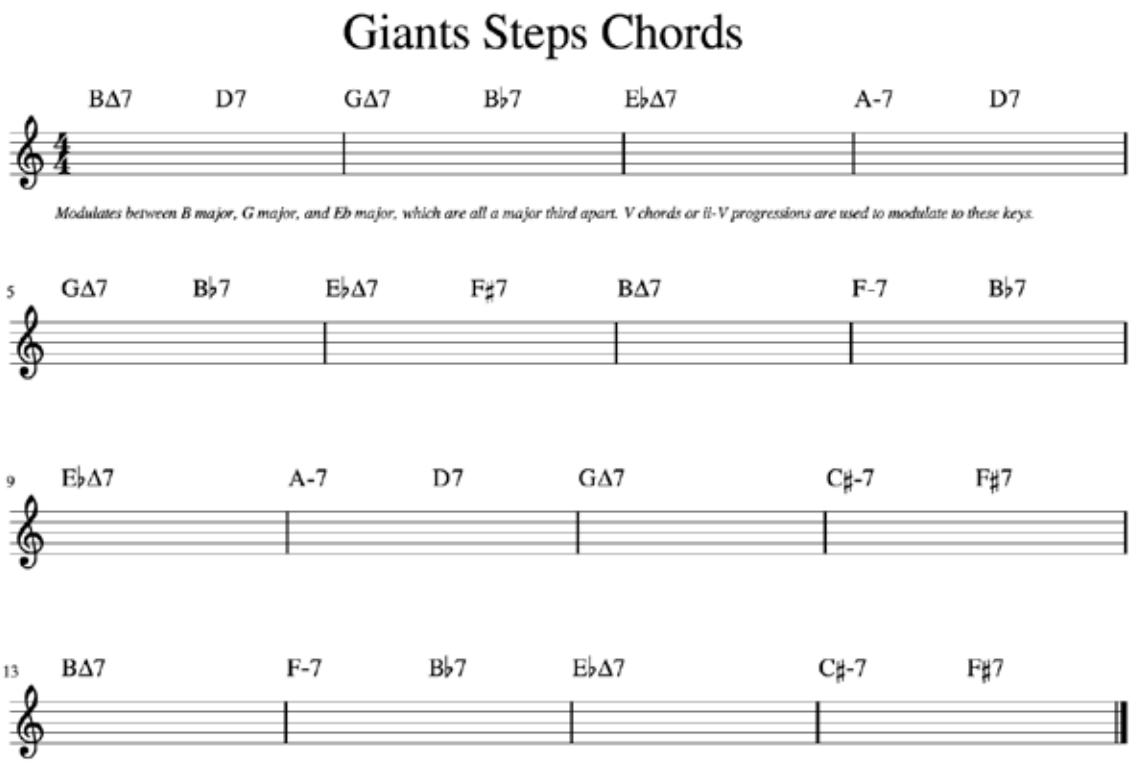
Soundbite 3.17



Returns to C major just before resovleing to chord I (could also have resolved on beat one of the last bar or soon after)

SUPERIMPOSING COLTRANE CHANGES

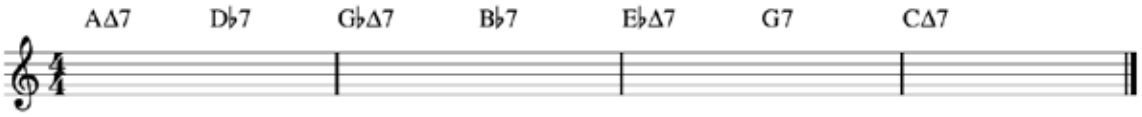
Coltrane changes is the name given for a particular chord progression created and popularised by the Jazz saxophonist John Coltrane. There are many different versions of Coltrane changes, but the most well known is the one used in 'Giant Steps'. In this example, the chords modulate by major thirds, usually every bar. The result is a very chromatic, unstable, and constantly moving sound. See the chords for 'Giant Steps' below:



Soundbite 3.18

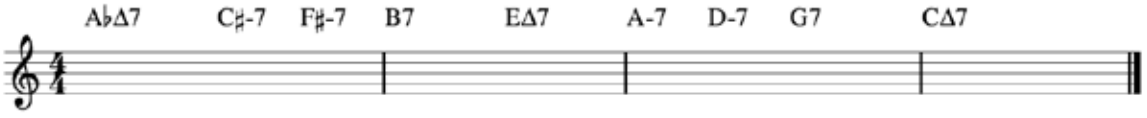
The underlying principles of Giant steps are moving between keys that are a third apart very quickly and using a V chord or sometimes a ii-V-I progression to do this. We can make different variations of this underlying idea by modulating by minor thirds instead of major thirds and using different chords to modulate to the new key (e.g. vi-ii-V-I instead of just V-I and ii-V-I). You should still modulate very quickly, (usually every bar or two). These two qualities can be mixed and matched in various ways to create different Giant Steps-like progressions. Below is just a few of the possible combinations:

Soundbite 3.19.1



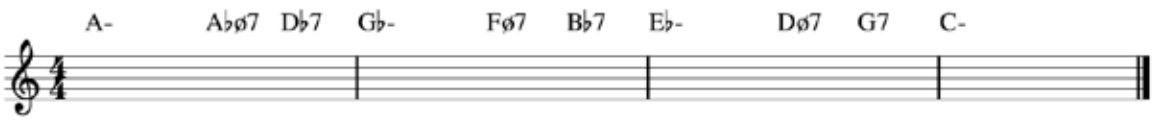
Modulate by minor thirds and use V chord

Soundbite 3.19.2



Modulate by major thirds and use a vi-ii-V progression

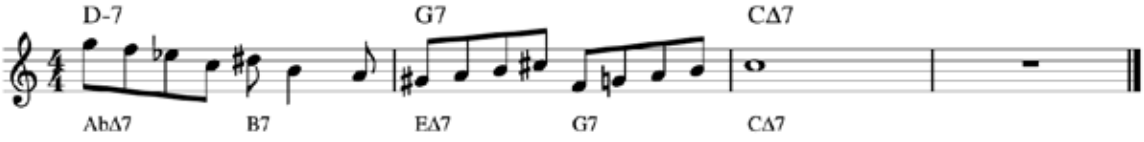
Soundbite 3.19.3



Modulate by minor thirds and use ii$^{\emptyset}$-V-i progressions in a minor key

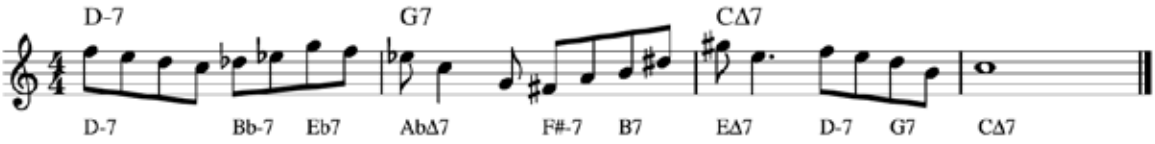
The Coltrane chord progressions have a lot of momentum, which makes them perfect for superimposing chromatically over the written chord changes. Like superimposing any other chord progression, how long the improviser stays out of key and when they come back into the key is still important. See how different kinds of Coltrane changes can be used to superimpose new harmonies over the existing ones below:

Soundbite 3.20.1



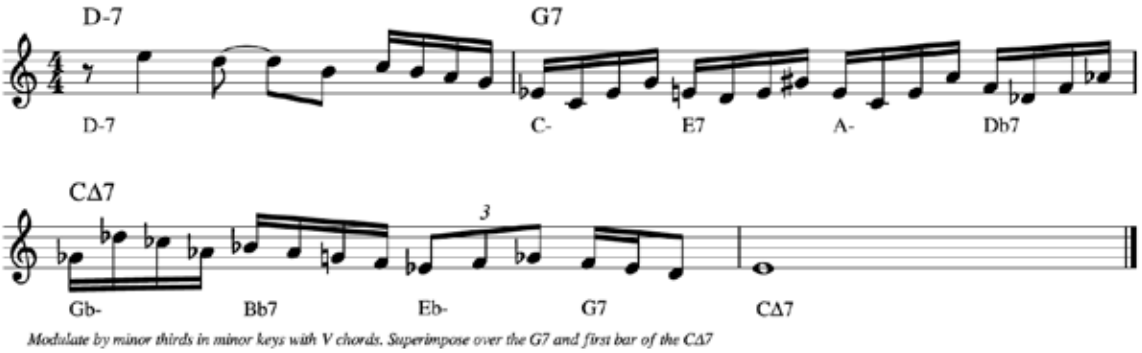
Modulate by major thirds and use V chords

Soundbite 3.20.2



Modulate by major thirds and use ii-V-I progressions, except still include the D-7 from the written chord progression

Soundbite 3.20.3



Modulate by minor thirds in minor keys with V chords. Superimpose over the G7 and first bar of the CΔ7

Remember that these examples are just a few variations of the Coltrane changes. You can modulate in major or minor thirds; use major or minor keys; modulate with V chords or longer chord sequences; completely replace the written chords or incorporate them somehow; superimpose over different parts of the written progression; and even combine it with other techniques. Experiment with superimposing Coltrane changes to find a way of applying it that you personally enjoy and is appropriate for your style.

EXERCISE

Solo over the 'Reinterpreting Harmony Chord Progression.' Play through the chords repeatedly, focusing on one of the above techniques each time. Remember to be careful with how long you stay on the superimposed chords and to be careful with when you come back to the usual chord progression. Repeat this exercise multiple times until you are confident with all of the above techniques. Once you are confident, solo again over the given chord progression but employing these techniques freely. Try not to overuse these superimpositions, but save them for climactic moments in your solo. Listen to your playing and notice what kind of sound each type of superimposition creates. This can be made a group exercise by adding harmonic and rhythmic accompaniment or you can use the backing track.

EXERCISE

Play the chords of 'Reinterpreting Harmony Chord Progression' using whatever accompaniment pattern is best for you. For each play-through of the chords, focus on one of the above techniques. Once you are confident with using the techniques, play through the chords again but use them freely. Be careful not to overuse the superimposed chords. Be sure to play them at points of climax or to enhance the momentum of the chord progression. Listen to yourself and the effect you are creating. This exercise can be done with other harmonic accompaniment or one or more soloists.

TIP

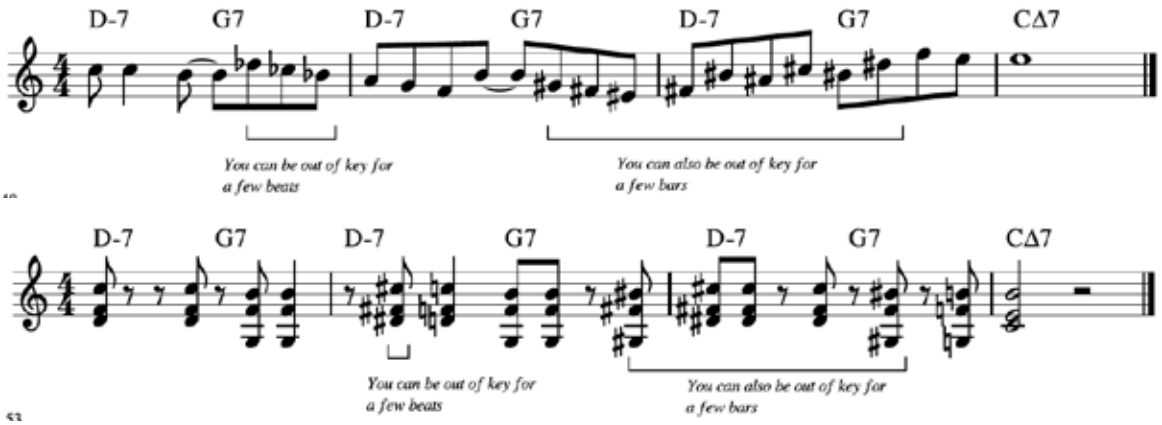
It will be particularly helpful to practice superimposed chord progressions over the backing track or someone playing the original chords. This is so you can hear how what you are playing would contrast with the accompaniment in a real performance

PLAYING ONE SEMITONE OUT OF KEY

A very common and relatively easy way to introduce chromaticism is to play one semitone out of key. This technique works for both soloists and accompanists and is generally only used for a short amount of time. Playing one semitone out for too long will not only start to establish this second key as a new key centre, but the sound created by playing one semitone out can also lose its novelty if it is used for too long or too often. This technique is more effective on chord progressions that tend to stay in the same key or chord for an extended period. You should be careful about applying this technique on a chord progression that is already chromatic or that moves through many keys. If you do want to use this technique over a chromatic chord progression, try going out of key for a short amount of time such as one or two beats. See both a soloist's and accompanist's example of playing one semitone out of key in use below:

Soundbite 3.21.1

Soundbite 3.21.2



EXERCISE

Solo over the 'Reinterpreting Harmony Chord Progression.' As you play through the chords, go one semitone out of key occasionally. Practice doing this for a short amount of time (a few beats) and for a longer amount of time (a few bars). Try to avoid being out of key for too long though (for example sixteen bars). As you practice this, experiment with both being one semitone too high and one semitone too low and compare the effect each creates. Avoid overuse and aim to apply this technique at more climactic moments. As always, this can be made a group exercise by adding accompaniment.

EXERCISE

Play through the chords of 'Reinterpreting Harmony Chord Progression' using whatever accompaniment pattern you want. As with the solo exercise, experiment with using this technique for different periods of time and by going both up and down a semitone. As you get more confident with the technique, try using it to create a climax or to emphasise certain parts of the chord progression.

REINTERPRETING HARMONY AS A GROUP

So far we have practised these techniques from the perspective of the individual. In practice though, musicians rarely perform Jazz on their own. If you have been practising these exercises as a group you will probably already be able to pick up when another band member starts reinterpreting the harmony. But noticing when someone else in your ensemble is reinterpreting the harmony is just the start, what can you do when you realise what they're doing? Listen to the accompanying soundbite.

Soundbite 3.22

A variety of approaches are employed in this example:

- In the beginning, the accompanist just continues playing the chords as they are actually written while the soloist reinterprets the harmony. This gives something for the soloist to contrast against with their melodies.
- In the middle of the performance, the musicians are attempting to follow each other when one of the others decides to reinterpret the harmony. For example, at 26 seconds the chordal accompaniment uses a tritone substitution which is recognised by the soloist who also starts treating it as a tritone substitution. This process can go either way, with either the accompanist or soloist reinterpreting the harmony and having others follow. This approach can have mixed results for the listener. If the improvisers constantly follow each other then the music can become a little repetitive and have no contrast between the written chords and the reinterpreted ones. On the other hand, having both players reinterpret the harmony can intensify its effect and have the music sound tighter.
- It may not always be possible to recognise exactly how someone is reinterpreting the chords, and so sometimes simply imitating the effect it creates is enough. This can be seen in the last section of the recording where the soloist starts playing a semitone out of tune and the accompanist starts to just play chromatically in general. This approach will be less cohesive than the second approach, but it can also be less repetitive because it allows for more variety and freedom.

Each approach will have a different effect on the music, and it is important to be proficient in all of them. Whether you choose to reinforce the original chords, closely follow your bandmate's reinterpretations, or follow them more vaguely will depend on the kind of music you are creating and your goals for the music at that time.

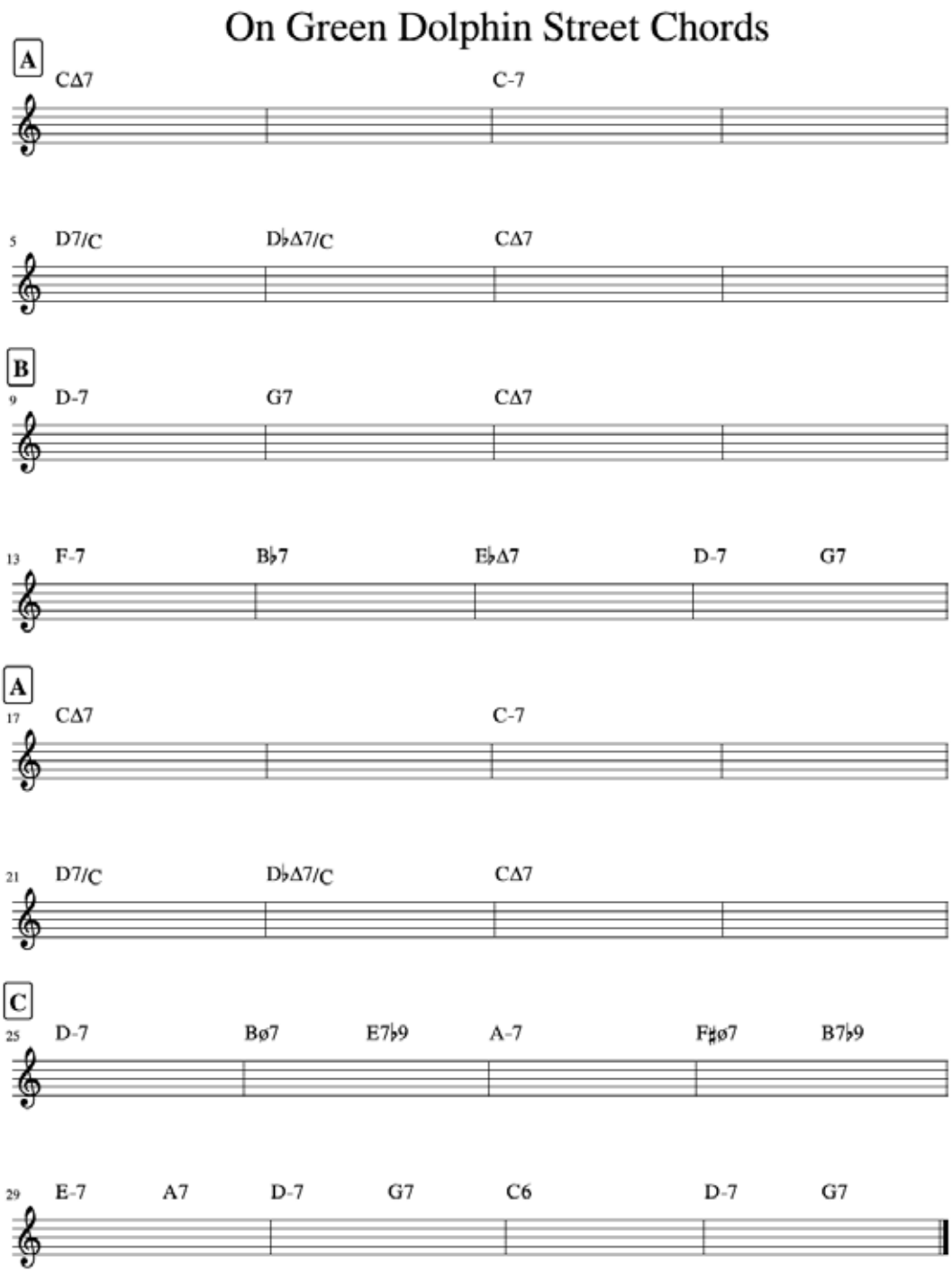
EXERCISE

As a group with at least one soloist, one harmonic accompanist, and one rhythmic accompanist, improvise over the 'Reinterpreting Harmony Chord Progression.' Spend one performance focusing on just tritone substitutions, one on just diminished chords substitutions, and so on until you have spent a performance focusing on each method of reinterpreting the harmony. As you improvise over the chords, try to identify when the soloist/s and harmonic accompanist/s reinterpret the harmony. Experiment with reinforcing the original progression, following their reinterpretation as closely as you can, and evoking the overall effect of their interpretation. Once you are confident with this, play through 'Reinterpreting Harmony Chord Progression' again but using any of the reinterpreting harmony methods freely. Once again, everyone in the ensemble should try and identify these moments and react them in one of the suggested ways.

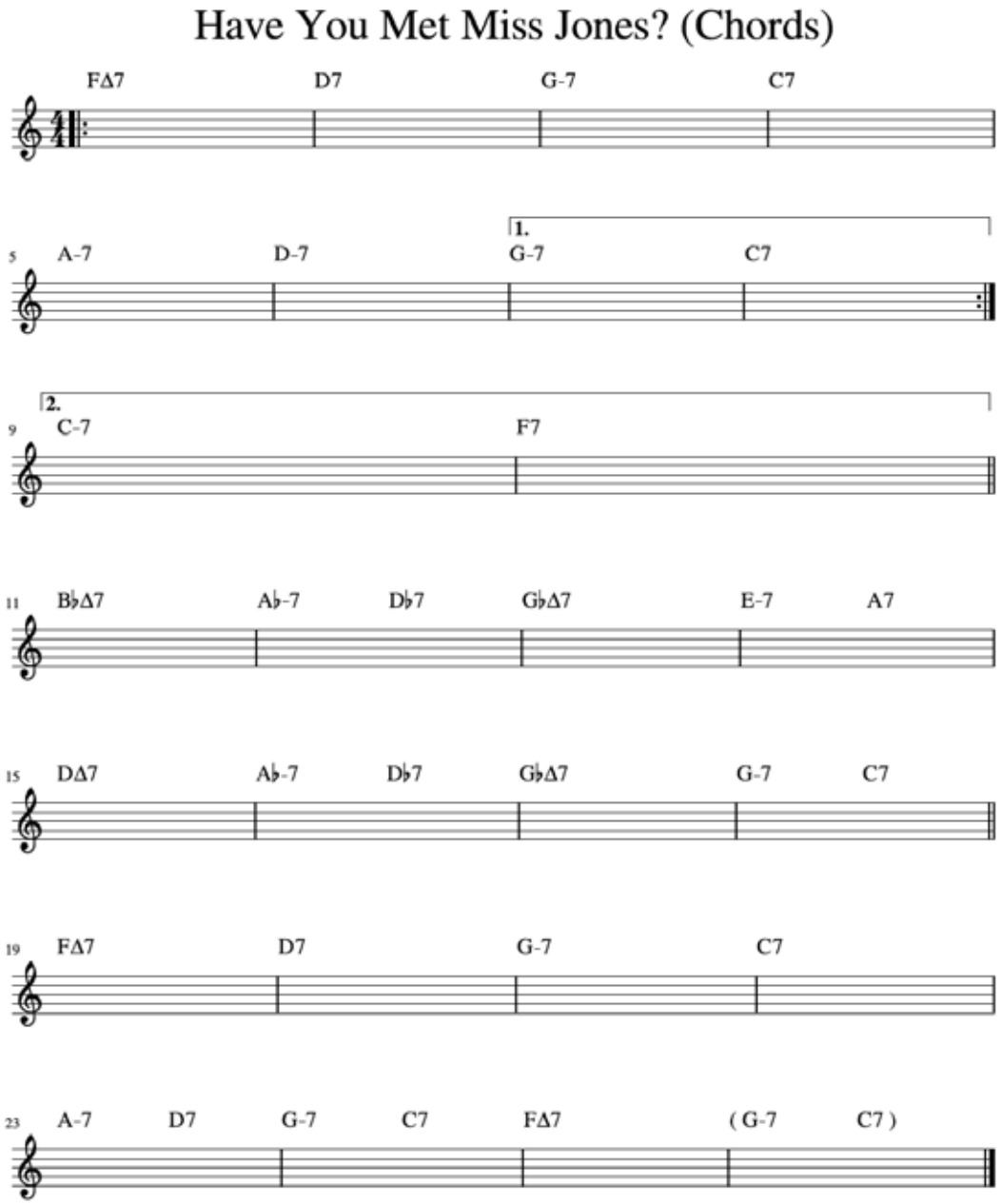
EXERCISE

As a group, improvise over the following chord progressions. Where you think it is appropriate, reinterpret the harmony in any of the ways described in this section. As you go through these improvisations, listen out for your fellow ensemble members reinterpretations and react to them as you find appropriate.

Soundbite 3.23



EXERCISE (CONT.)



Soundbite 3.24

NOTE

For more on how to reinterpret harmony, especially in a Jazz context, read Liebman, D 2013, "A Chromatic Approach to Jazz Harmony and Melody", advance music, Mainz.

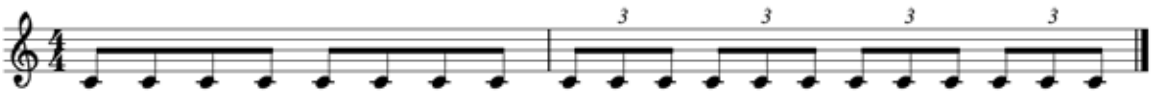
ADVANCED RHYTHM

So far we have discussed some different aspects of rhythm such as time signatures, phrasing, and more, but there is so much more to rhythm than that. There are many ways that an improviser can manipulate rhythm to make their music more interesting and unique. Understanding and being able to use these different devices is essential for improvisers in many styles of music.

TUPLETS

A tuplet occurs when a single beat is divided into an unusual number of equal parts. They are notated by placing a number over a series of notes, with the number indicating how many parts the beat is divided into. For example, in 4/4 the beat is usually divided into two quavers or eighth notes, but what if it was divided into three equal parts? This is called a triplet, which you can see and hear below:

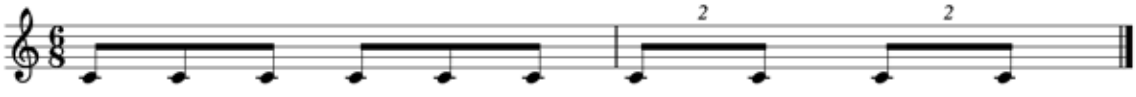
Soundbite 4.1



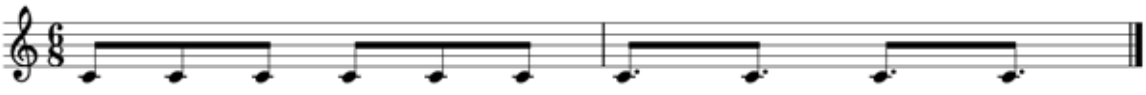
Instead of one beat being divided into two parts it is divided into three. This is a triplet

A beat isn't always divided into two parts though. In 6/8, each beat is divided into three parts. Tuplets can be used to have the beat divided into two or four parts, although usually dotted notes are used instead:

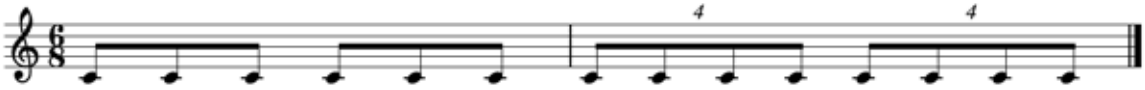
Soundbite 4.2.1



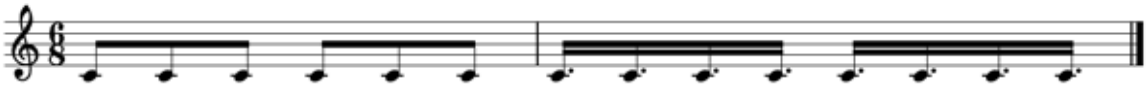
The beat is divided into two parts instead of three. This is called a duplet.



It can also be notated with dotted quavers



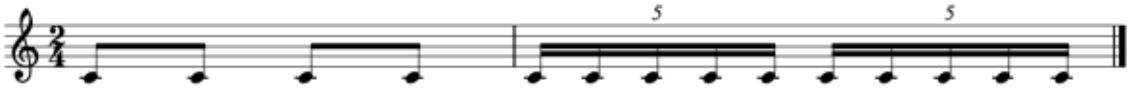
The beat is divided into four parts instead of three. This is called a quadruplet



It can also be notated with dotted semiquavers

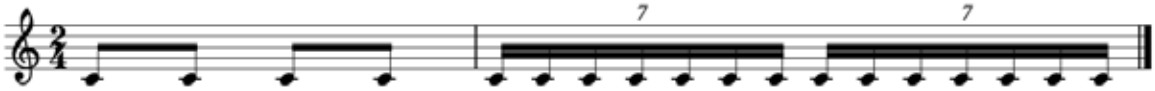
Soundbite 4.2.2

These examples are pretty simple. Tuplets can also be used to divide the beat into a particularly unusual or uneven number of subdivisions as well. Any number can be used in a tuplet to subdivide the beat, but the most common subdivisions other than three are five and seven. Hear each of these below:



Quintuplets

Soundbite 4.3.1

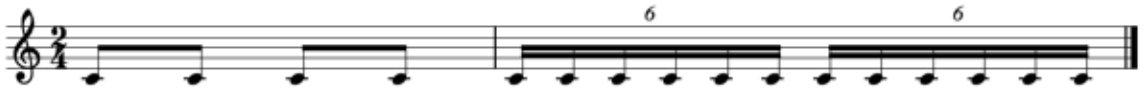


Septuplets

Soundbite 4.3.2

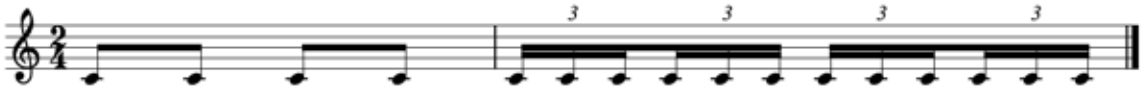
The tuplets notated with the number "5" are called quintuplets, and they involve splitting the beat into five equal subdivisions. The tuplets notated with a "7" are called septuplets and involve splitting the beat into seven equal subdivisions. These more unusual tuplets are not particularly common but are still great tools for any improviser to have in their arsenal.

Using any number for a tuplet is possible. Whatever number is placed above the line in the notation is how many equal parts the beat will be subdivided by. However, in the same way that duplets and quadruplets can be written as dotted notes, some tuplets will also be just a different way of writing the same thing. You can see this below:



Sextuplets

Soundbite 4.4



Both are exactly the same thing. You should think about this rhythm whichever way you find easiest.

EXERCISE

Play the triplet, duplet, quadruplet, quintuplet, sextuplet, and septuplet examples above to a metronome. Set the tempo to be slow, about 60bpm, and gradually increase the speed as you get more and more confident with them.

TIP

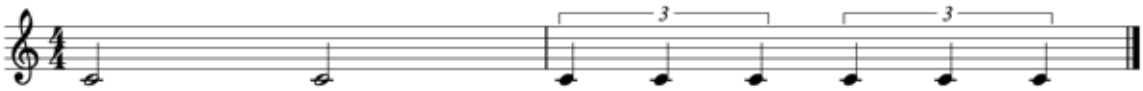
When practicing difficult rhythms like this it often helps to clap them out over a metronome before playing them on your instrument.

EXERCISE

Improvise in whatever key or scale you feel comfortable with. Incorporate each of these tuplets into your improvisation. Try focusing on one tuplet for an extended period before moving onto the next one. You should start at slower tempos until you are confident, then gradually increase the speed. Feel free to add rhythmic accompaniment and harmonic accompaniment (the harmonic accompanist/s might improvise a chord progression or outline the key/scale).

So far we have looked at how tuplets can divide a single beat, but tuplets can also occur across multiple beats. A common example is crotchet triplets:

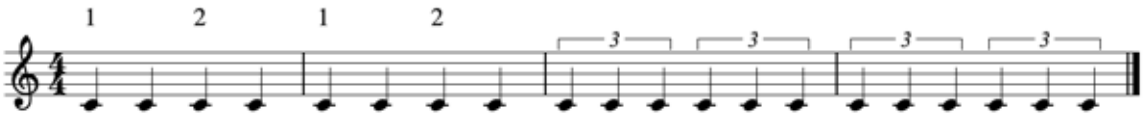
Soundbite 4.5



The triplets here are subdividing two beats instead of one

Tuplets can be placed over one beat, two beats, half a beat, one and a half beats, or any other number of beats. These kinds of tuplets are more difficult to play but can create some exciting and complex rhythms. There are two main ways of learning how to play tuplets that stretch across multiple beats. The first method involves thinking of the multiple beats as a single beat and then subdividing it like you would a normal tuplet. This may be a little hard to wrap your head around at first, but look at this example below:

Soundbite 4.6.1

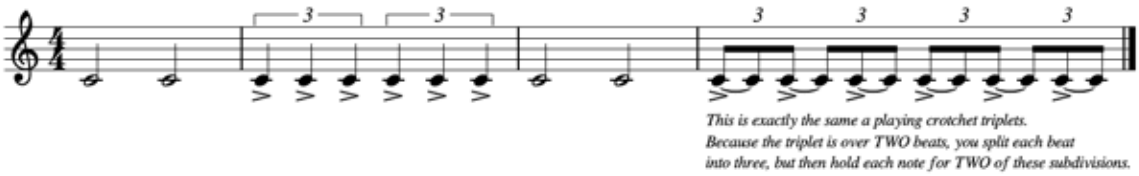


As you play these two bars, count every two beats not every beat

Now divide this longer beat into three equal parts the same as you have been in the past

In the above example, you need to temporarily ignore the actual pulse and instead be counting and focusing on every two beats. Once you have learnt how to play tuplets in this way, this strategy can be more natural and require less thinking. At the same time though, unfamiliar tuplets may be too complicated to work out with this approach. For these you may need the second method:

Soundbite 4.6.2



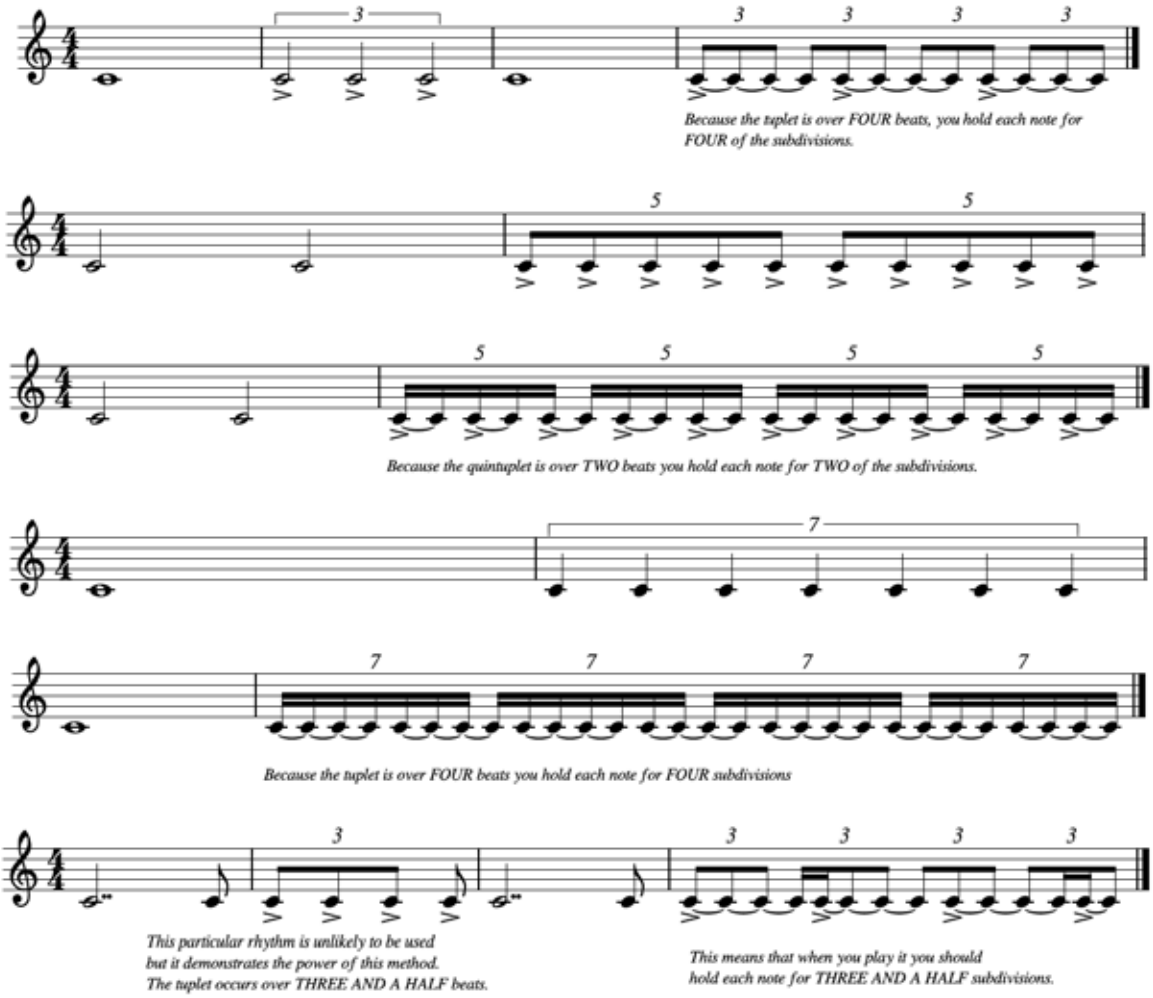
First, divide each individual beat into the same number of equal parts as the entire tuplet. If you are trying to play crotchet triplets, for example, you would divide each individual beat into three parts. Next, look at how many beats the original tuplet occurs over. A crotchet triplet occurs over two beats, so the answer is two. Finally, the subdivisions you made in the first step are going to be like the new beat and you are going to hold each note for the number of beats you worked out in step two. So, in our example, each note would be two triplet beats long. This is exactly what happens in the notated example above. This same method can be used for any tuplet that spans more than two beats.

