Theory 2

From Fundamentals of Jazz Improvisation: What Everybody Thinks You Already Know

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Modal Borrowing

Some of the “altered chords” used in jazz while in both major and minor modes are derived from modal borrowing. This concept involves the use of chord qualities indicative of one mode while in another. For example, the dominant chord in major (G7 in the key C major) naturally contains the leading tone B-natural. This tone is necessary for the dominant’s active quality and its function to resolve to tonic. In the minor mode dominant does not contain the leading tone (B-flat rather than B-natural in the key of C minor). In minor, the leading tone is borrowed from major in order for the dominant to function.

In other situations, chord qualities are borrowed not for the necessity of function but for the quality of sound. The half-diminished sound is viiØ in major but iiØ in minor. The 9th in the major mode is major while the 9th in minor is minor. Thus, the ii V7 progression in major is minor/minor (ii7) and major/minor (V7) while in minor the natural qualities are half-diminished (iiØ) and major/minor flat-9 (given the borrowed leading tone as explained above). If one is in the major mode, the qualities normal to minor can be borrowed creating an “altered” progression: iiØ V7 (flat-9) I. Because half-diminished is a function of viiØ in major, it is often written as minor7 flat-5 to show a function of supertonic (ii).

The examples below demonstrate.

Major Mode Chord Functions

Minor Mode Chord Functions

ii V7 I in Major

Qualities that occur normally from key signature are: ii=minor/minor7, major 9; V=major/major7, major9; I=major/major7, major 9.
iiø V7(9) i in Minor

Qualities that occur normally from the key signature are: ii=half-diminished7, minor 9; V=minor/minor7, minor9; i=minor/minor7, major 9.

The minor 9 on supertonic is not common. Use of the half-diminished without the 9th or use of the major 9 borrowed from the major mode is preferred.

The dominant chord without alteration does not contain the leading tone. Use of the major 3rd (leading tone) borrowed from the major mode is considered normal to the minor mode.

Tonic sometimes contains a major 7th in lieu of the minor 7th but not a common assumption.

Minor (Major Borrowing)

Major (Minor Borrowing)

Minor iiø V7(9) i #1: blanketing

The harmonic minor scale based on tonic can be used on all chords of the progression. Mode terminology can be applied when scale choices start on different degrees than tonic. For example, when one plays the harmonic minor scale starting on the second scale degree it is referred to as the 2nd mode of the harmonic minor. This applies to supertonic in the iiø V7(flat-9) i progression. Likewise, the 5th mode of the harmonic minor applies to V7(flat-9). The harmonic minor starting on tonic includes the major 7th and can be superimposed on i melodically, usually in passing, even if the minor 7th is 7th in the chord (harmony instruments will not play both).
Minor iiø V7(b9) i #2: scale specific

Note choices more specific to the chords include locrian and locrian sharp-2 on iiø, diminished ½-step 1ˢᵗ (octatonic) on V7(flat-9), and dorian or harmonic minor on i depending on which 7ᵗʰ is in the harmony.

Locrian includes the minor 9ᵗʰ, which works well melodically but isn’t often sustained. Locrian sharp-2 works well when the major 9ᵗʰ is included with the iiø and often when iiø is borrowed in a major key. The minor 9ᵗʰ of iiø is the same pitch as the minor 3ʳᵈ of tonic when in the minor mode. The major 9 of iiø is the same pitch as the major 3ʳᵈ of tonic when in the major mode.

The diminished scale is a sequence of whole steps and half steps. If tonic is followed by a half-step rather than a whole step, the flat-9 is played followed by sharp-9, major 3, sharp-11, the perfect 5th, major 6, and minor 7.

Harmonic minor can be played melodically on either minor/major 7 or minor/minor 7. Dorian is used when i is minor/minor 7.

