So What

This tune is totally in the Dorian Mode. Solo and all starts in D Dorian and then moves up to Eb Dorian. The chord rules as most of the solo notes are chord tones.

Tonight we will do a brief review of the head (melody), go over how to use the book and then start the analysis of the 1st 16 bars of the solo!! I do not know how far we will get tonight. My expectation is just starting the solo work! Must do a significant amount of listening! Some will have to be at home!

Next few slides for review – very quickly.
Main Line – 7th position. All Dorian mode built off of D Dorian
This will be the E form at the 7th Fret which is a C major
By starting on the 2nd note you will have a D dorian.

E Major

E Form (G Major Chord)
E Form Major Scales

Start here then move up to 7th position for C Major.

E form of the Major Scale, the G major scale in 2nd position

Left Hand Fingering unless noted otherwise

2nd fret = 1st finger, 3rd fret = 2nd finger
Here is the root scale in C. Memorize this as a starting place for the melody.
For the section in Eb minor just move it up one fret. Fingering and everything else stays the same.
Main part of the melody is right here. Starting on a ‘D’. Again Dorian Mode.
Main Line – 7th position. All Dorian mode built off of D Dorian
I like to slide up to the 9th fret from the 7th. This is just a repeat.
Now move everything up 1 fret to 8th position
Learn the whole tune. Make sure that you can play it all and hear it when not playing the melody. It will be much easier. The chords are just Dm7 for 16 bars, Ebm7 for 8 bars back to Dm7 for 8 bars.
Whole tune. Starts in D Dorian for 16 bars then Eb for 8 bars, lastly, back to D Dorian for 8 bars.
Note that Em is at the 7th fret, Ebm at the 6th fret and Fm at the 8th fret.

Pattern is:
For Dm Chords

Em11  Dm11
For Ebm Chords

Same Rhythmic pattern as previous example.
For Solo Start in 5\textsuperscript{th} Position.

- This is the G form of the major scale but in 5\textsuperscript{th} position it is a C major scale.
G Major

G Form (A Major Chord)
G Form of the Major Scale

G Form of Major Scale
In 2nd Position the A Major Scale

C Major Scale

G Form of Major Scale
In 2nd Position the A Major Scale

C Major Scale

G Form of Major Scale
In 2nd Position the A Major Scale

C Major Scale
Here is where the solo resides to start.
Another position to try.
So What Solo By Miles Davis
Note all chord tones for the start. Remember the Chord Rules!!

Note that the only note outside of chord tones is the G which appears 2 times. So for 5 measures almost all the notes are chord tones. The G is acting like a lower neighbor and note that it goes right back to a chord tone!! Notice how the line grows as it goes along. Notes in Dm7 are D, F, A and C. For Dm11 it is D, F, A, C, E and G. If that is considered the chord then all of the notes are in the chord!!

This is one of the reasons the solo sounds so good at the start.
Moving forward. Notice the chord tones and repeated figures. Miles really knew how to build a solo. Even if you are doing rock, his concepts apply!!
Now try the whole first line. It isn’t all that easy but not so difficult that you can’t do it. Just take your time. Notice the repeated riff of D F A G A in this solo start. This repeated idea is very common in jazz and pop music. Miles moves the timing around but the idea is the same.
Be sure to count while you play. Get these 2 lines down perfectly. See how this all falls nicely into 5th position. Just take your time. Listen to the CD and try to play along with it if you can. If not slow it down and play it. When you can do it here then try it in 7th position.

I really like the repeated D note at the start of the 2nd line. See you can repeat notes. Also notice the C# in the line. This note is a leading tone to the D. You can always play a note a ½ step below any chord tone as long as you come up to the chord tone for the next note.
Notice how here Miles uses a C Major Triad on top of the Dm7 Very cool and it works well – superimposing the C chord.

Back to the original riff. So cool. So Miles!
Here it is up an octave. For some students you will find this a easier place to play – but not in the same register as Miles played it.

So What Solo By Miles Davis
So What Solo By Miles Davis
Bass Line

• Bass line should be a walking bass pattern. That was the style at the time this was recorded.

• For guitar this is the place to start.

• Later musicians on guitar added chords in while they played the bass.
Bass Line for So What

Here it is in first position. Try to push it a bit so that it is right on the beat or a bit early!
Look at the line

• Notice that it starts on the Root!
• Also that it is almost all ¼ notes with some 1/8th notes thrown in.
• It goes from chord tone to chord tone with some chromatic or scale wise passages. Chord tones are the 1, b3, 5, and b7 for Dm7 it is D, F, A, and C.
• Note also that the main notes in the bass line are the chord tones with the root (1) as the most common tone.
Bass Line for So What
Starting here in mainly 5th position.
Create your own bass lines

• Look closely at what Paul Chambers did and create your own basslines.

• I only wrote out the first few measures. It would be good for you to write out the rest of the measures and really analyze it!

• Remember you can take just one or two measures and repeat them over and over again!
Chord Backup

• This is a whole course in itself, but the key is that you must come back to the Dm on a regular basis.

• Any combination of notes in D Dorian can be used but the main issue is to keep the pattern going. Play chords as more of a punctuation then as in most pop tunes.

• Use the rhythm of the Charlston as an example. Maybe go Dm7 on measure one then Dm7 on measure 2 etc. Note you must watch for the key change to Ebm! This is where people mess up the most. That is one reason why many players use 2 and  bar phrases throughout this piece.

• See the next couple of pages for some voicings and examples of the chord background.
This is using Dm11 and Em11 but the count is different than the introduction.
Same Charleston Rhythm but now a repeated. You could do this 2 times for an 8 bar section. A pattern like this can help with the form.
Slight variation from the last one.
Going up. You could play this in reverse also!!
Using clusters.
Going up.
So What Chords

Start here - all Dorian Mode!!
Try to create your own solo

• Use what was learned so far.
  – Create a riff that you repeat
  – Use it also at the end of the solo to tie it all in.
  – Stick with mainly chord tones.
  – Scale is D Dorian but you can use non-scale tones such as a lower neighbor (C# to D or any note a ½ step below a chord tone to the chord tone).
  – The b5 Ab can also be used very effectively. Usually it will go to A but can also go effectively to G. I like playing something like D to Ab resolve down to G. Sounds great to me.
  – Patterns can also be used.
  – Chord superimposition is another technique. Any chord in the D Dorian will work with that.

