

THE LYDIAN AUGMENTED SCALE

The term, lydian augmented scale, was coined by George Russell in his book, THE LYDIAN CONCEPT. He describes its structure as:

I II III +IV +V VI VII
example: C D E F# G# A B

It can be described, then, as a major scale with a raised (augmented) fourth and fifth. The term lydian augmented derives from the fact that the raised fourth makes it lydian, and the raised fifth, when speaking of interval names and triad structures, is called augmented.

The sound of the scale, to the novice, has minimal appeal, and its usefulness is vague, owing to the fact that the scale is seldom applied to the root of the chord, and the fact that the novice has not yet become accustomed to hearing the many applications of the scale to various types of chords. Once the sounds of the scale-to-chord applications have been ingrained in the ear (through practice), the student will no longer find the sound of the scale to be unappealing or vague, but will quickly form the subconscious habit of hearing at least one of the scale-to-chord applications whenever the scale is sounded, even if the chord is not, for the moment, being played.

Just as the major scale can be recirculated from different degrees of the scale, producing dorian, phrygian, lydian, etc., so can we recirculate the lydian augmented scale, also, producing the following modes:

C D E F# G# A B C (C lydian augmented)
D E F# G# A B C D (D lydian dominant)
E F# G# A B C D E (E Hindu)
F# G# A B C D E F# (F# locrian #2)
G# A B C D E F# G# (G# diminished-whole tone)
A B C D E F# G# A (A ascending melodic minor)
B C D E F# G# A B (B Javanese)

Of the thirteen varieties of chord types that are used in jazz music, five of them are accommodated by one of the above modes. If we utilize only the key used in the above example (obviously, there are eleven other keys of the above example), the five chords would be:

C^Δ+5 (C lydian augmented)
D⁷+4 (D lydian dominant)
F#⁹₀ (F# locrian #2)
G#⁷₊₅ (G# diminished-whole tone)
A-^Δ (A ascending melodic minor)

Now since all five of the above scales contain exactly the same pitches, an obvious conclusion would be that any one mode could have been used for all

five of the examples of chord-types. For example, the F# locrian #2 would have accommodated any or all of the five chords shown. Even the E Hindu or B Javanese scales (not shown in the list of five chord-types) would have worked. In other words, as long as the chosen scale has the appropriate pitch content in its members (scale degrees), it doesn't matter which mode is used. Now this brings up an interesting point...why would we want to burden ourselves with learning twelve keys of seven different modes (a total of 84 items to be learned) instead of learning twelve keys of one mode (a total of only 12 items to be learned)? The answer lies in a peculiar, unnecessary, even ill-advised habit of wanting to think and/or build scales from the root of the chord (i.e., a D lydian dominant for a D7(+4) chord). Such practice is "unnecessary" because we now realize that any single mode of the scale would have taken care of our needs, as long as it is in the correct key. And such practice might be considered "ill-advised" because thinking the scale from the root of the chord may cause us to play the root of the chord more often than we should (since the chord root is often the most redundant, ineffective note we can choose to use in our improvised melodies).

Of the seven possible modes, from which we need to choose one upon which to focus our attention and diligent practice, studies have shown that most players prefer the sound and effect of the lydian augmented scale (see p.38 of Coker's COMPLETE METHOD FOR IMPROVISATION). Unfortunately however, it is probably not the most familiar, at least for the moment. Ascending melodic minor, lydian dominant, diminished-whole tone, even locrian #2 are probably more familiar to the average student of jazz. Consequently the student may wish to use one of those modes instead of lydian augmented for the moment, until he/she has had sufficient time to ingrain the less-familiar lydian augmented, since improvisation demands quick, unfettered responses to each chord. The main points are: (1) focus on applying only one mode to all five chord-types, instead of trying to ingrain five different scale-types for the five chord-types, and (2) make plans to ingrain the lydian augmented scale for earliest possible use for all five chord-types.

It is extremely important that the student understand that the notes of the scales used to accommodate each of the five chord-types shown in the example at the bottom of page 1 is not arbitrary, or simply one choice of several possibilities. If those five chord-types were extended to include ninths, elevenths, and thirteenths, it would be found that the scale choices shown in the example are precisely the needed scale tones. For example, the F# \emptyset is spelled F#, A, C, and E. The ninth can only be G#, the eleventh is B, and the thirteenth is D. Simple comparison with the note content of the C lydian augmented (or any of the other six modes, like F# locrian #2, D lydian dominant, etc.) will show that the scale tones agree, not approximately, but precisely with what is called for by the full extension of the chord. This is also true of the other four chord-types.