Soundbite 4.6.3

Soundbite 4.6.4

Soundbite 4.6.5

Soundbite 4.6.6



EXERCISE

Play the following tuplets and use both of the above methods to work out how to play them. Double check that you are correct with the given soundbites:

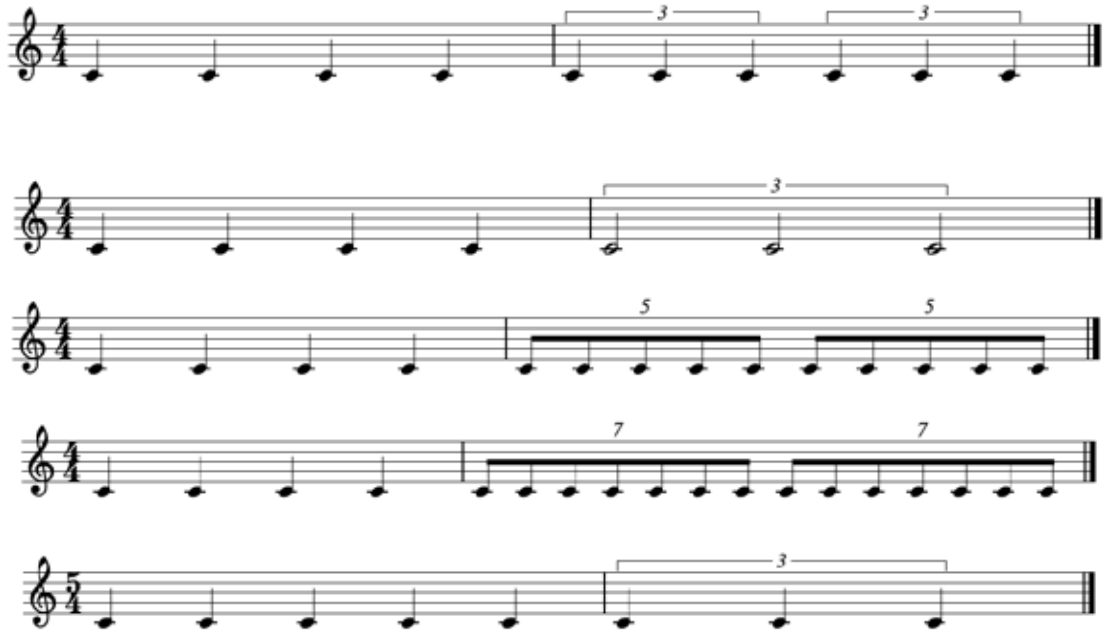
Soundbite 4.7.1

Soundbite 4.7.2

Soundbite 4.7.3

Soundbite 4.7.4

Soundbite 4.7.5



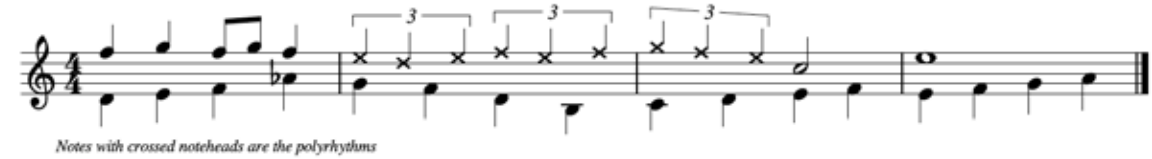
TIP

Start by practicing these over and over with the second method. Once you get confident playing them that way, try playing them with the first method and see if it is any easier.

POLYRHYTHMS

A polyrhythm is when there are two or more contrasting rhythms occurring at the same time. In practice, this involves two or more parts dividing the same amount of time in contrasting ways. An example would be one instrument dividing the beat into three parts (triplets), while another instruments divides it into two parts (quavers). This technique can be used temporarily (e.g. only for a few bars) or for an extended period of time (such as an entire section).

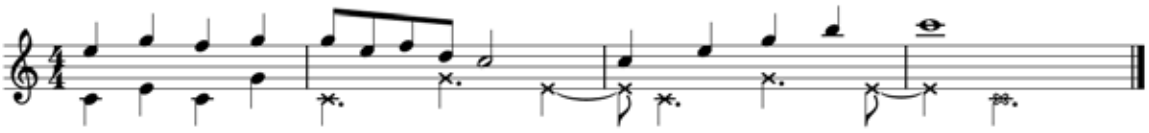
The polyrhythms start here in bar two. For every three beats in the top line there are two beats in the bottom line. This makes it a 3:2 polyrhythm



Notes with crossed noteheads are the polyrhythms

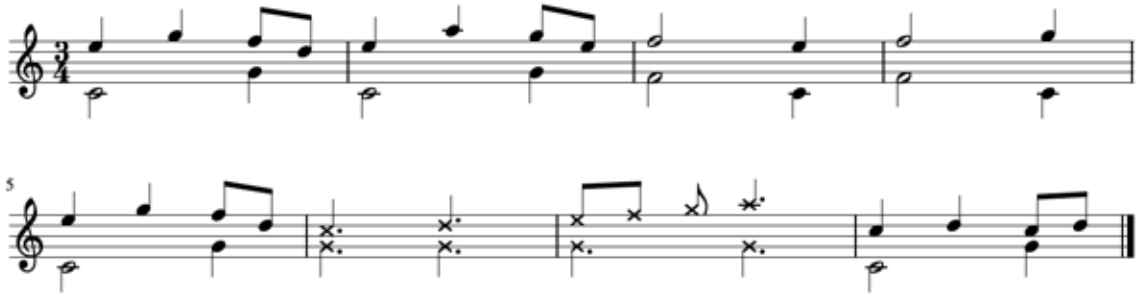
Soundbite 4.8.1

Soundbite 4.8.2



In this case the bottom line starts playing the polyrhythm in bar two. Even though the top line plays quavers and minims as well as crotchets, it is still outlining 4/4. This polyrhythm is also a 3:2 polyrhythm because for every three crotchet beats in the top line there ar two beats in the bottom line.

Polyrhythms can also occur when there is a rhythm that contrasts against the established metre, even if there is no instrument outlining that underlying metre. This can only occur temporarily though; otherwise, the polyrhythm will establish itself as the new metre. See this below:



Soundbite 4.9

Both the bottom and top line are playing the polyrhythm here. Because the metre of 3/4 is well established beforehand, we don't hear this as suddenly chaning into 6/8. Instead, we hear it as as rhythm that simply contrasts the 3/4. If this were to continue for a few bars more though it might sound like the metere has changed. This would a 2:3 polyrhythm because for every bar of three beats there are two beats in the actual music.

So far we have been notating polyrhythms by using a single time signature and just writing the contrasted rhythm over the top. This is because when we listen to polyrhythms, we do not isolate the two contrasting rhythms. Instead, we either think of one rhythm as being dominant and hear the other as a contrasting one on top or we combine the two rhythms into one. This is why you can temporarily play a polyrhythm and immediately return to playing normally, because the polyrhythm is perceived as a contrasting pattern over the top of the already existing pulse.

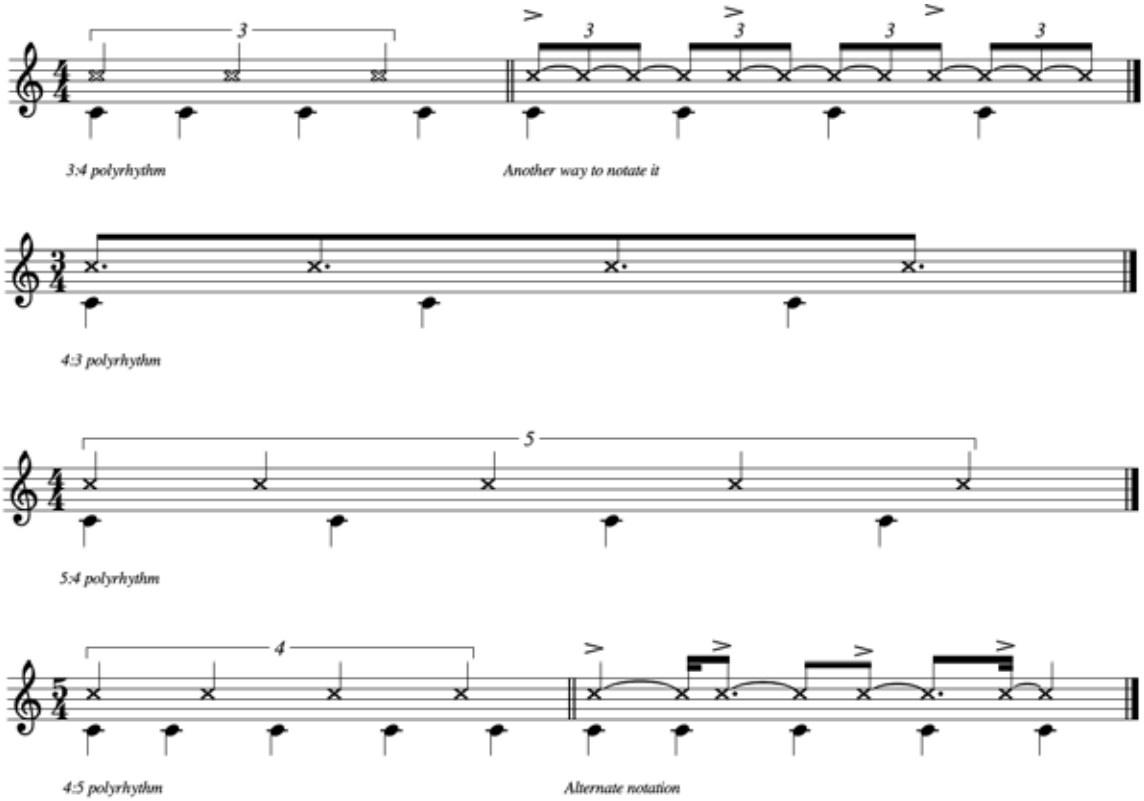
A polyrhythm can be any two rhythms that divide the same amount of time into a contrasting number of beats, but there are still some particularly common polyrhythms that you should know. The two most common kinds are 3:2 and 2:3 polyrhythms, which we discussed earlier. See and hear some other common polyrhythms below:

Soundbite 4.10.1

Soundbite 4.10.2

Soundbite 4.10.3

Soundbite 4.10.4



EXERCISE

Practice each of these polyrhythms (3:2, 2:3, 3:4, 4:3, 5:4, and 4:5) over a metronome. Start by clapping or counting the polyrhythm before actually playing it on your instrument. Start at a slow tempo and gradually increase it until you can confidently play these polyrhythms at reasonably fast tempos. This can be made a group exercise by getting into pairs and having each person play one of the contrasting rhythms. See how long you can maintain the polyrhythm when practicing this way!

TIP

Since many polyrhythms involve playing tuplets, it will be helpful to use the two methods of working out tuplets described earlier.

EXERCISE

Once you are confident with each polyrhythm, improvise in whatever key/scale you are most comfortable with in 4/4 over a metronome. Improvise freely, occasionally incorporating some of the polyrhythms we have just discussed.

EXERCISE

Repeat the above exercise, this time setting the metronome to different time signatures. You can also make this a group exercise by adding rhythmic or harmonic accompaniment..

EXERCISE

Improvise in a key/scale and metre of your choice, but incorporate polyrhythms that last for an extended amount of time, such as eight bars or more. Polyrhythms that last for an entire section or an entire piece are called cross-rhythms and are one way of making your music sound distinct and unique. This can be made a group exercise with rhythmic or harmonic accompaniment.

EXERCISE

Repeat all of the four exercises above, this time making your own polyrhythms instead of using the common ones! Simply choose two numbers and divide the same amount of time by both of those number simultaneously.

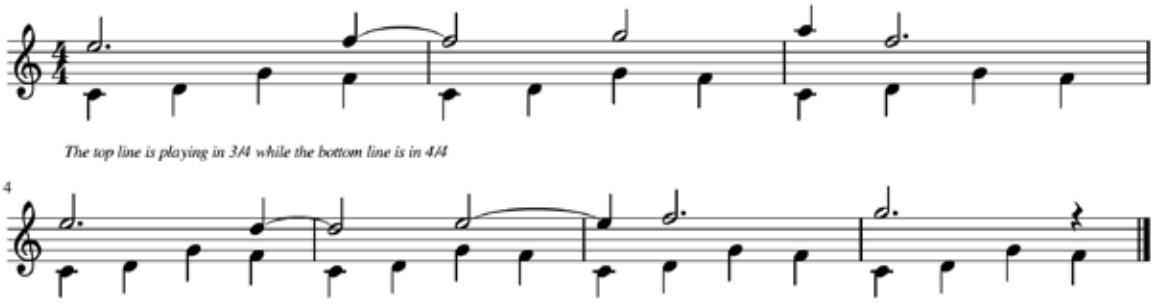
TIP

The second method of working out tuplets is extremely helpful when playing unusual polyrhythms.

POLYMETRE

Polymetre is when two musical parts are using different metres at the same time. In polymetre, the pulse will be the same for both parts, but the bar lines and the strong beats in each part will be placed differently. Often, polymetre will be maintained for an extended period of time, but it can also be temporary. You can see an example of polymetre below:

Soundbite 4.11



The top line is playing in 3/4 while the bottom line is in 4/4

Notice how every three bars the two metres line back again and beat one occurs on the same beat for both metres

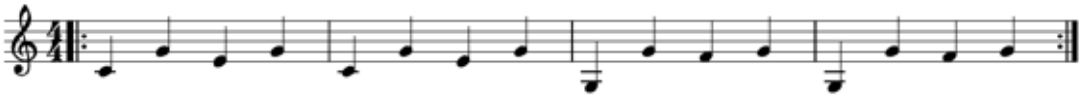
With polymetre, the two contrasted metres or rhythmic cycles will eventually line back up again, but different combinations will last different amounts of time before realigning. With 3/4 over 4/4, it takes three bars of 4/4 for the two cycles to line up again. If it were 5/4 over 3/4, it would take five bars of 3/4 for the two cycles to line up again. You can work this out by first multiplying the number of beats in each bar by each other (for example, five beats in 5/4 multiplied by three beats in 3/4 equals fifteen). Then, divide this number by how many beats fit into a bar in the appropriate metre (e.g. fifteen divided by three equals five, so five bars of 3/4 between each point where the metres line up).

EXERCISE

Use the given backing track or have someone play the following ostinato, which is in 4/4:

Soundbite 4.12.1

Polymetre exercise 4/4 bass line



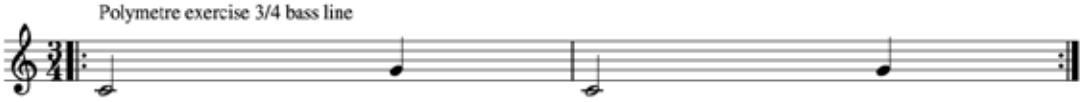
Over this ostinato, improvise in 3/4, 5/4, and 6/4. The pulse should be the same for both you and the bassline, but the melodies you improvise should look and sound as if they are in the metre you have been given (3/4, 5/4, or 6/4). Revise page 19 or more on how to outline a particular metre.

EXERCISE

Use the backing track or have someone play the following ostinato that is in 3/4:

Soundbite 4.12.2

Polymetre exercise 3/4 bass line



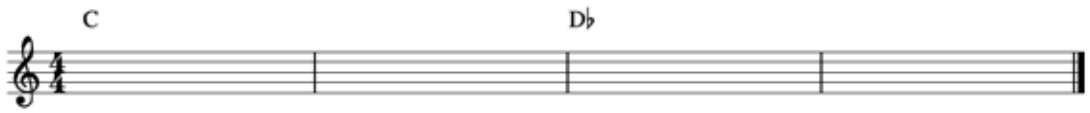
Improvise in 6/8, 4/4, and 5/4 over this ostinato.

EXERCISE

In groups of two, improvise in the same key or scale. Play along to a metronome, with each performer playing in a different metre (as always the pulse should be the same for both). You can use the polymetres from the previous exercises or experiment with your own. Listen out for when your two metres line back up again (i.e. when the first beat of the bar is on the same beat for both performers) and try and end the performance on one of those beats. Repeat this exercise with different combinations of metres and find which combinations sound the best to you.

EXERCISE

Improvise over the following vamp. Throughout the solo, incorporate different kinds of polymetre. This polymetre can last for a short amount of time or a while but listen to the effect that each creates. This can be played over the backing track or made a group exercise by adding harmonic and rhythmic accompaniment.



USING POLYRHYTHMS AND POLYMETRE FOR EFFECT

Why do musicians use polyrhythms and polymetre? In some cases, it is an integral part of a particular style and is necessary for evoking the sound associated with that kind of music. In much West African music, for example, different polyrhythms are used throughout, becoming one of its identifying features. Polyrhythms and polymetre can also be used to create certain effects in your improvisation. In Contemporary Jazz, polyrhythms are sometimes used to increase the intensity of the performance for structural reasons. Polyrhythms can also be used in Jazz for the sake of variety or for promoting interaction between improvisers. In North Indian music, polyrhythms are used during tihais to create tension towards a cadence (as discussed on page 164), but they also demonstrate the skill of the performers. In many kinds of Western music, including Jazz, Rock, and Classical music, polyrhythms and polymetre are used as ways of creating a distinctive sound that isn't typical of that genre. Listen to some examples of polyrhythm and polymetre below:

'LIFE GOES ON' BY HIROMI ON THE ALBUM ALIVE

Clip 3.4.1

A 2:3 polyrhythm is used between 4:41 and 4:46. In this example, the accented beats form a 2:3 polyrhythm with the underlying pulse. As often occurs, the drummer joins in. Listen to the recording before and after this polyrhythm and notice how she hints at the polyrhythm earlier in the performance and how the polyrhythm is a way of ramping up the intensity as the climax of the piano solo.

'LASSO' BY PHOENIX ON THE ALBUM WOLFGANG AMADEUS PHOENIX

Clip 3.4.2

The drum intro from 0:00 to 0:12 uses polymetre. The floor toms and hi-hat at the start are in 3/4 time and the snare drum that enters at 0:07 is played in 4/4 time.

'NOBODY' BY MITSKI ON THE ALBUM BE THE COWBOY

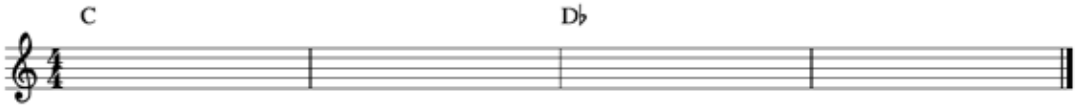
Clip 3.4.3

At 2:53 the vocals are singing a repeated phrase in a slow 3/4 while the piano plays block chords in a slow 4/4 time until the piano cuts out at 3:04. Both 'Lasso' and 'Nobody' use polymetre here to create a distinct sound. In both of these cases, it is to make the specific section stand out, but the technique can be extended to an entire piece or a more substantial portion of a performance as well.

EXERCISE

Improvise over the following vamp:

Soundbite 4.13



During this improvisation, employ the polyrhythmic and polymetrical techniques you have been taught throughout this section. Aim to use these devices to create a structure, to create variety in the rhythms used, and to create a more unique sound in your improvising. This can be made a group exercise with harmonic and rhythmic accompaniment. The accompanists should experiment with reinforcing some of the poly-rhythms played by the soloist or even improvise some polyrhythms of their own. Don't forget that your use of polyrhythm and polymetre could last a few beats, a few bars, or the whole performance!.

TIP

When improvising polyrhythms as a group there is often a choice between whether to join in with the poly-rhythm or just let the improviser play it on their own. It can be exciting when many performers reinforce an improvised polyrhythm, but remember that both contrasting rhythms need to be audible to create the effect of the polyrhythm

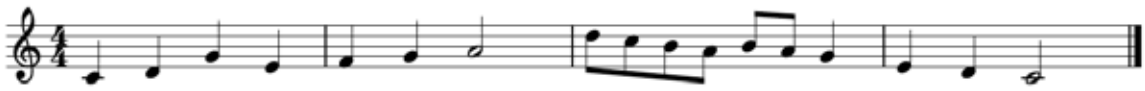
RUBATO

As you already know, tempo refers to how fast or slow the music is. In much of today's Western music, especially those that have African-American origins like Blues, Jazz, Gospel, and Rock, the tempo of a performance will stay the same throughout. This is not true for all styles of music. In many kinds of Classical music, it was common for the performers to speed up and slow down their phrases for expression, and there is evidence that some Pre-Classical Western music, such as Renaissance and Medieval music, had a very flexible sense of pulse. There are also many examples of musicians speeding up and slowing down for expression in Blues, Jazz, Gospel, and Rock, especially for slower tempo songs. This temporary change in tempo mid-performance is called rubato.

First of all, listen to the accompanying soundbite.

Soundbite 4.14

Notice how the melody speeds up and slows down within a single phrase but still centres around and returns to about the same tempo. Rubato might be used by part of the ensemble while the other musicians outline a consistent tempo or by the entire ensemble at the same time. Typically the melodic instrument/s will employ rubato while the accompaniment continues in strict time. Use the accompanying soundbites to hear how rubato can enhance the expressive of the given melody below:



- Delaying the onset of a particular note or chord, especially when there is a tension that is about to be resolved or when the delayed note plays a structural role in the music. This can be done by slowing down the music leading up to the delayed note or, especially if there is still a sense of strict time in other parts, by playing that note later than expected.

Soundbite 4.15.1

- Playing a note or chord earlier than is expected, especially if that note is being anticipated or if it is a structural part of the piece. This can be done by speeding up the music leading up to it or, especially if another instrument is playing consistent time, by playing the note earlier than expected.

Soundbite 4.15.2

- Playing a particular note at the right time but holding it for longer than is expected, especially at points of resolution or structural significance. The music that comes after this lengthened note can be shortened to compensate for the extra time, or they might continue as normal, essentially breaking the metre for the sake of emphasising a particular note.

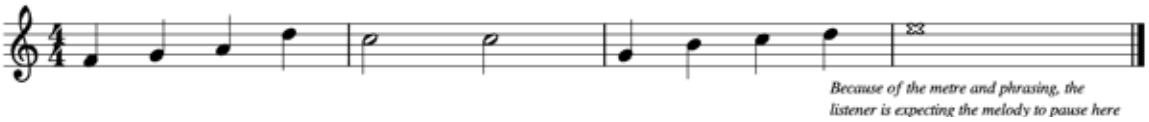
Soundbite 4.15.3

- Shifting part of a melody forwards or backwards so that it is not on the beat or it is played on the off-beats. This tends to be applied to no more than a bar or two as, otherwise, the sense of pulse can be disrupted.

Soundbite 4.15.4

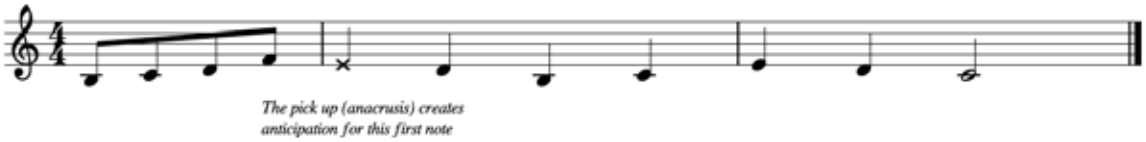
The above list describes using rubato on certain notes when they are structural or are greatly anticipated, but what exactly does that mean? As we learnt in the Improvising Harmonies section (page 136), tension and anticipation for a note or chord can be created using functional harmony. A V chord will create tension to be resolved to chord I, and so, the note where the music moves to chord I is a good choice for the use of rubato.

Soundbite 4.16.1

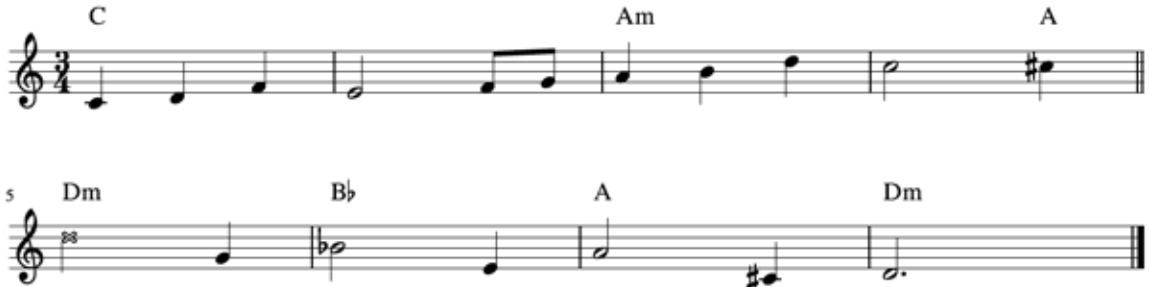


Anticipation can also be created through metre and rhythm. If the melodies in a section of music tend to end on the first beat of the fourth bar of a phrase, then the listener will be anticipating an ending.

Soundbite 4.16.2



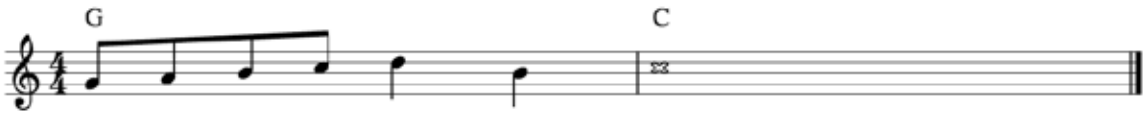
As another example, a pick up leading to the first note of the next phrase will create anticipation for that first note. These notes that start or end a phrase are good choices for the use of rubato.



The modulation to D minor and the change of rhythm suggests that this could be a new section, and, therefore, a good spot for using rubato

Soundbite 4.16.3

Structural notes can also be created just by changes in the music. Where a new section is introduced, where the music modulates, or where a section is coming to an end are all great places to employ rubato.



The G chord and the use of the leading tone B creates tension for the next C note

Soundbite 4.16.4

Like many of the special techniques we learn about throughout this book, it is important to be careful of overusing rubato. Too much rubato can destabilise the listener's sense of pulse and also diminish the effectiveness of the technique for the listener. If your goal is to use rubato to enhance the expressiveness of music that otherwise has a clearly defined pulse, then it is often better to use rubato to emphasise dramatic or emotional moments. The amount of rubato used will also depend on what style you are playing. If you are improvising in the style of nineteenth century and early twentieth century piano virtuosos like Liszt or Rachmaninoff then plenty of rubato is acceptable. If you are improvising an up-tempo Jazz-Rock piece, then rubato should be used very sparsely or not at all. Using rubato well is something that comes with experience, so be sure to practice the technique and listen out for examples where it is used.

Rubato can be heard in the following recordings:

'EVERYTHING HAPPENS TO ME' PERFORMED BY BILLIE HOLIDAY

Clip 3.4.4

Listen to the melodies sung by Billie Holiday, the accompaniment played by the clarinet, and the various solos from the band. While the drums keep their tempo consistent, the tempo in these melodies is flexible, temporarily shifting as they play to create expression.

'SLUMBER' BY THE NOISE STRING QUARTET

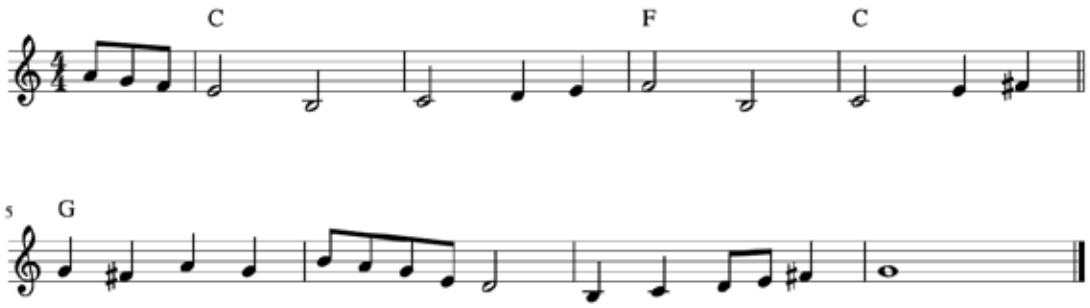
Clip 3.4.5

From the album STREAM

Try and count in 4/4 along to this recording. You will notice that the entire ensemble is constantly speeding and slowing the tempo for expression

EXERCISE

Play through the following melody:



Soundbite 4.17

Improvise different kinds of rubato using everything discussed so far. Be sure to identify the different places in the melody where rubato would work and try the four ways of implementing rubato explained earlier. Only use one instance of rubato per play-through of the melody at first. Once you are confident with this, use more and more rubato throughout. Listen to the effect created and notice how it affects the sense of pulse and metre. Do this exercise on your own with just the melody.

EXERCISE

Repeat the above exercise, this time either accompany yourself or having someone else play accompaniment. Experiment with rubato that only occurs in the melody while the accompaniment maintains the pulse and with rubato that occurs in both parts. For the rubato that happens just in the melody, the accompanist might want to maintain a strict sense of pulse, or they may also implement some rubato themselves.

EXERCISE

Improvise in whatever key/scale and whichever metre you feel comfortable. Implement the various kinds of rubato we have been discussing and practising throughout this section. Start by using a conservative amount of rubato, but also experiment with constant rubato. Listen to yourself and see what approach you like best and what styles the different levels of rubato would work well with. This exercise can be made a group exercise by adding rhythmic and harmonic accompaniment.

ADVANCED GROUP IMPROVISATION

We have already discussed the fundamental skills and techniques used by musicians to effectively improvise as a group. Things like listening skills, understanding performer roles, using non-verbal communication, and controlling dynamics as a group are crucial for any group improvisation. There are, however, many more specific ways that performers interact with each other in group improvisation.

DIALOGUE

Dialogue is when two (or more) performers are directly interacting with and drawing upon each other's playing to inspire their own improvising. In everyday usage, a dialogue is a conversation between two people where the two parties alternate the role of speaking and exchange ideas with each other. In music, a dialogue also works like a conversation, with each instrument alternating with the other and exchanging musical ideas. An example of a dialogue would be as follows:

A guitarist with distortion and a guitarist with a clean effect start taking turns at being the melodic instrument, quickly alternating with each other. During this period the melodies they improvise are directly inspired by the music being played by the other. This could involve imitating the rhythm or pitch of their partner, taking a motif from the other improviser and transforming it, designing their melodic contour so that it flows from the other performer's melody, intentionally choosing music that stands out from their partners, or any other countless number of methods that involve basing your improvisation on the other performer's improvising.

Soundbite 5.1

But what are the improvisers thinking about when playing as part of a dialogue? Here are some general strategies you can us that will help you think about how you can interact with the person you are engaging in dialogue with.

CONTRAST

Often performers will intentionally contrast what the other person has just played. Contrast works particularly well when there are only two people in the dialogue as it gives each person a distinct character to their improvisation. This contrast can be with any musical feature. It might be in terms of the rhythms, the speed, the register, the melodic contour, the timbre, the phrasing, how the beats are subdivided, dynamics, and much more. While improvisers might intentionally contrast each other's material, this usually does not mean completely disregarding any sense of unity. Things like style, underlying tempo, the overall character of the music, and the underlying metre tend to remain consistent across members of the dialogue.

IMITATION

Performers might also directly imitate something played by the musician/s they are in dialogue with. Simply repeating what someone else just played is usually not very interesting though. Generally, when this route is taken, the improviser will either develop and transform their partner's idea or they will imitate some aspects of their partner's playing. An example of this second case might be a trumpeter using the same rhythm as the saxophonist but changing the notes or a drummer using the same type of polyrhythm as the pianist but changing the specific rhythm. Any feature of the music is appropriate for imitation, whether it's the rhythm, the pitches used, the melodic contour, the phrasing, the timbre, the kind of polyrhythm used, any extended techniques, the general mood, the dynamics, etc.