• Take your time. Write out what you come up with. I prefer traditional music but even tab is ok.
Now really dig into it.

• Work on your own solo.
• Learn it in different positions.
• Use these ideas in other solos.
• Continue to work on chord tones.
More Modal Stuff

• Will be doing the class “Guitar Styles of Miles Davis”, starts end of March – let you know more later.

• In groups you might want to do this or a tune like Walk Don’t Run as they are related.
Here is the root scale in C. Memorize this as a starting place for the melody. For the section in Eb minor just move it up one fret. Fingering and everything else stays the same.

Main part of the melody is right here. Starting on a ‘D’. Again Dorian Mode.
D Dorian 7th position

F. Markovich
Main Line – 7th position. All Dorian mode built off of D Dorian
Whole tune. Starts in D Dorian for 16 bars then Eb for 8 bars, lastly, back to D Dorian for 8 bars.
Note that Em is at the 7th fret, Ebm at the 6th fret and Fm at the 8th fret.

Pattern is:
For Dm Chords

Em11  Dm11

Guitar

TAB
For Ebm Chords

Same Rhythmic pattern as previous example.
So What From Book

Using the CD and Book
View various instruments.

- Look at how So What looks to Bb and Eb instruments along with C instruments. (pages 12, 24 and 36)
- Guitar is in C on page 12.
- Miles most likely thought of it as E Dorian. The Bass and Piano as D Dorian.
Go to Page 12

• Listen to the CD and watch the music.
• Music is almost all 1/8\textsuperscript{th} notes.
• Starts with an 1/8\textsuperscript{th} note rest.
• Say the names of the notes if you can – may not be able to in tempo.
• See the interplay between the bass and the piano.
• Find the tempo (m.m marking). See how it is relaxed.
Now listen to the backup

• Start by counting it out one time through.
• Then try to close your eyes and see if you can hear when the key changes happen.
• You will have to hear that to really solo.
• Next listen to the bass. Notice the lines. The walking
• Lastly, listen to the rhythm part that the keyboard is doing. Pay particular attention to the simplicity of it!
Use the CD to work on Solo

- You will need this CD for the various songs as a backup to solo.
- On “So What”, start with playing the melody along with the CD until you can get it.
- You should have discovered that the tempo is m.m. = 140.
- If you have trouble with that tempo get a slow down program to slow it down and play along.
- Key is to get through the melody at tempo.
- Next solo with the CD. I recommend starting by just playing roots along with the CD until you can absolutely hear it. You will get to the point where you feel the changes as much as hearing them.
Use the CD to work on Solo (Cont.)

• Next, try doing a solo with just the root and various rhythms.
• Then do nothing but chord tones for a solo. If you have trouble doing that, do it with each tone once through, then mix 2 tones up.
• Then add in notes between the chord tones. Don’t play more than 1 non-chord note in a row.
Learn Miles Licks

• One other approach that we will be using is learning some of Miles lines.
• Take one motif and develop it. Don’t do this until you have completely analyzed the lick and understand the following:
  – Timing.
  – Chord tones vs. non-chord tones. How does Miles make the non-chord tones work?
  – How Miles developed the motif.
  – How you could go from what Miles did and make it or something like it your own.
Solo process

• Following are some steps to get you to solo to So What.
• Take these seriously. Do each exercise. We will do them in class but repeat them at home.
• To start you need some information that will help you.
• We will not do the entire solo – for time reasons and also as you will see much of the motif’s are played again.
• We will look very closely at the first solo particularly the 1st 16 bars. But the entire 32 bars of the opening solo will be analyzed.
• After we will go over the rest of the solo from a high level but you will analyze it yourself. The more analysis you do the more you will understand what Miles did and ultimately how you can approach taking a solo on a modal piece. Note that Carlos Santana does almost nothing but modal pieces.
• You should also see how blues creeps into even this type of piece. Not evident at first but will on close look it is there.
The Trumpet

When looking at music for various instruments it is important to realize that not all of them are in concert keys like the guitar. Even the guitar is different in that the notes are written an octave higher than concert (so the guitar can be all in one clef).

One of the most common keys for woodwind and brass instruments to be in is Bb which is one whole step (2 frets) lower than concert. That means that when a Bb instrument (such as trumpet or tenor sax) plays a ‘C’ it actually sounds ‘Bb’ concert. Or going the other way if the trumpet plays a ‘D’ it will sound as a ‘C’.

Miles Davis played “So What” for trumpet in the key of E Dorian. That means that to play the part as he played it you must take the transcription and move it down a whole step. So E becomes D and so on.
So What Solo Exercise #1

This exercise involves listening only and figuring out where the root occurs in the solo. Do not use your guitar or piano for this!!!! Don’t look at the music!!

1. Listen to the solo at least one time. We will only do the first 16 bars to start!
2. Look at the counting below and listen again. Just note where the root occurs.
3. Listen one more time (it may be many) and mark where you hear the root. Use a dot or other mark. If it is on the beat mark below the ¼ note if it is off the beat mark between the ¼ note.

Start by indicating where the Roots happen in the solo. First listen then count it out and mark it as you listen!

Claves

4. One thing that can help is to note the beginning note of the melody which is on a ‘D’. Use that as a reference.
5. We will check this against the transcription after we are done. Count the number of ‘D’s used in the 1st 16 bars. Think about that this week.
D Dorian mode Exercise #2

For the chord you must start with a minimum of the minor 7th voicing. The notes in a Dm7 are: D, F, A, and C. If you go out to the Dm11 they would be: D, F, A, C, E, and G. But for Miles he really emphasized the notes in the D minor triad (D, F and A).

As you listen try to hear the notes that are chord tones and the notes that are not chord tones. Again we will do the first 16 bars to start.
This exercise involves listening only and figuring out where the root occurs in the solo.
Do not use your guitar or piano for this!!!! Don’t look at the music!!

1. Listen to the solo at least one time. We will only do the first 16 bars to start!
2. Look at the counting below and listen again. Just note where chord tones occur.
3. Listen one more time (it may be many) and mark where you hear the chord tones. Indicate chord tones with a C as you did with the root. Later go back and figure which chord tone it was a D (1), F (3) or A(5).
Motif (motive or motif)

Definition: A **motive** or **motif** is a brief though recognizable group of notes, which is too short-lived and incomplete to be a theme, and is frequently used as a building-brick with which to construct a piece...