It might also help the student to remember that each of the fully-extended chord-types could be shown in a polychordal fashion. For example:

$\frac{E}{D7}$ = D7 with added 9th, augmented 11th(or +4), and 13th

$\frac{B-}{A-\Delta}$ = A- Δ 7 with added 9th, 11th, and 13th

$\frac{G\#o}{F\#\emptyset}$ = F# \emptyset with added 9th, 11th, and 13th

Several other generalities about chord structures, especially those chord-types under discussion here are:

- (1) chords are generally structured as 1, 3, 5, and 7 (in their basic form), the 'omitted' 2, 4, and 6 being utilized as 9(same as 2), 11(same as 4), and 13(same as 6);
- (2) in most cases, except for the $\emptyset 7$ and the $o7$, the use of a symbol containing a "b5" is a misnomer, since the chord-scale is going to contain an unaltered 5th or an augmented 5th as well, so the b5 confuses the player into wondering if that portion of the scale will be 4, b5, 5, 6, or 4, b5, 6, etc. A better way to symbolize that chord element would be +4 (or +11), thereby making it plain that the scale will have a +4, a 5th, and a 6th;
- (3) the question about the difference between a dominant seventh chord with a b9...or a +9 is a moot point. Both forms of the altered ninth (b9 and +9) can co-exist in the same chord voicing. Furthermore, the scale used with a chord having an altered (b or +) will contain both forms of the altered 9th (for example, the lydian augmented scale off the third of an altered dominant and the diminished scale for a b9, 13 dominant will each contain both the b9 and the +9). The only important distinction to make is between the unaltered 9th and the altered 9th (b or +), as the unaltered and altered ninths never appear in the same chord or scale;
- (4) in major seventh and all dominant sevenths except the sus.4 dominant, the issue of a 4 vs. a +4 is also a moot point, as the natural 4 is never a chord tone in those chord-types, and that note is rather 'dangerous' to use in improvised melodies, especially as a sustained or repeated tone. It is generally wiser to use the +4 on those chord-types, even when it is not specifically asked for;
- (5) it is extremely unlikely that any chord-type except the major seventh with a +5 will ever be found to have both a +5 and a 13th (or 6th). The inclusion of one or the other (+5 or 13) will be a strong determining factor with regard to the scale that should be used with the chord; and
- (6) with regard to the major seventh chord with the +5, it is at present a relatively rare chord, but its popularity in contemporary jazz compositions is growing dramatically, found often in the compositions of Ron Miller, Wayne Shorter, and John Scofield, to mention a few. It will also be noted that, at least for the present, the chord-type seldom contains a 9th, +11, or 13th.

We have listed five chord-types which are accommodated by the lydian augmented scale (or one of its modes). This is only significant if we encounter those chord-types frequently in the given chord symbols of the tunes we play. How frequent are those 5 chord-types? For starters, three of the chord-types (\emptyset , 7 with a +5 and an altered 9th, and the -) are all involved with II-V-I in minor, and we spend approximately half of our improvising time in minor! Then there is the growing use of the major seventh chord with the +5 (not all chords are actually growing in popularity). Finally, if we are to accept point (4) in the above list, then it is advisable to add a +4 to all 'unaltered' dominants, which occurs more often than any other chord!

One more point should be made with regard to applying scales and melodies to the II, V, I progression in minor: the successive scale roots and/or starting pitches of sequential patterns or melodies will shift up a minor third interval when moving from the II chord to the V chord, then up a major third interval when going from the V chord to the I chord, spelling a hypothetical minor triad with the starting pitches. For example, if the first scale root or starting pitch of a phrase (on the II \emptyset) is F#, then the next roots/starting pitches will be A (for the V7 alt.) and C# (on the I- Δ). This reduces the problem of application to figuring only the scale root/starting pitch for the II \emptyset , as the remaining two applications will fall into place via the hypothetical minor triad system, making for ease of scalar application. To develop facility with using the system, practice scales, patterns, and improvisation with the II, V, I (in minor) track of Aebersold's Volume 3.

PLACEMENT OF MODES WITHIN CHORDS

	asc.m.m.	javanese	lyd.aug.	lyd.dom.	hindu	loc.#2	dim./w.t.
\emptyset	3	4	b ₅	b ₆	7	root	2
7 alt.	b ₂	#2	3	#4	#5	7	root
- Δ	root	2	3	4	5	6	7
7 +4	5	6	7	root	2	3	#4
Δ +5	6	7	root	2	3	#4	#5

Chord substitutions are most commonly selected on the basis of common tones (between the given chord and its substitute chord) or common function. There are other means, of course, most notably the use of a substitute chord which simply accomodates or contains the given melody note. But since such melody notes cannot be anticipated in an improvised melody, the former means (common tones/common function) is bound to result in a more appropriate selection of substitute chords.