Locrian, locrian sharp-2, and diminished ½-step 1ˢᵗ (octatonic) will be explained in more detail in their respective sections of this text.
Major iiø V7(b9) I

Locrian  Diminished 1/2-step 1st  Dorian  Ascending Melodic Minor

flat-9 of iiø same as flat-3 of i

OR

Major iiø V7(b9) I

Locrian (#2)  Diminished 1/2-step 1st  Major

use of M9 on iiø, same as M3 of 1
More Modes

*Major, dorian, and mixolydian* modes have been examined above. There are many additional chord qualities used in jazz improvisation. Other modes of the major scale, modes of the harmonic minor, and modes of the ascending minor help us find pitch collections that represent specific altered sounds. Modes do not always represent chord qualities in a directly logical manner. Their identification helps us proceed from the familiar to the unfamiliar. For instance, if one has learned patterns and developed muscle memory with major scales, the same patterns and muscle memory facilitate *dorian* and *mixolydian* or minor and dominant. One works for three. The same is true for modes (scales) based on other foundational scale types. As in the examples illustrated for *major, dorian, and mixolydian*, the following modes can be transposed to any key.

**Lydian and Locrian**

*Lydian* and *Locrian* are modes of the major scale. As in the *Dorian* and *Mixoluydian* scales previously studied, tertian harmonies built on the scale degrees of the major scale generate different chord qualities and scales starting on the scale degrees, proceeding stepwise, generate various modes (scales).

The chord built on the fourth scale degree, when extended beyond the 7th, is major sharp-11. The mode is labeled *Lydian*.

The chord built on the seventh scale degree of a major scale is half-diminished. The mode/scale stepwise from seventh to seventh is *Locrian*. 
Harmonic Minor

Similar to the use of dorian and mixolydian in a major ii V7 I, the 2nd and 5th modes of harmonic minor can be used on a minor iiø V7(flat-9) I progression.

Harmonic Minor, possible use on minor tonic:

2nd Mode of the Harmonic Minor, possible use on supertonic (iiø):

5th Mode of the Harmonic Minor, possible use on dominant, V7(b9):

Ascending Melodic Minor

Several modes of the ascending melodic minor are useful in realizing altered chords.
Ascending Melodic Minor, possible use on minor tonic (i):

4th Mode, Lydian Dominant, use on dominant sharp-11, V7♯11:

6th Mode, Locrian Sharp-2, use on half-diminished major 9, iiø(♯9):

7th Mode, Super Locrian, Diminished Whole-Tone, or The Altered Scale, use on dominant chords with any combination of altered 5ths and 9ths:

Enharmonic spelling, pitches based on mode:

Theoretical spelling, based on chord tones:
Worksheet Packet #7: Harmonic Minor

Historically, this scale is derived from harmonic usage rather than melodic, primarily the addition of the leading tone to dominant chords in the minor mode. Composers in the Baroque and Classic eras preferred to not use augmented 2\textsuperscript{nd} intervals such as found between the 6\textsuperscript{th} and 7\textsuperscript{th} in the Harmonic Minor Scale. However, this interval is what makes the Harmonic Minor Scale so interesting to modern ears. When used on a minor tonic chord, the leading tone is also an interesting color and is used in the chord or as a melodic pitch even when the minor 7\textsuperscript{th} is in the harmony.

Harmonic Minor can be applied to a minor iiø V7(\textsuperscript{flat-9}), i(\textsuperscript{∆7}) progression. The Harmonic Minor of tonic is placed on all three chords. To be most accurate, the 2\textsuperscript{nd} mode matches iiø and the 5\textsuperscript{th} mode matches V7(\textsuperscript{flat-9}).

\begin{align*}
\text{C harmonic minor} &\quad \text{starting on D (2\textsuperscript{nd} mode)} & \text{C harmonic minor} &\quad \text{starting on G (5\textsuperscript{th} mode)} & \text{C harmonic minor} \\
\begin{align*}
\text{Augmented 2nd} &\quad \text{Leading tone} \\
\end{align*}
\end{align*}

Scale

Write all scales up to the 9th and down.
Do not use key signatures.
Include accidentals ascending and descending.