... a **motive** or **motif**, a short musical idea that has a distinctive rhythmic and melodic shape, and that can be used to build up a substantial section of music - or even a whole movement or complete piece. Composers differ in how strictly they deploy their motifs.

Examples: Beethoven's 5th Symphony - relentlessly repeats the rhythmic pattern or the motif below...

Find the first motif in the solo.
Expectations

• This solo isn’t difficult but will take some time.
• Commit to at least a 15 minutes per day in order to get the first 16 bars done in a week.
• Make sure that you can play this:
  – With the CD and book.
  – With Miles as he plays it.
• For me to learn something like this will take a solid week of playing and listening.
• If it takes longer that is fine. But also you must both hear it and understand it for this to be meaningful.
Here is what So What solo would look like for the trumpet. Notice the key it is in E Dorian! The next slide has it in D Dorian – which is concert and what the guitar is in!!
Here are the roots or ‘D’s.

So What Solo By Miles Davis

Dm7

Guitar

D D

10 8

7

TAB

7 10 8 10 7 10 8 10 7 10 8 10

7 8 7 8 7 10 10 10 10 10 10 10 10 8 10

Gtr.

13

D D

13

10 8 10 9 10 12 12 10 10 8 10 8 7 7

Gtr
So What Solo By Miles Davis

Dm7

Guitar

Grtr.
Now the chord Tones.

So What Solo By Miles Davis

Dm7

D C D D A A D D F A A D F A A

Guitar

TAB

C C A F A A D D D D D F D A F F

Gtr.

13

F A D D C A D D

13

8 10 12 15 12 10 8 10 8
So What Solo By Miles Davis

Solo starts on beat 3 as pickup

Notice 2 beats of rest

Dm7

Comes in on beat 2

D A G A D D

Again 3 beats of rest! Next measure comes in on the and after 1.

D F A G A D F A G A

All Chord Tones

All chord other than G Lower Neighbor

Minor mod to previous motif.

Another minor mod to previous motif

T

10 8

10 8 10

10 8 10

10 8 10

A

10

7 10

10 8 10

10 8 10

10 8 10

B

7

7

7

7

10
B is a lower neighbor on first note then a passing tone.

Listen to B.B. King do this in The Thrill is Gone!

2 beats of rest then the root.

D to F expect an A to follow but in this he goes back to F then moves down using chord tones and one passing tone (G) to the F. Listener most likely expect to hear the A after the G.

A full 4 beats of rest.

See how Miles uses silence.
5 1/2 beats of rest. Takes guts to sit that long on a rest.

The E and the C# are lower neighbors leadint to chord tones.

Then a whole measure of rest before the change to Eb Dorian

This is interesting. Miles seems to be going back and forth from a Dm to an Am chord. Am will work against a Dm it is like playing a Dm9 - but very cool and addint the G in the 2nd measure makes it a Dm11.
So What Solo By Miles Davis

Solo starts on beat 3 as pickup. Notice 2 beats of rest. Comes in on beat 2. Again 3 beats of rest! Next measure comes in on the and after 1.

All Chord Tones

D C D

D A G A D D

D F A G A D F A G A

Dm7

Minor mod to previous motif. Another minor mod to previous motif.

Guitar

T 10 8

7

7 10 8 10 7 7 7 10 8 10 7 10

B is a lower neighbor on first note then a passing tone.

2 beats of rest then the root. Listen to B.B. King do this in The Thrill is Gone!

C B C B A F A G A D D D D D

A full 4 beats of rest. See how Miles uses silence.

Gtr.

8 7 8 7

10 10 8 10 7 7

10 10 10 10 10 10 10 8 10

5 1/2 beats of rest. Takes guts to sit that long on a rest.

The E and the C# are lower neighbors leadint to chord tones.

Then a whole measure of rest before the change to Eb Dorian.

E F G A C# D E G E D C A G D D

Gtr.

13

9 10 10 9 10 12 15 12 10 8 10 8 7 7

This is interesting. Miles seems to be going back and forth from a Dm to an Am chord.
Now we will try playing it

- Do in 7th position.
- Take your time.
- Pick out licks you like and add them to your arsenal.
- Note that we won’t do all of the solo in this detail for a number of reasons – time being just one of them.
- But listen to the whole solo and note how often Miles repeats motif’s.
It is key that you do this correctly from the start. Solo starts on beat 3. Look at counting below the notes. Pinky on the 10th fret to middle finger on the 8th fret. Next measure is a D only for 2 beats. Hold the entire 2 beats (use your index finger on this).

2nd and 3rd complete measure are the first motif or idea. Make sure that after the last note you immediately stop all sound!

Motif has a slight change in the next 2 measures. Very cool how miles starts on the and after one in the first measure and directly on 1 in the 2nd measure. Otherwise they are the same.

You must have this down before going on. Listen, listen, listen … to the recording. Sing along with the solo! You should be able to sing the solo.

Then use these ideas elsewhere!
Measure 7 starts with the C (7th of the chord) does a brief (1/8th) note down a ½ step (1 fret) to the B then scale-wise down to the A. Then a real cool turn on motif 1 from the previous page. Ending on 2 D’s, that the 2nd one must be choked so it is only an 1/8th note.

Measure 9 starts with 2 beats of rest then a high D in 1/8th notes with the last one held for 1 ½ beats. Hold the full time. Then a full measure of rest. Measure 11 melody starts on beat 2. This is a variation of the opening motif. Watch the timing. Look closely at the rhythm of it. Compare the last 2 beats of each measure.

Memorize this also.

Before you go on you should be able to do both of these lines by heart!!
1st 2 lines – make sure that you can play and sign these lines before going on!!

Dm7
Measure 13 is all rest. Measure 14 starts with 1 ½ beats of rest like earlier.

As talked about earlier the E and C# are lower neighbors. All 1/8\textsuperscript{th} notes starting on the E ending on the D in the next measure. The C# is the only note not in the scale and it is a lower neighbor.

