HOW TO SIGHT READ JAZZ AND OTHER SYNCOPATED TYPE RHYTHMS

BY

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EXERCISES

CHAPTER I

EAST VS. WEST

The purpose of this course is to provide you with a technique for training your instincts to respond to the type of rhythms which appear in jazz, rock, Latin, or any of the syncopated styles of music that originated in the United States.

What does sight reading mean exactly? On a professional level, it means being able to produce a performance of the music upon reading it down for the first time. On a recording session in New York City for instance, musicians are able to produce close to a perfect performance of the music on the very first reading. The first time down is generally a rehearsal for mistakes. The second reading is for the nuances, and by the third reading, they are rolling the tape and recording.

Students of jazz gererally have trouble with reading due to the fact that they were taught rhythm in terms of European music, and jazz rhythm has an African basis.

This is another way of saying East vs. West. Although Africa is not exactly in the East, its music is based on what is considered to be an Eastern concept of rhythm. Rhythm from the Eastern part of the world developed differently and is conceptually different from Western music. In order to sight read jazz rhythms, one must understand the Eastern concept of rhythm. Most of you who have trouble reading rhythm are probably attempting to read from a Western concept, and that is 99% of the problem. This will become more evident as you read on.

From a purely musical point of view, jazz is specifically the "off spring" of a marriage between African music and European music -- or East and West.

If one views the world from a contemporary perspective, one can see the world getting smaller. For example, a journey which took several weeks to accomplish only a hundred years ago, now takes only a few hours in our

modern contemporary world. Today we can pick up a phone and talk to someone on the other side of the planet in a matter of minutes.

If one views music history from this perspective, a very interesting pattern seems to have developed. Let us view this from a composer's point of view. Composers are individuals who involve themselves with the "inner forces" which control music. If we were to catalog these forces into catagories, we would be able to come up with five major forces to be found in music from any period or any culture. These forces are

1. Melody,
2. Harmony,
3. Rhythm,
4. Counterpoint,
5. Form.

If one views modern music in terms of these forces, one begins to notice that the forces themselves seem to have developed and evolved in different parts of the world as part of an ever-advancing art form that was destined to culminate in a union of cultures at some point in history.

In a very general sense, one can see melody as having flourished around Italy, harmony and counterpoint around Germany and France, rhythm around India and Africa, and form throughout Europe and Russia.

What this indicates is that musicians from these regions had a profound influence on musicians from other parts of the world in the specific areas of music previously mentioned. In some cases a whole scientific body of knowledge grew out of the music developed by composers from these various regions. One good case in point would be J.S. Bach and counterpoint.

One need only to listen to the music of Africa and India to hear that the rhythmic behavior is profoundly more sophisticated and evolved than the rhythmic behavior found in European or Western music prior to the birth of jazz.

In a forthcoming book of mine called "The Rhythmic Nature of Jazz," a technique for graphing rhythm developed by the late Joseph Schillinger is used to demonstrate that the rhythmic behavior found in the music of Africa is a natural and universal rhythmic behavior.

Joseph Schillinger wrote a large two volume work in the 40's called "The Schillinger System of Musical Composition" in which music is viewed totally from the mathematical properties contained within it. It was Schillinger's contention that music could be created on a par with great masters by anyone who "simply" uses the mathematical equations and techniques outlined in his extensive work.

Although I do not agree with Mr. Schillinger's contention personally because I have a high degree of respect for the spiritual forces in music as well as for the intuitive nature in musicians, I did find his technique to be an excellent vehicle for transforming complex musical phenomenon into tangible, graphic illustrations. His technique can enable you to visually "see" how music works. Further I found that it actually increased my awareness of the natural forces present in all music and how they work and interact with each other.

Although this subject is dealt with in depth in "The Rhythmic Nature of Jazz," we are touching on it here to prepare you for the sight reading course which is to follow.

An interesting phenomenon which is investigated in "The Rhythmic Nature of Jazz" is the fact that when a rhythmic ratio such as 3 against 2, or 3 against 4 is graphed and subjected to natural mathematical processes, a graphic illustration results, which when transformed into musical notation and performed by musicians, sounds exactly like an African drum section. This is evidence that this particular rhythmic behavior developed in this part of the world and is in tune with and the result of natural laws.