Modes

Write scales starting on the degree appropriate to the chord.
Ascending on iiø and V7(\textsuperscript{flat-9}).
Ascending and descending on tonic.
Chords

Appropriate chord and arpeggios will be covered in another section.

Patterns

A pattern exercise will be required in a subsequent section.
Harmonic Minor

Example:
Modes of Harmonic Minor

Example:
Worksheet Packet #8: Half-diminished

Locrian (7\textsuperscript{th} mode of Major)/2\textsuperscript{nd} mode of Natural Minor and Locrian Sharp-2 (6\textsuperscript{th} mode of Ascending Melodic Minor)

There are two philosophies in regards to the half-diminished chord in jazz.

1. Use of the \( \emptyset \) symbol for function of vii in major; use of \( ii \text{ min7}_{(\text{flat-5})} \) for function of supertonic.

The natural chord quality of vii in the major mode is half-diminished. This chord (vii\( \emptyset \)) can be used as a substitute for \( V7 \) (dominant). Half-diminished chords may also function as supertonic in an altered ii V7 I progression. In order to avoid confusion, the \( \emptyset \) symbol is used when functioning as dominant and the \( \text{min7}_{(\text{flat-5})} \) symbol used when functioning as supertonic. In essence, half-diminished is vii and natural to major while the supertonic ii is an altered minor. The idea is for vii\( \emptyset \) to signal a V7 I situation and \( ii \text{ min7}_{(\text{flat-5})} \) to signal a ii V7 I situation.

2. Use of the \( \emptyset \) symbol for function of ii in major as borrowed from minor; use of vii\( \emptyset \) when vii substantuting for V7.

The natural chord quality of ii in the minor mode is half-diminished (\( \emptyset \)). When vii\( \emptyset \) is used as a substitute for \( V7 \) it is almost always altered to become fully diminished vii\( \emptyset \). Use of vii\( \emptyset \) in a V7 function is weak and quite rare. The diminished symbol (\( \emptyset \)) signals a V7 I situation while the half-diminished symbol (\( \emptyset \)) signals an altered or, rather, borrowed from the minor mode ii V7 I situation.

Locrian and Locrian Sharp-2 contain a minor 3\textsuperscript{rd}, diminished 5\textsuperscript{th}, and minor 7\textsuperscript{th}. The scales are identical except for the 9\textsuperscript{th}.

Locrian includes a minor 9\textsuperscript{th} and Locrian Sharp-2 a major 9\textsuperscript{th}. To some, the sound of the flat-9 on half-diminished chords is not desirable. Even so, the flat-9 in the Locrian scale works well melodically. Locrian is the 7\textsuperscript{th} mode of the Major Scale.

Locrian is the traditional terminology and means for identifying the half-diminished chord/scale relationship. However, there another means. Half-diminished is used in jazz as a function of supertonic: \( ii \text{ min7}_{(\text{flat-5})} \) or \( ii \emptyset \). This is the normal quality of supertonic in the minor mode. When used in major, the quality is being borrowed from minor; in this way of thinking it is not an altered supertonic nor is its derivation from the 7\textsuperscript{th} scale degree (half-diminished in major = Locrian mode). Therefore, if one thinks supertonic (second scale degree) and applies the minor key signature of tonic, all the right notes fall into place. In other words, rather than thinking Locrian, which belongs to major, think 2\textsuperscript{nd} mode of Natural Minor.
A major 9th on a half-diminished chord is an interesting tone color and not uncommon. The major 9th in the Locrian Sharp-2 Scale fits this chord and can be sustained. Locrian Sharp-2 is the 6th mode of Ascending Melodic Minor. In an altered ii min7(⁵) V7alt I progression, the major 9th of altered ii min7(⁵) is the same chord tone as the major 3 of I. This can be a unifying option when borrowing or altering the ii V7 in major.

Scale

Write all scales up to the 9th and down.
Do not use key signatures.
Include accidentals ascending and descending.

Arpeggio

Write all arpeggios up to the 9th and down.
Do not use key signatures.
Include accidentals ascending and descending.