Measure 15 starts on the 1 or D and then outlines an Am chord in 1/8\textsuperscript{th} notes. Note the cool mirror of beat 1 and 2 in measure 1 to 1 and 2 in measure 2. Not only rhythmic but also melodic. Measure 2 start on 1/8\textsuperscript{th} notes finishing off the outline of the Am chord. Then 1 beat on the G to the root (D) for 2 8\textsuperscript{th} notes. Be sure to chock the last 1/8\textsuperscript{th} note – do not let it hold over!!

The last measure is a rest.

Note that measure 14 is the hardest to sing in this whole opening 16 bars.

Now when you have this down try putting the whole thing together!!
This concludes the first section

• Before moving on you should do the following:
  – Make sure that you can play up to this point in tempo.
  – Take at least the motif and use it in other songs.
  – Use the 1st motif up a ½ step so that you can do it in Eb Dorian.
  – Write at least 1 motif yourself and develop it into a solo for the 1st 16 bars.
  – Find where in the rest of Miles solo he used the same motif. This opening idea happens over and over again!!
Class to play their motif’s

• I will start with a motif that I developed. You can hear how I did it.
• We will go around the class and see what motif’s each of you can do.
• While this takes time it is valuable to develop your own ideas.
D Dorian 7th position

F. Markovich
For Solo in $5^{th}$ Position.

- This is the G form of the major scale but in $5^{th}$ position it is a C major scale.
G Form of the Major Scale

A Major

G Form of Major Scale
In 2nd Position the A Major Scale

C Major Scale
Here is where the solo resides to start.
Another position to try.
Note all chord tones for the start. Remember the Chord Rules!!
Note that the only note outside of chord tones is the G which appears 2 times. So for 5 measures almost all the notes are chord tones.
The G is acting like a lower neighbor and note that it goes right back to a chord tone!! Notice how the line grows as it goes along. Notes in Dm7 are D, F, A and C. For Dm11 it is D, F, A, C, E and G. If that is considered the chord then all of the notes are in the chord!!
This is one of the reasons the solo sounds so good at the start.
Moving forward. Notice the chord tones and repeated figures. Miles really knew how to build a solo. Even if you are doing rock, his concepts apply!!

4 th position Back to 5 th position
Now try the whole first line. It isn’t all that easy but not so difficult that you can’t do it. Just take your time. Notice the repeated riff of D F A G A in this solo start. This repeated idea is very common in jazz and pop music. Miles moves the timing around but the idea is the same.
Be sure to count while you play. Get these 2 lines down perfectly. See how this all falls nicely into 5th position. Just take your time. Listen to the CD and try to play along with it if you can. If not slow it down and play it. When you can do it here then try it in 7th position.

I really like the repeated D note at the start of the 2nd line. See you can repeat notes. Also notice the C# in the line. This note is a leading tone to the D. You can always play a note a ½ step below any chord tone as long as you come up to the chord tone for the next note.
Scales to Use

- While this tune is in D Dorian, Miles uses the Harmonic Minor Scale many times. This is the same notes but with the 7th raised to C#.
- Dorian mode is great to use as it is the basis of the whole tune.
- Other minor scales can be used if used sparingly. When it is just a walking bass and not much harmonically below then other minor scales work well.
- The D minor pentatonic can be used along with the D blues Scale. The D minor pentatonic only has notes that appear in the D Dorian. The D Blues scale has an added Ab (flat 5). Will give a very blues feeling to this tune.
Now do the first 2 lines as a whole.
Notice how here Miles uses a C Major Triad on top of the Dm7. Very cool and it works well – superimposing the C chord.

Back to the original riff. So cool. So Miles!
The Ebm 1st Section

• Following is the first Ebm Section. This should be started in the 3rd position.
• Analysis as we go forward.
• Interesting that in this one Miles is doing an Ab7 which is a substitute for Ebm. But by doing the Ab7 it opens up the notes.
So What Solo By Miles Davis - 1st Ebm Section

Here it is as a whole. Notice that it is preceded by a full 5 beats of rest. Line starts on beat 2. Also note the Ab7 notes.
One key to analysis is the notes that are on the beat! Look at this analysis to see what is going on.

The Analysis of this is not quite as easy as easy as the first Dm section but it is very revealing. To start from a high level. Miles is looking at this as an Ab7 Chord more than an Ebm7 chord. It is still modal but much of it relates to b5 which is a substitute for Ebm7. Notice that Miles starts this by preceeding with a full measure of rest and then comes on beat 2. This helps establish the key change. Ebm notes = Eb, Gb, Bb, Db. Ab7 notes = Ab, C, Eb, Gb.

\[ \text{Ebm7} \]

Names of the notes Ebm7

Play in 3rd position

For Ebm 11 1 7 1 1 3 1 1 5 1 1 11
For Ab7 1 5 1 1 3 1 7 9 3 1 1 5 3 9 9 5 1

Notice that the notes on the beat are more in the Ab7 chord than in the Ebm chord. It even looks like it once you start to play the song. If you listen closely to the solo without a background up to this point the song sounds like it is Ab7. That is the b5 of D. For Miles this could have been what he was thinking of all of the time. It does add some uneasyness to the solo.
For Ebm  3 9 11 b9 1 1  11 5 b7 b9 9 3 11 5 b7 b1 11 b1 7
For Ab7  7 13 1 b13 5 5  1 9 4 b13 13 7 1 9 7 b5 1 b5 11

This line is a little less obvious, but still makes sense that Ab7 is what Miles is thinking of. Particularly towards in the last measure where he is adding in the b5 blues note and hanging on the Ab 1/2 way through the measure. Then look at the next measure the first 1/2 of it and he is almost outlining the Ab before doing a 1/2 measure anticipation of key change back to D Dorian. You will note on the guitar that it lays out almost perfectly to an Ab7 chord. Then theory wise the Ab7 is a substitute for Ebm7. In some ways Miles may not be thinking modally on this change. That would be way cool as he is going for Modal then more traditional back to modal.
Here Miles is starting back on D Dorian before the chord even changes - very common and sets up a dissonance that works well.
So What Solo By Miles Davis - 1st Ebm Section

The Analysis of this is not quite as easy as easy as the first Dm section but it is very revealing. To start from a high level. Miles is looking at this as an Ab7 Chord more than an Ebm7 chord. It is still modal but much of it relates to Ab7 which is a substitute for Ebm7. Notice that Miles starts this by preceeding with a full measure of rest and then comes in on beat 2. This helps establish the key change. Ebm7 notes = Eb, Gb, Bb, Db. Ab7 notes = Ab, C, Eb, Gb.