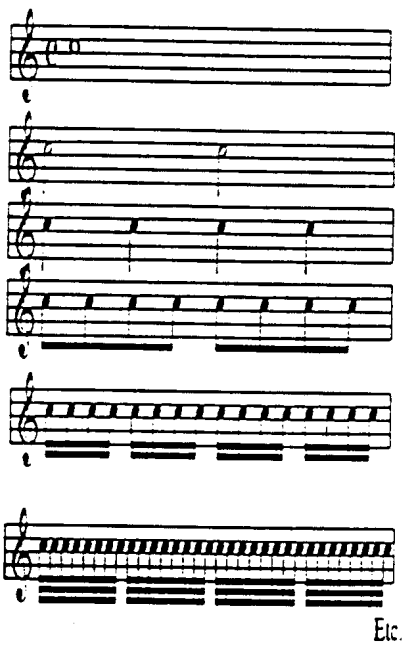
This is another way of saying that African rhythmic behavior (or the principles of rhythm which developed in the East) <u>is rhythm</u>. In my estimation, if one wishes to investigate rhythm as extensively as the musicians from the European school have investigated harmony, one must turn to the East, which is where we will be heading in the very next chapter.

CHAPTER II

ADDITIVE RHYTHM

How does the rhythmic behavior of the East differ from that of the West? Let us examine our own music education as it pertains to rhythm. Most of us who learned to read music in the United States were taught to read from the standpoint of European or Western tradition. Most of you reading this are experienced musicians to some degree or another. But if you will think back to the time you first began learning to read music and try to recall what you were taught in regard to rhythm, you will probably find, as I did, that aside from the explanation of various meters such as 4/4, 3/4, etc., most of what you learned about rhythm can be summed up in the following illustration.

EX. 1



Etc.

If we examine the illustration in example 1, we can observe that this represents different ratios of the same thing, namely the pulsating unit.

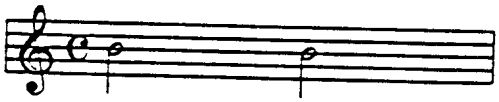
For example, if the pulsating unit is designated as quarter

notes as in the following example,

EX. 2

then the following would represent the same thing twice as slow.

EX. 3



Likewise, the following would represent the same thing twice as fast.

EX. 4

This could continue on down the line: sixteenths are twice as fast as eighth notes, whole notes are twice as slow as half notes, etc. So you see, the illustrations in the previous examples represent several levels of the same principle at different ratios of speed in multiples of two.

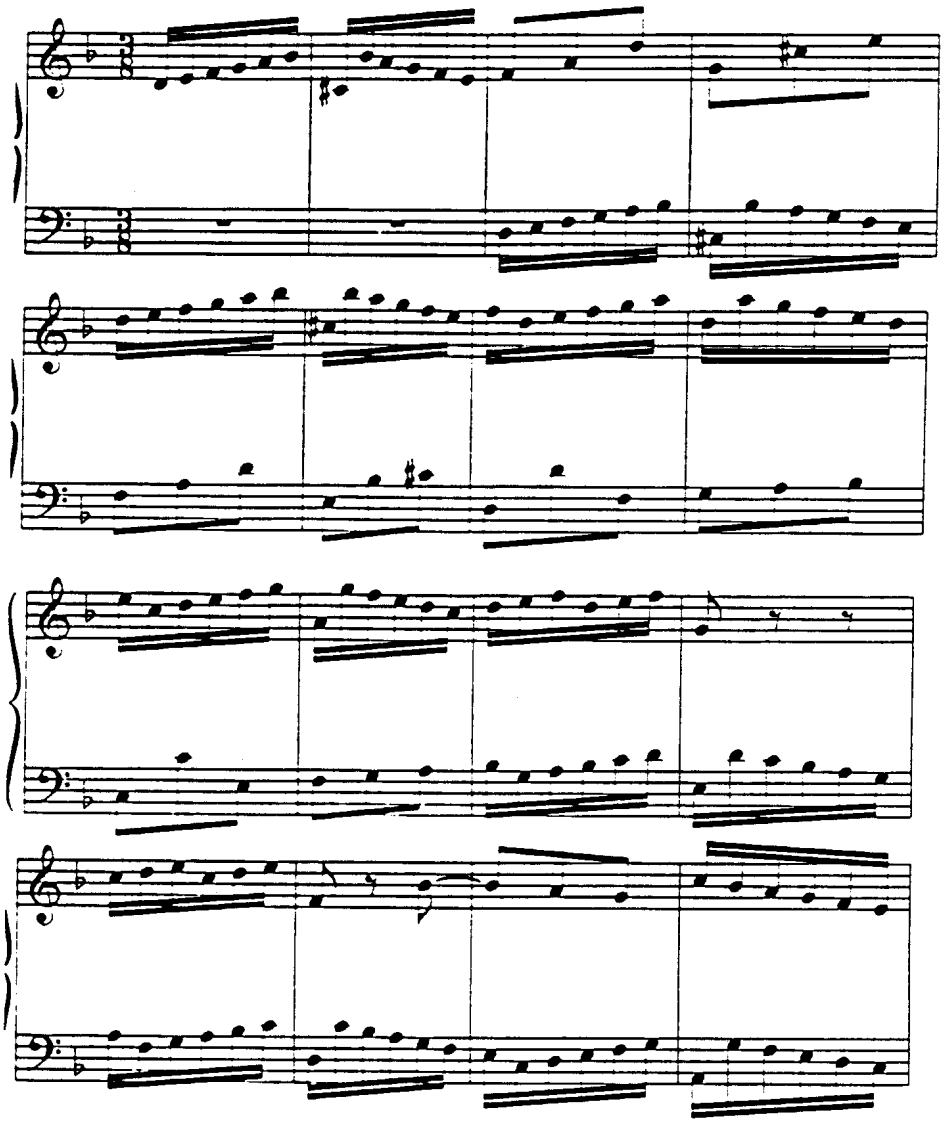
In this concept, rhythm is produced from the interplay of these different ratios as in the following example.