The lydian augmented scale (and its modes, such as ascending melodic minor, diminished-whole tone, locrian #2, lydian dominant, etc.) is a remarkably flexible scale, accomodating five types of chords: - Δ 7, \emptyset , Δ 7(+5), 7(+4), and the altered dominant chord (+5, +9 or b9). These are by no means all chord-types that are possible, but they do represent many commonly-encountered chord-types. Furthermore, those chords which are accomodated by the major scale or one of its modes (dorian, lydian, etc.) are easy to deal with, and in the case of chords which utilize the diminished scale or whole-tone scale, like the 7(b9)(13) and the 7(+5)(9) respectively, the choices are simple, because the scales are symmetrical (a C7 with a b9 and 13, for example, can be substituted for by a chord of the same type on Eb, F#, or A; similarly a C7 with a +5 and a 9 can be substituted for by chords of the same type on D, E, F#, G#, or Bb). The following chart, then, will focus on the chord-types accomodated by the lydian-augmented scale. To use the chart, simply locate the given chord root and type on the chart and select any of the other four chords shown on the same horizontal line. The "unused chord root" columns are to aid the user in structuring slash chords with any of the five chord-types shown on any horizontal line.

	$-\Delta$	$\begin{matrix} 7 \\ +4 \end{matrix}$	$\begin{matrix} +9 \\ 7 \\ +5 \end{matrix}$	ϕ	$\Delta+5$	UNUSED CHORD ROOTS	
E^b LYD. AUG.	$C^{-\Delta}$	F^7_{+4}	B^{+9}_{7+5}	$A\phi$	$E^b\Delta_{+5}$	$/G$	$/D$
E LYD. AUG.	$C^{\#\Delta}$	$F^{\#7}_{+4}$	C^{+9}_{7+5}	$B^b\phi$	E^{Δ}_{+5}	$/G^{\#}$	$/D^{\#}$
F LYD. AUG.	$D^{-\Delta}$	G^7_{+4}	$D^b^{+9}_{7+5}$	$B\phi$	F^{Δ}_{+5}	$/A$	$/E$
G^b LYD. AUG.	$E^b-\Delta$	A^b7_{+4}	D^{+9}_{7+5}	$C\phi$	$G^b\Delta_{+5}$	$/B^b$	$/F$
G LYD. AUG.	$F^{-\Delta}$	A^7_{+4}	$E^b^{+9}_{7+5}$	$C^{\#}\phi$	G^{Δ}_{+5}	$/B$	$/F^{\#}$
A^b LYD. AUG.	$F-\Delta$	B^b7_{+4}	E^{+9}_{7+5}	$D\phi$	$A^b\Delta_{+5}$	$/C$	$/G$
A LYD. AUG.	$F^{\#-\Delta}$	B^7_{+4}	F^{+9}_{7+5}	$E^b\phi$	A^{Δ}_{+5}	$/C^{\#}$	$/G^{\#}$
B^b LYD. AUG.	$G^{-\Delta}$	C^7_{+4}	$G^b^{+9}_{7+5}$	$E\phi$	$B^b\Delta_{+5}$	$/D$	$/A$
B LYD. AUG.	$A^b-\Delta$	D^b7_{+4}	G^{+9}_{7+5}	$F\phi$	B^{Δ}_{+5}	$/D^{\#}$	$/A^{\#}$
C LYD. AUG.	$A^{-\Delta}$	D^7_{+4}	$A^b^{+9}_{7+5}$	$F^{\#}\phi$	C^{Δ}_{+5}	$/E$	$/B$
D^b LYD. AUG.	$B^b-\Delta$	E^b7_{+4}	A^{+9}_{7+5}	$G\phi$	$D^b\Delta_{+5}$	$/F$	$/C$
D LYD. AUG.	$B^{-\Delta}$	E^7_{+4}	$B^b^{+9}_{7+5}$	$G^{\#}\phi$	D^{Δ}_{+5}	$/F^{\#}$	$/C^{\#}$

PLAY-ALONG TRACKS FOR THE LYDIAN-AUGMENTED SCALE

for 7(+4) chords:

<u>source</u>	<u>title/topic</u>	<u>duration</u>	<u>tempo</u>	<u>no.times</u>
JA-1	cycle of dominants	4 meas. ea.	132	2
JA-21	dominants, chromatically \uparrow & \downarrow	4 meas. ea.	168	1
JA-16	cycle of dominants	2 meas. ea.	132	6
JA-21	cycle of dominants	1 meas. ea.	88	4
JA-21	dominants, random order	2 meas. ea.	108	4

for - Δ chords:

JA-21	- Δ , chromatically \uparrow & \downarrow	4 meas. ea.	138	1
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for 7, +5, +9 to I (Δ or -):

JA-3	V7 alt.-I Δ or I- , random	4 meas.(4x ea.)	126	1
JA-16	V7 alt.-I Δ & I- , random	2 meas.(2x + 2x)	108	1 (ca. 3 min. length)

for \emptyset :

JA-21	cycle	4 meas. ea.	132	1
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for II \emptyset , V alt., I- :

JA-3	II-V-I in minor, downstep	4 meas. ea. (\cdot !f)	120	1
TFI-III-1	The Fifth Minor (reverse cyc.)	2 meas. ea.	144	6