Here is the full 8 bars of Ebm analysis. Make sure that you understand what is going on here. I haven’t written in the timing. You should do that yourself. The timing is actually very easy compared with the choice of notes.

While this looks difficult at first, it is not so hard. I spent less time on learning this than I did on the first 8 bars of the solo.
Final 8 bars of Chorus 1

• Key here is to see how much of what was done in the first part repeats, and the use of a chord substitution in the solo.

• Take your time.
Here is the Am chord – against the D Dorian. Will happen more in the next section.

So What Solo By Miles Davis Last 8 of 1st chorus

This is really chord tone galore!! The only non-chord tone in the first 7 measures is the E passing tone at the end of measure 6. Notice the motif from the first just turned slightly. Miles knew how to hold this all together. There are a total of 18 notes in this section 6 are roots (1) and 6 are 5's. The G and E at the end are telling the listener that this section is over.
So What Solo By Miles Davis Last 8 of 1st chorus

This is really chord tone galore!! The only non-chord tone in the first 7 measures is the E passing tone at the end of measure 6. Notice the motif from the first just turned slightly. Miles knew how to hold this all together. There are a total of 18 notes in this section 6 are roots (1) and 6 are 5's. The G and E at the end are telling the listener that this section is over.

Dm7

Dm chord for 3 beats then the Am chord. 8 bars begins and ends with the A or 5th of the scale (chord).
So What Solo By Miles Davis Last 8 of 1st chorus

This is really chord tone galore!! The only non-chord tone in the first 7 measures is the E passing tone at the end of measure 6. Notice the motif from the first just turned slightly. Miles knew how to hold this all together. There are a total of 18 notes in this section 6 are roots (1) and 6 are 5's. The G and E at the end are telling the listener that this section is over.
That ends the first chorus

• Make sure that you can play the entire 1st chorus before moving on.

• Suggest that if you can’t play it all yet then just do what you can do, but go ahead with analysis of the rest of the solo. Then come back to this.

• Total time that it should take is about 8 – 10 hours to learn this. Add another 3 to 4 hours to totally memorize the solo.
Miles 2\textsuperscript{nd} solo

• Again 32 bars, 16 on D Dorian, 8 on Eb Dorian and back to 8 on D Dorian.

• You should see how much is repeated or built upon from the first chorus.
So What Solo By Miles Davis

This starts off with really an Am7 being used to play against the Dm. This technique is done all of the time by soloists. It adds in all of the upper notes in the chord. The notes in Am7 are A, C, E, and G. That is all there is in the first 6 measures and even in the pickups to the first measure. Notice how it is similar to the first motif but against the Am7 chord.

Starting in this line you see the return to Dm. The only surprise is the Ab (b5) or blues tone in the 2nd measure of this line. But hear how Miles is playing with the first motif in the whole solo. In fact, the last 3 measures are almost the exact idea at the same place in the first chorus.

The Ab here is leadint to the key change but is also the b5 or blues note of the Dm. Again very cool. There are only 16 bars left in this solo. By now you should really understand quite a bit about how Miles Davis Approached the solo!
So What Solo By Miles Davis

This starts off with really an Am7 being used to play against the Dm. This technique is done all of the time by soloists. It adds in all of the upper notes in the chord. The notes in Am7 are A, C, E, and G. That is all there is in the first 6 measures and even in the pickups to the first measure. Notice how it is similar to the first motif but against the Am7 chord.

\[
\text{Dm7}
\]

Starting in this line you see the return to Dm. The only surprise is the Ab (b5) or blues tone in the 2nd measure of this line. But hear how Miles is playing with the first motif in the whole solo. In fact, the last 3 measures are almost the exact idea at the same place in the first chorus.

The Ab here is leadin to the key change but is also the b5 or blues note of the Dm. Again very cool. There are only 16 bars left in this solo. By now you should really understand quite a bit about how Miles Davis Approached the solo!
So What Solo By Miles Davis

This starts off with really an Am7 being used to play against the Dm. This technique is done all of the time by soloists. It adds in all of the upper notes in the chord. The notes in Am7 are A, C, E, and G. That is all there is in the first 6 measures and even in the pickups to the first measure. Notice how it is similar to the first motif but against the Am7 chord.

Starting in this line you see the return to Dm. The only surprise is the Ab (b5) or blues tone in the 2nd measure of this line. But hear how Miles is playing with the first motif in the whole solo. In fact, the last 3 measures are almost the exact idea at the same place in the first chorus.

The Ab here is leadint to the key change but is also the b5 or blues note of the Dm. Again very cool. There are only 16 bars left in this solo. By now you should really understand quite a bit about how Miles Davis Approached the solo!
2nd Chorus Ebm Section

• This is very simple.
• Make sure you understand this section.
• Lots of chord and scale movement.
• Still chord tones rule even if they are substitute chords.
So What chorus 2 Eb Dorian section

This start from the Ab which is the b5 of the previous key (D Dorian) the leads or anticipates the change to Eb Dorian. Then it is just running basically down the scale but the start is a Bbm7 chord (chord up a 1/2 step from the Am7 starting this solo). Really a cool idea. The notes in Bbm7 are Bb, Db, F, Ab. Just look at the line, it is played from the Ab going down to the Bb scale tones. Then just down the scale to the 7th of Ebminor. Also notice how sparse this is, only 11 notes in 5 measures. In the previous style (Bebop) there would have been closer to 40 notes in the same space!!

```
Ebm7
```

This line (measure marked 6) starts with a pattern of ascending 3rds. Very common in jazz. The next measure starts by delaying the Bb or 5 by playing the note directly above and below the note. Then continues up in 3rds. The resolution and end is again outlining the Ab chord as Eb, C and Ab form the Ab triad. Again tie in and ending of this phrase with super-imposing one chord on the solo.

The last 4 notes really belong in D Dorian. Tells the whole band where the tune is going next. Anticipation is alwaya a good key to mark the next big change.
Final 8 bars of the solo

• This is simple with lots of rehash.
• Look at the motif.
So What Solo last 8 bars

At this point you should be able to analyze this by yourself but here goes. Scale from D up to the G. Then back to the Am7 against the D Dorian this happens for 4 measures the end is like a mirror of the intro to this section decending rather than ascending but still placing emphasis on the Am7. Notica again how few notes!!