Chords

Two chord considerations are applied. In minor keys, half-diminished without the 9th is common. In modal borrowing contexts where tonic is major, the major 9th works well on the half-diminished chord.

Write chord voicings as in the example given.
Keep voicings centered around middle C.
Play all chords on the piano, listen, become familiar with the sound of the jazz voicing.
Play the companion scale and arpeggio.

Patterns

No patterns are included for this concept.
Scale: Locrian (7th mode of Major)

Example:

```
C     F
Db    Eb
Ab    G#
Db    C#
Gb    F#
B     E
A     D
G
```
Arpeggio

Example:

C

F

Bb

Eb

Ab

G#

Db

C#

Gb

F#

B

E

A

D

G
Chord: $7^\text{th}$ (no $9^\text{th}$)

Example:
Scale: Locrian Sharp-2 (6th mode Ascending Melodic Minor)

Example:

Example:

\[ \text{C} \quad \text{f} \]

\[ \text{Bb} \quad \text{Eb} \]

\[ \text{Ab} \quad \text{G}\# \]

\[ \text{Db} \quad \text{C}\# \]

\[ \text{Gb} \quad \text{F}\# \]

\[ \text{B} \quad \text{E} \]

\[ \text{A} \quad \text{D} \]

\[ \text{G} \]
Arpeggio: Half-diminished Major 9

Example:

\[\text{C}\quad\text{F}\]
\[\text{B}_b\quad\text{E}_b\]
\[\text{A}_b\quad\text{G}\#\]
\[\text{D}_b\quad\text{C}\#\]
\[\text{G}_b\quad\text{F}\#\]
\[\text{B}\quad\text{E}\]
\[\text{A}\quad\text{D}\]
\[\text{G}\]
Chord: Half-diminished Major 9th

Example:

```
C7(9)  B7(9)  Bb7(9)  A7(9)  Ab7(9)
      |     |      |     |      |
      |     |      |     |      |
      |     |      |     |      |
      |     |      |     |      |
      |     |      |     |      |
G#7(9) G7(9) Gb7(9) F#7(9) F7(9)
      |     |      |     |      |
      |     |      |     |      |
      |     |      |     |      |
      |     |      |     |      |
      |     |      |     |      |
E7(9)  Eb7(9)  D7(9)  Db7(9)  C#7(9)
      |     |      |     |      |
      |     |      |     |      |
      |     |      |     |      |
      |     |      |     |      |
      |     |      |     |      |
```
Dominant Flat-9 chords are a natural product of the minor mode. In D minor the key signature has one flat. If one stacks thirds starting on the 5th scale degree (A) the tones are A, C-sharp, E, G, and B-flat. (Remember, the 3rd of a dominant chord always contains the leading tone whether it is in the minor or major mode.) Notice that the 9th is flatted when compared to the 9th in the major mode.

A scale that represents the sound of the Dominant Flat-9 chord is the Diminished Scale starting with a ½-step in stead of a whole (as would be correct for a diminished chord). This creates an eight-note scale. Bartok labeled this as the Octatonic Scale. It is most commonly called the Diminished Scale (1/2-step or whole step 1st) because every other note, no matter which pitch one starts on, makes a diminished 7 chord.

This scale is successful in depicting the sound of both flat-9 and sharp-9 chords with no alterations of the 5th. There is also a sharp-11. This is not the flat-5 due to the fact that the scale includes the perfect 5th.

There are at least four reasons for the prevalence of the V7(9) chord/scale in jazz improvisation:

1. It sounds ‘cool.” For more than half a century jazz musicians have been improvising with the Diminished (½-setp 1st) or Octatonic scale. No matter the order of notes, when played in a jazz style this scale continues to sound contemporary.
2. There are only three transpositions of the scale, making one scale successful in four keys.
3. It is a symmetrical scale. Symmetrical scales lend themselves to pattern work.
4. The Diminished scale can be used on at least three chord qualities: dominant flat-9, dominant sharp-9, and diminished.