CONTINUING

An improviser's reaction to the musicians they are in dialogue with does not always have to be so extreme as contrast and imitation. Improvisers will often connect their solo to the material of the other soloists in less obvious ways. An example would be maintaining the feeling or mood of the previous soloist or playing a phrase that continues the melodic contour of what was just played. It is difficult to describe a general rule for this approach, but think of it as creating what could logically be the next phrase of the music.

IGNORING

Sometimes, intentionally drawing your material from others during a dialogue can have a negative effect. It might limit your creativity in a way that hurts the quality of the improvisation and can become repetitive if the improvisers are continually interacting with each other in obvious ways. As a result, improvisers may not focus on what is being played by their fellow ensemble members and instead improvise their own original ideas. This does not mean that the improviser does whatever they want, however. Like with contrast, improvisers will rarely change the style, underlying tempo, underlying metre, or overall character of the music. In addition, even if an improviser decides to create something without reference to the other members in the dialogue, the musicians following them might choose to take up their idea in some of the ways described above. The point of this approach is to help create a dialogue that strikes a balance between completely disconnected ideas and musical interactions that are too obvious or cliché.

It is important to remember that these different approaches are not always obvious to the listener. This doesn't matter though. These categories are here to help you think about what options you have when interacting with other musicians in a dialogue situation, not to be clearly identifiable techniques.

EXERCISE

Get into groups of two and improvise in a key or scale and metre that you are both comfortable with. Make it a dialogue. Alternate between each other every four bars and implement the four approaches described above (contrast, imitation, continuing, and ignoring)..

EXERCISE

Repeat the above exercise, this time swapping every:

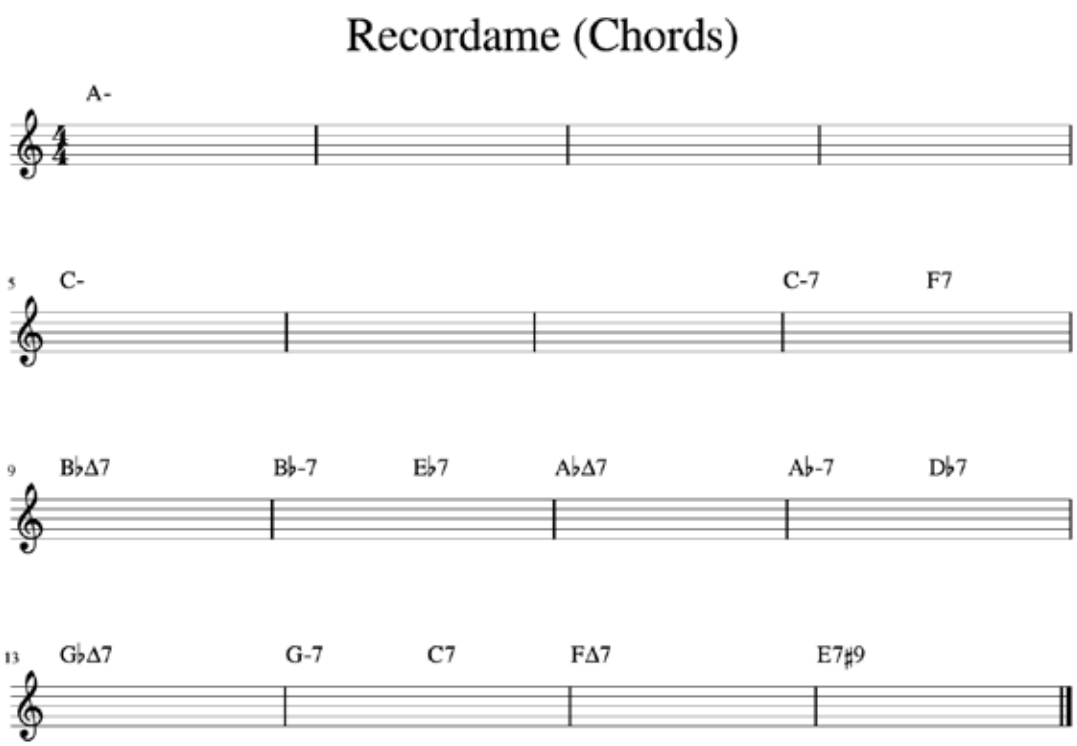
- *Two bars*
- *Two beats*
- *Phrase (regardless of length)*
- *Eight bars*
- *After a pre-determined signal*
- *Any other method of switching you can come up with*

EXERCISE

This time, get into groups of three or more. Choose two people from the group to be in dialogue with each other while the other members accompany harmonically or rhythmically. Throughout the performance, occasionally switch one of the improvisers in the dialogue with someone that is accompanying. You can use the non-verbal communication of page 132 (for example using eye-contact or a head nod) to help with this, or you may wish to simply determine the order of who switches before the performance.

EXERCISE

In groups of at least two, improvise over the chords for 'Recorda-me' given below:



With at least one soloist and at least one accompanist, occasionally engage in moments of dialogue while still improvising over the chords. Start with short exchanges of only a few bars then move onto extended dialogues that lasts for at least an entire play-through of the chord progression. If you have more than two performers in your group, then practice having dialogues with different pairs within the ensemble.

EXERCISE

Repeat the above exercise but this time allow your dialogues to include more than just two people. Use your active listening skills and non-verbal communication to ensure that you are still alternating with each other and responding to each other's material. There might be an order with which performers alternate with each other or it may be completely undetermined.

Dialogue can be (and usually it is) a temporary event that spontaneously occurs during group improvisation, but it can also be a pre-planned convention according to the style of music. Let's look at some specific ways different styles use the technique of dialogue.

"Trading" is a strategy used in Jazz performance where different musicians alternate short solos that last a pre-determined number of bars. The most common version is "trading fours", which refers to trading solos that last four bars each. Trading eights, twos, and ones are also common kinds of trading. The order of these alternating solos can be pre-determined or improvised mid-performance. Often, once an improvised order is established, that order will stay the same throughout the entirety of the trading. Usually, the musicians will alternate between the drummer and another member of the ensemble until everyone has had a turn. Conventionally, the improvised order will start with the melodic instruments like the trumpet, saxophone, voice, etc.; move to the chordal harmonic accompaniment like the piano and guitar; and continue on to the bass before repeating the cycle. Often the whole band will be involved in the trading, but it is also possible that only a subsection participate (e.g. just the melodic instruments or just one melody instrument and the drums). This improvised trading usually follows the chords of the composition, but it can be over a vamp, ostinato, or have no harmonic context at all. You can hear the trading fours in the below clip ordered this way:

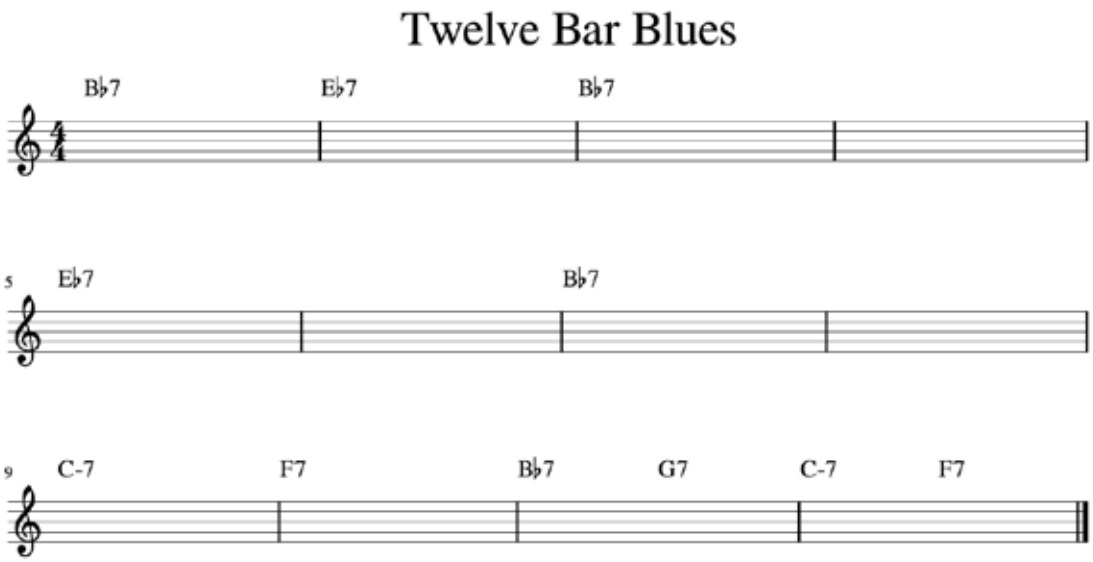
'ANTHROPOLOGY' BY CHARLIE PARKER

Clip 3.5.1

Hear the trading between the saxophone, trumpet, and drums between 3:44 and 4:31.

EXERCISE

Get into groups of at least three. Trade fours over the following twelve-bar blues chord progression:



Like in the given example, each person will improvise over four bars of the progression before moving to the next person. You still need to move throughout the chord progression, so if you start by soloing over bars one to four, the next person will solo over bars five to eight, and so on. If one of your musicians are playing percussion, then try alternating between the pitch-based instruments and the percussion.

EXERCISE

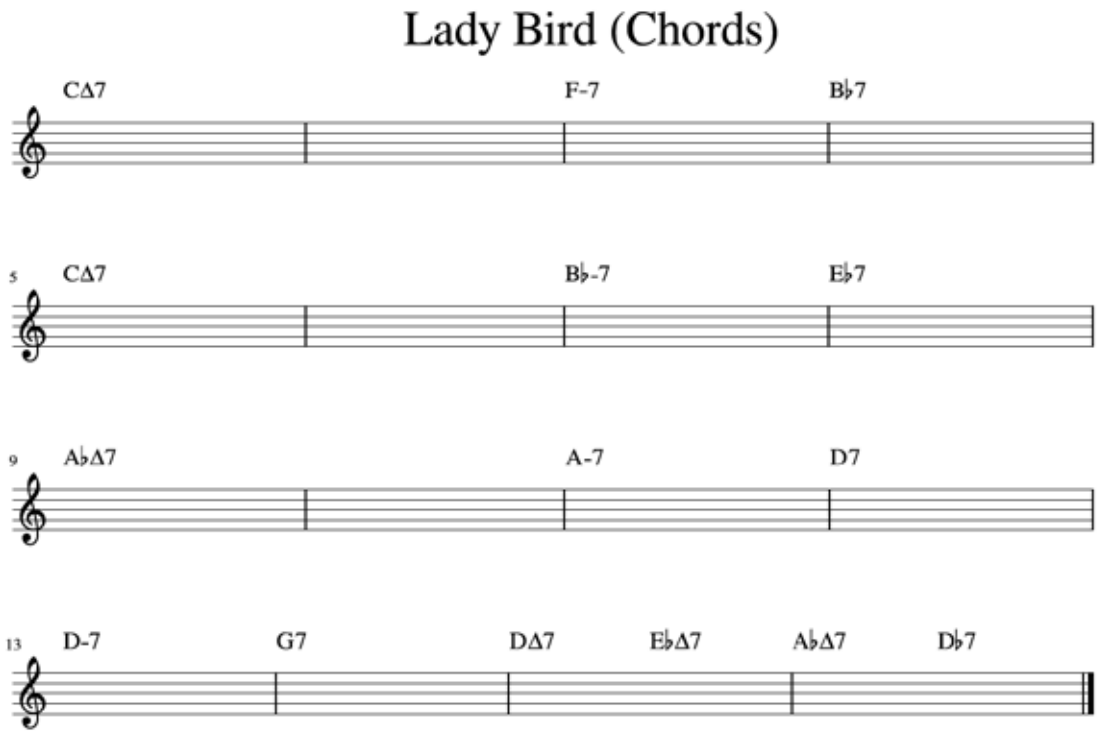
Repeat the above exercise, experimenting with trading eights, two, or any other number of bars. Listen to the effect created as the length of the solos changes.

EXERCISE

As you get more comfortable with trading fours, try implementing the different strategies for interacting with your bandmates that we discussed on page 249.

EXERCISE

In a group of at least three, trade fours over the chords for 'Ladybird.' Remember the different strategies for interacting with your bandmates. Once you are confident, experiment with trading eights, twos, ones, or any other number.



Another style of music that uses dialogue extensively is North Indian Classical music, the most obvious example being the sawal jawab. A sawal jawab is a section of the improvisation where the soloist and percussionist alternate with each other, with the percussionist immediately imitating the rhythm of the phrases played by the soloist. Often these phrases will be polyrhythmic, and the soloist will intentionally create phrases that are difficult to imitate as a way of challenging the percussionist. As the sawal jawab progresses, the soloist gradually plays shorter and shorter phrases, resulting in a gradually increasing intensity that leads into the climax of the whole performance. Throughout the whole sawal jawab though, the musicians still follow the metre

EXERCISE

Get into groups of two, preferably with one person on a pitch-based instrument and one on a percussion instrument, although two pitch-based instruments will also work. In 4/4 time at a medium tempo and in whatever key, scale, or mode you are comfortable with, play a sawal jawab. Perform the sawal jawab like this:

- *The soloist will play a phrase*
- *The percussionist (or second pitch-based instrument) will imitate that rhythm as precisely as they can*
- *Start with phrases that are four bars long*
- *Every so often, halve the length of the phrase to two bars, then one bar, and so on until it is too fast to possibly imitate each other*
- *End the exercise with a coordinated final hit on the tonic of whatever key/scale you are playing in*

TIP

Start out with simple rhythms, but as the two of you get better, start introducing polyrhythms or other complicated rhythms to throw off your partner (use the Polyrhythms and Polymetre section on page 194 to help with this). Have the intensity and excitement of the performance increase with time. For example, gradually increase the number of polyrhythms used, the degree to which those polyrhythms contrast the metre, or the speed of the rhythms

EXERCISE

Repeat the above exercise, this time in:

3/4

5/4

6/4

6/8

9/8

12/8

7/8

Any other metre you want to try

EXERCISE

Repeat both of the above exercises, but this time swap roles. Have the percussionist (or second pitch-based instrument) play rhythms that the soloist must imitate. This is not how Hindustani performances traditionally go; however, that doesn't mean you can't perform a sawal jawab in this way in your own music.

IMITATION

While we have already talked about how imitation can be used in dialogue, it can be used in many other situations as well. Imitation in improvisation is probably used most frequently to assist with accompaniment. Its effect on the

listener can range from increasing the performance's sense of unity to just being a fun way for two performers to interact. Let's look at some ways that imitation can occur and some specific examples of each in different styles.

IMITATING SOMEONE'S MUSICAL MATERIAL AS PRECISELY AS POSSIBLE

This is probably the most straightforward form of imitation and might occur immediately after the person has played the material (like an echo); as the person is playing the material so that both the imitator and the imitated are playing in unison; it might involve one of the musicians imitating a phrase that was played much earlier in the performance; or involve one of the musicians actually anticipating what another is going to play so that they both play the same thing in unison. When the imitation is in unison or immediately after the original material, it reinforces and highlights that material. Whether the imitation is immediate or later in the performance, it can also make the music being imitated more memorable. As a result, you should ensure that what you choose to emulate is interesting and something you want to be emphasised for the audience.

The use of exact imitation is found in many styles of music. In Jazz, for example, the drummer or the chordal accompaniment might echo back a particularly memorable phrase that was played by the soloist. In different genres of vocal Indian Classical music, there will be an instrumentalist (usually violin or sarangi) that accompanies the vocals by imitating them as soon as they are played. In Jazz, a relatively common way of connecting two solos is for the second soloist to imitate the last phrase of the first soloist before continuing with their own improvisation. Listen to some recordings of these in practice:

'RAGA DESI' BY THE SENIOR DAGAR BROTHERS'

Clip 3.5.2
Throughout the performance, the sarangi (the bowed instrument) imitates the vocals, usually echoing the singers but at times anticipating and playing in unison with them. The sarangi player especially predicts the singer at cadence points and when the music returns to the tonic.

'BLUE TRAIN' BY JOHN COLTRANE

Clip 3.5.3
From the album The Complete Blue Train Sessions (Hd Remastered Edition, Doxy Collection)
Listen from 5:08 and hear how the end of the trumpet solo is imitated by the trombone at the start of their solo

Soundbite 5.2

IMITATING SOME ASPECT OF THE MUSICAL MATERIAL

Imitation does not always have to occur for the entire musical idea. One approach is to take a fragment of what the other improviser played and imitate that. This ranges from a drummer imitating many of the pianist's rhythms to an accompanist imitating one or two notes of a soloist.

Another way of imitating less directly is to emulate some aspect of what they played. Examples include just the rhythm, pitch, timbre, register, harmony, type of articulation, mood, or other feature instead of the entire musical idea. These are good ways of reinforcing what was played but making it more interesting and less repetitive. Like the previous strategy, this can occur at the same time as, after, or in anticipation of the original material. For example, a guitarist in a free improvisation might notice the flute player outlining a particular chord, so they imitate it by playing that same chord with a different texture and rhythm. As another example, a trumpeter might hear the guitarist accompanying them use vibrato and start to do the same.

Soundbite 5.3.1

Soundbite 5.3.2

This kind of imitation can create greater unity between the ensemble and can also create interesting interactions between improvisers. Because only part or some aspect is being imitated, this approach is less likely to make the music too repetitive, however, caution should still be taken to avoid overusing this strategy. Listen to some of these examples in the accompanying soundbites.

Soundbite 5.3.3

IMITATING PART OR ALL OF THE MUSICAL MATERIAL BUT VARYING OR DEVELOPING IT

This form of imitation might involve imitation of the entire musical idea or just part of it, but the defining feature of this approach is what is done the imitated material. While it is common to imitate what someone is playing and then continue improvising as normal, you can also stay with and develop the borrowed idea in many ways. There are many approaches to "developing" an imitated phrase, but we have already discussed in the Ornamentation (page 34) and Transforming Existing Material (page 180) many of these techniques.

All of the examples of imitation already given could have also used variation or development of that imitated material if the improviser chose. A Jazz accompanist that imitates a melodic phrase from the soloist could vary it for the sake of variety, for example. As another example, a soloist that mimics a distinctive rhythm used by a previous soloist might then use that rhythm as the basis for their own solo. The use of variations and development in this way can give a greater sense of unity and identity to the performance. Listen to the accompanying soundbites for examples.

Soundbite 5.4.1

Soundbite 5.4.2

EXERCISE

Get into groups of two. Choose one person who will be "leading" and one person who will be "imitating". Improvise in any key, scale, or mode and in any metre. Throughout the performance, frequently employ the following: (1) imitating the other person as exactly as possible, (2) imitating part of what the other person is playing, and (3) imitating part or all of what they are playing but developing or varying it. Don't forget to swap roles and repeat the exercise!

EXERCISE

Repeat the above exercise, but this time focus on timing the imitation in the following ways: (1) imitate the leader immediately after they play; (2) imitate them as close as possible to when they are playing (this will require you to anticipate what they are doing); and (3) imitate their material a little while after they have played (this will require you to remember the material and recall it later).

EXERCISE

Now that you are comfortable with what imitation is, get into groups of at least three. Improvise in any key, scale, or mode and in any metre (you can even improvise over a chord progression if you like). Employ the three different kinds of imitation throughout the performance. Try and reserve the imitation for when your bandmates play something that is memorable or that you particularly like.

TIP

Imitation tends to create a sense of unity and reinforce memorable musical material, so consider this when thinking about how best to use these techniques

GROUP INTERACTION IN FREE IMPROVISATION

Free improvisation is improvisation where the performers do not decide anything about what they are going to play beforehand. Unlike most forms of improvisation where some aspects are pre-determined (such as the chords, the key, the metre, or a melody to work with), free improvisation is entirely guided by the improvisers' decisions mid-performance. Because of this lack of restrictions, there is a multitude of ways that the ensemble can interact, and these interactions are the main thing driving the performance.

If there are no pre-determined aspects to a free improvisation, then how do the performers know what to play at all, and how do they make sense of each other's playing? Well, composers and improviser don't create something new that no has ever heard before every time they play. When musicians improvise freely, they still use the melodies, rhythms, sounds, structures, and techniques that they know, just arranged and applied in new ways. For example, an American Jazz singer can't suddenly create an entirely new style of singing with no relation to what already exists. Instead, they rearrange the performance techniques and musical features of the styles they know.

What this unavoidable influence of previous musical experience means is that, even when there are no restrictions about what to play, free improvisers still use their common understanding of music to make sense of each other's playing. For example, if the American Jazz singer starts singing melodies that outline a ii-V-I progression and have swung quavers, a drummer trained in Jazz would know that playing a swing pattern on the ride cymbal would work well with what is being sung. They would also know that playing a different kind of drum beat, such as a death metal drum groove, would contrast what is being sung. Whatever the drummer chooses to do, the point is that their choices are influenced by how they understand what is being played by the other musicians.

Even if you don't have an in-depth knowledge of the other musicians' styles, you will inevitably use whatever your understanding of that music is to influence your decisions. For example, you might hear a European folk musician playing a rhythmic pattern you do not recognise. You may not be able to pick out the exact metre or exactly how the rhythm would usually fit with other instruments, but you can at least pick up on the pulse and tempo and use that information to determine how you should respond.

The point is that even though free improvisation has no restrictions, the musicians aren't just playing randomly. They listen to what their bandmates are playing and use their knowledge to inform how they can and should respond to what they're hearing. It is how the musicians respond to each other that determines what happens in free improvisation.

EXERCISE

Get into groups of at least three but not more than five. If possible, sit in a circle.

- *Have someone start improvising freely, with no discussion beforehand.*
- *Each member of the ensemble will gradually enter the improvisation by going in order around the circle.*
- *As you are waiting to enter, listen to what is being played and think about how it fits into any styles of music that you know, how it functions in those styles, what effect it might have on the audience, and the features of the music (metre, tempo, register, tonality, timbre, etc.).*
- *When it comes to your turn to enter the improvisation, use all of this information to assist you in deciding what you should play. Think about how what you are going to play will interact with what is already present, and what the combined effect of all your playing might have on a listener.*
- *Once everyone is playing, continue performing for a short amount of time. Continue to listen to what is being played and relate it to your own understanding of music.*
- *When it feels appropriate, improvise an ending.*

Repeat this exercise a few times and make sure that a different person starts the improvisation each time. .

EXERCISE

Repeat the above exercise. This time:

- *The first person who plays should clearly improvise in a particular metre and scale, but not tell anyone beforehand what that metre and mode will be.*
- *Every musician that enters should try as best as they can to play in the same metre and use the same set of pitches as the first improviser.*
- *If, after a few people have entered, the metre or scale is not agreed upon by everyone, then when someone enters they should try and align themselves with whatever seems to be the dominant metre and set of pitches.*

Repeat this exercise and change who the first improviser is each time

EXERCISE

Repeat the above exercise, but this time have one of the middle improvisers intentionally change the dominant metre or scale in the middle of the performance. Everyone else has to align themselves with this new standard.

Being able to identify and understand what is being played by your fellow improvisers and being able to join your bandmates metre or pitch set are vital skills in free improvisation, but how can you put them to use? A big part of this comes down to experience, knowing what musical material will and won't work with each other and what effect each combination will have. As usual, instead of trying to cover all of these, we will discuss some general approaches that you can take to help you think about different ways you can react to your fellow improvisers in a free improvisation (or even a non-free improvisation).

The different approaches are align, contrast, support, and ignore.

ALIGN

This approach involves aligning yourself with what the group or another improviser is playing. It can range from full-on imitation to simply playing something that reinforces the aims and intentions of the material. The way you align yourself could relate to the musical features, such as playing in the same key or metre, using the same rhythm, playing in the in the same register, following the dynamics, or using the same or similar timbre. It can also involve aligning yourself with what you perceive to be the effect of the material, such as matching the material's intensity, reinforcing the mood it creates, or emphasising the structure it is trying to make.

CONTRAST

As you can probably guess, this approach involves contrasting what is being played by all or part of the ensemble you are playing with. As before, this contrast can be of specific musical features, or it can be about the effect that the music creates. Like with align, the degree with which you contrast your bandmates' material can vary greatly and will have a different effect on the music. Some examples include playing in a completely different style, using polymetre or polyrhythms, employing contrasting articulation, improvising with a different set of pitches, evoking a contrasting mood, destabilising another musician's sense of home, or trying to interrupt the arrangement that another instrument or set of instruments has established.

SUPPORT

This approach is somewhat separate to align and contrast as it is less about how closely your playing relates to the other instruments' playing, and more about whether or not what you're playing compliments the other instruments. It involves ensuring that the other musician/s have the space to play what they are playing and making sure that what you are playing emphasises their material. As usual, there are different degrees to which you can support or not support other members of the ensemble. Examples include playing an accompaniment pattern so that you

don't interfere with someone else's melodic playing, filling the space in between someone else's material, echoing someone's melodies to reinforce it, and more. This approach will tend to create more unity and a greater sense of cohesion in the ensemble's improvised music.

IGNORE

This involves not basing your improvisation on what is being played by the others as much as possible. Like all of the approaches so far, there are multiple degrees of intensity to this. As hard as you try, it is difficult to completely ignore what you hearing, and even if you don't consciously try, your playing can be influenced by what you hear sub-consciously. At the same time, it is also possible to arbitrarily decide something without considering how it interacts with what is already being played. It is not always possible to know how material created with this approach will interact with what is already being played, but that is part of the point. Ignore is also a great way for the improvised music to transition into a new section or to create variety in some way. Some examples of the ignore approach are playing a melody without considering whether it matches the pitch set/s already being used, introducing a new timbre or tone colour without considering how it fits into the overall sound of the ensemble, or thinking of a rhythm and playing it without attempting to make it fit with the existing rhythms.

COMBINATION

Not all of these approaches are independent of each other. For example, the way you support someone might align with their playing or contrast it. As another example, you might align one or more aspects of someone's playing but contrast other elements (e.g. you imitate their rhythm, but you play in a different key with different articulation).

Remember that there are far too many examples to outline every single way that these approaches might be used. Try and think of your own ways of aligning, contrasting, supporting, and ignoring.

EXERCISE

Get into a group of more than three but less than five and improvise freely. Arrange yourselves in a circle if possible.

- *Start with one person freely improvising.*
- *Gradually enter the performance one at a time.*
- *As each person starts playing, use the methods of align, contrast, support, ignore, or a combination of them to inform what you play.*
- *As the improvisation goes on, continue to use these approaches to help you decide how to react to what is being performed by the rest of your ensemble, especially when new material is introduced or when you think it is time to make a substantial change to your playing.*
- *Improvise an ending collectively.*

Repeat this exercise many times, changing the person who starts the improvisation each time

TIP

Don't forget to listen to what is being played and use your understanding of that to decide the best way of reacting to it!

STRUCTURE

Whether improvised or pre-written, music always has a structure. Structure refers to how the music changes over time. Features that affect a piece's structure include how different sections repeat, what changes between each section, how the effect created by the music changes over time, how long each section is, and much more. Structure can have a massive impact on the experience of the listener and is an essential consideration for any improviser. In some cases, an improvisation's structure might be pre-determined, like a performance of Indian Classical music which moves through four pre-determined phases. In other cases, it is less about progressing through different sections and more about how the various aspects of the music change in satisfying ways, such as a gradual increase in intensity in an improvised Jazz solo. Regardless of exactly how the structure is created, it is something that any improviser should be aware of and know how to do.

CREATING AN ARC IN YOUR IMPROVISATION

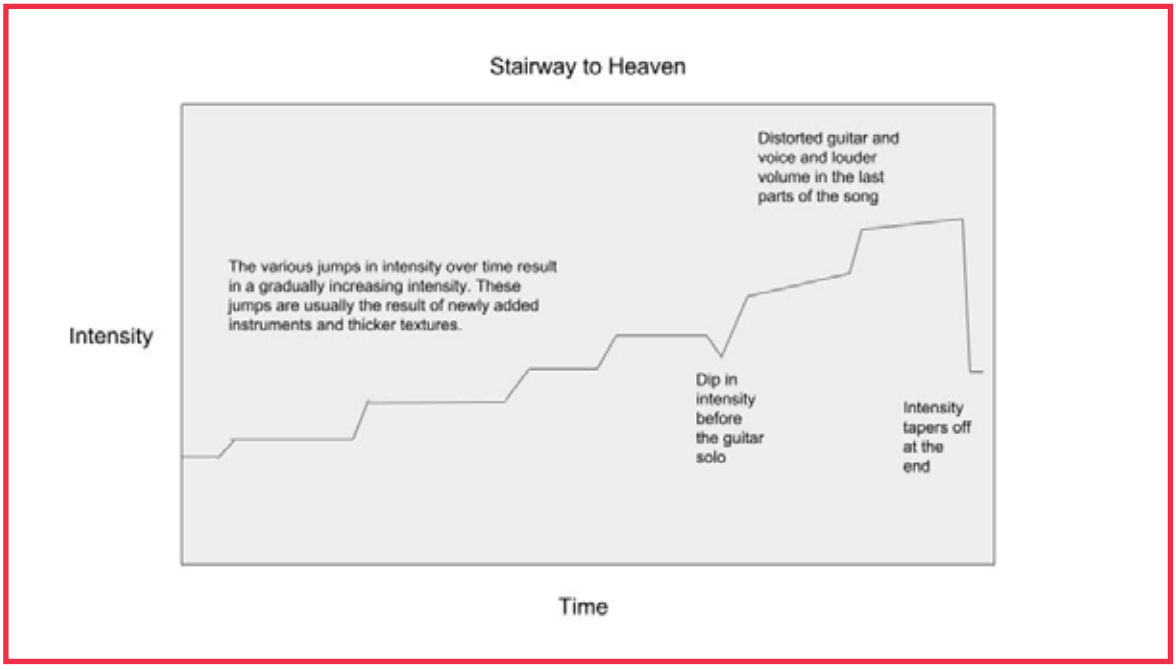
Whether a piece of music has repeating sections or is just a series of different ideas, there is always an arc. The arc of a performance refers to how the features of the music change over time and, therefore, how the effect on the listener changes over time. This section will focus on how intensity changes over time. For the purposes of this book, intensity means the excitement or tension that is experienced by the listener. High intensity music might have a lot of instruments playing different parts, but it could also be a solo instrument playing really fast, a small number of instruments playing highly emotional melodies, and so on. Specific ways of changing intensity will be discussed later, but for now let's look at different kinds of arcs.

Listen to the following recording of 'Stairway to Heaven' written by Jimmy Page and Robert Plant and performed by Led Zeppelin on the album *Led Zeppelin IV*.

STAIRWAY TO HEAVEN – LED ZEPPELIN

Clip 3.6.1

As the piece goes on, more instruments are gradually added, the arpeggio accompaniment changes into thick block chords, the instruments play louder, faster rhythms are used, and the timbre of both the guitar and the vocals becomes more distorted. In a simplified diagram, you could summarise the arc as this:



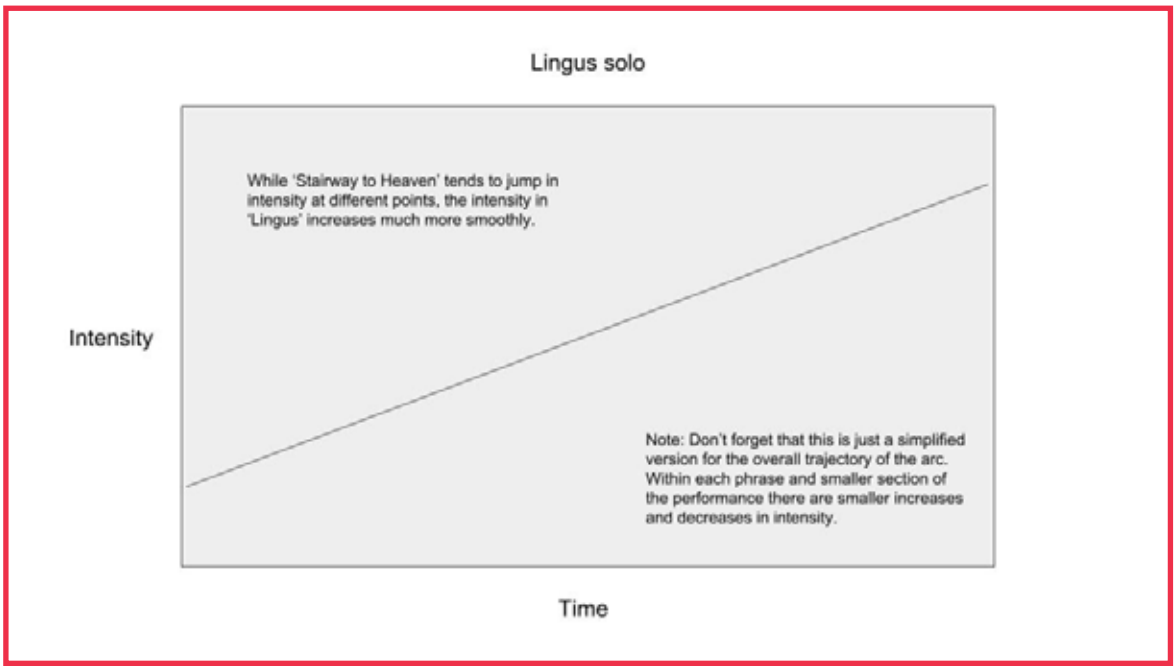
You can see how the intensity continuously increases as different aspects of the music change. This rising arc helps keep the piece interesting and makes it sound like the music is going somewhere.

Another example of an arc in music is Cory Henry's improvised keyboard solo on 'Lingus' written by Michael League and performer by Snarky Puppy on the album *We Like It Here*.