After the A starting this section which is a pivot between the Am7 and the Dm7 the last 4 bars are clearly in D minor (D Dorian). See the motif in the end measure of this. That line is almost the same as in the first 16 bars of the whole solo but just slightly changed. Next measure outlines the Am7 chord then clearly at the end going back to the Dm arpeggio with a G# as the lower neighbor (even could be considered the b5) of the A (5th of the chord) to the Dm at the end.
Put it all together

• Next steps are to put it all together.
• Then write your own motif’s.
• Do a solo based on your motif’s. Add in some of Miles Davis ideas and you are well on your way.
• You also want Miles solo to flow and feel relaxed. To do that you must be able to play it faster than the CD. The CD is at m.m. = 138 so try to play it at least at m.m. = 150!!
Here it is up an octave. For some students you will find this a easier place to play – but not in the same register as Miles played it.

**So What Solo By Miles Davis**
So What Solo By Miles Davis
So What Solo By Miles Davis
Bass Line

• Bass line should be a walking bass pattern. That was the style at the time this was recorded.
• For guitar this is the place to start.
• Later musicians on guitar added chords in while they played the bass.
Here it is in first position. Try to push it a bit so that it is right on the beat or a bit early!

Bass Line for So What
Look at the line

• Notice that it starts on the Root!
• Also that it is almost all ¼ notes with some 1/8th notes thrown in.
• It goes from chord tone to chord tone with some chromatic or scale wise passages. Chord tones are the 1, b3, 5, and b7 for Dm7 it is D, F, A, and C.
• Note also that the main notes in the bass line are the chord tones with the root (1) as the most common tone.
Bass Line for So What

Starting here in mainly 5th position.
Create your own bass lines

- Look closely at what Paul Chambers did and create your own basslines.
- I only wrote out the first few measures. It would be good for you to write out the rest of the measures and really analyze it!
- Remember you can take just one or two measures and repeat them over and over again!
Chord Backup

• This is a whole course in itself, but the key is that you must come back to the Dm on a regular basis.

• Any combination of notes in D Dorian can be used but the main issue is to keep the pattern going. Play chords as more of a punctuation then as in most pop tunes.

• Use the rhythm of the Charleston as an example. Maybe go Dm7 on measure one then Dm7 on measure 2 etc. Note you must watch for the key change to Ebm! This is where people mess up the most. That is one reason why many players use 2 and 2 bar phrases throughout this piece.

• See the next couple of pages for some voicings and examples of the chord background.
This is using Dm11 and Em11 but the count is different than the introduction.
Same Charleston Rhythm but now a repeated. You could do this 2 times for an 8 bar section. A pattern like this can help with the form.
Slight variation from the last one.
Going up. You could play this in reverse also!!
Using clusters.
Going up.
So What Chords

F. Markovich

Start here - all Dorian Mode!!

2004
Try to create your own solo

• Use what was learned so far.
  – Create a riff that you repeat
  – Use it also at the end of the solo to tie it all in.
  – Stick with mainly chord tones.
  – Scale is D Dorian but you can use non-scale tones such as a lower neighbor (C# to D or any note a ½ step below a chord tone to the chord tone).
  – The b5 Ab can also be used very effectively. Usually it will go to A but can also go effectively to G. I like playing something like D to Ab resolve down to G. Sounds great to me.
  – Patterns can also be used.
  – Chord superimposition is another technique. Any chord in the D Dorian will work with that.

• Take your time. Write out what you come up with. I prefer traditional music but even tab is ok.
Now really dig into it.

- Work on your own solo.
- Learn it in different positions.
- Use these ideas in other solos.
- Continue to work on chord tones.
- Sing the solo – this will really help you learn it and the sound on the guitar of the various notes.
- Next song will be “All Blues” which in some ways is also a modal piece. Much of what you did here will apply.
So What Week 4 Class 5

• Goals tonight:
  – Finish first 16 bars in time. Play with CD and Miles.
  – Analyze bass and piano part for elements.
  – Start bass and piano parts.
  – Assign next 16 bars – time permitting do analysis.

• Discuss solo part for class – bass and drums maybe. Question is how to pay for that.

• In other class start All Blues – chords only for now and 6/4 time. Will fold just a bit into the other class.
Let’s watch Miles

• Listen and ask the questions like before.
• We will also listen to a minute or so of John Coltrane’s solo.
• Listen closely for licks he used before – this was a year or so later than the recording. Miles Davis and John Coltrane - So What.wmv
This concludes the first section

• Before moving on you should do the following:
  – Make sure that you can play up to this point in tempo.
  – Take at least the motif and use it in other songs.
  – Use the 1st motif up a ½ step so that you can do it in Eb Dorian.
  – Write at least 1 motif yourself and develop it into a solo for the 1st 16 bars.
  – Find where in the rest of Miles solo he used the same motif. This opening idea happens over and over again!!
Class to play their motif’s

• I will start with a motif that I developed. You can hear how I did it.

• We will go around the class and see what motif’s each of you can do.

• While this takes time it is valuable to develop your own ideas.
My Motiff

So What FM Riff

Frank Markovich
D Dorian 7th position

F. Markovich
Scales to Use

• While this tune is in D Dorian, Miles uses the Harmonic Minor Scale many times. This is the same notes but with the 7th raised to C#.
• Dorian mode is great to use as it is the basis of the whole tune.
• Other minor scales can be used if used sparingly. When it is just a walking bass and not much harmonically below then other minor scales work well.
• The D minor pentatonic can be used along with the D blues Scale. The D minor pentatonic only has notes that appear in the D Dorian. The D Blues scale has an added Ab (flat 5). Will give a very blues feeling to this tune.
Notice how here Miles uses a C Major Triad on top of the Dm7. Very cool and it works well – superimposing the C chord.