Scale

Write all scales up to the 9th and down.
Do not use key signatures.
Include accidentals ascending and descending.
Arpeggio

Write all arpeggios up to the 9th and down.
Do not use key signatures.
Include accidentals ascending and descending.

Chords

Write chord voicings as in the example given.
Keep voicings centered around middle C.
Play all chords on the piano, listen, become familiar with the sound of the jazz voicing.
Play the companion scale, arpeggio, and pattern.

Patterns

Several examples are given with the chord most appropriate to the pattern included.
Find two patterns that are specific to the quality (major). Sources might include a transcription, a
jazz improvisation textbook, Aebersold play-a-long series, a book on jazz patterns such as Jerry
Coker's Pattern for Jazz, a reputable professional (i.e. Aaron Miller, Ryan Nielsen, Mark
Watkins, Jay Lawrence, Keith Phillips, Justin Nielsen, or a visiting guest).
Include the appropriate chord symbol and pattern source.
Add patterns to the log to increase vocabulary.
Scale

Example:

C  F

Bb  Eb

Ab  G#

Db  C#

Gb  F#

B  E

A  D

G
Arpeggio

Example:

```
C    F

Bb   Eb

Ab   G#

Db   C#  

Gb   F#  

B    E

A    D

G
```
Patterns (treble)

Examples:
Patterns (bass)

Examples:

\[ \text{G7(b9)} \]

\[ \text{D7} \]

\[ \text{C7} \]

\[ \text{D7(b9)} \]

\[ \text{C7} \]

\[ \text{G7(b9)} \]

\[ \text{D7} \]

\[ \text{C7} \]

\[ \text{G7(b9)} \]

\[ \text{C7} \]
The Altered Scale is also known as the Superlocrian Scale and the Diminished Whole Tone Scale.

The term Superlocrian comes from its placement as the 7th mode of the Ascending Melodic Minor Scale. The Locrian Scale is the 7th mode of major thus the “super” distinguisher. Notice that the Altered Scale and the Superlocrian scale carry the same pitches enharmonically.

Diminished Whole-tone terminology comes from the scale's combination of Diminished Scale (1/2-step 1st version) and Whole-tone Scale properties. The first part of the scale proceeds: half-step, whole-step, half, whole to the flat-5 (sharp-11).

Diminished Scale ½-step 1st:

Whole-tone Scale:
The next part overlaps starting on the 3rd and proceeds by whole-step to the octave. Alterations of both the 9th and the 5th are included.

Scale

Write all scales up to the 9th and down.
Do not use key signatures.
Include accidentals ascending and descending.

Arpeggio

Write all arpeggios up to the 9th and down.
Do not use key signatures.
Include accidentals ascending and descending.

Chords

Write chord voicings as in the example given.
Keep voicings centered around middle C.
Play all chords on the piano, listen, become familiar with the sound of the jazz voicing.
Play the companion scale, arpeggio, and pattern.
Scale

Example:

C  F

Bb  Eb

Ab  G♯

Gb  F♯

B  E

A  D

G
Arpeggio

Example:

\[ \text{C7(9\#3)} \]

\[ \text{Bb} \quad \text{Eb} \]

\[ \text{Ab} \quad \text{G\#} \]

\[ \text{Db} \quad \text{C\#} \]

\[ \text{Gb} \quad \text{F\#} \]

\[ \text{B} \quad \text{E} \]

\[ \text{A} \quad \text{C} \]

\[ \text{G} \]
Chord
Worksheet Packet #11: iiØ V7(b9) i(∆7)

Review the chapter on Modal Borrowing before proceeding through the following exercises.

Chord Progressions

Write chord voicings as in the example given.
Keep voicings centered around middle C.
Play all chords on the piano, listen, become familiar with the sound of the jazz voicing.