LINGUS

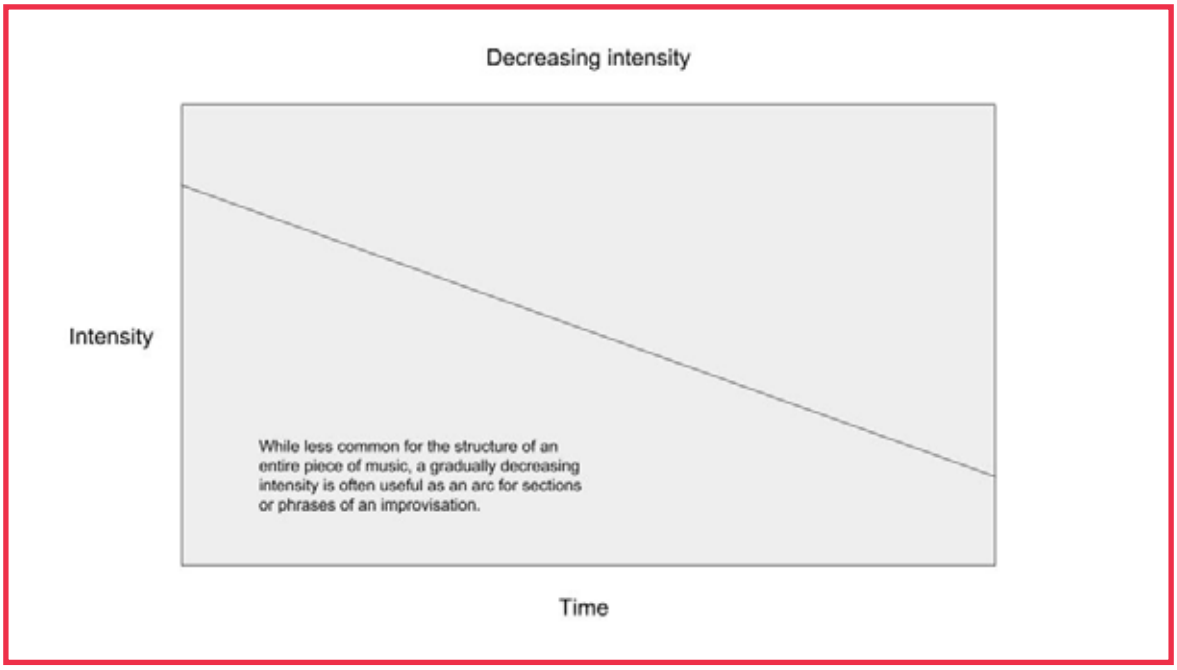
Clip 3.6.2
4:18 to 8:16

The solo starts with chords at a soft dynamic and with a subdued and clean timbre. Next, Cory Henry introduces sparse melodies and the timbre changes to a distorted synthesiser. As the solo progresses, Henry leaves less space between phrases and introduces faster rhythms. The intensity increases even more when he adds block chords as accompaniment and later on when he doubles the melody on a second keyboard. The amount of chromaticism, asymmetrical phrasing, and polyrhythms being used increases as the solo goes on, as do the dynamics and the use of the upper register. A simplified arc of the keyboard solo could be described like this:

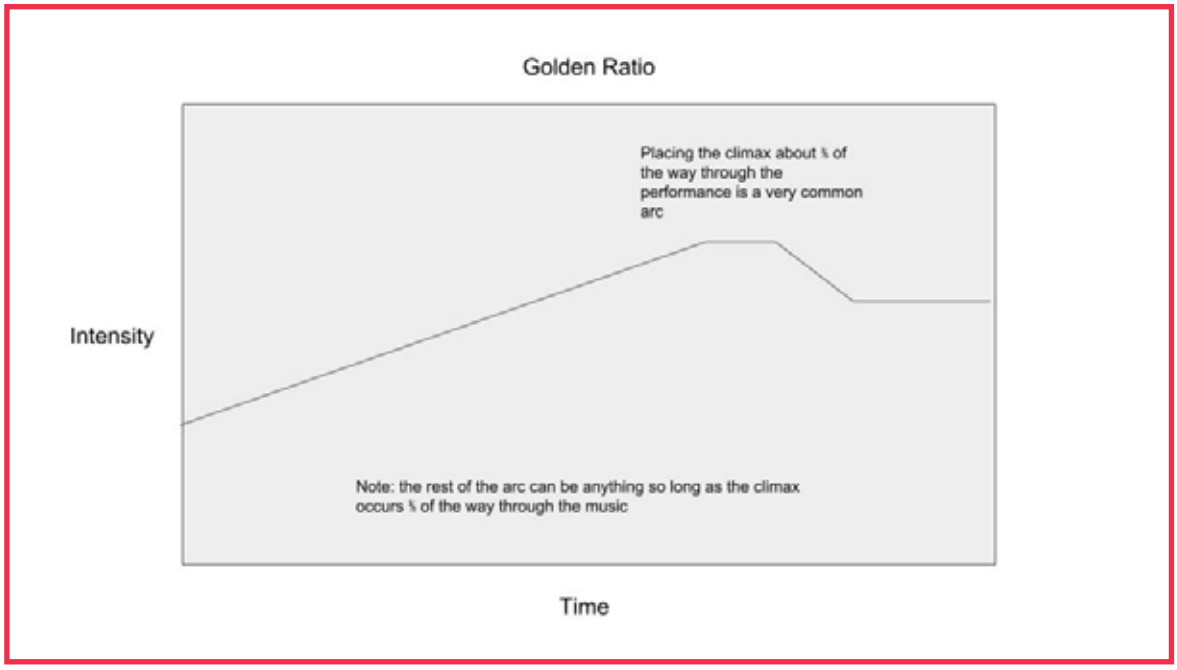


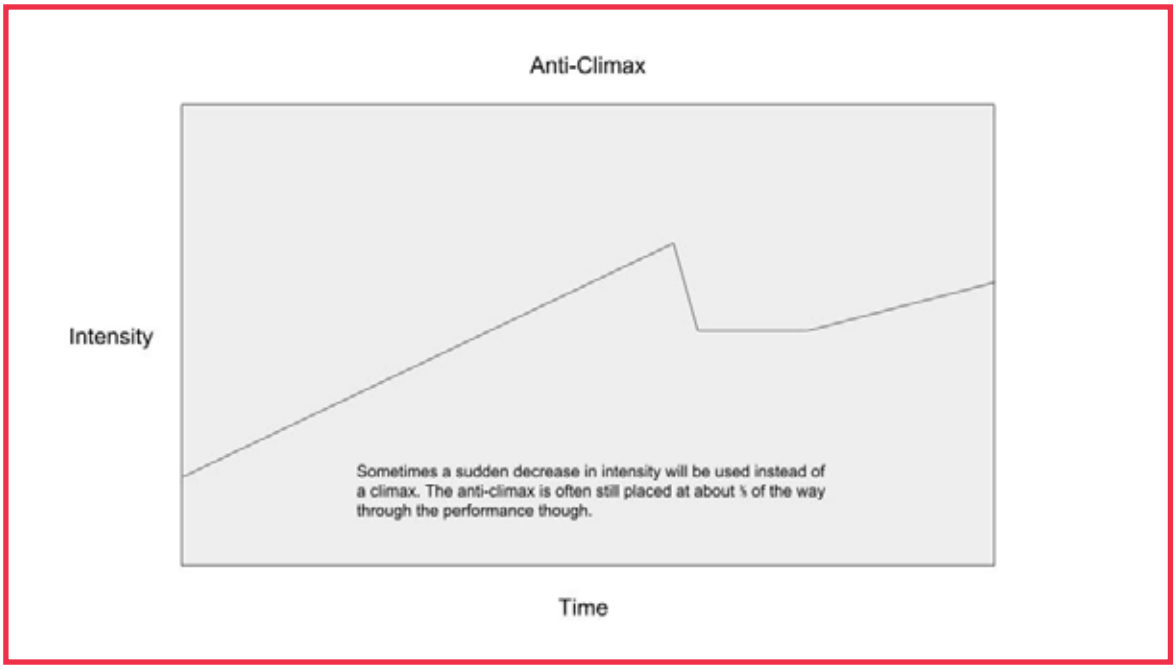
In both 'Stairway to Heaven' and the 'Lingus' solo, the music isn't literally constantly getting more intense. Within each phrase there will be moments of increasing and decreasing intensity. The point is that, because of the changes in the music outlined, the overall intensity gradually increases over time.

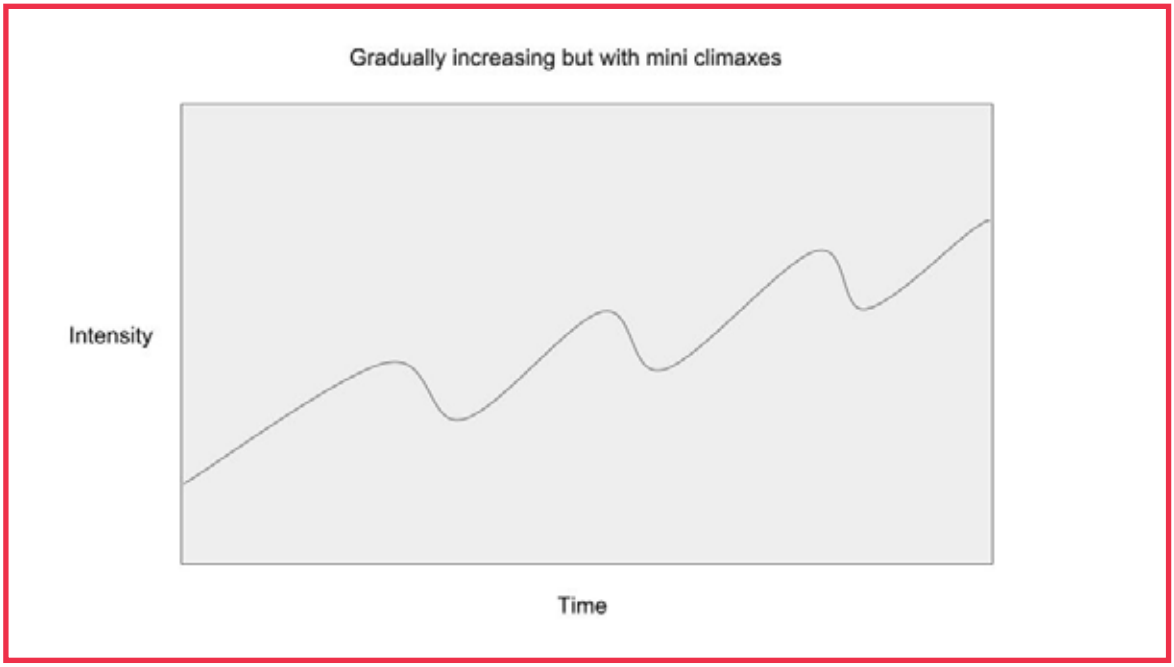
Hopefully these two examples of a constantly ascending arc gave you a good idea of what an arc is and its impact on the listener. Look at a few diagrams demonstrating some other common musical arcs:

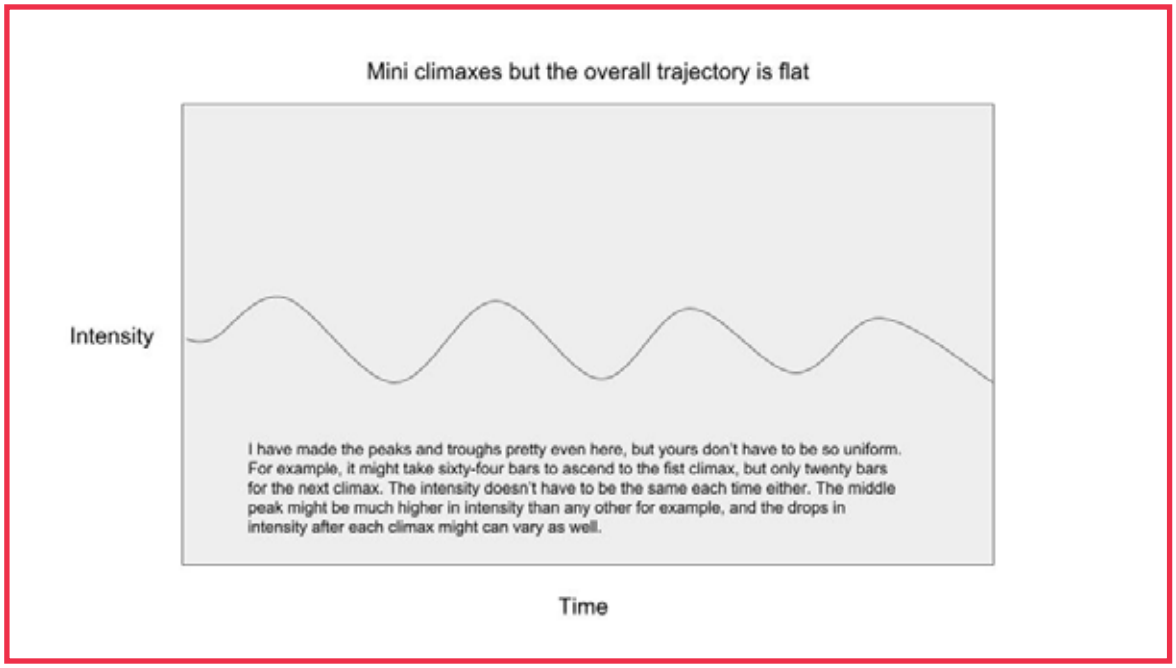



Flat Arc
Intensity
Not every musical contexts needs changes in the music.
Music for meditation for example may employ a flat arc.
Time


Golden Ratio
Placing the climax about ⅝ of the way through the performance is a very common arc
Intensity
Note: the rest of the arc can be anything so long as the climax occurs ⅝ of the way through the music
Time


Anti-Climax
Intensity
Sometimes a sudden decrease in intensity will be used instead of a climax. The anti-climax is often still placed at about ¾ of the way through the performance though.
Time


Gradually increasing but with mini climaxes
Intensity
Time



While the arcs given for 'Stairway to Heaven' and the solo in 'Lingus' describe musical changes across an entire performance, arcs can also be used to understand smaller time spans. For example, the overall arc of the performance may be constantly ascending while each eight bar phrase uses the golden ratio arc. In the 'Lingus' solo, even though the overall arc gradually moves upwards, each eight bar phrase tends to rise in intensity before tapering at the end and dropping back down in intensity for the start of the next phrase. When you are creating arcs yourself, remember to use them for not just the overall structure of the performance, but also for individual phrases or sections.

These arcs can also be combined with each other where they are compatible. The lead up to the climax in a 'golden ratio arc' could be the 'gradually increasing but with mini climaxes arc'. Alternatively, a 'flat arc' could be the lead up to the 'golden ratio arc'. You can even combine arcs together, like making the first half of the performance the 'gradually increasing arc' before moving into the 'decreasing intensity arc'. Remember that these common arcs are here to give you ideas, but they are not the only ways to structure your music. In your own improvising and composing, place smaller arcs within larger ones, combine arcs with each other, and use your creativity to turn these common examples into interesting musical structures.

EXERCISE

Choose one of your favourite songs at the moment. Listen to the song a few times and, on a piece of paper, draw a line that describes how the intensity changes over time (just like with 'Stairway to Heaven' and 'Lingus' earlier). Think about what it is in the music that is causing the intensity to change in the way that it is. See if you can match the arc you drew to any of the common arcs or some combination of them.

EXERCISE

Repeat the above exercise, this time drawing the arc of each section and each phrase of the song. Once again, see if you can work out what it is that is making the intensity change in this way and see if the arc matches any of the common arcs

MUSICAL FEATURES THAT AFFECT AN ARC

There are many musical features that affect the intensity of a piece of music. By manipulating how these features change over time, you can produce musical arcs yourself. While the specific effect that different musical changes will have on the intensity of the music depends on the musical style, in general, the following features will increase the intensity:

- Louder dynamics
- More instruments
- Thicker textures
- The use of shorter note durations (e.g. semiquavers instead of crotchets)
- Faster tempi
- Acceleration in the tempo
- Higher pitched melodies
- Ascending melodic lines
- Busier phrasing
- More chromaticism
- More dissonance over the underlying harmony
- A faster harmonic rhythm
- Less repetitive harmonies
- Less repetitive melodies
- Polyrhythms
- Asymmetrical phrasing
- "Aggressive" or "rough" timbres (e.g. electronic distortion or growled vocals)
- Brighter timbres
- Extended techniques
- More ornamentation

The following features will generally reduce the intensity of the music:

- Softer dynamics
- Fewer instruments
- Thinner textures
- The use of longer note durations (e.g. minims instead of quavers)
- Slower tempi
- Deceleration in the tempo
- Lower pitched melodies
- Descending melodic lines
- Sparser phrasing
- Less chromaticism
- More consonance over the underlying harmony
- A Slower harmonic rhythm
- More repetitive harmonies
- More repetitive melodies
- Rhythms that emphasise the established metre
- Even phrasing
- "Delicate" or "clean" timbres (e.g. a sine wave or a flute playing softly)
- Less ornamentation

Look out for these features the next time you are listening to music. Think about how the piece changes over time, what in the music changes to create these changes, and what effect those changes have on you as the listener.

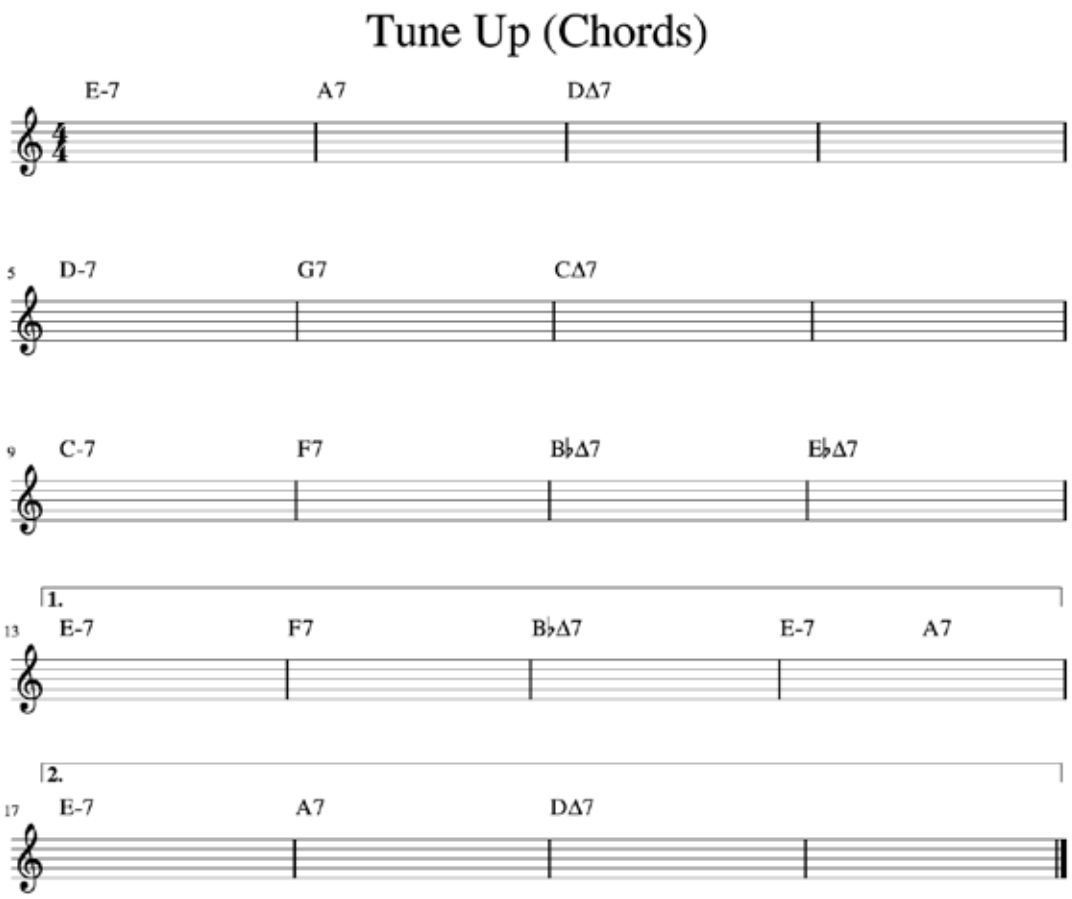
TIP

You can go back to the arcs you drew in the previous exercises and see how the above features shape the arc of the music.

EXERCISE

Soundbite 6.1

Improvise over the chords for the Jazz standard 'Tune Up':



Improvise three choruses over this progression (one chorus is one play-through of the chord progression). Give the first chorus a low level of intensity, the second chorus a medium level of intensity, and the third chorus a high level of intensity. Remember to use the musical features described earlier to do this. This exercise can be made a group exercise by adding rhythmic or harmonic accompaniment.

EXERCISE

Soundbite 6.2

Repeat the above exercise. This time, instead of suddenly changing intensity every chorus, gradually transition between the intensity levels so that the arc is one smooth increase in intensity.

TIP

You can listen to the accompanying soundbite for a demonstration of this exercise.

EXERCISE

Once again improvise over the chords for 'Tune-Up.' Perform multiple times over this chord progression. Each time you do, replicate one of the common arcs described on page 261. Try each arc a few times, as it can take some practice to get it perfectly right. Once you are confident with this, try combining the common arcs together. This can be made a group exercise by adding harmonic or rhythmic accompaniment.

EXERCISE

Repeat the above exercise. Instead of just choosing an arc for the entire performance, also choose some arcs for smaller sections or phrases. For example, maybe the entire performance will be a 'flat arc,' but each chorus will be a 'golden ratio' arc and each four bar phrase will be a 'decreasing intensity arc.' Try as many combinations as possible and see what sounds you can create with this method.

EXERCISE

Improvise in any key or scale and metre you feel comfortable in. Play multiple performances, replicating a common arc each time. Because you don't have the repeating chord progression to guide you anymore, you will have to focus a bit more on how you change the intensity of the music throughout each performance. As you get more comfortable with the exercise, try and expand the length of your arc to a performance of several minutes. Once again, try combining the arcs together.

EXERCISE

Draw your own arc on a piece of paper. This might be based on one of the common arcs or entirely original. Improvise freely and bring this arc to life in you performance. This can be made a group exercise by improvising together freely.

EXERCISE

Improvise freely, giving an arc to the music. This time, do not pre-plan the arc or arcs you are going to use.

CREATING ARCS AS A GROUP

So far we have been exploring what arcs are and how to make them, but we haven't really discuss how this is employed in group improvisation. Just as different improvisers can change dynamics together, improvise an ending together, or arrive at a common metre together, a group of improvisers can work together to generate musical arcs.

Listen to the solo in 'Lingus' again:

LINGUS

Clip 3.6.3
4:18 to 8:16

You will notice that the drummer gradually introduces more layers to his drum beat as the intensity of the solo increases. He also employs many of the same techniques that we have just discussed, such as increasing dynamics, making his playing busier, and introducing more polyrhythms. In this case, the drummer is mainly following and reinforcing the arc that the soloist creates. This does not have to be the case though.

Listen to the improvisation section in 'Emergence' by Mark Isaacs, performed by Mark Isaacs Resurgence Band on the album *Aurora* from 2:24 to 5:14:

EMERGENCE - MARK ISAACS

Clip 3.6.4

In this improvisation, the electric guitar and saxophone alternate solos while the piano, bass, and drums accompany. After this, the band smoothly transitions into a group improvisation where there is no clear soloist. The arc in this example shares a very similar trajectory to 'Lingus'. This time, however, changes aren't driven by a single soloist, but by the group as a whole. Throughout the improvisation, all of the performers are gradually changing what they play to contribute to the increasing intensity. Some moments in the recording that demonstrate this are the pianist playing polyrhythms to ramp up the intensity leading into the next solo, the guitarist repeating and crescendoing on a repeated motif in its high register before the group improvisation begins, the saxophonist using chromaticism to increase the intensity of their playing, the bassist making their riff more rhythmically busy as the improvisation goes on, and the drummer using more cymbals and emphasising beat one and three of each bar less clearly as the improvisation goes on.

But how do you do this yourself? When you improvise an arc on your own, you have complete control of where you take the music. In a group improvisation though, control over the music is shared amongst the different performers, so you might not all agree on where the music should go. Even if you do agree on what musical arc to create, it isn't easy to communicate and coordinate the changes in the music required for creating that arc. As it is often discussed throughout this book, this means you have to use active listening and non-verbal communication to work together.

For now, let's assume that you all know and agree upon what musical arc to create. How do you make sure that you are all making the various changes to the music at the same time? One way for this to happen is for one person to start changing the different features of their music and for others to follow. For example, a drummer might suddenly introduce a polyrhythm to increase intensity. The other musicians might then reinforce this in their own ways. As another example, a violinist may suddenly play pizzicato at a softer dynamic to bring the intensity down, which the other musicians recognise and reinforce. For this to work, everyone needs to use their active listening skills (as described on page 128) and be able to react quickly.

Another method for coordinating changes as a group is non-verbal communication (page 132). Maintaining eye contact and using signals like head nods or hand gestures to organize changes in the music can be very useful. For example, making eye contact with each of your fellow ensemble members as you start a diminuendo can signal them to pay attention to what you are doing and follow you. Specific gestures like pointing upwards with your hand or instrument to tell someone to play higher in pitch or placing a single finger on your lips (to imitate a "shoosh" sound) to tell someone to be quiet can also be used.

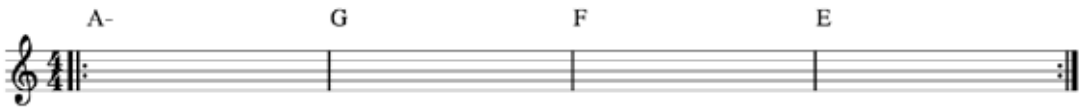
It's also possible to anticipate what your fellow improvisers will do. This approach is more effective when you have played with the group multiple times or when everyone in the group has a shared musical understanding. The idea of forming an arc by guessing what is going to happen may sound unreliable, but, especially when used in combination with the other techniques, it is an integral part of creating musical arcs as a group. For example, if you know from experience that the pianist often plays fast arpeggios before moving into a loud crescendo, then you can predict and react to this crescendo before it even happens! In terms of a shared musical understanding, you might know that playing part of the pre-written melody during a Jazz improvisation is sometimes a way of signalling the end of a solo, so you start bringing the intensity down when you hear this.

If you happen to be improvising over a reoccurring event (such as a repeated chord progression), then it can be useful to have changes in the music occur at moments where the event repeats. In the 'Lingus' solo, the drummer tends to add additional layers to his beat at the start of the repeated chord progression, and the soloist tends to make significant changes in intensity at these points as well. In 'Emergence', each musician tends to change an aspect of their playing when the soloists alternate with each other

EXERCISE

Soundbite 6.3

As a group of at least three, improvise over this repeated chord progression referred to as the Andalusian cadence:



As a group, decide upon a musical arc to perform. Use the strategies described earlier (following others, non-verbal communication, anticipation, and changing at points of repetition) to improvise this musical arc as a group. Be sure to use you active listening skills throughout.

EXERCISE

In a group of at least three, improvise freely. Once again, choose an arc to perform and use the aforementioned techniques to bring this arc to life. You no longer have the repeated chord progression to mark moments where the music should change, but you can always improvise a repeating pattern yourself.

TIP

In these exercises, try and use all of the discussed strategies rather than just relying on one or two. If you notice, for example, that you only every use non-verbal signals to communicate a change, then make a conscious effort to employ the other techniques.

Of course, you may not always be able to pre-plan what arc you will play as a group. So how do you improvise musical arcs collectively? The same techniques used to bring an existing arc to life can also be used to determine that arc mid-performance. Generally, what happens is that each performer will change the music in the way they think is most appropriate and the group will either follow them or not.

For example, when the piece starts, the guitarist might gradually play faster, use more chromaticism, and get louder to increase the intensity. Every time the guitarist plays faster, introduces more chromatic notes, or gets louder, the other improvisers will choose whether to reinforce this increased intensity or not. Say the group follows the guitarist and the energy ends up being really high. The guitarist might try to bring the intensity back down by suddenly switching to a softly repeated single note. In this case, each improviser will once again choose whether to follow the guitarist or not. If no one or very few people follow the guitarist, then the overall intensity will stay high, and the music will not change significantly. Let's say no one follows the guitarist, but a short while later the violinist also tries to bring the intensity down by sustaining long notes at a softer volume. As usual, the group has a choice. If half of the improvisers follow the violinist, but the rest do not, then the intensity will be reduced but not to the degree intended by the violinist. All of these little interactions build up and result in changes across the entire the performance that determine the music's arc.

In addition to following changes made by others, all or part of the group may anticipate changes in the music. As before, this anticipation can be because they know their fellow improvisers well or because the group has a shared musical understanding. For example, if everyone in the group likes following really loud and intense sections with really quiet sections, then there is a good chance that you will be able to predict when everyone else is going to want to suddenly become quiet. As another example, given how common it is to arrange musical phrases in groups of two, four, or multiples of four, the whole group of improvisers might instinctively change to contrasting material after sixteen of thirty-two bars in a free improvisation. This kind of anticipation is important for being able to shape the arc as a group without an individual person needing to initiate every single change.

The arc created by a group may be the result of each member working together to intentionally shape the music a certain way. Often though, improvisers will intuitively create satisfying arcs in the music just because of their experience. While you should try and shape your improvised performances in satisfying ways, it is important to remember that things rarely go completely to plan and that the arc you end up with will almost definitely be (at least) a little bit unpredicted. This isn't necessarily a bad thing though. Unpredictability and chance are part of the fun of improvising!

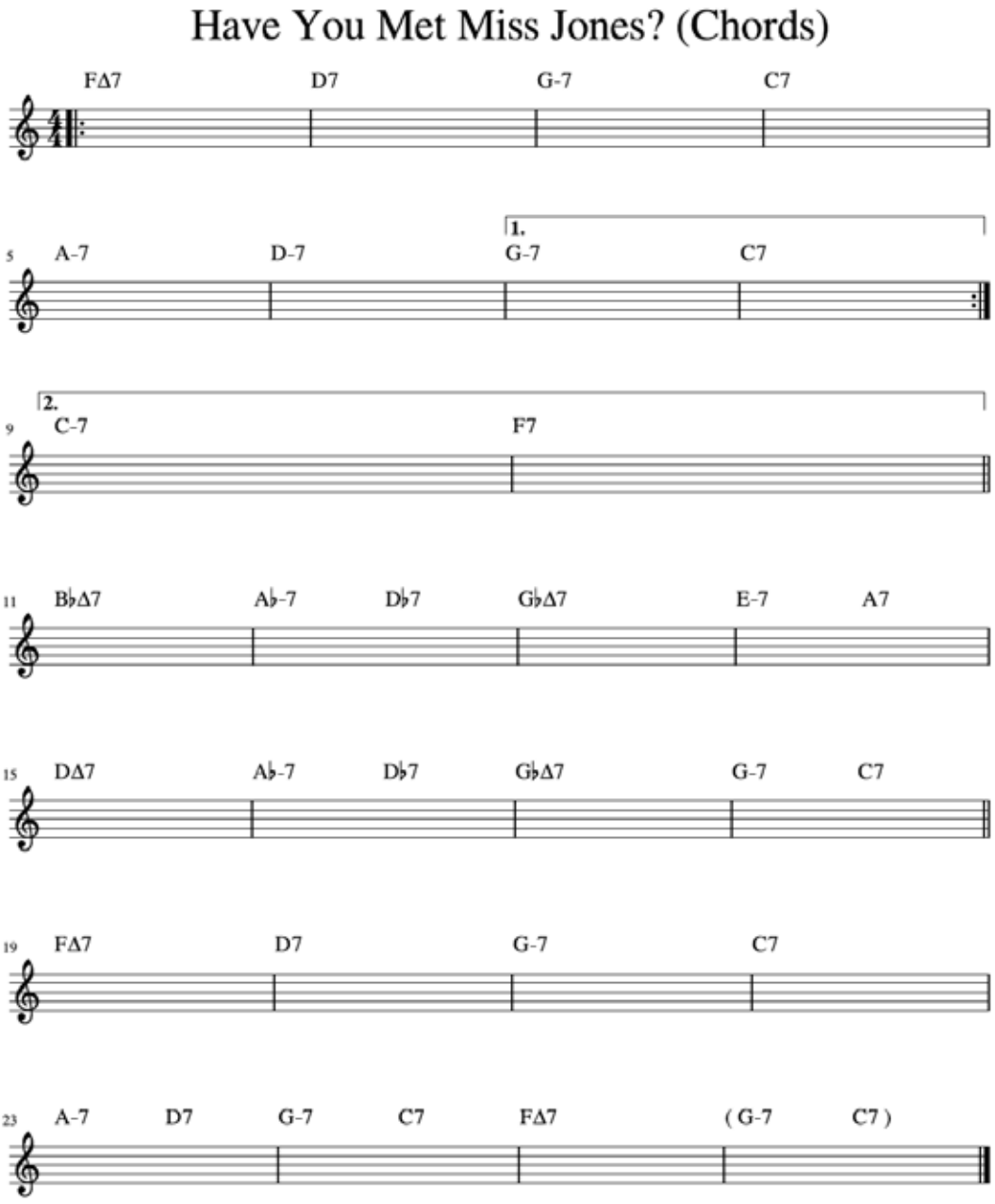
EXERCISE

Improvise freely as a group of at least three. Do not determine you arc beforehand. Remembering that arcs are formed by following or anticipating each other's changes (and a little bit of chance), improvise a satisfying arc as a group. Monitor the arc you are creating and experiment with pushing the arc in the way you want, letting others shape the music, and a bit of both. Use active listening, non-verbal communication, and anticipation to ensure you are working as a group.

EXERCISE

In a group of at least three, improvise over the following chord progression:

Soundbite 3.34



Feel free to assign performers specific roles. Using all that we have discussed earlier, work as a group to create satisfying musical arcs throughout each performance. Remember that the repeat of the chord progression can be useful for signifying changes in the music, but try not to over-rely on it.

CREATING FORM IN IMPROVISATION

The form of a piece of music refers to the specific way that it is organised. While it can refer to the structure in general, it usually means the particular way that a piece of music moves through different sections. It takes into consideration whether those sections repeat and what the similarities and differences are between these sections. There are some common templates that musicians use depending on their style, and these will affect the listener in different ways. It is important to remember that these templates are just tools to help you organise your improvisations and compositions, and they can easily be altered depending on your tastes and what will best achieve the goals of the music. Many of these forms are mostly used in pre-composed music, but are nevertheless useful as inspiration for your improvisations.