Back to the original riff. So cool. So Miles!
Before going on the Bass and Harmony

• Start by listening closely to the bass part during the solo section.
• Take out a piece of paper and note the following as a minimum:
  – Rhythmic basic notes – how often something else?
  – Notes – Root – Chord tones. Does it go step wise mainly or lots of jumps.
  – Notes on beat 1.
  – Notes on beat 3.
• Now listen to the chords backup and do the following:
  – Listen to the rhythm – note how the piano backs up.
  – Timing
  – Chord density – lots of note, minimal?
  – Tonic chords do they appear?
  – Rhythmic patters?
Bass Line

• Bass line should be a walking bass pattern. That was the style at the time this was recorded.
• For guitar this is the place to start.
• Later musicians on guitar added chords in while they played the bass.
Bass Line for So What
Here it is in first position. Try to push it a bit so that it is right on the beat or a bit early!
Look at the line

- Notice that it starts on the Root!
- Also that it is almost all ¼ notes with some 1/8\textsuperscript{th} notes thrown in.
- It goes from chord tone to chord tone with some chromatic or scale wise passages. Chord tones are the 1, b3, 5, and b7 for Dm7 it is D, F, A, and C.
- Note also that the main notes in the bass line are the chord tones with the root (1) as the most common tone.
Bass Line for So What

Starting here in mainly 5th position.
Create your own bass lines

• Look closely at what Paul Chambers did and create your own basslines.
• I only wrote out the first few measures. It would be good for you to write out the rest of the measures and really analyze it!
• Remember you can take just one or two measures and repeat them over and over again!
Chord Backup

• This is a whole course in itself, but the key is that you must come back to the Dm on a regular basis.
• Any combination of notes in D Dorian can be used but the main issue is to keep the pattern going. Play chords as more of a punctuation then as in most pop tunes.
• Use the rhythm of the Charleston as an example. Maybe go Dm7 on measure one then Dm7 on measure 2 etc. Note you must watch for the key change to Ebm! This is where people mess up the most. That is one reason why many players use 2 and 2 bar phrases throughout this piece.
• See the next couple of pages for some voicings and examples of the chord background.
This is using Dm11 and Em11 but the count is different than the introduction.
Same Charleston Rhythm but now a repeated. You could do this 2 times for an 8 bar section. A pattern like this can help with the form.
Slight variation from the last one.
Going up. You could play this in reverse also!!
Using clusters.
Going up.
So What Chords

F. Markovich

Start here - all Dorian Mode!!
Try to create your own solo

• Use what was learned so far.
  – Create a riff that you repeat
  – Use it also at the end of the solo to tie it all in.
  – Stick with mainly chord tones.
  – Scale is D Dorian but you can use non-scale tones such as a lower neighbor (C# to D or any note a ½ step below a chord tone to the chord tone).
  – The b5 Ab can also be used very effectively. Usually it will go to A but can also go effectively to G. I like playing something like D to Ab resolve down to G. Sounds great to me.
  – Patterns can also be used.
  – Chord superimposition is another technique. Any chord in the D Dorian will work with that.

• Take your time. Write out what you come up with. I prefer traditional music but even tab is ok.
The Ebm 1st Section

• Following is the first Ebm Section. This should be started in the 6th position.
• Analysis as we go forward.
• Interesting that in this one Miles is doing an Ab7 which is a substitute for Ebm. But by doing the Ab7 it opens up the notes.
• We will look at it down one octave first to see the Ab7.
So What Solo By Miles Davis - 1st Ebm Section

Here it is as a whole. Notice that it is preceded by a full 5 beats of rest. Line starts on beat 2. Also note the Ab7 notes.
One key to analysis is the notes that are on the beat!. Look at this analysis to see what is going on.

The Analysis of this is not quite as easy as easy as the first Dm section but it is very revealing. To start from a high level. Miles is looking at this as an Ab7 Chord more than an Ebm7 chord. It is still modal but much of it relates to D minor which is a substitute for Ebm7. Notice that Miles starts this by preceeding with a full measure of rest and then comes in on beat 2. This helps establish the key change. Ebm notes = Eb, Gb, Bb, Db. Ab7 notes = Ab, C, Eb, Gb.

For Ebm 11 1 7 9 11 3 5 13 7 1 13 5 5 1 11
For Ab7 1 5 11 13 1 7 9 3 11 5 3 9 9 5 1
Notice that the notes on the beat are more in the Ab7 chord than in the Ebm chord. It even looks like it once you start to play the song. If you listen closely to the solo without a background up to this point the song sounds like it is Ab7. That is the b5 of D. For Miles this could have been what he was thinking of all of the time. It does add some uneasiness to the solo.
This line is a little less obvious, but still makes sense that Ab7 is what Miles is thinking of. Particularly towards the last measure where he is adding in the b5 blues note and hanging on the Ab 1/2 way through the measure. Then look at the next measure the first 1/2 of it and he is almost outlining the Ab before doing a 1/2 measure anticipation of key change back to D Dorian. You will note on the guitar that it lays out almost perfectly to an Ab7 chord. Then theory wise the Ab7 is a substitute for Ebm7. In some ways Miles may not be thinking modally on this change. That would be way cool as he is going for Modal then more traditional back to modal.
Here Miles is starting back on D Dorian before the chord even changes - very common and sets up a disonance that works well.
Here is the full 8 bars of Ebm analysis. Make sure that you understand what is going on here. I haven’t written in the timing. You should do that yourself. The timing is actually very easy compared with the choice of notes.

While this looks difficult at first, it is not so hard. I spent less time on learning this than I did on the first 8 bars of the solo.
Ebm Section up 1 octave

• I actually like playing the whole solo up one octave.
• It is up to you.
• The analysis is the same.
So What Solo By Miles Davis - 1st Ebm Section

The Analysis of this is not quite as easy as easy as the first Dm section but it is very revealing. To start from a high level. Miles is looking at this as an Ab7 Chord more than an Ebm7 chord. It is still modal but much of it relates to A which is a substitute for Ebm7. Notice that Miles starts this by preceeding with a full measure of rest and then comes on beat 2. This helps establish the key change. Ebm notes = Eb, Gb, Bb, Db. Ab7 notes = Ab, C, Eb, Gb.

