LESSON 9.
BLUES THEORY & PENTATONIC SCALES.

9.1 Style ***Two jazz styles; one rhythmic idiom.***

We mentioned distinguishing STYLE by rhythmic tendency in lesson 6.4 and it is possible that you will have some sort of an idea of what is implied. However, the blues style is identified by something other than rhythm.

The difference between improvised continuities produced by the techniques of 'playing the changes' as detailed in lessons 1 to 8 and those which will emerge from pentatonic and blues scales studied in the next 3 lessons will be revealing. A much better understanding of what is meant by style, in terms of MELODIC PATTERNS, will be gained by comparing the playing methods of these two approaches.

It should be noted that there is NO DIFFERENCE in RHYTHMIC IDIOMS between the 'playing the changes' style of improvisation and the blues style. This confirms again that RHYTHM is the major component in all the jazz idioms we are studying. Its peculiar character remains, even though the harmonic and melodic idioms may change.

We must emphasise that although rhythm is the major distinguishing feature of jazz, the blues are a second characteristic which is of massive important to jazz.

If so, why have delayed our studies of the blues until lesson 9? The reason is that the blues are still FURTHER REMOVED from the western musical tradition than improvising over the chord sequences. The chord sequences we have studied have much in common with the western tradition, but the blues idiom is very much more Afro American and its assimilation can therefore be more difficult.

It should become clear that there is an advantage when teaching and studying jazz to isolate these two 'sub styles'. The advantage of the separation is that when we analyse the SOUND of the jazz sub styles we find one is concerned with CHORDS and the other with SCALES. The underlying theory is conveniently different although we must stress again that BOTH have the same rhythmic characteristics and BOTH have preoccupied jazzmen of all generations and permeated all developments and most important they OVERLAP CONTINUALLY in performance. The separation is a convenience to help the leaning process which is often irrelevant when we come to playing.

First of all we must explain exactly what we mean by THE BLUES.

The blues are integral to all legitimate jazz. Whatever jazz you listen to, wherever you go, you are bound to hear the blues ..... played in varying styles, in varying forms with varying instruments, but still basically, the blues.

The emotional, 'haunting' music of the blues originated in USA in the last century, developing from the early work songs and church songs. These 'riveting laments of the rural South' were echoes of field hollers and Baptist jubilees. Contrary to popular belief the blues are not always sad, they encompass all emotions, but they do have a CHARACTERISTIC SOUND.

The sound emerges from the co-ordination of CERTAIN SPECIAL SCALES with a SPECIFIC TYPE OF CHORD SEQUENCE.

Normally a composer of a song first constructs a melody and afterwards he fits an appropriate, 'correct sounding' chord sequence to that melody. The usual pattern establishes the key sound and then moves away before returning to the original key to finish as we have discussed. The way the chords move from and to the tonic must SOUND right and the generally accepted 'rules' are now well understood and some fundamentals have been outlined in the previous lessons.

The blues are DIFFERENT. Although the music moves from and then back to the key sound it does so within a fixed sequence of chords. The same traditional set of chords have been handed down from the very early start of jazz. Styles have changed but jazzers have remained loyal to the blues vehicle. It is the SEQUENCE which initially distinguishes the blues from other

songs. With the blues the chords come first, the melody is created afterwards. There has been more jazz played around the blues sequence over the years, than all other sequences put together.

The particular attraction of the blues to jazz musicians is that they are FREE to create melody and rhythmic patterns around a FAMILIAR harmonic framework. Thousands of blues with unimaginable diversity have been created over the years around the same basic framework. When improvising some sort of framework is essential to avoid chaos, and because jazz is essentially a rhythmic music the relative simplicity of the harmony is irrelevant. Nevertheless the basic sequence can be adapted and 'enhanced' in endless ways to avoid monotony, but the fundamental 'feeling' of the blues sequence is always intact. See lesson10.3 for some blues progression variations.

The traditional blues is a SPECIFIC song form with the ubiquitous 3 chord ‘trick’ and overwhelmingly, but not exclusively a 12 bar structure –

C / / /	/ / / /	/ / / /	C7 / / /
F / / /	/ / / /	C / / /	/ / / /
G7 / / /	/ / / /	C / / /	/ / / /

The pattern is 3 groups of 4 bars, with fitting words. The words are usually stated in the first 4 bars, repeated in the second 4 bars with a release to the dominant 7th in the last 4 bars.