It is also important to remember that form can occur at multiple levels. The entire piece might be split into two distinct sections, but each of those sections might be divided into three different sub-sections. The overall piece would be a binary form while each section would be through-composed. Let's look at some common forms found in different kinds of music:

CLASSICAL MUSIC

Binary form

Binary form occurs when there are two distinct sections, usually about the same length. These sections differentiate themselves by being in different keys (the B section is usually in the key a fifth above the A section's, also known as the dominant), having different melodies (although the melodies can be related), and using a different chord progression. Generally speaking, the second section will retain enough in common with the first section that it sounds like it is a logical continuation of it. If the first section is labelled as the A section and the second section is labelled as the B section, then binary form can be described as AB. These sections can also be repeated (e.g. AABB). Binary form creates interest because it establishes a precedent with the A section and then contrasts this with the B section, creating the feeling that the music has gone somewhere. This being said, the B section does not have to end unresolved. It is also very common for the B section to return to the key of the A section at the end to create a sense of resolution.

A section	B section
Establishes a certain key	*Moves to a new key*
Can be repeated	*Uses a new but related melody and/or chord progression*
	About the same length as A
	Can be repeated
	Often ends in the same key as A to create closure

A single play-though of the folk tune 'Greensleeves' is an example of binary form.

GREENSLEEVES

Clip 3.6.5
0.00 to 0.53

Ternary form

Ternary form involves starting in one section, moving to another contrasting section, then returning to the initial section. It can be described as ABA. In many styles, the second A section will be varied in some way. This variation could be a change in the accompaniment pattern, dynamics, articulation, musical texture, melodic ornamentation, or other feature that doesn't critically alter the melody or rhythm. Because the A section returns at the end, the B section can contrast the A section even more significantly than in binary form. Ternary form creates the sense of movement that binary does, but it then returns to the first section, creating a sense of resolution or of returning "home". By varying the return to the A section (which many do) it alleviates some of the repetition and better maintains the listener's interest.

A section	B section	A section
Establishes a certain key	*Moves to a new key*	*Often varied in terms of accompaniment pattern, dynamics, articulation, musical texture, melodic ornamentation, or other feature that doesn't critically alter the melody or rhythm*
Can be repeated	*Uses a new but related melody and/or chord progression*	
	Can be more contrasting than in binary form	
	About the same length as A	
	Can be repeated	
	The ending should lead back into A	

'Somewhere Over the Rainbow' with music by Harold Arlen and words by Yip Harburg is an example of ternary form where the A section repeats

'SOMEWHERE OVER THE RAINBOW'

Clip 3.6.6

Rondo form

Rondo form involves alternating between multiple sections and one reoccurring section. The reoccurring section should both start and end the piece. It can be described as ABAC…A, with A being the reoccurring section. Often this reoccurring A section is called a refrain or the principal theme and the new sections episodes. While there are many different arrangements possible within this template, the most common is ABACA. Technically though, it could be arranged however you want, such as ABABABA, ABACADACABA, ABABACA, etc. The principal theme may be varied in different ways each time it returns, although usually it will stay in the same key and it will always be recognisable as the principal theme. Similar to ternary form, rondo form allows for a sense of leaving and returning to a home. The difference, of course, is that rondo form allows this movement to happen multiple times in a piece and allows the improviser to take the music in many different directions before returning to this home.

A section/refrain/ principal theme	B section/ first episode	A section /refrain/ principal theme	C section/second episode	A section/refrain/ principal theme
Establishes a certain key	*Contrast with A while still sounding like the same piece of music*	*May have some variation*	*Contrast from both A and B while still sounding like the same piece of music*	*May have some variation*
Should be memorable and enjoyable enough to still be interesting after retuning many times				

Beethoven's No. 8 in C minor, Op. 13 from 13:40 onwards. Listen out for the main theme that starts this section and see how it reoccurs.

'BEETHOVEN'S NO. 8 IN C MINOR, OP. 13'

Clip 3.6.7

Listen from 13:40 onwards

Theme and variations

A theme and variations involves the constant repetition of a theme, with significant variations of that theme on each repeat. Usually, the melody is the aspect that is common between the different variations but is also possible to take the chord progression, the specific accompaniment pattern, the outline of the melody, the general structure, some selected distinctive features, or any combination of these as the material common between variations. While this common material will usually stay recognisable even amongst the variations, other aspects of the music can be changed freely. Generally speaking, the set of variations will be structured so that they gradually drift further and further from the initial material. This basic structure of main theme followed by variations can be altered by adding introductions, codas, or even intermediary episodes like in rondo form. A theme and variations can be a powerful tool as it gives the listener something consistent to listen out for throughout the piece, but it also renders that material in various exciting and different ways. It is important to ensure that the repeated material is continuously being made exciting again and that the material does not just become repetitive or boring.

Main theme	Variation One	Variation Two	Variation Three	Etc…
Establish the melody, chord progression, rhythm, and other material the piece will be based on	*A variation of A, usually reasonably light*	*A more varied version of A*	*An even more varied version of A than previous sections*	

Mozart's Twelve Variations on Twinkle, Twinkle, Little Star. Try and identify when the start of each new variation is and figure out how Mozart has changed the music each time.

'MOZART'S TWELVE VARIATIONS ON TWINKLE, TWINKLE, LITTLE STAR'

Clip 3.6.8

Canons and fugues

In a canon, there is a main theme, and every voice that enters plays that main theme, often at different intervals. A specific type of canon called a fugue occurs when each part proceeds into counterpoint (a type of polyphonic texture) after playing the central theme (called the subject). There are also specific requirements in terms of how the subject should be transposed as each voice enters, but that is beyond the scope of this section. The repetition of the same material as each new one enters, as well as the fact that often this same material will occur throughout the piece, gives canons and fugues a strong sense of unity and identity. It often also makes the music more memorable and identifiable for listeners.

Entry One	Entry Two	Entry Three	Entry Four	Etc…
Plays the main theme/subject	*The added instrument/voice plays the main theme, either at the same pitch or transposed to a different pitch*	*The added instrument/voice plays the main theme, either at the same pitch or transposed to a different pitch*	*The added instrument/voice plays the main theme, either at the same pitch or transposed to a different pitch*	
	(In a fugue, the previous voice goes into counter-point)	*(In a fugue, the previous voice goes into counter-point)*	*(In a fugue, the previous voice goes into counter-point)*	

The start of *Music for Strings, Percussion and Celesta* by Béla Bartók is an example of a fugue. Listen to when each new group of instruments and notice how it is the same main theme. This piece has been used in various films including Stanley Kubrick's horror film The Shining (1980).

'MUSIC FOR STRINGS, PERCUSSION AND CELESTA' BY BÉLA BARTÓK

Clip 3.6.9

Sonata form

Sonata form is a large-scale structure used in many different kinds of compositions in Western art music between the 18th and 20th centuries. There are three large sections in a sonata form: the exposition, the development, and the recapitulation. The exposition will usually contain a main theme and a second theme, although it is also possible to have just one theme or to have more than two themes. The second theme will almost always be in another key, usually a closely related one. The development involves taking these two themes and placing them in different keys with different transformations. The length of the development can vary greatly depending on the style of music and the tastes of the artist. The final section, the recapitulation, involves returning to the original tonic key and playing both the main theme and the second theme (and any others) in the tonic key, before ending on an emphasised tonic chord.

It is also possible to have a coda to finish off a sonata form. It is important to note that often the ideas of sonata form, (i.e. having a main theme, a development of that theme, and then a restatement of that theme) is applied to various kinds of music, even when they are using other forms.

Whether using the typical template of sonata form or applying its principles to other forms, its structure allows for movement away from a starting point and then a return to that starting point. This journey is often made more dramatic because of the way that the material is developed and moves through different keys before returning to the "home". The fact that the development uses material from the exposition also allows for a greater sense of unity or consistent identity.

Exposition	Development	Recapitulation
State theme A	*Take the themes from the exposition and develop them in different and more distant keys*	*Restate theme A*
State theme B in a different but related key		*Restate theme B in the same key as A*
(Optional: State any other themes)		*Restate any other themes in the key of A*
		End with an emphasised tonic chord (optionally with a coda beforehand)

Listen for the A and B theme in the first movement of Mozart's 'Eine Kleine Nachtmusik'. Once they are in your head, identify how the material of the development relates to these two themes. Also try and identify when the recapitulation occurs.

'EINE KLEINE NACHTMUSIK' BY MOZART

Clip 3.6.10

Strophic form

Strophic form is specific to vocal music and refers to pieces where the same section of music is repeated with only the lyrics changing. One play-through of this single section is called a strophe. There can be some variations on each strophe, and there often will be changes to the melody to adapt it to the changing lyrics. As the music of a strophic form is mostly unchanging, it tends to put the focus onto the lyrics as opposed to the music.

Strophe one/verse one	Strophe two/verse two	Strophe three/verse three	Etc…
Play a section of music and lyrics	*Play the same music but with different lyrics*	*Play the same music but with different lyrics*	

Listen again to the previous recording on Greensleeves. Even though one play-through of the tune is in binary, as a whole it is in strophic form! In this version the performers vary the strophe but the melody and underlying harmony remain the same, even though the lyrics change.

'GREENSLEEVES'

Clip 3.6.5
0.00 to 0.53

Chain form

Chain form involves "chaining" together different sections with no return to previous material. These sections can be repeated before moving to the next section, and it is entirely possible for these different sections to be greatly contrasting and have little or no apparent relationship to each other. Most composers and improvisers would try to connect these sections in some logical way though, whether it be giving the overall piece of music a satisfying musical arc or arranging the unrelated sections so that the musical changes aren't so jarring (i.e. making sure musical features like key, tempo, time signature, rhythms, the character of the piece, and more are fairly similar between adjacent sections). A very common example of this is the medley, where a collection of different melodies or compositions are played in a row. Medleys are often used as a way of showing appreciation for a favourite artist or style, but they can also be used to introduce or go over the main melodies used (or going to be used) throughout a larger performance (e.g. you might end an extended improvisation with a medley of the major themes you used throughout). Chain form lacks a typical structure, but it does allow the listener to be introduced to a variety of new ideas in a row. Constantly presenting new material can be useful for maintaining the listener's interest, but it can also lack a sense of unity or identity, so be careful when using chain form.

Section A	Section B	Section C	Etc…
Can be repeated	*Contrast to section A*	*Contrast to A and B*	
	Can be repeated	*Can be repeated*	

Through-composition

Through-composed music is that which avoids repeating old material and instead has constantly new music. Themes, ideas, or motifs can re-occur throughout the music, but there should not be an entire section that is repeated for a piece of music to be classified as through-composed. This form is relatively common in improvisation, and in the exercises where you freely improvised you probably already used this form. This form allows for the improviser or composer to take the music wherever they feel is appropriate at that particular moment. Through-composed music can be given a greater sense of unity by repeating some previous material in a new way, such as by using the Transforming Existing Material techniques discussed on page 180. Through-composed music gives the composer or improviser greater freedom in where they can take the music, but it is important to use reoccurring material and the musical arcs on page 261 to give through-composed a satisfying structure.

Through-composed piece of music
Lack of repeated sections, although the music can still be divided into sections
Flexible in the way the music moves between different ideas and moods
Can still use previous motifs or musical ideas in a transformed way
The use of a musical arc will improve this forms feeling of structure

Mozart's Fantasia in D Minor, K. 397 is a great demonstration of through-composition. Listen to how the piece still creates a satisfying structure despite the lack of a clear form.

'FANTASIA IN D MINOR, K. 397' BY MOZART

Clip 3.6.11

Varying the existing forms

Classical music is known for its use of structure and form, but this doesn't mean Classical composers followed these templates absolutely strictly. An important way of keeping the listener engaged was by creating a balance between meeting and subverting their expectations. As a result, many composers would alter these established forms by adding new sections, taking away sections, and changing the qualities of certain sections. The added sections were usually:

- Introductions, which occurred at the very start of the piece and established the mood and usually the key and time signature of the piece before moving into the main content.
- Codas, which occurred at the end of the composition, usually to extend the ending. It often introduces new material in the same or similar mood as the rest of the music, but it can also be related to the material of the main body of the piece.
- Transitions, which were placed in between main sections to both add variety to the music and to better join the two sections together. Transitions tend not to take attention away from the main sections and so are usually short and less memorable.
- Repetitions of main sections, which may or may not have also included variations of those sections. This would vary the form without introducing drastically new material like with the other additional sections.

Aside from adding to the form, composers could also take sections away or diverge from the expected features for each section. It is impossible to examine all of the ways this can be done, but remember that the point is to maintain the logic and unity that form gives the music while still keeping it interesting for the listener through variety.

POPULAR MUSIC AND JAZZ

Verse-Chorus form

This is the structure used for most songs in Popular music. It involves alternating between a verse and a chorus and often involves additional sections like an intro, bridge, solo, pre-chorus, or outro. The verses will have essentially the same music but with different lyrics (like strophic form) and the choruses will have the same music and the same lyrics as each other. There can and usually are musical variations between repeats of these sections, although it is less common for the chorus. The usual structure will look like this (with optional sections in brackets): (intro), verse 1, verse 2, (pre-chorus), chorus, verse 3, (additional verses and choruses), (bridge), chorus, chorus, (outro). The chorus in this form provides the listener something reliable and memorable to listen to, similar to the refrain of a rondo form. The verse, like a strophe in strophic form, highlights the lyrics with its repeating music. The other optional sections allow for variety and extra interest depending on the specific style and tastes of the artist.

Verse one and two	Chorus	Verse three	Bridge (optional but extremely common)	Chorus
Same music between both verses but different lyrics	*Something memorable to maintain the piece's identity*	*Same music as verse one and two but with different lyrics*	*Completely different music to previous sections*	*Repeat the chorus until the end*
Can be variations between the music of the two verses	*May have a pre-chorus beforehand to lead into this section*	*Can be varied from previous verses musically*	*Provides some contrast before the climax of the music*	*The repeated choruses may be varied (usually by transposing it a tone higher)*
May have an intro (introduction) beforehand				*May have an outro (coda) afterwards*

A good example of a typical verse-Chorus form is 'Castle on the Hill' by Ed Sheeran and Benny Blanco on the album titled ÷. Identify the verses and choruses and work out which optional sections have been used.

'CASTLE ON THE HILL' BY ED SHEERAN AND BENNY BLANCO

Clip 3.6.12

AABA form

Many Jazz compositions are based on popular songs from the time. As a result, a particularly common form for the main melody of a Jazz composition is AABA form. These compositions are generally thirty-two bars long with each individual section eight bars long. Often the end of the second A section will be varied to lead into the B section. The B section is frequently in a different but related key and will use a melody that is different from the first but still fits within the overall character of the piece.

Like ternary form, AABA allows for the feeling that the music has gone someone and returned. The contrast provides by the B section is very important when the chords are repeated multiple times during the solos, as it alleviates what would otherwise be pretty significant repetition.

A section x2	B section	A section
Is repeated twice	*Often in a different but related key*	*Repeat of the A section*
The ending of the second A section may be changed to lead into the B section	*Different melody and chord progression, but still similar enough that it sounds like the same piece of music*	*The ending may be varied to make it a more definite ending for the piece as a whole*
Each A section is usually eight bars long		

'In a Sentimental Mood' by Duke Ellington and sung by Ella Fitzgerald is a perfect example of AABA form. Try to follow the different sections as they occur.

'IN A SENTIMENTAL MOOD' BY DUKE ELLINGTON AND SUNG BY ELLA FITZGERALD

Clip 3.6.13

ABAC form

ABAC is another very common form in jazz. Similar to rondo form it allows for the musical to alternate between something familiar and something new, maintaining listener interest. The unique challenge of ABAC form is ensuring that the B section and C section are differentiated from both the A section and each other, and this could be done through different keys, melodies, or chord progressions. Often each section is eight bars long, but they may be of different lengths.

A section	B section	A section	C section
Establish the key and musical ideas	*Contrast from the A section but still sound like the same piece of music*	*Repeat A section*	*Contrast from both A and B section*
	Usually a different but related key	*May have some variation for variety or to lead into C section*	*A common technique is to start similar to one of the previous sections but diverge from there*
	Different melody and chord progression		

'Someday My prince Will Come' by Larry Morey and Frank Churchill is an example of ABAC form.

'SOMEDAY MY PRINCE WILL COME' BY LARRY MOREY AND FRANK CHURCHILL

Clip 3.6.14

The ABAC form can be heard between 0:40 and 1:16

Variations to these forms:

Like in Classical music, there are many variations possible to these forms. The addition of introductions, codas, and transitions, as well as simply removing sections or adding new sections can occur. Feel free to experiment. While not appropriate in every style of improvisation, form is important for adding a sense of unity and logic to music. These forms are also very useful when improvising a piece of music from scratch. .

EXERCISE

On your own, improvise each of the above forms (binary, ternary, rondo, theme and variations, canon, fugue, sonata form, strophic form, chain form, through-composition, verse-chorus form, AABA form, and ABAC form). For now, follow the forms strictly, ensuring the length of sections, movements between different keys, and other formal conventions are employed. Listen to the effect created by each and find what you like about each. Canons will only possible on instruments that can play multiple melodies at once, so don't worry about performing this solo if your instrument will not allow it.

EXERCISE

Once again improvise in each of the given forms but experiment with them yourself. Make sections longer or shorter than expected, don't follow the requirements of key changes, add extra sections, or do anything else that you can think of that maintains the overall idea of the form but changes it in some way. Experiment with it and find what you like about each.

TIP

It will take a while to go through and practice each form, but it will be worth it in the long run. Be sure to stick with it and learn each form in depth!

EXERCISE

n groups of at least two, improvise in each of the given forms. Choose each form beforehand, but don't plan out exactly how you will bring that form to life. Use the most typical version of each form without your own variations or experimentations. Use active listening, non-verbal communication, following a leader, and anticipation to decide as a group when to change to a new section, whether to change key, and other musical decisions that delineate the form.

EXERCISE

Repeat the above exercise, but this time don't decide beforehand what form you are going to use. Listen out for distinctive features of each of the forms, like a return to previous material or the introduction of contrasting material. You won't be able to perfectly replicate each form, but that's okay! The point of this exercise to think about how you can structure you performance without any pre-planning. Simply aiming to add some form to the music will result in a much more satisfying structure for your improvisation.

Being able to improvise these different forms is a useful skill, but how can you apply it to real improvisation? The most obvious example is during an improvisation where there is no preset structure, like a free improvisation. However, in Jazz, the repeated chord progression that the performers improvise over already strongly suggests a form. What do we do then? Even in situations where a structure is already implied, you may be able to alter it to fit into a different improvised form. For example, a hymn being improvised over by an organist may be in strophic form, but by placing new sections in between each of the strophe, the music suddenly becomes a rondo.

Before

Strophe one	*Strophe two*	*Strophe three*	*Etc...*

After

Strophe one (refrain)	*Episode one*	*Strophe two (refrain)*	*Episode two*	*Etc...*

As another example, you might be improvising over a thirty-two bar composition in binary form. However, if you create an entirely new section of about the same length, then return to the original composition, suddenly that original composition has just become the A section of an even bigger ternary form!

Section A	Section B	Section A
Thirty-two bars in binary form	*Thirty-two bars of a contrasting section*	*Thirty-two bars in binary form*

Just as it is possible to take a composition and make it part of a larger form, it is also possible to insert smaller forms into a pre-determined template. For example, the chords you are improvising over might be in AABA form, but you might arrange your two bar phrases so that they create an ABAC form. You might improvise a short melody then vary it like a theme and variations while still making the melody suit the chords. Remember that just because the form might not be able to be implemented exactly as it is traditionally intended, it does not mean the underlying idea of the form can't be used on a smaller scale.

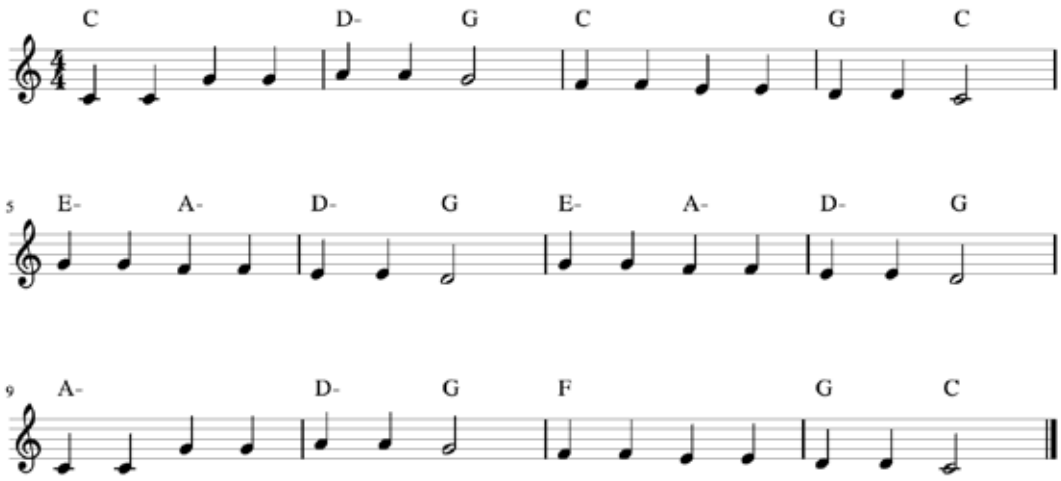
Section A of eight bars	Section A of eight bars	Section B of eight bars	Section A of eight bars
Two bars of phrase one	*One bar melody*	*Through composed melody*	*Four two bar phrases that contrast each other like in chain form*
Two bars of phrase two	*Variation one*	*May have some variation for variety or to lead into C section*	*A common technique is to start similar to one of the previous sections but diverge from there*
Repeat phrase one	*Variation two*		
Two bars of phrase three	*etc...*		

It is also possible to simply break the pre-existing form. For example, you might be playing a popular song and then proceed into a through-composed improvisation with material from that song.

Verse one	*Verse two*	*Chorus*	*Verse three*	*Start a through composed improvisation...*

EXERCISE

Improvise over 'Twinkle, Twinkle, Little Star.'



Experiment with the four approaches above (adding new sections, fitting the composition into a larger form, adding smaller forms into the pre-existing form of the composition, and breaking the form entirely). You can use the melody, the chords, or both as the material for your improvisation.

STRUCTURE IN NORTH INDIAN CLASSICAL MUSIC

There are many genres of North Indian Classical music, but the one you are most likely to be familiar with is alap-jor-jhala-gat. This is the genre popularised by Pandit Ravi Shankar for many westerners. Performances of North Indian Classical music can last for well over an hour at times, and as a result, there needs to be a well-designed structure to keep listeners engrossed in the music.

The alap-jor-jhala-gat style is an instrumental genre and involves a soloist on a string instrument, an accompanist on a tabla (two pitched drums), and something to provide the "drone", usually the soloist's student playing the tamboura (a four-stringed instrument where the performer strums the open strings and lets them ring out). These improvisations will usually occur in a specific raga, which is a set of musical conventions that the performers need to bring out in their playing. These conventions include things like particular pitches, distinctive phrases, dominant notes, certain kinds of ornamentation, certain kinds of intonation, and much more. Different ragas are also associated with different moods (called rasa), different times of the day, and different seasons. The tabla player will accompany by outlining the rhythmic cycle, but they can also take solos themselves or interact with the soloist in different ways.

The different sections within this genre are easy to remember because the genre is named after the four sections! These are the **alap**, the **jor**, the **jhala**, and the **gat**. Let's look at each one in more detail and think about how the principles could be applied outside of Indian music.

ALAP

Depending on the style of music and the tastes of the performer, the alap can last anywhere from a few minutes to over an hour. It may last for less time, be equal in length, or greatly outlast the rest of the performance. The alap, performed by just the soloist and the drone, has no sense of metre or pulse, and the overall goal of this section is to slowly reveal the intricacies of the raga being played. In vocal music, it will start with the singer singing and sustaining the tonic, but in instrumental music, it usually begins by strumming the instrument's sympathetic strings (extra strings which ring out "sympathetically" when particular notes are played) or a few initial phrases outlining the raga.

As the alap goes on, the various distinctive phrases and characteristics of the raga will be slowly revealed by the improviser, and the rate at which this unveiling occurs is important for maintaining tension for the listener. The other main way that tension is created and sustained is by delaying the ascent to the raga's upper tonic. As the alap moves on, the soloist will gradually use more and more of their instrument's upper register, with the climax of the alap occurring when the soloist reaches the upper tonic (this upper tonic is an octave above the middle tonic of the instrument) and goes beyond it. The improviser will maintain this tension by creating and subverting the listener's expectations in regards to this upper tonic, often playing a phrase as if they are going to hit the higher notes before going back down, or even lightly touches the upper tonic without fully providing the resolution of that note. It is the slow revealing of the raga and the gradual ascent to the upper tonic that allows for the long improvisation of the alap.

Throughout the alap, the soloist will delineate sections with a mohra. This is a short phrase that brings the music back to rest on the middle tonic. While there are many possible mohra, this phrase will usually approach the tonic from below, go to the second degree of the scale, and then finish on the tonic. Even though the rest of the alap lacks pulse or metre and contains phrases that go for varying lengths, the mohra will create a temporary feeling of metre with the tonic occurring on the downbeat of this temporary metre. Aside from the use of the the mohra, the alap will often also follow the asthai-antara form that is used in the gat, and might also include the optional sections of sanchari and abhog (see a description of these sections below). In the alap, the lack of pulse and metre makes the form ambiguous and free-flowing.

The alap could be summarised as a gradual ascent to the upper tonic that also involves gradually unveiling the intricacies of the raga. This underlying idea can easily be applied to a solo in Jazz or Rock. Start in the instrument's middle or lower register playing a small set of phrases that stay around the tonic. As time goes on, gradually ascend to you instrument's upper register and use more and more phrases that are distinctive of the style you are playing in.

You might also adapt the way that sections are set out in the alap. For example, you could employ a kind of mohra to delineate subsections in your improvisation or use the asthai-antara form to structure your material. Hear an example of a performance that draws on the alap without being in the traditional style in the accompanying soundbite.

Soundbite 6.5

EXERCISE

In a key or scale of your choosing, improvise an alap. Revise the above discussion to help with this. Focus on maintaining tension throughout the improvisation. This can be made a group improvisation by having someone sustain the tonic of you chosen key/scale.

TIP

Start by improvising short alaps then gradually increase the length. The longer you play the harder it will be to maintain the tension, but keep practicing until you get it.

JOR

The jor is signified by the entrance of a pulse. There is still no specific tala or metre though. The jor is more like playing your instrument while you tap your foot at a constant rate. You can use the asthai-antara form if you like, and, like the alap, subsections are concluded with a mohra that temporarily creates a sense of metre. In dhrupad, a traditional vocal style, this section starts slowly and gradually increases in tempo. In instrumental performance this is optional, but this gradual increase in tempo can be a great way to smoothly transition into the jhala which also uses an accelerating tempo. Another common method for manipulating the tempo is to simply double the speed at different points in the performance.

Soundbite 6.6

As the jor doesn't have too many formal constraints in the first place, there isn't too much to say about how it can be adapted to other styles. The most adaptable aspects are the gradual increase in tempo and the use of mohra to delineate sub-sections. Hear how the techniques of jor could be applied in the accompanying soundbite.

EXERCISE

In whatever key or scale you are comfortable, play a jor. Revise the above discussion for advice on the structural elements you should include. This can be made a group improvisation by having someone sustain the tonic of you chosen key/scale.

JHALA

The jhala is a climactic section that can occur at multiple points in the music. In alap-jor-jhala-gat, the jhala will occur after the jor as the name implies, but it can also occur after the gat as a climactic end to the performance as a whole. On string instruments, it involves alternating between the bass strings and a melodic line, with the tempo gradually getting faster and faster. This section may end with a mohra (a phrase that brings the music back to the middle sa or tonic) or often a tihai (the mohra may even be the tihai). The alap, jor, and jhala all transition into each other smoothly and are unmetered, so it is possible to consider the three sections as part of a larger whole. There is often a short break between the jhala and gat to further create this differentiation, and the musicians may even retune their instruments here.

The alternation between a bass note and melodic phrases and the gradual increase in tempo are two clear devices that can be applied to other kinds of music. The use of a tihai, mohra, or both to end the section is another useful concept. Of course, the situation you are in may not always allow for the tempo to gradually increase, but this doesn't mean you can't use faster sub-divisions to create the effect of increasing speed. Hear how you might adapt the techniques of jhala in the accompanying soundbite.

Soundbite 6.7

EXERCISE

In you chosen key or scale, play a jhala. Read through the above discussion for assistance and aim to produce the gradual increase in intensity provided by the increasing tempo. This can be made a group improvisation by having someone sustain the tonic of you chosen key/scale.

TIP

Depending on your instrument it may be difficult to play the alternation between a bass note and melodic phrase. Find an approach that works best for you.

GAT

Within all of this improvisation, there is still some pre-composed music. The gat is a pre-composed melody that the musician has learnt or composed. A pre-composed gat is usually in two parts, but also potentially four parts. The two expected sections of a gat are the asthai and antara, and there are two optional sections which are the sanchari and abhog. These four sections are differentiated by register. The asthai is critical for demonstrating the distinctive qualities of a raga and will usually occur in the middle register of the instrument without reaching the upper tonic. The antara will start by ascending to the upper tonic, potentially multiple times, and will also go beyond this into the instrument's upper register. The sanchari is like a second asthai and the abhog is like a second antara. The sanchari and abhog provide an opportunity to contrast the first two sections and demonstrate a different way of interpreting the conventions of the asthai and antara. The sanchari and abhog are often shorter in length than the asthai and antara.

The start of the gat is where the tala enters the performance. The tala is the rhythmic cycle of the music and is essentially the Indian Classical music version of metre. Both the pre-composed and improvised parts of the gat will be in this tala. The tabla player will often maintain the tala, but both the soloist and tabla player will be using polyrhythms over this underlying metre. Throughout the entirety of the gat, the tempo often gets gradually faster and faster. After playing through the pre-composed part of the gat, improvisation begins.

In vocal music, the improvisation involves using both the lyrics and melody of the gat as material to improvise with and develop. When the music is instrumental, however, there is only the melody to draw from. Like the alap, the improvised portion of the gat can be short or very long depending on the artist and the specific context that they are performing in. The improvised segment of the gat should bring out the character of the raga being used and the characteristics of the pre-composed section of the gat. You can do this by following the shape of the pre-composed melody but still improvising new material or by developing the actual material of the gat. Often, the opening line of the will be repeated and varied in different rhythmic ways. This includes things like repeating certain notes, sequencing, ornamenting the melody, adding learned melodic patterns, and much more. In addition to these rhythmic and melodic variations, tihais (page 164) are used throughout the gat.

Throughout this section, the pre-composed gat can return at many points. First of all, part of the gat is used to reinforce significant cadences (cadences are moments where a musical phrase ends). The gat is also often played by the soloist to allow the tabla player to take a solo. The gat can also be played simply as a way to return the listener to some familiar material, often after a tihai or other device that contrasts the gat's tala (metre). Think of the pre-composed melody of the gat as the refrain of a rondo, occasionally returning to give the music unity and re-ground the listener.

The end of the gat will often be a sawal jawab (the form of dialogue discussed on page 251) followed by a final jhala that ends with a tihai. Because the musicians in a sawal jawab will alternate more and more frequently and because a jhala involves gradually accelerating in tempo, the ending of a performance of North Indian Classical music ends up being extremely exciting and climactic. The final tihai of the performance will often be a tihai within a tihai. This means that not only is a sub-phrase repeated three times to create a tihai, but the tihai itself is repeating three times! Because of the complexity of doing this, this tihai within a tihai will usually be pre-planned.

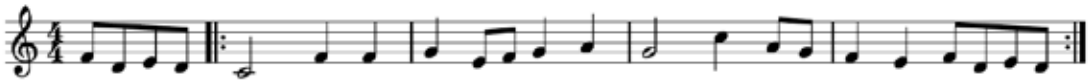
In many musical styles, the underlying methods and principles of improvisation in the gat will probably already be present. Nevertheless, there are plenty of concepts to draw from the gat. One applicable idea is the following of the words and shape of the pre-composed material. Another is using a distinctive part of the melody and: varying it throughout your improvisation, playing it in full to emphasise cadences, or using it to accompany a solo. Look at Ornamentation on page 34 and Transforming Existing Material on page 180 for different ways to vary material, but use variations that are appropriate to your style. Specific devices like the tihai, jhala, and sawal jawab at the end of the performance are extremely useful. Beyond improvisational ideas, the asthai antara form can be applied to arrange your improvisation in a satisfying way. Listen to the accompanying soundbite for a demonstration of how the structural principles in gat could be applied in a non-traditional way.

Soundbite 6.8

EXERCISE

Soundbite 6.4

With a percussionist or on your own with a metronome, play the following gat and improvise over it as if it is the gat of an alap-jor-jhala-gat performance:



NOTE

This gat has a sixteen beat tala split into four groups of four. The piece has just been notated in 4/4 for simplification.

Use the various structural devices above to help you effectively perform this. Don't forget to end with a tihai of some kind. If playing with a percussionist, provide space for the percussionist to solo by playing the pre-composed melody.

The overall structure of an alap-jor-jhala-gat performance can be summarised like this:

Alap	Jor	Jhala	Gat
No pulse	*Introduces pulse but no metre*	*Alternate melodies and bass notes*	*Often there is a short break between the jhala and gat*
Gradual unfolding of distinctive phrases	*Gradual or sudden increases in tempo*	*Still no metre*	*Metre and rhythmic accompaniment introduced*
Gradual ascent to the upper tonic, maintaining tension by "teasing" the upper tonic		*Even further increase in tempo*	*Play a pre-composed melody in asthai-antara form (with optional sanchari and abhog)*
Delineate sub-sections with a mohra			*Improvise variations of this melody or follow the shape of the melody*
May use asthai-antara form			*Play the pre-composed melody to emphasise cadences or accompany a solo*
			Often end with a sawal jawab and/or a jhala
			End with a tihai, often a tihai within a tihai

This overall structure can be applied to other styles effectively. The gradual move from no pulse, to a pulse but no metre, to full blown metre is an excellent structuring device. The same can be said for the gradual increase in tempo of the jor and jhala. Another easily adaptable structural feature is the splitting of the performance into two parts. The first part (the alap, jor, and jhala) has no rhythmic accompaniment, is completely improvised, and contains the gradual introduction of pulse and increase in tempo mentioned earlier. The second part (gat) has rhythmic accompaniment, is based on a composition, and features a clearly defined metre that the soloist contrasts against more and more as the performance goes on. Imagine the structural satisfaction of a Jazz improvisation that starts with an alp-jor-jhala as the first half of the performance before going into the head and improvising over it like it was a gat.