Pattern Creation

Five altered progressions are indicated.
Determine which mode/scale best fits the chord.
Compose a melody/improvisations/pattern.
Progression

Example:

\[\begin{array}{c}
  Bb & ii^c & V^7(99) & i & Ab & ii^c & V^7(99) & i & F# \\
  (4) & \text{b3} & \text{b3} & \text{b3} & \text{b3} & \text{b3} & \text{b3} & \text{b3} \\
  (2) & \text{b2} & \text{b2} & \text{b2} & \text{b2} & \text{b2} & \text{b2} & \text{b2} \\
  (1) & \text{b7} & \text{b7} & \text{b7} & \text{b7} & \text{b7} & \text{b7} & \text{b7} \\
  (5) & \text{b9} & \text{b9} & \text{b9} & \text{b9} & \text{b9} & \text{b9} & \text{b9} \\
  \text{(fingerings)} & \text{chord tones} & \text{e} & \text{c} & \text{C} \\
  \end{array}\]
Pattern Creation

Exercise 1:

\[ C-7(b5) \quad F7(b9) \quad Bb-7(b7) \]

Exercise 2:

\[ F#m7(b5) \quad B7(#9) \quad E119 \]

Exercise 3:

\[ D7(b9) \quad G7(b5) \quad C117 \]

Exercise 4:

\[ F8 \quad Bb7(#9) \quad Eb-7(b7) \]

Exercise 5:

\[ E87(b9) \quad A7(b9) \quad D115 \]
Worksheet Packet #12: Diminished

The Diminished Scale is a symmetrical scale of limited transposition. It proceeds whole-step (W), half-step (H), W, H, W, H, etc.

This configuration can only be transposed three times; there are only three Diminished Scales. When one starts on any of the diminished chord tones (one, flat-3, flat-5, diminished 7), it can be applied to that key. For example, a diminished chord on D is: D, F, A-flat, C-flat. The scales on D is: D, E, F, G, A-flat, B-flat, C-flat, C-sharp, and D.

One can start on F and proceed: F, G, A-flat, B-flat, C-flat, C-sharp, D, E, and F applied to an F diminished chord (F, A-flat, C-flat, E-double flat).

The pitches of the scale are the same. This applies to A-flat and C-flat (B) diminished chords as well.
Thus, the D, F, A-flat, and C-flat (B) Diminished Scales constitute one of the three Diminished Scales. The same process applies to C, E-flat, G-flat, and B-double flat (A) as a group sharing one Diminished Scale and to E, G, B-flat, and D-flat (C-sharp).

Extensions on diminished chords can be achieved by adding any note that is a whole-step above a chord tone. These tones will create color without undue dissonance.

![Example of diminished chord extensions](image)

Every other note is a leading tone to a chord tone providing forward motion.

![Example of leading tones](image)

**Scale**

Write all scales up to the 9th and down.
Do not use key signatures.
Include accidentals ascending and descending.

**Arpeggio**

Write all arpeggios up to the 9th and down.
Do not use key signatures.
Include accidentals ascending and descending.

**Chords**

Write chord voicings as in the example given.
Keep voicings centered around middle C.
Play all chords on the piano, listen, become familiar with the sound of the jazz voicing.
Play the companion scale, arpeggio, and pattern.

**Patterns**

No pattern exercises are given due to the fact that they are the same as the patterns applied to the Dominant Altered 9 worksheets.
Scale

Example:

C

F

Bb

Eb

Ab

G♯

Db

C♯

Gb

F♯

B

E

A

D

G
Arpeggio

Example:

\[ C_7 \]

\[ F \]

\[ Bb \]

\[ Eb \]

\[ Ab \]

\[ G\# \]

\[ Db \]

\[ C\# \]

\[ Gb \]

\[ F\# \]

\[ B \]

\[ E \]

\[ A \]

\[ D \]

\[ G \]
Worksheet Packet #13: Dominant Altered 5th

One of the most common scales associated with alterations of the 5th on dominant chords is the Whole-tone scale. This includes flat-5 and flat-9 with no alteration of the 9th.

The Whole-tone scale is a symmetrical scale with limited transposition; meaning, there are only two Whole-tone scales. Due to its division into major seconds with no half-steps or augmented intervals, there is no strong pull or motion to any particular note.