The BIG change in the 9th bar and the HIGHLY CHARACTERISTIC 'blues change' in the 5th bar are always retained but otherwise the harmony can be 'enhanced'. This can be done with 7th chords (and 9ths), a move to the subdominant can be made early in the 2nd bar, the minor inserted in bar 6 and 'turnarounds' introduced in the 11th and 12th, and perhaps in the 7th and 8th. More recently the dominant resolving through the subdominant in the10th has become very common. We will look at these variations again in the next lesson.

It is known that the specific 12 bar structure emerged from much more ‘flexible’ structures of the early folk blues and it is also accepted that blues can vary from the 12 bar structure. However, the main chord movements still apply and the idiomatic blues playing and phrasing is always present.

So far so good, we have a chord sequence, albeit a quite specific one, but nevertheless one that can be understood in terms of our study of the first eight lessons. On this traditional framework the characteristic blues melodies are improvised. The characteristic blues sound is generated by rhythmic interpretation of the BLUES SCALES.

The main technical requirement will be the practising of these SCALES. They are new and they have a different sound to the do re me fa sol la ti do of the major scale. We will study them in the context of western theory but we should note at the outset that some of the scale intervals do not fit neatly into the 12 semitone chromatic scale.

The style of improvisation is quite different from the one we have studied to date and it is this characteristic style that we will now consider.

9.2 Melody. *The pentatonic Scale.*

We will start with the simplest of the scales which are of interest to blues players.

There are a group of five note scales known collectively as PENTATONIC scales. Intervals in a traditional pentatonic scale are normally limited to whole steps and minor thirds. These relatively simple scales can be used to good effect as we will see.

Strictly speaking, a pentatonic scale means ANY selection of 5 notes from the chromatic or 12

note scale. But there are two basic pentatonic scales of interest to the jazzman, these are the MAJOR PENTATONIC SCALE and the MINOR PENTATONIC SCALE.

Note that the C minor pentatonic scale, "C, Eb, F, G, Bb", is actually the fifth ‘mode’ of an Eb major pentatonic scale. But more about this scale in the next lessons.

In this lesson we are going to study just one particular 5 note selection; a group which seems to have a VERY WIDE SIGNIFICANCE. This is the C major pentatonic shown in Ex.1. This selection of notes has been, and still is, used in most countries as a basic element of FOLK MUSIC. It is also very prominent in popular music in general, and in JAZZ in particular. It is basic to the BLUES idiom as we shall see.

Pianists will know the scale as the BLACK KEY scale since the Gb pentatonic emerges when the black keys are played from Gb upwards.

Play for yourself on these black keys and you will find everything you play begins to sound familiar. Scottish folk songs will ‘emerge’ quite easily. Any sequence of notes sounds OK. The scale is ‘forgiving’ and doesn’t contain the difficult problem notes of the major scale. Refer back to 6.3. You will find you can drum out rhythmic patterns on these 5 notes with exciting ease!

Look through some of the simple tunes in your repertoire, see if you can find examples of the pentatonic scale. The following tunes should be analysed, many more will easily be found –

I Got Rhythm	Louise	Buttons and Bows
Always	Old Man River	Swing Low Sweet Chariot

The scale can be regarded as the MAJOR CHORD with an added 6th and 9th, and is a scale which can be played against this chord in the style of the first eight lessons. See 9.5 below.

Example –	C	D	E	G	A
	1	9	3	5	6

These notes can be inverted to produce 4 other groupings. See Ex.2.

IT IS ESSENTIAL THAT THESE SCALES BE AT THE FINGER TIPS OF ANY IMPROVISOR WHO WISHES TO PLAY IN THE BLUES AND RELATED IDIOMS.

They should, therefore, be MEMORISED and TRANSPOSED to all other starting points.

Ex.3 shows some examples of usage. Ex.4 illustrates some pentatonic 'quotes' from familiar folk songs.

9.3 Practical. *Absorb the blues idiom.*

In lesson 4.5 we suggested that enjoying and playing music depends on our capacity to absorb and subsequently recognise patterns of sounds. We mentioned above that the blues are further removed from ‘traditional’ western musical sounds, and it follows that a new sound must be absorbed which may take time.