Listen to this recording of 'Raga Bairagi Todi' by Ravi Shankar from the album *Spirit of India*.

'RAGA BAIRAGI TODI' BY RAVI SHANKAR

Clip 3.6.15

Notice how the recording starts with Shankar strumming the sympathetic strings a few times. Once he begins playing the melody, he stays very close to the middle tonic. After playing a mohra at 1:36, he moves into the lower register of his instrument. From here, Shankar gradually increases his register and uses more phrases until reaching the upper tonic at about 7:02. Notice how, leading up to this moment, he repeats a phrase that feels like it is going to ascend to the upper tonic, but only on the third repeat does it actually do that. You will also notice that this teasing appears throughout the minute or so leading up to 7:02. After 7:02, he plays around and above the upper tonic for a short while before moving into the jor at 7:55. Shankar liberally uses repeated notes to articulate the pulse clearly. He doubles the speed of his playing at 9:46 and also introduces the strums of the bass strings. The jhala is at 10:56 before the unmetered portion of the performance ends with a tihai at 11:56 which is followed by a mohra played with a ritardando. There is a short break in the music where Shankar strums the sympathetic strings and then it is onto the gat.

The gat starts at 12:13. It starts with an anacrusis (or a pick up) where the melody begins before beat one. It is important to note that the tabla doesn't join in until beat one itself. This gat is in a tala with eleven and a half beats. Listen to how the melodic ideas of the gat are used throughout the improvisation and sequenced or played with different rhythms. There is also plenty of improvised material in addition to the variations on the gat. The pre-composed melody of the gat returns in full as well throughout this section. Two examples are 16:41 and 18:42, where the drums also take a short solo. By comparing the speed of the pre-composed gat here to earlier on, you can hear how the tempo has been gradually increasing. Tihais are also used throughout this section of the improvisation. Some examples are 16:09 or 25:22.

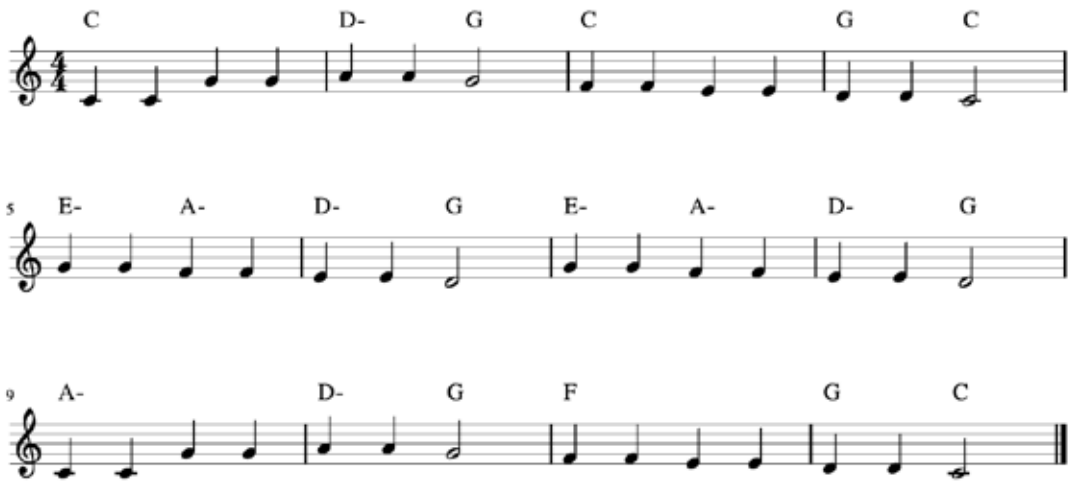
The duo moves into a jhala at 21:00, with alternation between melody notes and repeated notes on the high pitched strings. At 26:36 you can hear the tihai within a tihai discussed earlier. There is no sawal jawab in this example.

EXERCISE

Using the pre-composed melody from the gat exercise, improvise a full alap-jor-jhala-gat performance. Be sure to use all of the structural devices discussed for each specific section, and ensure that the transitions are smooth and logical. Try to ensure that the structure of the piece is such that the music sounds like it is gradually unfolding. Start with shorter performances and then work on being able to keep this structure interesting over longer periods of time. This can be made a group exercise with rhythmic accompaniment and someone outlining your chosen key/scale.

EXERCISE

Play through the pre-composed section, then perform an extended improvisation over the below version of 'Twinkle, Twinkle, Little Star.'



As you improvise, adapt the structural devices used in North Indian Classical music to this Western context, both in the ways suggested earlier and in any other ways that you can think of. Feel free to arrange the music however you like. You might add additional sections to the performance (like an alap, jor, or jhala); improvise over the chords but incorporate the techniques of North Indian music; use the melody as the base of your improvisation; or any other method. This can be made a group exercise by adding harmonic and rhythmic accompaniment.

NOTE

If you are interested in actually learning North Indian Classical music, I highly recommend Khan, A and Ruckert, G 1998, The Classical Music of North India: The Music of the Baba Alluadin Gharana as taught by Ali Akbar Khan at the Ali Akbar Khan College of Music, Munshiram Manoharlal Publishers Pvt. Ltd., New Dehli

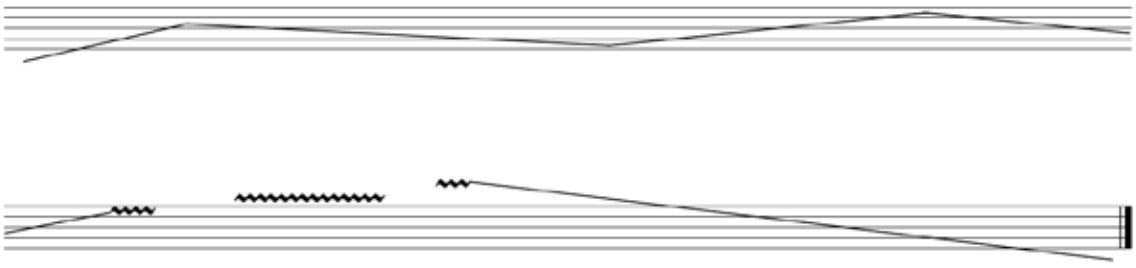
STRUCTURE WITH EXTERNAL RESTRICTIONS

So far we have looked at how an improviser can create structure as they are performing. However, many kinds of experimental improvisation add structure to a performance through external restrictions. Examples of these external restrictions include graphics, specific hand gestures, or written instructions. While it is important to be able to create structure in the moment, the use of external restrictions can make the performance more interesting and allow for a more specific structure that might otherwise be difficult to improvise. Let's look at some of these methods more closely.

Graphics

At the beginning of the twentieth century, the performance of a piece of Classical music became increasingly pre-determined. Where scores from the Baroque and Classical eras would leave some ambiguity and allow for the performers' interpretation, composers in the twentieth century started becoming extremely specific with their instructions. In response, graphic notation developed as an alternative. Graphic notation involves using images other than traditional notation to tell the performer what to play. In some cases, the graphics are similar to traditional notation, using up and down on the page to represent pitch and left to right to represent duration. Other times the graphics depart completely from the established method, simply giving an image that the performer can interpret however they want. A prominent piece that combined both strategies was Treatise (1967) by Cornelius Cardew. See two example graphic scores below and recordings on how they might be interpreted:

Graphic score similar to traditional notation.



Soundbite 6.9.1

Graphic score that diverges from traditional notation.

Soundbite 6.9.2

Listen to how the performer has interpreted the graphics into musical information such as pitch, rhythm, or mood, and how you might do the same.

Graphic scores create structure by pre-determining the order of events and the qualities of those events, but not exactly how those events should be represented musically. Placing the effort for structuring the performance on the score itself can give the performer more room to think about what they are doing in the moment.

EXERCISE

As an individual or as a group, perform the two above examples. You can interpret the graphics however you like. Some common ways of interpreting the graphics are:

- *Converting how the lines and dots move on the page to how the music moves in pitch and time (e.g. jagged lines equals an angular melodic contour and spaced apart dots equal single notes with lots of silence in between).*
- *Representing the emotional response to the image in the music (e.g. portraying an aggressive looking image with aggressive music).*
- *Using something the image reminds you of as a stimulus for your improvisation (e.g. maybe the image looks like a mountain so you use that as inspiration).*

Start by simply performing the pieces without thinking about how you are going to interpret the graphics. Once you have tried that a few times, think about or discuss with your group members some ways you might want to bring these scores to life.

EXERCISE

Draw an image to be used to structure an improvisation. It might be similar to traditional notation or be completely abstract. Of course, it can also be a combination of both (e.g. abstract images arranged on a stave). Feel free to experiment with the different graphics you can make.

EXERCISE

Either as an individual or as a group, improvise using the image from the previous exercise to inspire your improvisation. Try improvising over the same graphic a few times and see how it can be interpreted differently in different performances. If you do this as a group, ensure that everyone's image gets a chance to be performed.

Hand Gestures

Various improvisers in the twentieth and twenty-first centuries use hand gestures to structure group improvisations. These hand gestures have specific pre-determined meanings. Probably the two best-known examples of this approach are Butch Morris's Conduction® method and John Zorn's piece Cobra. In Conduction®, a conductor will direct the ensemble and use hand gestures to control the roles of each performer, when they can and can't play, how and when they develop their material, when they return to older material, the dynamics, specific timbres, and more. The conductor doesn't control everything though.

The conductor will determine part of the music but leave the rest of it up to the performer. For example, a rhythm may be specified but not the exact note or register. Giving the conductor control over only certain aspects of the music allows them to change the music over time to create structure. It also solves the issue of different ensemble members not agreeing on the structure to be used, as only the conductor determines the overall structure and only the performers determine exactly what is being played.

"TESTAMENT" BY LAWRENCE D. BUTCH MORRIS

Clip 3.6.16

Listen to a recording of Conduction® above. While Morris and the ensemble have created some pretty dissonant music here, listen to how the performance is structured by the conducting. Even though a large ensemble is improvising, there are multiple sections, changes in the music that occur together, and a clear arc throughout the piece. This level of organisation occurs because of the conductor and their hand gestures.

Cobra, on the other hand, doesn't put the power of the structure in the hands of one person and instead distributes it across the ensemble. In Cobra, various hand signals represent different musical textures, such as playing in duos or having an ensemble-wide dialogue. Anyone can request one of these changes, and there is one person at the front of the ensemble that chooses which of these signals to follow and relays the chosen messages to the rest of the band. Aside from once again improving the improvisation's structure, the fact that anyone in the group can make a hand gesture also makes the interactions between the different performers more interesting as different improvisers fight for control over the music. Listen to a performance of Cobra.

Watch the performance below and see how whenever the individual at the front of the ensemble displays a message with the cue cards, it is because someone in the band requests it. You can also see this format's effect on the performer relationships as certain performers tend to request changes more often (such as the electric bassist in the middle), while others just sit back and do what they're told.

'COBRA' BY JOHN ZORN

Clip 3.6.17

Like with Conduction®, these recordings show how the physical gestures can be used to create synchronised changes in the music and a sense of structure or form.

EXERCISE

In groups of at least three, create some hand gestures that signify different changes in the music. Use Conuction® and Cobra as inspiration. To start, design no more than four or five. Ensure that the hand gestures aren't telling the improviser exactly what to play, but just controlling aspects that affect the overall structure. It is useful to make the hand gestures resemble the musical feature in some way. Some suggestions include making someone quieter by putting one finger over your lips and imitating a "sssshhhh" sound, making someone louder by cupping your hands around the side of your mouth as if you are shouting at someone far away, pointing at someone to have them start playing, and pointing up or down to have them play higher or lower in pitch.

EXERCISE

Once you have decided on the hand signals, choose someone to be the conductor and begin a conducted improvisation. The conductor will use the hand gestures to structure what the performers do, and the performers will improvise within these constraints to create interesting musical material. The conductor should aim to structure the performance in a satisfying and interesting way according to their preferences. After every performance, choose a new conductor. Ensure everyone gets a turn at conducting and being in the ensemble.

EXERCISE

Repeat the above exercise, but this time, the conductor can't make hand signals of their own choice. Instead, the members of the ensemble will make symbols, and the conductor will relay those hand gestures to the rest of the group like in Cobra. If multiple people are making different hand gestures at the same time, the conductor will have to choose which one they are going to relay to the ensemble. Part of the interest of this exercise is seeing how the members of the ensemble interact with each other when they have the potential to control the whole band.

Instructions

Another common way of imposing an external structure onto an improvisation is with a set of instructions. It involves the performers going through a set of tasks where the specific musical material is mostly up to the performers. Some well-known examples in this category are Burdocks by Christian Wolfe and Aus Den Sieben Tagen by Karlheinz Stockhausen. The instructions can be specific and refer to musical techniques (e.g. "sing a random note and then gradually slide to the note of the performers around you until everyone is singing the same note") or they can be vague and sometimes even philosophical (e.g. "tune into the playing of your fellow improviser, and once you feel truly in tune with them, suddenly stop"). The length of the instructions can also vary. Sometimes it will be one sentence long like the two examples given earlier and other times they will go for paragraphs. Usually though, they will short enough that the performers have plenty of room for their personal input into the performance and so that they can remember the instructions. Here are some examples:

Example One:

"Sustain a single tone for as long as you can manage.

As you sustain this tone, align it as closely as you can with the sounds of your fellow performers and the environment"

Example Two:

"Play quietly using any rhythms you want, but you can only play each note on your instrument once. When everyone performer has played every note on their instrument, the performance ends."

Example Three:

"Decide on three sounds that you can use for this performance. Sitting in a circle, try to play in rhythmic unison with the person on your right, and avoid playing in rhythmic unison with the person on your left."

EXERCISE

As a group of at least two but preferably four or more, perform the above examples. These pieces leave plenty of freedom for the performers, but still think about what you are doing. Ensure that what you are playing is interesting and still works with what is being performed by the rest of the ensemble. Feel free to interact with the rest of the ensemble in the ways described on page 256.

EXERCISE

Create your own set of instructions for improvisation. Aim to strike a balance between restricting the performers and allowing them room to improvise. Your instructions should give structure to the performance, but the tasks assigned to the performers should also be interesting in of themselves. Think about how you can expand the usual way of playing music or how you can set up interesting relationships between performers.

EXERCISE

As an individual or as a group (depending on the instructions), perform your set of instructions. Play it multiple times to see the different ways that the same set of instructions can be interpreted. Feel free to adjust the piece as you go. If you do this as a group, ensure everyone has their piece performed.

It's important to remember that these external methods do not exist purely to give structure to the improvisations. They usually also aim to create interesting interactions between improvisers or to push them to improvise music in different ways. Keep this in mind if you decide to continue creating improvised pieces with these three techniques.

REFERENCES

Gaines, J.R 2006, *Evening in the Palace of Reason: Bach meets Frederick the Great in the Age of Enlightenment,* Harper Perennial, New York

Gooley, D 2015, 'Saving Improvisation: Hummel and the Free Fantasia in the Early Nineteenth Century', *The Oxford Handbook of Critical Improvisation Studies, Volume 2,* eds B, Piekut and G.E., Lewis accessed from Oxford Handbooks Online 28 Feb 2019

Hudson, R 2005, *'Rubato,' Grove Music Online* accessed Oxford Music Online 8 Feb 2019

Khan, A and Ruckert, G 1998, *The Classical Music of North India: The Music of the Baba Alluadin Gharana as taught by Ali Akbar Khan at the Ali Akbar Khan College of Music,* Munshiram Manoharlal Publishers Pvt. Ltd., New Dehli

Lieban, D 2013, *A Chromatic Approach to Jazz Harmony and Melody,* Advance Music, Germany

London, J 2001, *'Rhythm,' Grove Music Online* accessed Oxford Music Online 5 Feb 2019

Rosenblum, S 1994, 'The Uses of Rubato in Music, Eighteenth to Twentieth Centuries', *Performance in Practice Review,* Vol. 7, No. 1, pp. 33-53

Sisman, E 2001, *'Variations,' Grove Music Online* accessed Oxford Music Online 19 Feb 2019

Sutcliffe, W.D. and Tilmouth, M 2001a, 'Binary Form', *Grove Music Online* accessed Oxford Music Online 19 Feb 2019

Sutcliffe, W.D. and Tilmouth, M 2001b, 'Ternary Form', *Grove Music Online* accessed Oxford Music Online 19 Feb 2019

Trotter, R 1995, '"Raga Puriya Kalyan": Opening the Door to a Treasure', *College Music Symposium,* Vol. 35, pp. 109-123 accessed from JSTOR 13 Feb 2019

Wade, B 1979, *Music in India: The Classical Traditions,* Manohar Publishers and Distributors, New Dehli

PART FOUR
DEVELOPING INDIVIDUALITY

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GIVING YOUR IMPROVISATION CHARACTER

Think about a recording or piece of music you like. Does it sound like a series of different musical devices stringed together? More likely, the various sections of the composition will combine in a way that creates an interesting and memorable identity for the listener. This is true for both improvised and pre-composed music, and there are many ways to grant each of your improvisations a unique and interesting character.

MOTIVIC AND THEMATIC DEVELOPMENT

A motif is a short musical idea that is usually repeated and developed throughout a piece, section, or phrase of music. It is considered the smallest recognisable unit that you can divide a piece of music into (aside from individual notes). A theme is also a complete musical idea, except it is much longer. For a melody to be a theme though, it needs to be the (or one of the) main identifiable elements of the piece, such as the main melody of a canon. See the difference below:

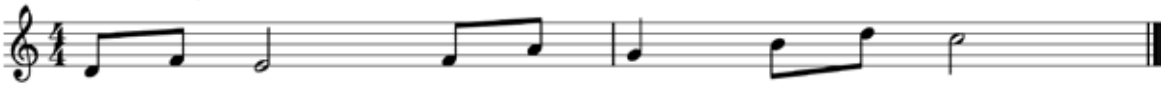
Soundbite 1.1.1

Soundbite 1.1.2

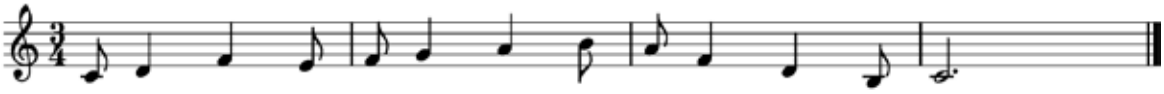
Soundbite 1.1.3

Soundbite 1.1.4

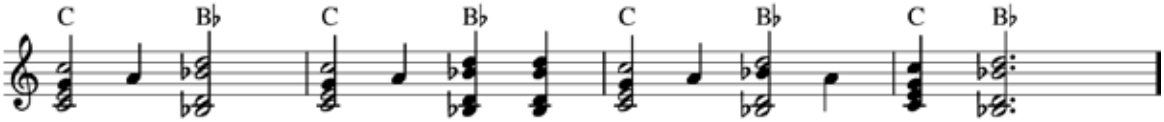
Pitch-Based Motif



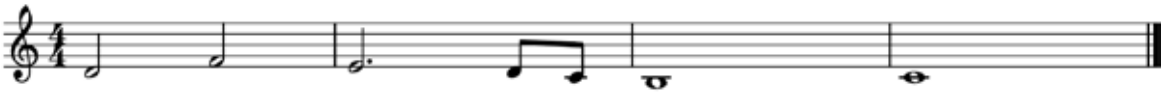
Rhythmic Motif (pitch doesn't matter, just the rhythm)



Harmonic Motif (rhythm and specific pitch doesn't matter, just the harmony)



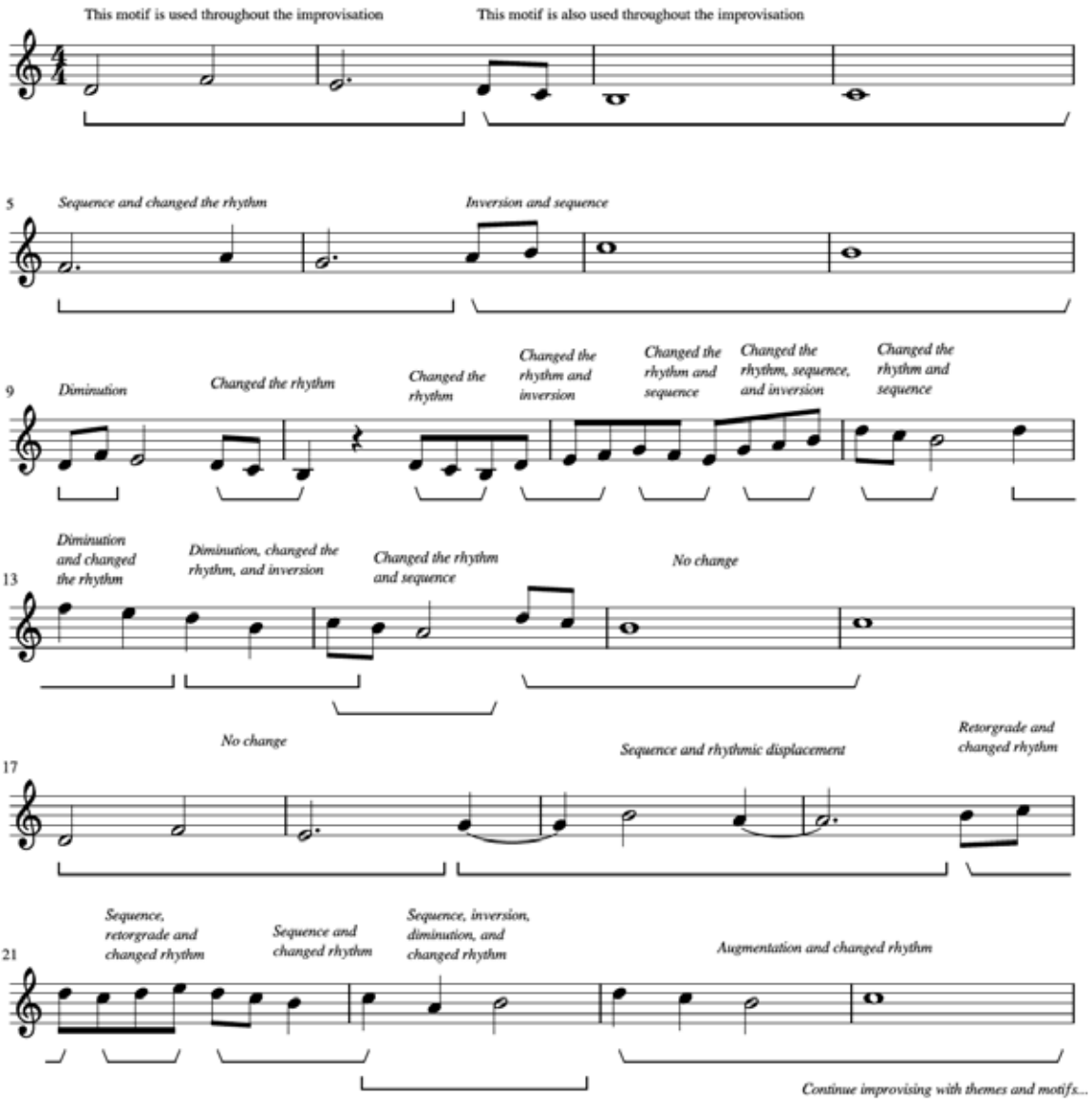
A Full Theme



As you can see from the above examples, a motif is usually very short, only lasting a few notes. It also generally refers to the pitch and rhythm of the musical fragment. However, a motif can also be a purely rhythmic or harmonic idea or even a series of notes without a specific rhythm attached. A theme, on the other hand, is a longer and more complete musical idea that can be transformed in its entirety, or split into smaller motifs and transformed that way. There will often be multiple motifs at work in a single piece of music, and sometimes multiple themes. With any musical composition though, you need to balance the sense of unity that comes with reoccurring ideas and the boredom that occurs with too much repetition. Over an extended performance, different groups of motifs or themes might be used to differentiate different sections, with a return to earlier material throughout the performance solidifying the identity of the music.

Development of a motif or theme occurs through the ways described in the **Ornamentation** and **Transforming Existing Material** sections on page 34 and page 180. By repeating one or more motifs or themes in different forms throughout a composition or performance, it gives that composition or performance a more cohesive identity. This is because the listener can hear certain ideas reoccurring and those ideas start to become associated specifically with that piece of music. This being said, simply developing any old motif or theme will not guarantee that it becomes memorable or interesting. The material you are developing throughout your improvisation should be satisfying to listen to on its own, and the different transformations should take that material and put it into evermore interesting situations. Let's take a look at an example of motivic and thematic development:

Soundbite 1.2



This example is intentionally kept simple, but it demonstrates the basics. The first four bars would be a theme. These four bars are split into smaller motifs to make it easier to work with, and even these smaller motifs aren't always used in their entirety all the time. Throughout the example, the theme (and the motifs that make it up) are transformed using sequences, inversions, changes to the rhythm, and other transformations. In some cases, the original theme is still recognisable or has some resemblance to the original material (e.g. bars 5-8, bar 9, bars 15-16, bars 17-18). Other times, it is transformed into something completely new that still fits the mood of the music. This balance between recognisability and new material is vital for maintaining a sense of individual character in the performance, as it allows the listener to hear the reoccurring ideas throughout.

Motivic and thematic development is common in the Classical music of Beethoven. To hear how motivic and thematic development occurs over a longer period, listen to the following recording:

'SYMPHONY NO. 5, OP. 67' BY LUDWIG VAN BEETHOVEN

Clip 4.1.1

You will probably notice already the use of this motif throughout:

Soundbite 1.3

From the start of the recording until 0:28, the motif is sequenced at various pitches and passed between multiple different instruments. Where the motif is quickly passed between different instruments, the final note is drawn out, an example of changing the rhythm.

From 0:28 to 0:37, the inversion of the motif is played and sequenced, now ascending instead of descending. 0:37 until 0:44 sees the motif sequenced as usual, but instead the rhythm is changed so that the final note is a quaver, not a minim. There are also occasional changes in the pitches, but the rhythm and general idea of the motif remains.

At 0:46, the music moves into the next section, but you can still see the influence of the motif throughout. The rhythm of the horns first few notes match the motif, and even though the final note is different, it still involves a descending interval. The motif returns in full at 1:22, except the key around it, has now changed to major.

This is just the opening of the piece, but it is enough to see how motivic development can be used to give a piece of music a unique and interesting identity. While you probably don't have access to an orchestra like Beethoven, you still have access to the full range of transformations and ornamentations as discussed on page 180 and page 34. Hopefully, this recording gives you a better idea of how a motif or theme can be used to provide a performance character.

EXERCISE

Improvise some short motifs and write down or remember the ones that you like. Remember, motifs don't have to have a specific pitch and rhythm and can be purely rhythmic, harmonic, or pitch-based. Improvise different transformations of these motifs.

EXERCISE

Arrange some of the motifs from the previous exercise into a full theme. Improvise various transformations and ornamentations of this theme.

EXERCISE

Using motivic and thematic development, perform an extended improvisation on the theme from the previous exercise. Use both the theme and the motifs that it is made of as material for the improvisation. Use our discussion throughout the ***Structure*** *(page 260) section to ensure the performance has a satisfying sense of movement.*

TIP

Sometimes music that employs motivic and thematic development is critiqued as being too "mechanical". This can happen if you are focusing too much on the different ways of transforming the theme and not on making satisfying music. Ensure that your goal is to create interesting and satisfying music with motivic and thematic development, rather than using these techniques for their own sake.

EXERCISE

Improvise in a key or scale you are comfortable with. As you start improvising, take motifs and themes from what you are playing and develop them for the purpose of giving the performance character. Remember to still give your performance structure and to strike a balance between giving your improvisation character and being too repetitive.

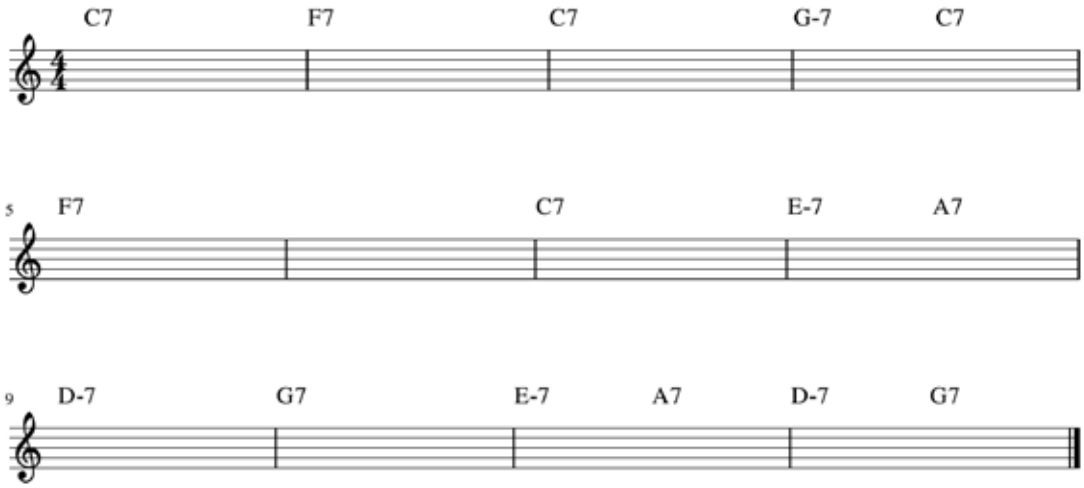
EXERCISE

Improvise over the following chord progressions. Apply the techniques we have learnt in this section, but ensure that you are still conforming to the chord progression. Don't forget that motifs can be a rhythm, a series of notes, a harmonic pattern, or a combination! This can be done as a group by adding harmonic and/or rhythmic accompaniment or on your own with the given backing track.

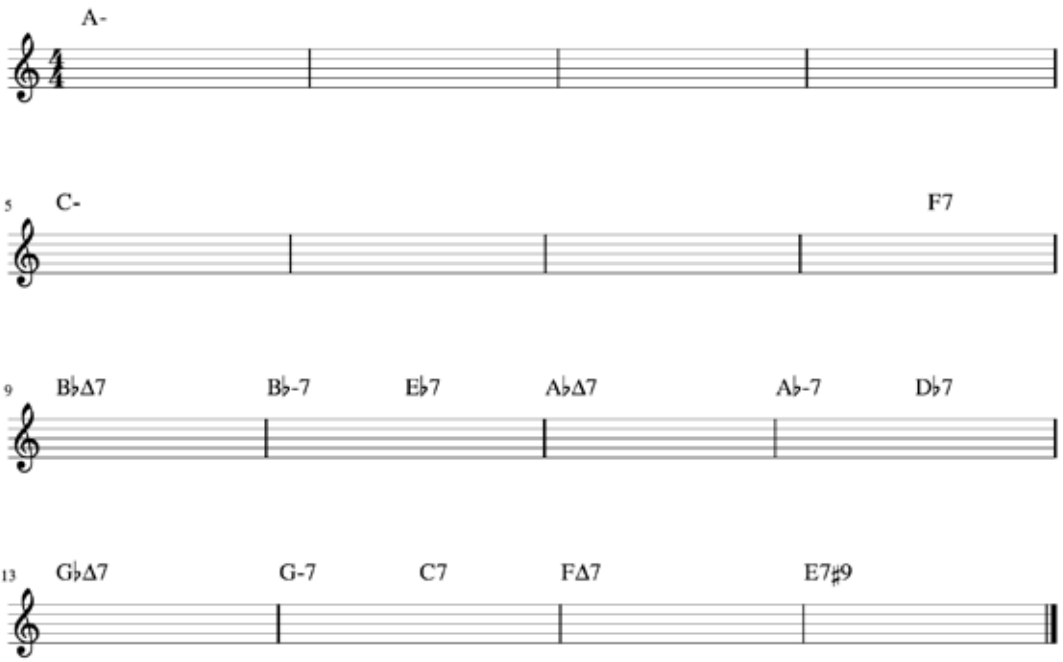
Soundbite 1.4.1

Soundbite 1.4.2

Twelve-Bar Blues

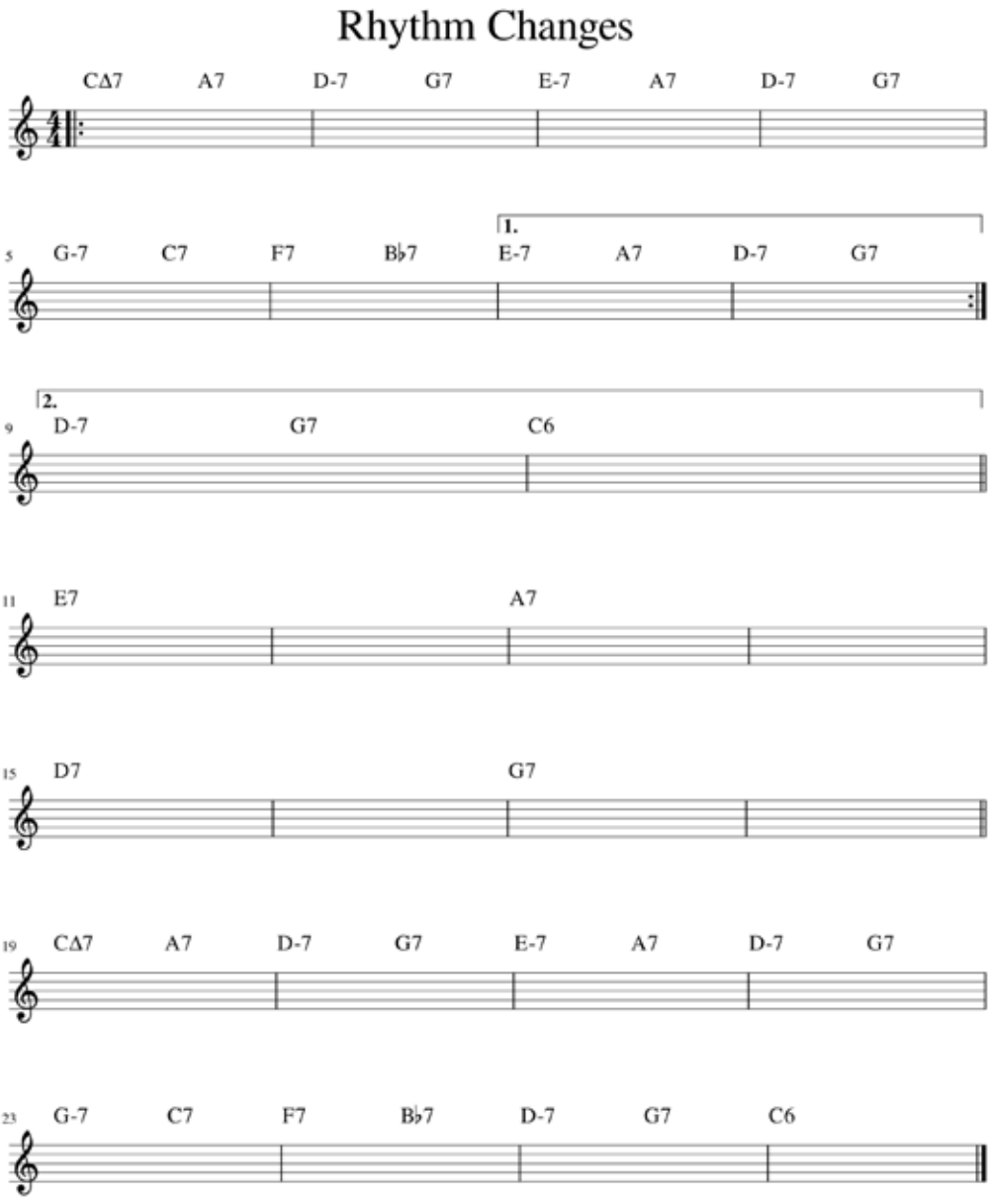


Recordame



EXERCISE (CONT.)