Notice that the notes on the beat are more in the Ab7 chord than in the Ebm chord. It even looks like it once you start to play the song. If you listen closely to the solo without a background up to this point the song sounds like it is Ab7. That is the b5 of D. For Miles this could have been what he was thinking of all of the time. It does add some uneasyness to the solo.
So What Solo By Miles Davis - 1st Ebm Section

The Analysis of this is not quite as easy as easy as the first Dm section but it is very revealing. To start from a high level. Miles is looking at this as an Ab7 Chord more than an Ebm7 chord. It is still modal but much of it relates to Ab7 which is a substitute for Ebm7. Notice that Miles starts this by proceeding with a full measure of rest and then comes in on beat 2. This helps establish the key change. Ebm notes = Eb, Gb, Bb, Db. Ab7 notes = Ab, C, Eb, Gb.

Ebm7

Names of the notes
Ab Eb Db F Ab Gb Bb C Db Eb C Bb Bb Eb Ab

Play in 3rd position

T

For Ebm

A

For Ab7

1 5 11 13 1 7 9 3 11 5 3 9 9 5 1

Notice that the notes on the beat are more in the Ab7 chord than in the Ebm chord. It even looks like it once you start to play the song. If you listen closely to the solo without a background up to this point the song sounds like it is Ab7. That is the b5 of D. For Miles this could have been what he was thinking of all of the time. It does add some uneasiness to the solo.
So What Solo By Miles Davis - 1st Ebm Section

The Analysis of this is not quite as easy as easy as the first Dm section but it is very revealing. To start from a high level. Miles is looking at this as an Ab7 Chord more than an Ebm7 chord. It is still modal but much of it relates to Ab7 which is a substitute for Ebm7. Notice that Miles starts this by preceeding with a full measure of rest and then comes in on beat 2. This helps establish the key change. Ebm notes = Eb, Gb, Bb, Db. Ab7 notes = Ab, C, Eb, Gb.

For Ebm 11 1 7 9 11 3 5 13 1 7 9 3 11 5 3 9 9 5 1
For Ab7 1 5 11 13 1 7 9 3 11 5 3 9 9 5 1
Notice that the notes on the beat are more in the Ab7 chord than in the Ebm chord. It even looks like it once you start to play the song. If you listen closely to the solo without a background up to this point the song sounds like it is Ab7. That is the b5 of D. For Miles this could have been what he was thinking of all of the time. It does add some uneasiness to the solo.

For Ebm 3 9 11 b9 1 1 11 5 b7 b9 9 3 11 5 b7 b1 11 b1 7
For Ab7 7 13 1 b13 5 5 1 9 4 b13 13 7 1 9 7 b5 1 b5 11
This line is a little less obvious, but still makes sense that Ab7 is what Miles is thinking of. Particularly towards in the last measure where he is adding in the b5 blues note and hanging on the Ab 1/2 way through the measure. Then look at the next measure the first 1/2 of it and he is almost outlining the Ab before doing a 1/2 measure anticipation of key change back to Dorian. You will note on the guitar that it lays out almost perfectly to an Ab7 chord. Then theory wise the Ab7 is a substitute for Ebm7. In some ways Miles may not be thinking modally on this change. That would be way cool as he is going for Modal then more traditional back to modal.

Here Miles is starting back on D Dorian before the chord even changes - very common and sets up a disonance that works well.
Now play the Ebm section. Not as hard as it looks.
Final 8 bars of Chorus 1

• Key here is to see how much of what was done in the first part repeats, and the use of a chord substitution in the solo.

• Take your time.
So What Solo By Miles Davis Last 8 of 1st chorus

This is really chord tone galore!! The only non-chord tone in the first 7 measures is the E passing tone at the end of measure 6. Notice the motif from the first just turned slightly. Miles knew how to hold this all together. There are a total of 18 notes in this section 6 are roots (1) and 6 are 5’s. The G and E at the end are telling the listener that this section is over.

Here is the Am chord – against the D Dorian. Will happen more in the next section.
So What Solo By Miles Davis Last 8 of 1st chorus

This is really chord tone galore!! The only non-chord tone in the first 7 measures is the E passing tone at the end of measure 6. Notice the motif from the first just turned slightly. Miles knew how to hold this all together. There are a total of 18 notes in this section 6 are roots (1) and 6 are 5's. The G and E at the end are telling the listener that this section is over.

Dm7

Repeated D again – really sets the key up for the listener.

Dm chord for 3 beats then the Am chord. 8 bars begins and ends with the A or 5th of the scale (chord).
So What Solo By Miles Davis Last 8 of 1st chorus

This is really chord tone galore!! The only non-chord tone in the first 7 measures is the E passing tone at the end of measure 6. Notice the motif from the first just turned slightly. Miles knew how to hold this all together. There are a total of 18 notes in this section 6 are roots (1) and 6 are 5's. The G and E at the end are telling the listener that this section is over.
On Higher Octave

- Again this is where I would play it.
- Notice again how simple.
So What Solo By Miles Davis Last 8 of 1st chorus

This is really chord tone galore!! The only non-chord tone in the first 7 measures is the E passing tone at the end of measure 6. Notice the motif from the first just turned slightly. Miles knew how to hold this all together. There are a total of 18 notes in this section 6 are roots (1) and 6 are 5's. The G and E at the end are telling the listener that this section is over.
So What Solo By Miles Davis Last 8 of 1st chorus

This is really chord tone galore!! The only non-chord tone in the first 7 measures is the E passing tone at the end of measure 6. Notice the motif from the first just turned slightly. Miles knew how to hold this all together. There are a total of 18 notes in this section 6 are roots (1) and 6 are 5's. The G and E at the end are telling the listener that this section is over.
So What Solo By Miles Davis Last 8 of 1st chorus

This is really chord tone galore!! The only non-chord tone in the first 7 measures is the E passing tone at the end of measure 6. Notice the motif from the first just turned slightly. Miles knew how to hold this all together. There are a total of 18 notes in this section 6 are roots (1) and 6 are 5's. The G and E at the end are telling the listener that this section is over.
Let’s Try The Whole 1\textsuperscript{st} Chorus

• Now I know this is hard but just do as best as you can.
• Take it slowly at first!
• Try it at home with your book and CD.
That ends the first chorus

• Make sure that you can play the entire 1st chorus before moving on.
• Suggest that if you can’t play it all yet then just do what you can do, but go ahead with analysis of the rest of the solo. Then come back to this.
• Total time that it should take is about 8 – 10 hours to learn this. Add another 3 to 4 hours to totally memorize the solo.