You must listen to the blues. Nowadays the recordings of many of the great blues singers are readily available - Robert Johnson, Huddie Ledbetter, Blind Lemon Jefferson through to Muddy Waters. However, Bessie Smith would be a good starting point because she recorded with instrumentalists, and everything she recorded was soaked in the idiom, even the popular songs she sang have the unmistakable blues sound. Here are some tips for your listening periods –

- learn to listen to the rhythmic basis, ignoring other components
- learn to listen to the TRAJECTORY or path of a melody independent of the actual notes made use of
- try to detect the scale being used. At present you should listen for the major scale or the pentatonic scale but after the next lesson you will become conscious of the blues scale as well

- can you recognise that some notes don't fit the expected pattern? They sound 'flat', 'off key' or 'blue'!?

After listening you must start to play. Remember our comments about self development and initiative in lesson 3.6? Try some of your own personal exercises in imagination –

- hum, sing, and tap out rhythmic patterns of the type given in any of the lessons. See Ex.5 for an example. Rhythmic consciousness tends to result in jazzmen articulating the jazz sounds with strong, bouncy, full blooded consonants. This reflects the tendency for each note to be attacked and 'tongued' to emphasise accents and rhythm. Legato phrasing is not typical in jazz apart from its use for contrast. The vocal symbols shown in Ex.5 are a great help in the above exercise
- repeat the above with an 'imagined' melodic trajectory.
- then using the same rhythm add a 'trajectory' of the type required. Ex.6 shows this last step adding the actual melodic material which involves knowledge of, and ability to perform, some scale pattern co-ordinated with some of the blues chords. Stick to the simple pentatonic scale to start with. We suggest that success with this technique depends on how well you have stocked your mental apparatus with the rhythms and idioms of jazz

The above is one of THE MOST REWARDING EXERCISES FOR STUDENTS. These rhythmic trajectories, articulated to 'dahs' and 'de-bahs', with the simple scale and with limited harmonic restriction provide an excellent vehicle for transferring what you have heard into reality. 'Singing' can be done anywhere, almost any time, giving a wonderful opportunity to practice and test your progress and familiarity with jazz phrasing. You can absorb the idiom without the 'complication' of learning your instrument at the same time. Once you can 'drum out' these blues rhythms in your head and with your voice, you will find that transferring them to your instrument will be easy.

We know of many students who have grasped the idiom in this way and have improved the 'effect' by using a kazoo to add some typical blues timbre. Try it!

WE STRONGLY RECOMMEND THIS VOCALISING APPROACH TO ABSORB THE JAZZ AND BLUES IDIOM.

9.4 Harmony. ***Basic chords & characteristic scales.***

We have already said that the basic harmony of the blues progression is fixed and already familiar to you. Thus, no new chords are introduced in this lesson, but we will now start to study the problem of relating SCALES to various chords and progressions.

Ex.7 shows the pentatonic scale co-ordinated with the blues chordal resource in the key of C. Take this simple 4 bar sequence and play some of YOUR OWN rhythmic pentatonic patterns with it. By far the best way is to record the changes, without the melody, on a tape recorder and then play along with the tape.

The instructive conclusion from this exercise is that ANY pentatonic pattern you play, assuming the rhythm is coherent, will SOUND FINE with these chords.

Unessential notes can be used but BE CAREFUL, in the blues idiom, TOO MANY NOTES will result in the character of the scale being destroyed. Any suitable rhythmic pattern can be used with the scale. At this stage don't try to search for the 'best' patterns, concentrate on good rhythmic feeling and express your personal preferences.

This self development exercise is invaluable. Your confidence will rise as you find inventing patterns on this scale with these chords is easy and –

THE RESULTS SOUND OK!

9.5 Technical Details. ***Why it works!***

A BREAKTHROUGH in our ‘technical’ thinking occurs when we realise that it is possible to play the SAME scale over changing chords with a pleasant sounding result. Ex.8 to 10 are further examples of the same pentatonic scale being played over more varied chords. This has very important implications for the improviser –

WE NO LONGER HAVE TO ‘PLAY THE CHANGES’.

Because this potential makes life so much easier we must clearly understand what is happening.

If the melody in these examples is analysed it will be found that it 'fits' the chords in the majority of cases. This is because there is a good chance that any individual note we play will be 1 3 5 6 or 9 of any chord being played.