Soundbite 1.4.3



MOTIVIC AND THEMATIC DEVELOPMENT AS A GROUP

Motivic and thematic development can be just as effective in group improvisations. While not every style allows for the extensive melodic development we have explored above, there are often ways of incorporating the techniques in some form. Motivic and thematic development in group improvisation is essentially the same as individually, the only difference is that the motifs and themes can come from anywhere in the ensemble. For example, the violinist might play a two note motif that is taken up and developed by the rest of the group. In situations where the band takes on a motif and develops it as a group, it is important not to force your own idea if the ensemble is tending towards something else. Listen to the accompanying soundbite to hear an example of group motivic and thematic development.

Soundbite 1.5

As you can hear, a few different motifs are taken up by the ensemble, which are then developed by individual members. These developments themselves are also taken up by the group. As discussed earlier (page 299), chasing motivic and thematic development can sometimes make the music sound mechanical or dull, and it is no different in group improvisation. Use an amount of motivic development acceptable for your style; and, even when you do, the motivic and thematic development should serve the music, not vice versa.

EXERCISE

In groups of at least three and no more than five, arrange yourselves in a circle. Choose one person to start. That first person will begin improvising using a small set of motifs or themes. At approximately twenty second intervals (or whenever it feels right) the next person in the circle will enter. This person will need to take one or more of the motifs or themes from the first person and develop them in their own improvising. Continue this process around the circle, with the next person developing the motifs and themes of the previous, until everyone is playing. Make sure that what you are all playing still works as a cohesive whole and is enjoyable in its own right. Don't forget that you can split themes, into smaller chunks and that rhythms, harmonies, and a series of pitches can be a motif on their own. Practice this exercise until the group is confident with taking and developing motifs and themes from another band member.

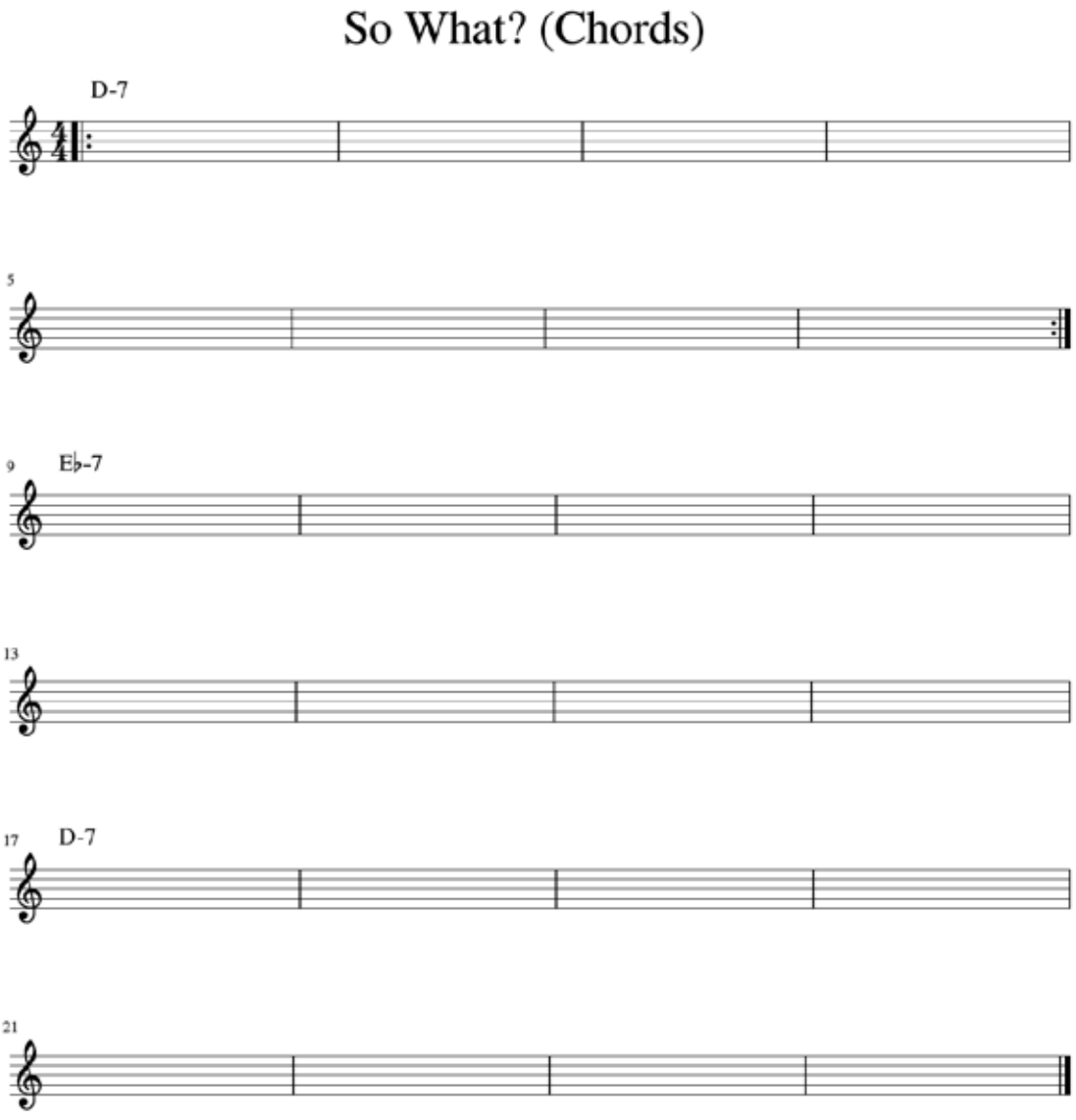
EXERCISE

As a group of at least three, improvise freely. As you go, take and develop each other's motifs and themes. Your main goal should always be to create satisfying music, but now is a chance to employ the techniques we've been practising to create a group improvisation with a sense of individual character. Improvise the ending to this performance as a group.

EXERCISE

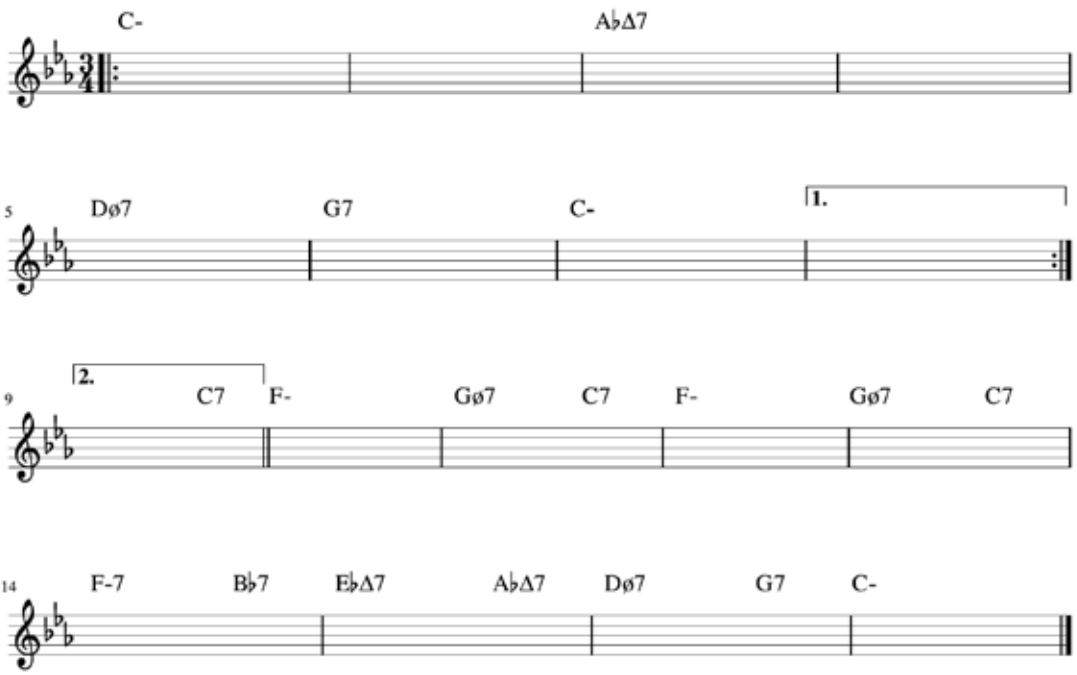
Improvise over the following chord progressions as a group. As you do this, incorporate the techniques of motivic and thematic development discussed in this chapter. Be sure to have the developed material conform to the chord progression, and be sure to avoid being too motivic if it is detrimental to the music being created. You will have to find ways of taking each other's motifs and themes while still outlining or playing the chords. Remember that just a rhythm and just the pitch can be a motif, and be sure to transform the material to suit whatever role you are playing in the group (e.g. the chordal accompanist might take a rhythmic motif from the soloist).

Soundbite 1.6.1

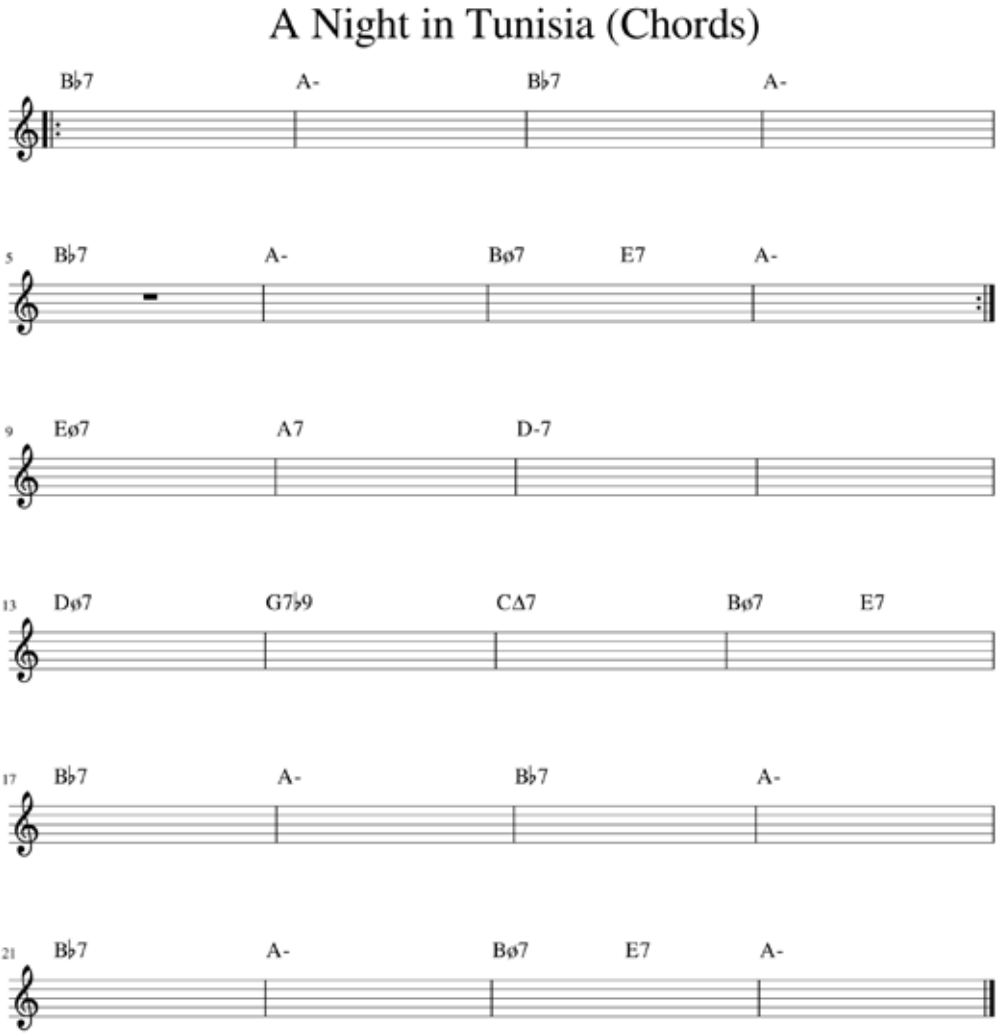


EXERCISE (CONT.)

Soundbite 1.6.2



EXERCISE (CONT.)



Soundbite 1.6.3

As useful as motivic and thematic development is, it's important to remember that it isn't the only way to give your music a clear identity.

DEVELOPING REPEATED MUSICAL IDEAS

So far, we have explored developing motifs and themes throughout a performance. Motifs and themes refer to specific musical material, but you can also develop repeated musical ideas in a much more general and conceptual way. Listen to Miles Davis solo over 'So What'

'SO WHAT' - MILES DAVIS

Clip 4.1.2

You will notice that, for much of the solo, the gaps in the phrasing are in approximately the same spot. This spot is also where the spaces appear in the pre-composed melody. Over the performance he develops this phrasing idea, giving it a stronger and more unique identity in the same way motivic and thematic development does.

In practice, he starts the solo leaving the gap within half a beat or so of the same place every time. As the performance goes on, this gap gets more and more approximate in its exact location in the two bar cycle. By repeating a particular aspect of phrasing (where the phrase ends), developing it over the improvisation (being more approximate with its location), and not overusing the idea (simply not following the rule sometimes) Miles Davis creates an improvisation that has a distinct feature or personality without necessarily using repeated motifs or themes.

While phrasing was used in this example, it is not the only aspect of the music that can be developed to create interest and add uniqueness to your performance. Essentially any musical concept can be used in this way, whether it is register, timbre, dynamics, the interactions between improvisers, the harmony, or anything else. To do this yourself, follow this process:

1. Choose a musical concept. This can be from any of the sections in this book or any other aspect of music you are aware of. In the case of 'So What', it was phrasing, but for this example, let's choose reinterpreting the harmony.
2. Choose a specific way of approaching that concept. In 'So What' the approach to phrasing was ending each phrase approximately on beat one of each two-bar cycle and leaving a gap of about six beats. For our example, let's choose playing one semitone out of key at the start of each eight-bar cycle.
3. Repeat the musical idea throughout your improvisation, but gradually develop it. How exactly you develop the idea will vary depending on what concept you choose and how you approach that concept. In general, you will want to keep the core idea there while gradually deferring from it in some way. In the case of 'So What', this involved being more and more approximate with where each phrase ended and leaving different amounts of space between each phrase. Be creative and experiment. For our example, let's gradually change for how long we are out of key and how out of key we will be.
4. Remember not to overuse the idea. In 'So What', Miles Davis diverges from the phrasing idea at multiple points (1:40, 2:01, 2:28, 2:56, etc.). This helps alleviate some of the repetition and prevent boredom for the listener. In our example, we will do this by going out of key for different amounts of time each phrase and by occasionally not going out of key at all during an eight-bar phrase.

Soundbite 1.7

Hear this example in the accompanying soundbite.

Here are a few more soundbites to give you more ideas:

EXAMPLE ONE

Soundbite 1.8.1

1. Polyrhythms
2. A 2:3 polyrhythm
3. Gradually use the polyrhythm more often until you are playing only in that polyrhythm
4. Space the moments of 2:3 polyrhythms far apart from each other and don't use the same rhythm

EXAMPLE TWO

Soundbite 1.8.2

1. Dialogue
2. Alternate every four bars and use the imitation approach
3. Imitate in different ways as time goes on (e.g. sometimes imitate the rhythm, sometimes the pitch) and gradually alternate with each other more quickly
4. Avoid imitating each other too precisely, have the developments from step three happen at unexpected times, and ensure that what your improvising is interesting in its own right

EXAMPLE THREE

Soundbite 1.8.3

1. Improvised endings
2. Ending sections of the improvisation with a tihai
3. Gradually use more complicated tihais
4. Make the length between tihais slightly unpredictable and make sure the tihai is different each time

EXAMPLE FOUR

Soundbite 1.8.4

1. Timbre
2. A distorted timbre
3. Explore different kinds of distortion
4. Don't overuse one type of distortion and ensure the other aspects of the music are interesting in of themselves

EXERCISE

Go through the four-step process of (1) choosing a concept, (2) choosing a specific approach to that concept, (3) finding a way to repeat and develop it, and (4) think about how you can avoid repetition. Write this out somewhere and spend a little bit of time thinking about it. Do this a couple of times for a few different concepts.

EXERCISE

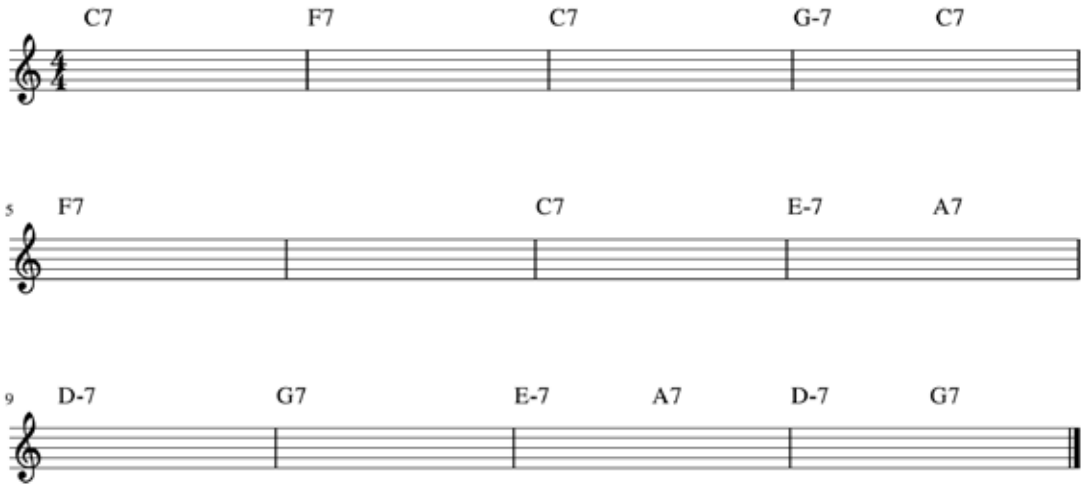
As a group or individual, perform an improvisation that develops repeated musical ideas in the ways you wrote down in the previous exercise. Spend some time on each and remember that the goal is to give the performance an identity without it becoming repetitive. The repeated idea is almost like the hook or chorus of a song. It makes the music more memorable and gives it personality, but it would be pretty tedious if the hook were the only part of the song.

EXERCISE

Improvise over the following chord progressions using the repeated ideas you wrote down in the first exercise. Feel free to make some more using the four-step process, and always focus on balancing memorability and repetitiveness.

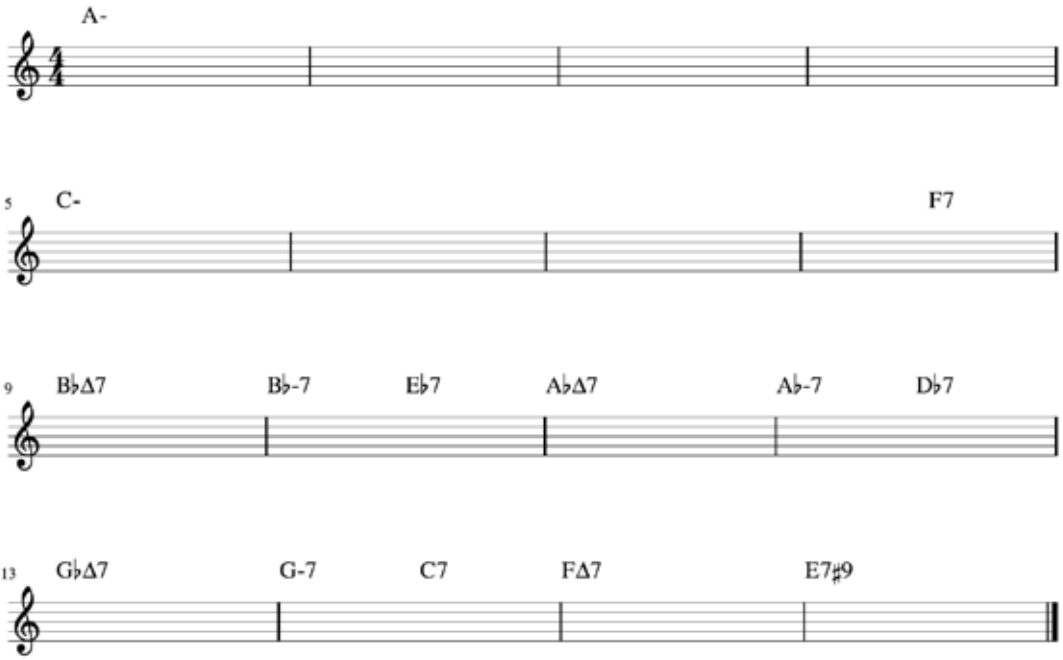
Soundbite 1.4.1

Twelve-Bar Blues

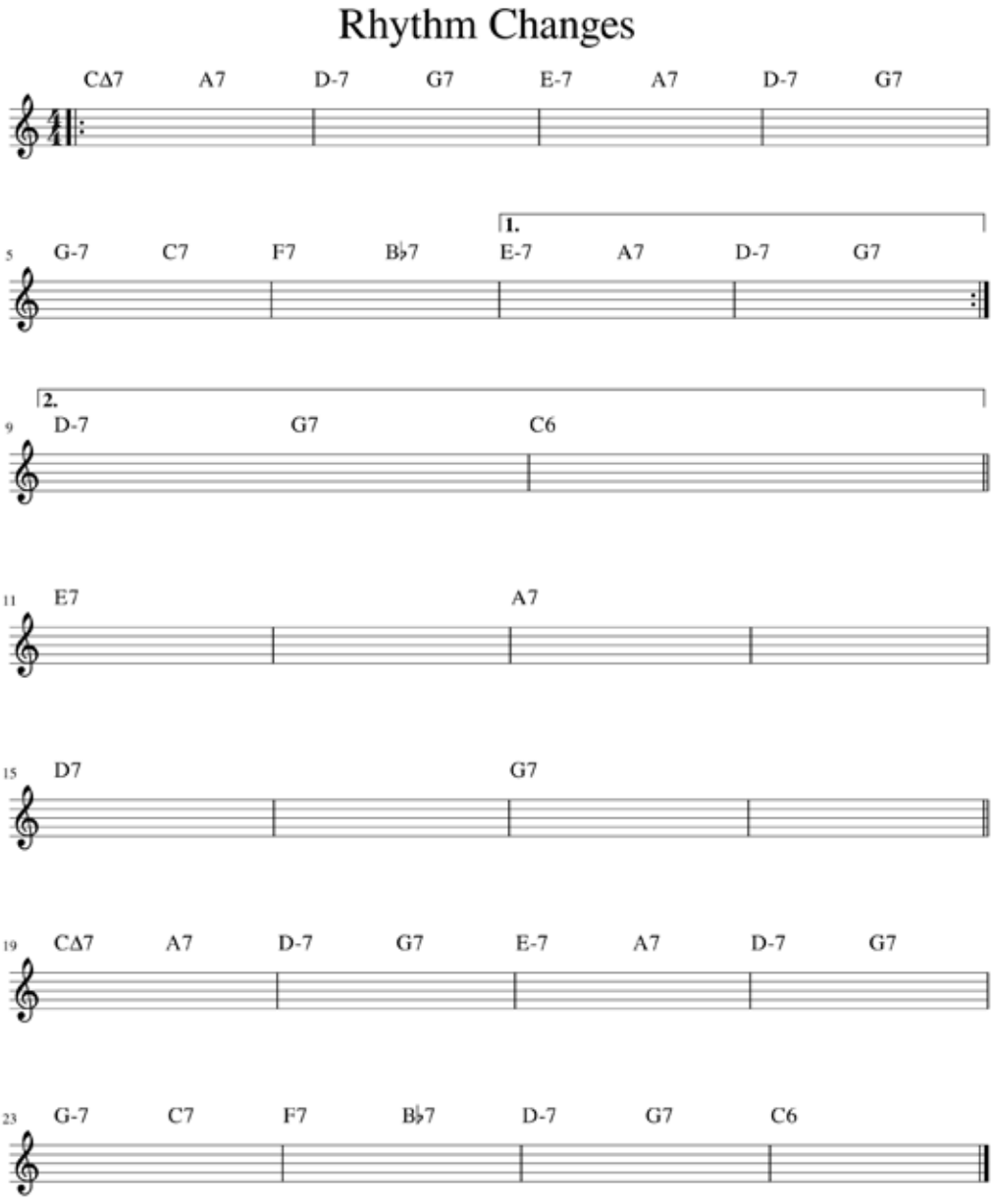


Soundbite 1.4.2

Recordame



EXERCISE (CONT.)



Soundbite 1.4.3

The four-step process is a great way to think about repeating and developing a musical idea to give your improvisation character. In reality though, this happens much more spontaneously. What usually happens is that, in the middle of the performance, a musical idea will emerge as being interesting. The performers then decide to develop and repeat it from there. Read and listen to this scenario to see and hear this in action:

A guitarist is performing a solo improvisation and, early on, improvises an idea that involves sudden alternations in the instrument's register. They repeat this alternating register idea but transformed a short while later. The thought occurs that the shift between different registers could be an exciting and memorable feature of the performance, so they decide to take that idea and develop it throughout the entire performance. They remember steps three and four of the four-step process from earlier, and so they vary how frequently the alternations occur and the registers that are alternating (step three). They are also sure not to use the alternation idea too often and to use different notes and rhythms each time they do (step four). As a result, they make a memorable and interesting performance from a musical idea that emerged organically from the performance.

Soundbite 1.9

EXERCISE

As a group or on your own, begin improvising freely. As you are playing, find an aspect of the music that stands out. Go through steps three and four on the spot, thinking about how you might be able to develop the concept and how you can avoid repetition. If nothing stands out to you while you are doing this, feel free to do the four-step process on the spot and come up with something. Practice until you are comfortable with taking a more conceptual or abstract musical idea and developing it to make the improvisation memorable without any pre-planning.

As we have seen throughout the book, there is no reason that you can't combine different ideas. In the earlier scenario, the guitarist uses alternations of register as the repeated idea, but this could be paired with other concepts as well. For example, every time the performer alternates registers, the rhythm might become syncopated or the speed may suddenly double. They might even combine all three, alternating registers, syncopating their rhythms, and doubling the speed! Listen to a soundbite of this.

Soundbite 1.10

The point to remember is that you shouldn't needlessly restrict yourself when repeating and developing a musical idea; if it sounds good then it is. As usual, be careful that you don't overuse an idea so that the music becomes messy or repetitive. You should also remember that not every musical idea will combine well with every other idea. Alternations in register and syncopated rhythms can combine easily, but polyrhythms and syncopation have a risk of becoming too complicated for the listener. Finally, it's also unnecessary to give each idea an equal amount of importance. You could have the alternation in register and the doubling of the speed as the most apparent repeated ideas and occasionally use syncopation to make it a bit more interesting.

EXERCISE

Do the four-step process, this time with two musical ideas. Imagine how the two concepts might combine and ensure that they blend effectively. Once you have done this, try them out in an improvisation, either as a group or an individual. Listen to what you are playing (record it if necessary) and decide whether you think the two ideas combine in an effective manner. Repeat and experiment with this exercise until you find various combinations that work well.

EXERCISE

Repeat the above exercise, but with more than just two ideas. The more ideas you try to combine into one, the greater the risk of it becoming messy or confusing. Remember that you don't have to give each idea an equal level of importance.

EXERCISE

As discussed earlier, these repeated musical ideas may not always be pre-planned. Begin improvising and use whatever interesting approach to the music that emerges as the repeated idea. If it is not already a combination of two or more ideas, think of what other musical concept (or concepts) will go well with it and combine them. As always, remember that goal is to make the performance memorable without being repetitive or messy.

EXERCISE

Combine the motivic development techniques from page 306 with the tactics we have discussed in this section to make an improvisation that has a clear and interesting character. The motifs and themes could be tied to the musical idea you are developing or motivic and thematic development could be used as a general improvement to the improvisation's sense of character. As always, balance memorability and repetitiveness.

STYLE

In the first three parts of this book, we explored various tools and strategies for improvising. We also looked at the effects that these techniques tend to have on a "typical" listeners. In reality though, improvisers don't just deploy what they know indiscriminately, but work within different styles or genres. A saxophonist soloing in a 1960s Jazz style is going to use very different rhythms to an organist improvising over a hymn. The structure in a Classical North Indian music performance is going to be very different from that of a sixteen bar keyboard solo in a pop song. It is important to understand what musical features and improvisational techniques are expected in the style you play so that the music you are creating actually sounds appropriate. Beyond this, by knowing the conventions of the style or genre, you also know what aspect you can change to make yourself stand out. Before we get to that though, let's talk about how to work out a style or genre's characteristic features in the first place.

IDENTIFYING STYLISTIC FEATURES

Styles of improvised music will have both *musical features* and *improvisational practices*. The musical features are the identifiable aspects of the music itself (the pitches, rhythms, timbres, textures, etc.) while the improvisational practices are the different strategies used by improvisers in that genre (using guide tones, tending to contrast other performers, etc.). While the approaches being taken by the improvisers aren't always clear just by listening to the music, you can often make a good guess based on the music being created. For example, if you can hear the accompanist avoiding the range and playing in the spaces of the soloist, you can probably assume they are taking the supportive approach from page 258. When trying to work out the conventions of a style or genre you will need to listen to various pieces or improvisations in that genre and then identify the standard musical features, while also making some guesses about the strategies the performers are using to help them improvise.

A great way to derive the important aspects of a genre or style is to think about all the different features a piece of music could have and identify how the music you are listening to approaches each topic. Ask questions like: What pitches or scales are they using? What melodic contours can you hear? What rhythms and time signatures do they use? How do they tend to phrase the music? There will often be many answers to each of these questions, and it is essential to know the many ways that one musical concept might be approached in the style you are examining.

Let me demonstrate this whole process with the genre of Jazz Fusion.

Ensemble size in Jazz Fusion is usually relatively small, such as a trio, quartet, or quintet, although larger bands exist. The *timbres* used in Jazz Fusion tend more towards the electronic, and use *instruments* such as keyboard, electric guitar, electric bass, and sometimes even electronic effects on acoustic instruments. This allows for the use of distortion and other electronic manipulations of timbre.

The *time signatures* in Jazz fusion are usually 4/4 for older examples of the genre. However, contemporary Jazz fusion often uses unusual and asymmetrical time signatures. Regardless of the time signature, the performers avoid using *swing* and instead use even quavers. This is both when they play melodies and in the *rhythmic patterns* played by the drums. Instead of swing, in 4/4 time, the drums will usually emphasise beat one and three like in rock music.

Phrasing in Jazz Fusion varies greatly from artist to artist. There is everything from the asymmetrical and off-beat phrasing of Scott Henderson in Tribal Tech to the smoother and more even phrasing of the Yellowjackets. Despite this range, there is still a tendency for asymmetry and syncopation in Jazz Fusion phrasing compared to most other genres of western music.

The overall *form* of Jazz Fusion pieces, like most kinds of Jazz, involves playing a pre-composed melody with improvisation in the middle. The pre-composed section of the music can follow various forms and be of many different *lengths*. Sometimes they are short repeated melodies that are repeated as a *riff*. More often though, they are longer multi-section compositions with intros, codas, and transitionary sections (the first solo doesn't start until 1:54 in Hiromi's 'Kung-Fu World Champion, for example). The improvised solos of a Jazz Fusion performance follow a similar level of variation in their form, although the *harmonic progressions* tend to be simpler compared to other forms of Jazz like Bebop and Hardbop. Nevertheless, there are also plenty of examples where the chords can be complex and chromatic. 'The Hornet' by the Yellowjackets is an excellent example of both the simple and complex chord progressions. The first section after the introduction uses a repeated bass riff that only changes chord twice in the span of sixteen bars. The next section, however, uses a very chromatic chord progression to end every four bar cycle.

The *scales* used in Jazz Fusion can vary greatly. Many pieces will stay within the usual major or minor keys, but, like bebop and later forms of bop, the modes of the major scale, modes of the harmonic minor scale, modes of the melodic minor scale, and the symmetrical scales are used in contexts where they are appropriate for the chord progression. There are also examples of performances that use significant amounts of chromaticism or atonality, like 'Bitches Brew' on the album *Bitches Brew* by Miles Davis.

The *harmonic accompaniment* patterns used in Jazz Fusion can vary, but ostinati are used most frequently with block chords being the next most common form of accompaniment. There is often greater opportunity for the soloist to use techniques like *reinterpreting the harmony* and *polyrhythms* to create interest, because the base of the song is so well established by the ostinati and block chords.

Usually, the *roles* during improvisation are similar to conventional forms of Jazz (i.e. a soloist with rhythmic and harmonic accompaniment). There is much variation on this though. Many of the performances on *Bitches Brew* by Miles Davis, an early example of Jazz Fusion, have little distinction between who is a soloist and who is an accompanist.

Because of the often exciting and intense nature of rock music, which Jazz Fusion is strongly influenced by, the *musical arcs* tend to be different variations of ascending arcs. These arcs occur across the entire performance, but also within each player's solo. Given the focus on excitement and energy, the *dynamics* tend to be louder overall, but there are still some changes in dynamics over time, even if it isn't as much of a focus as it is in say Classical music or Ballads.