The following example shows the flat-5 and sharp-5 chords based on each scale degree of a Whole-tone Scale. The related scale follows the chords and is written with the theoretically correct spelling. There are six scale examples representing a single Whole-tone scale starting on each of its six scale degrees.

The same can be done for the “other” Whole-tone scale starting on C-sharp, E-flat, F, G, A, and B.

Scale

Write all scales up to the 9th and down.
Do not use key signatures.
Include accidentals ascending and descending.

Arpeggio

Arpeggios in this exercise are all dominant sharp-5. Dominant flat-5 could have been applied to demonstrate the principle.

Write all arpeggios up to the 9th and down.
Do not use key signatures.
Include accidentals ascending and descending.
Chords

Chords in this exercise are all dominant sharp-5. Dominant flat-5 could have been applied to demonstrate the principle.

Write chord voicings as in the example given.
Keep voicings centered around middle C.
Play all chords on the piano, listen, become familiar with the sound of the jazz voicing.
Play the companion scale, arpeggio, and pattern.

Patterns

Several examples are given with the chord most appropriate to the pattern included.
Find two patterns that are specific to the quality (major). Sources might include a transcription, a jazz improvisation textbook, Aebersold play-a-long series, a book on jazz patterns such as Jerry Coker’s *Pattern for Jazz*, a reputable professional (i.e. Aaron Miller, Ryan Nielsen, Mark Watkins, Jay Lawrence, Keith Phillips, Justin Nielsen, or a visiting guest).
Include the appropriate chord symbol and pattern source.
Add patterns to the log to increase vocabulary.
Scale: Whole Tone

Example:

```
C  F

Bb  Eb

Ab  G#

Db  C#

Gb  F#

B  E

A  D

G
```
Arpeggio

Example:
Chord

C9(#5)  Eb9(#5)  G9(#5)  F9(#5)  A9(#5)

C#9(#5)  D9(#5)  E9(#5)  G9(#5)  B9(#5)

C9(#5)  E9(#5)  A9(#5)  G9(#5)  B9(#5)
Patterns (treble)

Examples:

G A B, or G#7(#5)

\[\text{Musical notation image}\]
Patterns (bass)

Examples:

G, A, B, or C♯(♯5)
Worksheet Packet #14: Sharp-11 Concepts

Lydian and Lydian Dominant are mode names for scales that apply to shar-11 chords, major and dominant respectively. Lydian is the 4th mode of the Major Scale; that is, the key signature of tonic but starting on the 4th note of the scale. For example, G Lydian uses the same key signature as D major. One can also consider the Lydian scale as major with a raised 4th.

Lydian Dominant is the 4th mode of the ascending melodic minor scale. Ascending Melodic Minor in G is G, A, B-flat, C, D, E, F-sharp, G. The 4th mode in this key starts on C and proceeds C, D, E, F-sharp, G, A, B, C: same pitches. One can also consider the Lydian Dominant scale as dominant (myxolydian) with a raised 4th.

**Scale**

Write all scales up to the 9th and down.
Do not use key signatures.
Include accidentals ascending and descending.

**Arpeggio**

Write all arpeggios up to the 9th and down.
Do not use key signatures.
Include accidentals ascending and descending.

**Chords**

Write chord voicings as in the example given.
Keep voicings centered around middle C.
Play all chords on the piano, listen, become familiar with the sound of the jazz voicing.
Play the companion scale, arpeggio, and pattern.
Scale: Lydian
4th mode of Major

Example:
Arpeggio: Major Sharp-11

Example:

```
| C   | f  |
| Bb  | Eb |
| Ab  | G# |
| Db  | C# |
| Gb  | F# |
| B   | E  |
| A   | C  |
| G   |    |
```
Chord: Major Sharp-11


Scale: Lydian Dominant
4th mode of Ascending Melodic Minor

Examples:

\[ C \rightarrow F \rightarrow Bb \rightarrow Eb \rightarrow Ab \rightarrow G\# \rightarrow Db \rightarrow C\# \rightarrow Gb \rightarrow F\# \rightarrow B \rightarrow E \rightarrow A \rightarrow D \rightarrow G \]
Arpeggio: Dominant Sharp-11