Analysis of the above principle –

Melody note, pentatonic scale –	C	D	E	G	A
Blues chords –					
C	1	9	3	5	6
F	5	6	(7)	9	3
G7	(11)	5	6	1	9

only 2 out of the 15 notes may cause a dissonance!

Note that all the chords used are within the tonal sound of C.

Charts similar to those above should be made for the pentatonic scale of F and G.

For the time being, the principle should only be applied to the blues material studied in this lesson. More information about how it can be applied to more complex melodic / harmonic patterns will be given later.

However, if we extend our analysis to the major scale we also find a good degree of 'fit' for several common chords.

Melody note, major scale –	C	D	E	F	G	A	B
Chords –							
Cmaj7	1	9	3	(11)	5	6	7
Dm7	7	1	9	3	(11)	5	6
Em7	6	7	1	9	3	(11)	5
Fmaj7	5	6	7	1	9	3	(11)
G7	(11)	5	6	7	1	9	3
Am7	3	(11)	5	6	7	1	9

We can see that the only troublesome note is the (11), that is the 4th of the major scale. Remember our discussion about this note in 6.3.?

The conclusion is that for chords which are part of the tonal scheme of C major, the major SCALE can also be played over them without dissonance, as the 1 3 5 6 7 9 are all notes of chords we have studied which have strong affinity to the tonic tonality.

Thus, whenever you see these chords you know an improvisation on the C major scale will be OK and you can mentally ‘block out’ whole sequences of chords and take a much broader line and just think ‘C major’!

THIS IS A BIG SIMPLIFICATION FOR THE IMPROVISOR !

9.6 Rhythm. ***Latin & early jazz rhythms.***

We continue to stress the importance of rhythm and, although jazz seldom employs them directly, it maybe help rhythmic development if we study some familiar Latin American rhythms and compare them to the early jazz rhythms. Ex.11 shows some typical patterns.

The steady four to the bar is broken up in all sorts of interesting ways, Latin and jazz musicians use similar devices; laying new rhythmic patterns on top of the basic four to the bar. However, there is a major difference; Latin rhythms remain strictly repetitive to match the body movement of dancers, whereas jazz rhythms are much more flexible. These Latin rhythms are presented because they will be familiar to you and may help you to relate the notation of jazz rhythms with the sound and feel.

We must also stress ACCENTUATION if we are to get the true 'Latin' feel. Notice that most of these rhythms involve OFF BEAT accentuation. The Rumba achieves off beat accentuation by emphasising every THIRD eighth note, in the repeated pattern. The Samba stresses strongly the SECOND eighth note of the bar. The Charleston 'explodes' on the fourth eighth note.

Let's now go back to the early days of jazz and follow the development of syncopation.

Undoubted the early jazzmen learned their rhythms by listening to their mentors, it was entirely an aural imitation. However, with our current understanding of jazz we can analyse what they were doing and so SPEED UP OUR OWN LEARNING.

The first trick they learned was to 'jazz up' 'parade' music by playing a FOUR TO THE BAR melody on top of the basic 'two beat' marches. The effect was to 'lightened' the heavy 'plod' of the march, by introducing a simple polyrhythm, with a four beat superimposed over the original two beats. This device can be used whatever the underlying pulse; eighth note melodic runs are frequently played over a basic four to the bar giving a feeling of 'double time'.

We have already mentioned in lesson 1 a SIMPLE SYNCOPATION when the OFF BEATS on 2 and 4 of 4/4 time were emphasised instead of the 'conventional' strong beats on 1 and 3. Syncopation involves getting away from regular four to the bar. We can do this by three methods –

- emphasising off beats by accentuation
- anticipating the beat by starting a note early
- delaying the note end until the beat has passed.

The syncopated rhythms in previous lessons have employed these techniques.

Simple repetition of notes, playing two quavers to the croquet, or introducing triplets, was an early 'embellishment' technique which also helped to break up the established regularity of the beat.