The *endings* in Jazz Fusion can vary, but they are usually a typical form of a final hit. Fade outs are used sometimes as well on recordings.

The above analysis has gone through both improvisational strategies and general musical features. I started with the most characteristic and fundamental elements of the genre, like the instruments, timbres, rhythmic feel, form, etc. I also left out things that weren't particularly relevant to the genre (for example, the harmonies are all pre-written, so there is no need to discuss improvised harmonic progressions). It also identified some specific cases which can then be listened to on repeat to get ideas in your own improvisation. While it isn't an in-depth analysis, it still outlines the basic features of the style and what you would need to know to play Jazz Fusion yourself.

EXERCISE

Choose your favourite genre or style of music. Select some of your favourite pieces or recordings from this style/genre and listen to them thoroughly. As you are listening, go through each of the concepts discussed throughout the book so far (as well as any more you can think of) and identify how what you are listening to approaches each topic. Start with the most obvious and characteristic and spend more time properly understanding these features. In most cases there will be multiple musical features or improvisational practices possible that could be classified under the same topic (e.g. Jazz Fusion has both ostinati and block chords as accompaniment patterns).

EXERCISE

Now that you have identified the various aspects of that genre or style, it is time to put them to use. As a group or as an individual, improvise in the style you have chosen. Use your newfound understanding of that style to ensure you play within its conventions. Practice this exercise until you feel like you can easily evoke the sound of the style you are aiming for.

EXERCISE

Now that you can improvise proficiently in that style, it is time to push a bit further. Perform an improvisation in your chosen genre or style (with a group or on your own). This time though, add something to the music that isn't usually seen within that style or genre. This could be explicitly taken from another style or it could be something you come up with yourself, but the point is to vary the established conventions for the sake of variety and novelty. Experiment with this until you find a musical result that you find satisfying. You should aim to have the original genre recognisable, while also having your personal addition being substantial as well.

GOALS IN THE MUSIC

While musical features are often readily apparent to the listener and improvisational approaches are usually audible in the music to some degree, there is more to playing a piece of music than what you can hear. An essential part of improvising well within the genre or style you are playing is understanding the goals of that music and what the listener is going to value in that music. For example, something appreciated by many listeners of bebop is the virtuosity of the performers, and so it makes sense for the performers' improvisations to emphasise faster tempos, complicated harmonies, and spontaneity rather than pre-preparation. As an alternate example, a band playing music at a party is often trying to encourage dancing from partygoers, so it is important to play pieces that are recognisable, use grooves and tempos that are conducive for dancing, and to ensure any improvisations do not interfere with the underlying pulse that is allowing people to dance.

Unlike improvisational practices and musical features, which you can often hear in performances and recordings, finding the goals and values of a genre or style usually require further research. The best way to do this research is to regularly play and listen to the music you are examining and engage with the community of listeners and performers, either online or in person. For genres and styles you already listen to or play regularly, it is often a case of thinking a bit more deeply about what you value when you listen to that music or what you are trying to do when you play that music.

EXERCISE

Using the same genre from before, list some of the features of that music which you value as a listener, and list any goals you are aiming for as a performer. Try to go a bit deeper than "the music sounds good". Think about why it sounds good to you as a fan. Is it because it is catchy? Is it because it has meaningful lyrics? Are there certain moods that make that music enjoyable to listen to? Is it the relationship between the performers and audience (like the dance band example earlier)?

EXERCISE

As a group or individual, perform an improvisation in this style or genre, making an effort to achieve the goals and values you described in the previous exercise. You should also include the musical features and improvisational practices from earlier. Recordings of yourself will be helpful here so you can hear how well you are achieving the intended goals. Practice this many times and be sure to think about the goals and values of the music you are playing whenever you improvise.

An understanding of the musical features, improvisational practices, goals, and values of your style are vital for performing that style well. This understanding isn't something that you gain straight away, but something that builds up over time. Often, this happens in the background, but by actually thinking about and identifying the aspects of the music that make it what it is, you can become a more proficient improviser in that style or genre. Simply playing well in a particular genre is only the start. Another crucial thing to understand is your own personal style.

PERSONAL STYLE

Just as there are certain musical features, improvisational practices, goals, and values in the overall genre or style, each musician will have certain tendencies that become their personal style. This personal style will usually still fit within the general style they are playing, but will be more specific to them. It can be interesting to add your own spin on the conventions of the style or genre you are playing in by including aspects of other styles or creating your own addition. In many cases, these areas where the artist does things differently or interprets the conventions of the style in different ways are what makes up their personal style. Other times, common features of a genre can become a part of one's personal style simply because they use them frequently or particularly well. Even particular melodies, licks, riffs, and rhythms can become a part of someone's personal style.

IDENTIFYING PERSONAL STYLE

The process of identifying personal style is, in essence, the same as with a musical style in general. Go through each concept and determine how the artist tends to address each concept. Think of both musical features and improvisational practices. Be even more specific than before and feel free to transcribe distinct melodies or rhythms if they seem significant enough.

You can see this process in practice with the below analysis of the Jazz Fusion pianist Hiromi.

Like with Jazz Fusion in general, the rhythmic feel of Hiromi's music is usually even, with the drum beats often being very Rock-based. While most of her melodies use even quavers in the melodies that she plays. While most of her music uses even quavers, swing is applied in many cases as a way of varying the music and adding some personality to it. Similarly, Hiromi also alternates between electronic and acoustic instrumentation and timbres, switching between an electronic synth and acoustic piano in many of her performances, especially earlier ones.

Similar to Jazz Fusion in general, Hiromi's phrasing varies quite significantly between different pieces. Her phrasing in 'Alive' on the album Alive, for example, can at times be very unexpected, while the phrasing in 'Life Goes On' from the same record is much easier to anticipate with occasional touches of asymmetry or surprises to keep it interesting. Like Jazz Fusion in general though, her phrasing tends towards the more complicated side of things. While the majority of the compositions by Hiromi are in 4/4 time, there are also many that use unusual time signatures, even if only temporarily.

Hiromi rarely uses simple forms in her music. Most of her compositions involve many different sections, and her pieces rarely stick to the typical Jazz format of playing the head and then soloing over the chords. Usually, her compositions interleave improvised and pre-composed sections throughout the entire performance. Generally, the improvised solos will be over pre-composed material.

The energy in Hiromi's music definitely follows the trend set by Jazz Fusion, in that it is high. As a result, the arcs are almost always some version of ascending. This is often achieved by using a relatively high level of polyrhythms, chromaticism, and reinterpretations of the harmony. The polyrhythm she uses most often is the 2:3 polyrhythm that is everywhere in Jazz. A frequent technique for employing chromaticism is to play a semitone out of key. Additionally, she will often move up or down multiple times in a row before returning to the original key. Her reinterpretations of the harmony tend to be freer and, unlike many other Jazz musicians, often don't imply a particular chord progression. Instead, Hiromi tends to repeat earlier phrases and motifs when being chromatic to maintain cohesion and momentum. Another way that Hiromi creates arcs is by marking increases in intensity with clear musical events. Usually, this will be a trill or a thick piano chord played staccato.

Interaction between ensemble members is usually quite subtle. Since all of her music involves smaller ensembles of only three or four members, each performer needs to make sure they are properly fulfilling their roles of soloist, harmonic accompaniment, or rhythmic accompaniment. As a result, each band member tends to imitate, contrast, or ignore each other in subtle ways like dynamics, rhythm, texture, and other features that don't involve direct imitation or contrast. For example, the drummer might imitate the loud and fast solo of the keyboard by also playing loud and fast, but not directly mirroring specific material.

In terms of harmonic accompaniment, ostinati and block chords are used in almost every piece. Both are used a pretty equal amount of times. Walking basslines and arpeggios are used sometimes, but not as much as block chords and ostinati. An ostinato played by both the piano and bass is often used to accompany to drum solos.

The roles in Hiromi's work follow the typical Jazz format, which is a single soloist at any one time and the other instruments providing harmonic and rhythmic accompaniment. As Hiromi is the primary artist, most of her songs feature her as the main soloist. There are many cases where the other performers will solo as well, however.

Hiromi has a very diverse approach to melodies. Some will be lyrical and tuneful, others will be fast semiquaver runs, and others will be simple and repeated but transformed to be chromatic or polyrhythmic to create tension and excitement. All of these different types might even be used in one performance to create variety or be arranged in a certain way as to create an arc in the music.

Motivic and thematic development is used throughout Hiromi's improvisations. Usually, this is in the form of sequences, sometimes transposed up or down directly. Other times, it involves repeating part of a motif or phrase and changing one or two notes using rhythmic displacement, or changing the rhythm of the notes. This tends to be on a more local level, repeating motifs quickly in a single phrase to make it feel distinct, but not necessarily repeating the same motifs throughout the entire performance. There are also many tracks where a repeated and developed idea is used to give an improvisation a certain character. One example is on 'Alive' where an accented and full chord is used on beat one of the cycle at various points throughout the performance to delineate different sections of the solo and to ramp up the intensity.

While this is not an exhaustive analysis of Hiromi's style, it gives a solid outline of the fundamentals and some specifics as well. Notice how, unlike in the genre analysis, more specific techniques are mentioned and we narrowed down the features more precisely. For your attempt, you could also list all of the recorded examples you find for each technique or approach so you have something specific you can listen to and learn from. It is also a good idea to relate the personal style of the artist to the genres that they mainly work in, as we have done here with Hiromi. This will not only help you understand what has influenced them, but you will also start to see how people differentiate themselves from others in their genre.

EXERCISE

Choose one of your favourite musicians or group of musicians. As described above, go through each concept discussed in this book, as well as any other areas of music you can think of, and identify how your chosen artist addresses them. If their music involves improvisation, be sure to include the improvisational strategies they use as well. It is a good idea to transcribe some exemplary melodies or motifs.

EXERCISE

Now that you have identified the characteristics of your musician, perform an improvisation that incorporates these characteristics. This performance can be either a group or solo performance, so long as you are using the distinctive features of your chosen artist. Practice this for some time until you are comfortable playing in their style. Feel free to repeat this and the above exercise with other musicians you enjoy.

DEVELOPING YOUR OWN STYLE

When developing our own style, we rarely come up with ideas completely on our own. Instead, our personal style tends to be created by taking what we like from our favourite artists and incorporating that into our own playing. Sometimes this involves directly using the musical features as they were originally used, and other times it means taking the original idea and adapting it so it works for you personally. This phenomenon can be seen very obviously in the world of Jazz. A common way of learning how to improvise in Jazz is learning licks from your favourite improvisers and finding ways of making them your own. Taking distinctive features from your favourite artists is also something seen in pre-composed music. Many Rock bands, especially smaller ones, will frequently discuss the other groups that have influenced them and use features of these bands' music in their own compositions. Before you can add to your style by taking from others, you need to actually know what your style is at the moment.

EXERCISE

Look at your own playing and see how it addresses each of the issue discussed in this book. You can do this by listening carefully as you improvise, but it may be more effective to record yourself as you are improvising and listen back to it. List everything you find and be specific.

EXERCISE

Look at the list of your own personal style and look at the list you made of your favourite artist side by side. What's similar, what's different, and, most importantly, what features from your favourite artist could work with your style. Make a new list of things you want to add to your style that aren't already there.

EXERCISE

Go through each characteristic on the list made in the previous exercise and incorporate them into an improvisation. Focus on one feature at a time, and spend as long as you need to experiment with it, seeing how it could work with your own style. If you believe it is effective and works well, then continue using that aspect going forward. You should continue this process of thinking about what you like in the music you listen to and experimenting with them in your style throughout your career as an improviser. Doing this with multiple different artists will help you build your own personal style.

GIVING YOURSELF A UNIQUE PERSONA

Being able to develop a personal style is very important, but it is also necessary that that style stands out from the crowd. Most musicians, regardless of their genre, will have a persona or image that makes people want to listen to them. This persona is often portrayed through how that artist dresses, how they speak, and how they behave in the real world, but it is also affected massively by their music. Think of Bruno Mars, for example. At the time of writing, his persona could be described as "retro", "soulful", or "romantic", and these are seen in both his music and how he looks. The use of instruments and sounds used in the 80s and 90s as well as musical devices from funk and R&B work with his old-school clothing to evoke a sense of being retro. His occasional use of ornamentations and the expressive timbre of his voice contribute to a sense of soulfulness. And the lyrics of his songs, as well as the way he acts in music videos and on stage, create the idea that he is a romantic. At the same time, there is also an absence of visual images or stylistic features that would contrast this image. For example, even though much of the music from his first two albums uses guitar, the sound is rarely harsh or distorted and the guitar solos are often relatively simple. This avoids the image created by many Rock guitarists of being "virtuosic", "epic", or "hard". In short, by using particular visual images and musical features and avoiding others, Bruno Mars creates a clear, coherent persona for himself.

While a musician's image is often quite obvious in pop music because we see how they look in music videos, interviews, and stage shows, artists in other genres, like classical and Jazz, have personas too. The classical composer Beethoven is often portrayed as being "dramatic" because of the increased use of chromaticism for the time, subversion of conventional forms, and use of larger and more "epic" sounds for his time. The Jazz musician Dizzy Gillespie is often seen as "intelligent" and "sophisticated" because his music used more complex harmonies and rhythms than earlier forms of Jazz.

The difference between the persona and personal style of an artist is that the persona is what is created by the personal style when you look at it from a distance. One's personal style contains all the musical techniques and approaches they use, while the persona is the image or character that those techniques and approaches create.

EXERCISE

Choose some of your favourite musicians or groups of musicians. For each of these artists, write a list of words that you think describe their persona. You can look at both their music and how the artist portrays themselves visually to find these. Once you have described their personas, write down some of the musical features that help create these personas. Don't worry if you don't get a full list, do as much as you can and add to it if you think of any more.

EXERCISE

List some qualities that you would like to evoke in your own persona. Choose words that are interesting and evocative and look to your favourite artists for ideas. Once you have done this, make a second smaller list by choosing the qualities that combine or interestingly work with each other. In general, you should avoid words that seem to contrast each other, but sometimes this can create something new and different! Once you have this more refined list, look through it and think of musical features that might evoke this persona you have created.

EXERCISE

Perform an improvisation that uses the musical features you figured out in the last exercise. Try and think of the overall persona you are aiming for as you improvise. Record yourself and listen back to see what you have created! If you like it then continuing developing it, but feel free to experiment and don't be afraid to try something completely different if you aren't happy with the sound you are creating. As we have seen throughout this section, taking inspiration from your favourite artists is a great way to develop your style further!

BRINGING IT ALL TOGETHER

The first three parts of this book are an exploration of many of the tools used by improvisers in various styles. This final chapter has looked at how you can use these different tools to give each improvisation a unique and interesting character, as well as how you can ensure you are performing with a standout understanding of style. This final section will end the book with some advice on how you might want to continue your dive into the world of improvisation.

First of all, like any skill, you will need to *practice*. Improvisation may involve creating music mid-performance, but improvisers can only do this by drawing from what they know. The more you know and the better you know, the better you will be able to improvise. This, of course, is probably something you have already realised. If you compare yourself at the start of this book up until now, you will undoubtedly be a more proficient improviser. This is because of all the techniques, approaches, and strategies that you have learnt during your time with the book. However, you didn't learn all of this just by reading the book, it was by doing the exercises and applying what you learnt. The more you practice, the more easily you will be able to apply what you have learnt, and the more versatile and compelling you will be as an improviser.

Following from the previous paragraph, it is essential, as an improviser, to *draw inspiration from a wide array of sources*. You never know what might end up becoming a defining feature of your personal style. Listen to various kinds of music, learn a variety of different songs, and take what you like from them so you can use it in your own improvising. You can also take inspiration from other instruments, don't feel like because you play the flute you can only learn from flute players. You will need to practice to ensure that you can draw from these different sources of inspiration in the moment. Find what inspires you, learn it, and practice it.

Just because you have a vast array of improvisational techniques, doesn't mean you should use them all the time. You need to use the *right tools for the right job*. If you are improvising short drum fills for a Pop song, then you probably won't have a use for the long term structural techniques of North Indian classical music. Similarly, tihais and polyrhythms probably aren't appropriate for accompanists improvising chords for a Jazz ballad. Some ways to understand which tools are appropriate for which situation are learning through experience, talking to those who are experienced, and listening to others improvise in that situation.

Regardless of the musical situation, it will probably never be appropriate for you to jam everything you know into one performance. *Avoid using too many ideas in one improvisation*. As discussed on page 300, individual improvisations can be unique and memorable, and using too many ideas in one can make prevent this memorability while also making the performance sound messy or lacking direction. This and the previous point go hand in hand with each other. Apply the techniques and approaches you have learnt as appropriate to the situation and avoid using too many different ideas in the one improvisation.

Be aware of your goals as an improviser. Different situations will require you to aim for different things, and you as an artist may be trying to create a certain kind of music. For example, a wedding band might intend to make people dance, while a recording artist might be trying to make music that their fans like, while a third artist might just be experimenting with what they can do as an improviser. Always keep this in mind as you performing and when you are practising. It may not always be clear to you what you are aiming for, and that is fine too, you will work it out eventually. The point is that you are improvising the way you set out to do.

Just because you have learnt a technique, doesn't necessarily mean you can instantly apply it in your improvisation. *Practice each technique or strategy in multiple contexts.* This book makes every exercise in concert C for consistency, but you should practice each technique in different keys and time signatures. You also shouldn't just practice these techniques on your own, but use them in as many rehearsals and performance situations as you can.

It is always a good idea to go over and follow up with older improvisational ideas. You may not have thought about melodic contours or what rhythms work for which time signatures in a while. Whether it is what you have learnt in this book, another book, from your tutor, or your listening, you may have a different perspective on the issue now that you have more experience. Go through the book again and see how you could do some of the concepts discussed differently, now that you have more time and experience improvising.

Be aware of your strengths and weaknesses. Like practice, this applies to any skill and is a great way to encourage yourself and feel confident in your own playing (the strengths) while also understanding what needs further work (the weaknesses). Probably the best way to do this is by listening to recordings of yourself playing, both immediately after you perform and a few days later. Focus on both what you liked about what how you played and what you think needs work to ensure you have an accurate picture of your own ability. It is also a great idea to show your friends or family. Sometimes feedback from others, especially people who aren't trained musicians, will show you a side to your music that you have never even considered before.

Depending on the situation, improvisation is usually a highly enjoyable and emotional experience, especially when done with others. It is crucial when improvising to *maintain a balance between being in the moment and thinking about what you are doing*. Getting into the music can definitely improve your improvising, allowing you to think less and to listen and interact more with bandmates. Sometimes though, being too present in the moment can also be detrimental. Some common examples of this are getting faster because you are excited, missing cues and section changes because you aren't thinking ahead, and playing too long because you lost track of the performance time. You should avoid overthinking things as you play, but don't get so lost in the moment you forget the music you are performing and the situation you are in.

One of the most important things to remember when improvising is to *have fun*. When you enjoy what you are doing you can put more focus into that activity, and therefore, get better at that activity. Find what aspect of improvisation makes it fun for you and use that to drive you to learn more and get better. While you shouldn't neglect your weaknesses just because you don't enjoy practising them, you should still try and find things that help you keep going with your journey into improvisation. Plus, having fun is a benefit in of itself!

While what you have learnt in this book is useful when playing musics that requires improvisation, like Jazz or organ improvisation, you can also *apply it to other musical situations*. If you can improvise something in the moment, then you can write it down and make it a composition. If you can improvise a solo without preparation, then you can come up with a last minute solution when something goes wrong in your performance. If you can make your improvisations unique and full of character, then you can find ways of making an otherwise pre-composed piece of music stand out as well. Of course, being good at improvisation doesn't instantly make you good at all of these other things as well, but many skills cross over, which can help you improve in other aspects of your skill set.

FINAL EXERCISES

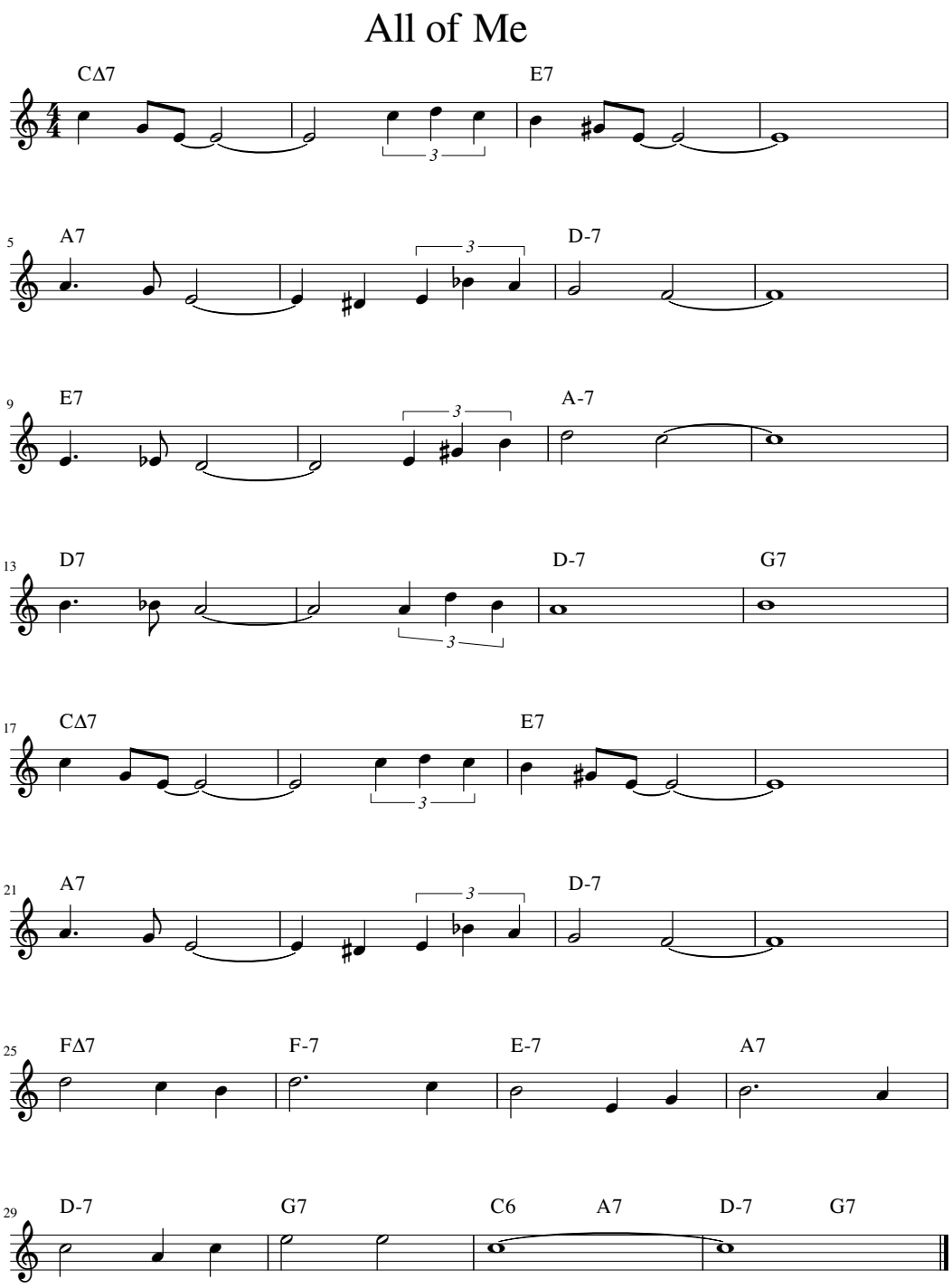
Before going onto the closing statements, I want to leave you with some final exercises to bring all of your knowledge together. Each exercise is based on one of the main styles we have been discussing throughout this book. These are Jazz, Rock/Pop, Classical, Indian Classical, and Free Improvisation. There are some things that you should always be thinking about as you improvise. The structure of the improvisation, your sense of style, and how you are improvising as a group are some examples of this. Other topics will be more specific to the type of music you are improvising. All of these can be made group exercises, but you can use your knowledge of each style to work out exactly how to do that. Let's get into the final exercises.

JAZZ

EXERCISE

Soundbite 4.1

Play 'All of Me' in the standard Jazz format (play the pre-composed melody and chords; improvise over those chords; play the melody chords one final time to end).



NOTE

If you are using the backing track it allows for one chorus of the head, two choruses of your solo, one chorus for you to accompany the backing track, and a final chorus for the head.

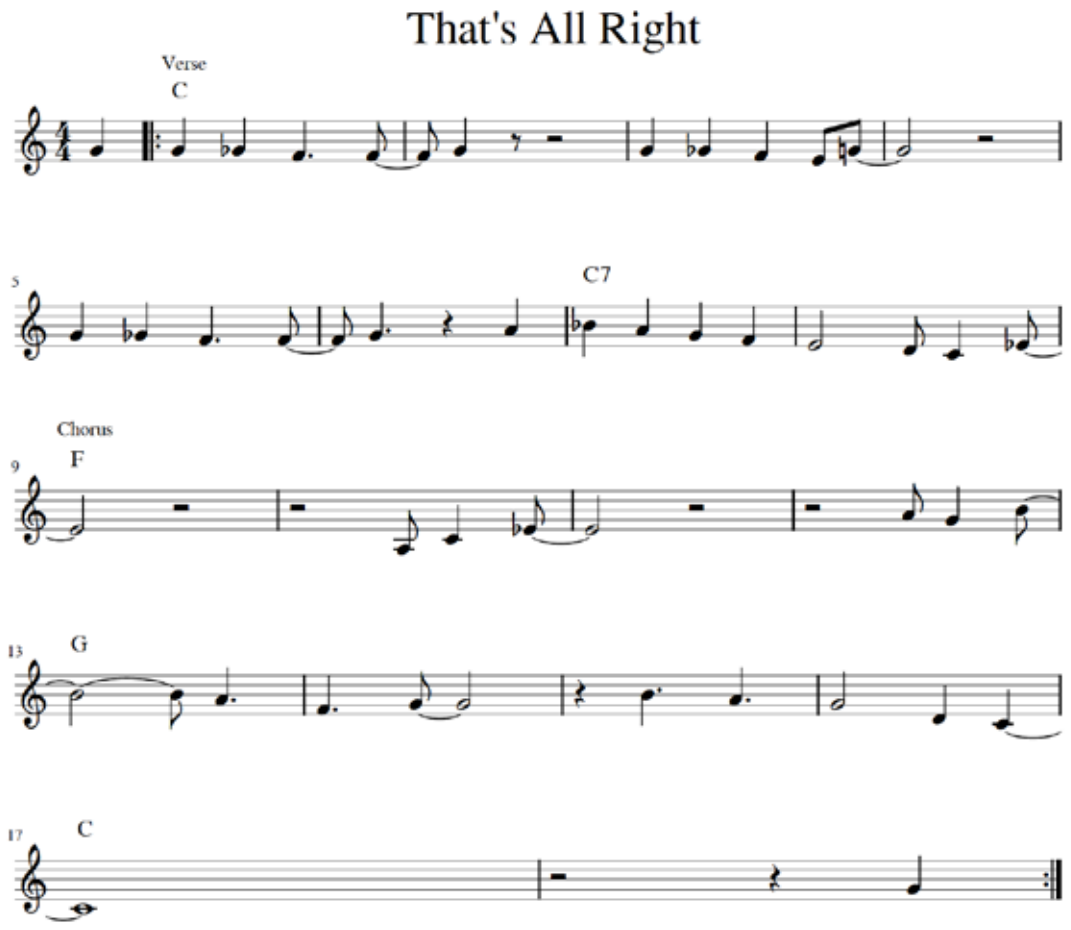
Be sure to use your skills in improvising over chords, improvising harmonic accompaniment, reinterpreting the harmony, improvising endings, advanced rhythmic techniques, and motivic and thematic development throughout this exercise.

ROCK

EXERCISE

Play 'That's Alright' by Arthur Crudup.

Soundbite 4.2



NOTE

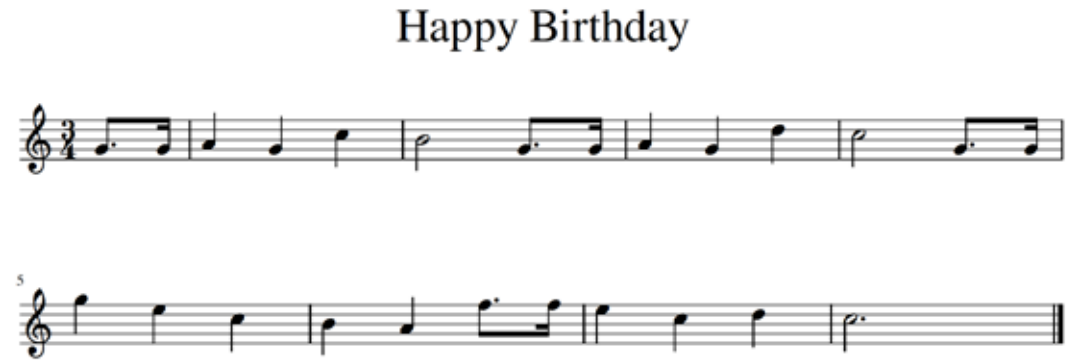
If you are using the backing track it will allow for two repeats of the melody, three repeats of the music for your solo, one repeat of the music for you to accompany the backing track, and one repeat of the melody again

Be sure to use your skills in improvising over chords and improvising harmonic accompaniment in the exercise.

CLASSICAL

EXERCISE

Improvise over the melody to Happy Birthday.



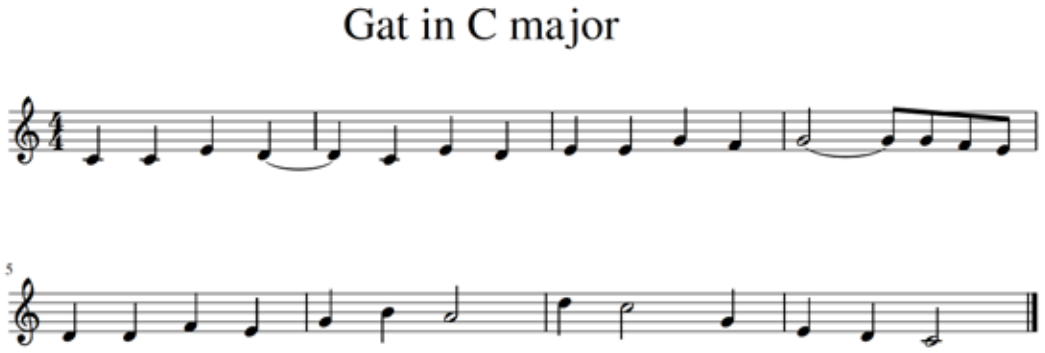
Be sure to use your skills in ornamentation, two-part harmony, improvising harmonic accompaniment, improvising harmonies, transforming existing material, and motivic and thematic development throughout this exercise.

INDIAN CLASSICAL

EXERCISE

With the following melody as your gat, improvise in an alap-jor-jhala-gat style.

Soundbite 4.3



Be sure to use your skills in improvised endings, advanced rhythmic techniques, and structure in Indian Classical music through this exercise.

FREE IMPROVISATION

EXERCISE

Improvise freely.

Be sure to use whatever skills become relevant as the character of the improvisation emerges throughout the performance.

CLOSING STATEMENTS

The overall aim of this book has been to give students a step by step guide to improvisation that is useful in any style and at a variety of skill levels. While it is necessary to talk about specific styles to give examples for certain techniques, we tried to teach each skill in a way that can be applied by any improviser.

We started the book talking about the fundamental tools of improvisation, what notes to use, what rhythms to use, and how to phrases those notes and rhythms in satisfying ways. We then moved on to ways of improvising over material that already exists, like ornamenting melodies, adding a harmony line, or improvising a melody over chords. In that, we also looked at how musicians in different styles improvise various accompaniment patterns. This was part one.

Part two discussed even more tools and techniques, like more ways to improvise over chords or how to improvise chords from scratch, but it also talked about a critical part of most styles of improvisation, how to do it as a group. Here we discussed some of the skills necessary for improvising as a group, such as active listening and non-verbal communication, but also different ways of thinking about it, such as what role each member performs. Part two also examined the important but often overlooked issue of how to improvise an ending to a performance.

Part three continues with more advanced improvisational techniques. This includes transforming musical material, reinterpreting the harmony, how to improvise more advanced harmonic progressions, and more difficult approaches to rhythm and phrasing. There was also even further exploration of group improvisation which focused on how improvisers interact with and respond to each other and what to do when there aren't any constraints guiding the performers. Part three ended by looking at how everything we have learnt so far can contribute to a satisfying musical structure. This section looked at multiple approaches to structure in different genres, hopefully giving readers a broad range of methods to pick from for their own work. Structure is often what changes your improvisations from a series of separate musical ideas to a satisfying and complete piece of music.

Finally, we get to part four, where we are now. Throughout the book, we discussed the effects of each technique and how you can use each tool that was given. This final chapter had an explicit focus on how you can use what we learnt to create improvised music that has a sense of individuality. We started by looking at how repeating and developing motifs, themes, and other musical ideas can give your improvisation a unified identity that makes it stand out. From there, we focused on understanding what makes something have a sense of "style", both in terms of entire genres of music and individual artists. One of the main things that differentiate a professional musician from simply anyone playing their instrument is their ability to provide a unique experience that draws on conventional tastes in a way no one else can. This is where the ability to create character and individuality in your improvising is vital. Of course, we ended part four with some tips for how you can move forward with your improvising after this book.

There are many reasons why you might want or need to improvise. It could be because its an integral part of the music you play (like in Jazz or North Indian Classical music). It might be because the situations where you play are flexible and require improvisation to adapt the music to the surroundings (such as church organ music or when you are providing musical entertainment). It might also purely be for fun. Whatever your reason for playing, this book has provided many tools and approaches to help you in your improvising, as well as many of the ways you might use these skills. Of course, there is only so much that can fit in a single book, and you should continue exploring and experimenting with what is possible in the world of improvised music. Still, this book will always be a source for you to come back to when you want to go over certain techniques or revise some of the approaches to improvisation that are out there. Whatever you do with your musical journey, remember to keep improvising!

REFERENCES

Drabkin, W 2001a, *'Motif', Grove Music Online* in Oxford Music Online accessed 13 May 2019

Drabkin, W 2001b, *'Theme', Grove Music Online* in Oxford Music Online accessed 14 May 2019

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