Examples:
Chord: Dominant Sharp-11

\[
C_9(#11) \quad A_{b9}(#11) \quad G_{#9}(#11) \quad E_{#9}(#11) \quad D_{b9}(#11)
\]

\[
C_{#9}(#11) \quad A_{b9}(#11) \quad E_{b9}(#11) \quad B_{b9}(#11)
\]

\[
G_{b9}(#11) \quad F_{#9}(#11) \quad E_{b9}(#11) \quad B_{b9}(#11) \quad C_{#9}(#11)
\]
Pentatonics have been used in much of the folk music of the world for centuries. They are groups of any five different pitches. In Western art music two types have become common.

The Major Pentatonic scale is comprised of scale degrees 12356 of the Major Scale.

Minor Pentatonic can be found by one of two ways. It is related to major similarly to relative minor. From major, use scale degrees 61235 in that order. For example, C Major Pentatonic is CDEGA. Minor Pentatonic is ACDEG.

The second way to determine minor pentatonic is through alteration of the major scale, as follows: 1, flat-3, 4, 5, flat-7.

The Minor Pentatonic with an added flat-5 constitutes the Blues Scale.

The Major Pentatonic with an added flat-3 is also a Blues Scale (i.e. C Major Pentatonic with an added flat-3 is C, D, E-flat, E-natural, G, A). This is the same as “the” Blues Scale starting on the 6th scale degree of tonic.

Major Pentatonic and the various blues scales can be used on any dominant chord. Minor Pentatonic can be used on any minor chord.
The Minor Pentatonic works on a sus4 chord if one starts on the 5th scale degree. For example, on Csus4 start on G and play the G Minor Pentatonic. This is the same as playing the Major Pentatonic starting on the minor 7th. The pitches of these two pentatonic scales are the same as the chord tones of a 9sus4 chord.

The pentatonic scale’s strong melodic sound creates a momentum that sometimes allows the improviser to blanket lines over varying chord sequences.

**Scale**

Write all scales up to the 9th and down.
Do not use key signatures.
Include accidentals ascending and descending.

**Arpeggio**

Write all arpeggios up to the 9th and down.
Do not use key signatures.
Include accidentals ascending and descending.

**Chords**

Write chord voicings as in the example given.
Keep voicings centered around middle C.
Play all chords on the piano, listen, become familiar with the sound of the jazz voicing.
Play the companion scale, arpeggio, and pattern.

**Patterns**

Several examples are given with the chord most appropriate to the pattern included.
Find two patterns that are specific to the quality (major). Sources might include a transcription, a jazz improvisation textbook, Aebersold play-a-long series, a book on jazz patterns such as *Jerry Coker’s Pattern for Jazz*, a reputable professional (i.e. Aaron Miller, Ryan Nielsen, Mark Watkins, Jay Lawrence, Keith Phillips, Justin Nielsen, or a visiting guest).
Include the appropriate chord symbol and pattern source.
Add patterns to the log to increase vocabulary.
Scale: Major Pentatonic

Example:

```plaintext
C  C#  Gb  G  G##  C  G  G##  D  D##  G  G##

C  F

Bb  Eb

Ab  G#

Db  C#

Gb  F#

B  E

A  D

G
```
Scale: Minor Pentatonic

Example:

\[ \text{C - C-7 - A-9 - A-11 - C-13 - A-7 - C-9 - C-13} \]

\[ \text{C - F - Bb - Eb - Ab - G# - Db - C# - Gb - F# - B - E - A - D - G} \]
Patterns (treble)

Examples:

- C7 C-7 Eb7 Fsus
  - (circular)
  - start on lowest note of instrument, continue pattern starting on next scale degree

- C minor = E-flat major
  - same as above
Patterns (bass)

Examples:

- Start on lowest note of instrument, continue pattern starting on next scale degree
- Same as above
- C minor = E-flat major
- Same as above