The off beat principle was further extended when playing eighth notes. As seen in Ex.12 'straight eighths' with equal emphasis, or emphasis on the 'down beat', were never played. The jazzmen accentuated the off beats, thus, the one and two and three and four of the eighths became one AND two AND three AND four AND. Additionally the 'even', 'jerky', nature of the eighths was modified to SWING EIGHTHS where the time values change towards the dum-di dum-di shuffle rhythm shown. But the swing eighths have more of a TRIPLET feel than the shuffle rhythm and are better articulated as one-and uh two-and uh three-and uh four-and uh. The second eighth, the 'uh', is sometimes referred to as a 'kicking quaver' which gives the feel of 'kicking' into the next beat, but smoothly …

It is likely that early jazz syncopation learned from the cakewalk and ragtime. Syncopation is not, of course, confined to jazz but, on the other hand, jazz always involves syncopation, it is an essential feature. The patterns shown in Ex.13, and the CHARACTERISTIC TIMING the jazzmen gave to these patterns, are heard everywhere jazz is played.

There are all sorts of variations to the same basic pattern but it is not played directly as written and you should listen to jazz to hear how the pattern is played. The 'on beat' starting quaver is prolonged and relaxed, the off beat crochet, the second note, is slurred and slightly clipped and the third note quaver KICKS into the remainder of the phrase. Above all the rhythm of the phrase is relaxed and smooth.

This pattern must be absorbed thoroughly, it is the essence of jazz.

Wherever the pattern appears and whatever the variation the characteristic rhythm is the same. You must listen and imitate, otherwise, regardless of how proficiently you execute the phrase it

will not be jazz, because it will not sound like jazz. You must remember when you play jazz you play a certain way, you develop a jazz 'sound'. Although jazz has its own repertoire it is not the tunes that define the idiom but the SOUND. Any tune can be the subject of jazz interpretation..

No doubt you are now becoming more aware of the problem of notating jazz. See lesson 6.4. The problem is that the subtleties of timing, which makes notation difficult, are the ESSENCE of jazz. The student will always have early difficulties sight reading the patterns in this course, not only because many notes are played when the 'foot tapping' foot is at the top of its motion and not when it hits the floor, but also because of the subtlety of the timing. Remember lesson 1.6. As written the cakewalk pattern is jerky, like early ragtime, but as played in jazz it is smooth and exciting, urging you to get up and dance. You must LISTEN to learn. Your technique will get better as you practice playing the sounds you HEAR.

We now want to introduce a further important rhythmic sophistication associated with jazz. We want to contrast simple syncopation and the emphasising of the off beats with more complex syncopation which the early jazzers called SECONDARY RAG. Secondary rag is the result of cross rhythms, particularly building melodic THREE groupings over the FOUR in the ground beat. Look out for these three over four rhythms, they are everywhere in jazz. The Rumba rhythm is a three over four.

We will return to polyrhythms in the next lesson and rhythmic groupings of threes in lesson 12.

We can now reflect on why these rhythms are interesting?

If we EXPECT a steady four to the bar but experience something different a TENSION develops which we find stimulating and exciting. Something new and surprising is happening, we can still feel the basic pulse but the actual notes are not on the beat but contrasting and COMPLEMENTING it. We suggest that this is the same psychological effect as the tension that is created in harmonic development when moving temporarily away from the tonic tonality.

This has been a long but important section which may benefit from summarising. Syncopation is achieved by employing three main devices –

- ACCENTUATION of the off beats and/or introducing rests on the normally accented beat
- ANTICIPATING the normal beat by throwing the start of the note onto the preceding off beat which is then tied to the normal beat.
- And conversely DELAYING the start of the normal beat by tying it over to the preceding off beat.
- super imposing rhythmic patterns of THREE OVER THE NORMAL FOUR to the bar which will automatically produce off beat accents.

9.7 Written Work.

Using Ex.6 as a model, prepare a 16 bar continuity in the style of an improvisation, using the following specification –

Harmony – 8 bars leading to the dominant, followed by 8 bars leading back to the tonic.

Rhythm – Own choice of material.

Melody – Use the pentatonic scales on C, F and G chords with some SLIGHT unessential element. (Lessons 3 and 4).

Key – C major.

Write an 8 bar section using the C pentatonic scale throughout, co-ordinating this with a chord progression which fits according to the principle given at 9.5 above.

NB. This lesson introduced you to the idea of playing a simple pentatonic scale over moving chords. We now extend the same principle to a more complex scale, the blues scale, which will deliver the ‘BLUES FEELING’ proper.

John p birchall
website = http//:www.themeister.co.uk