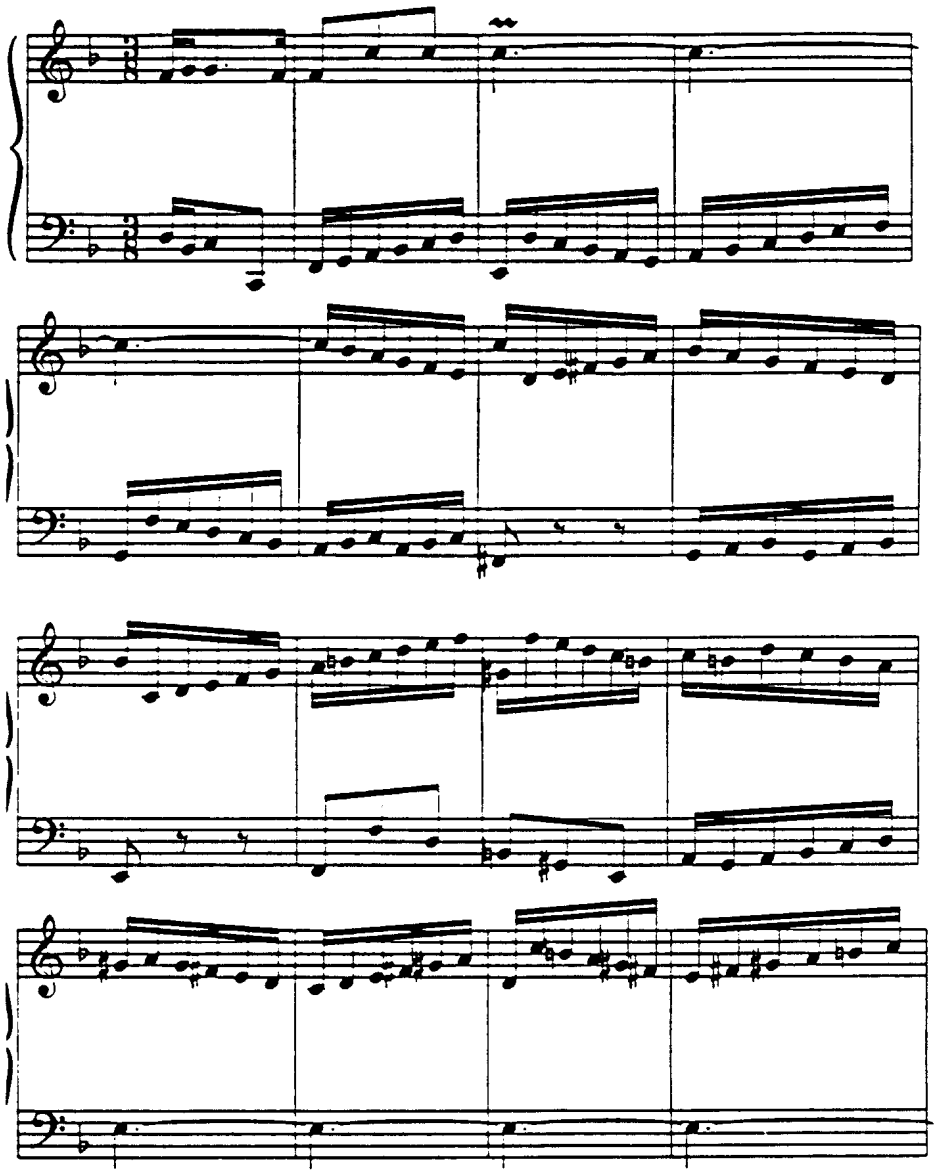
EX. 5

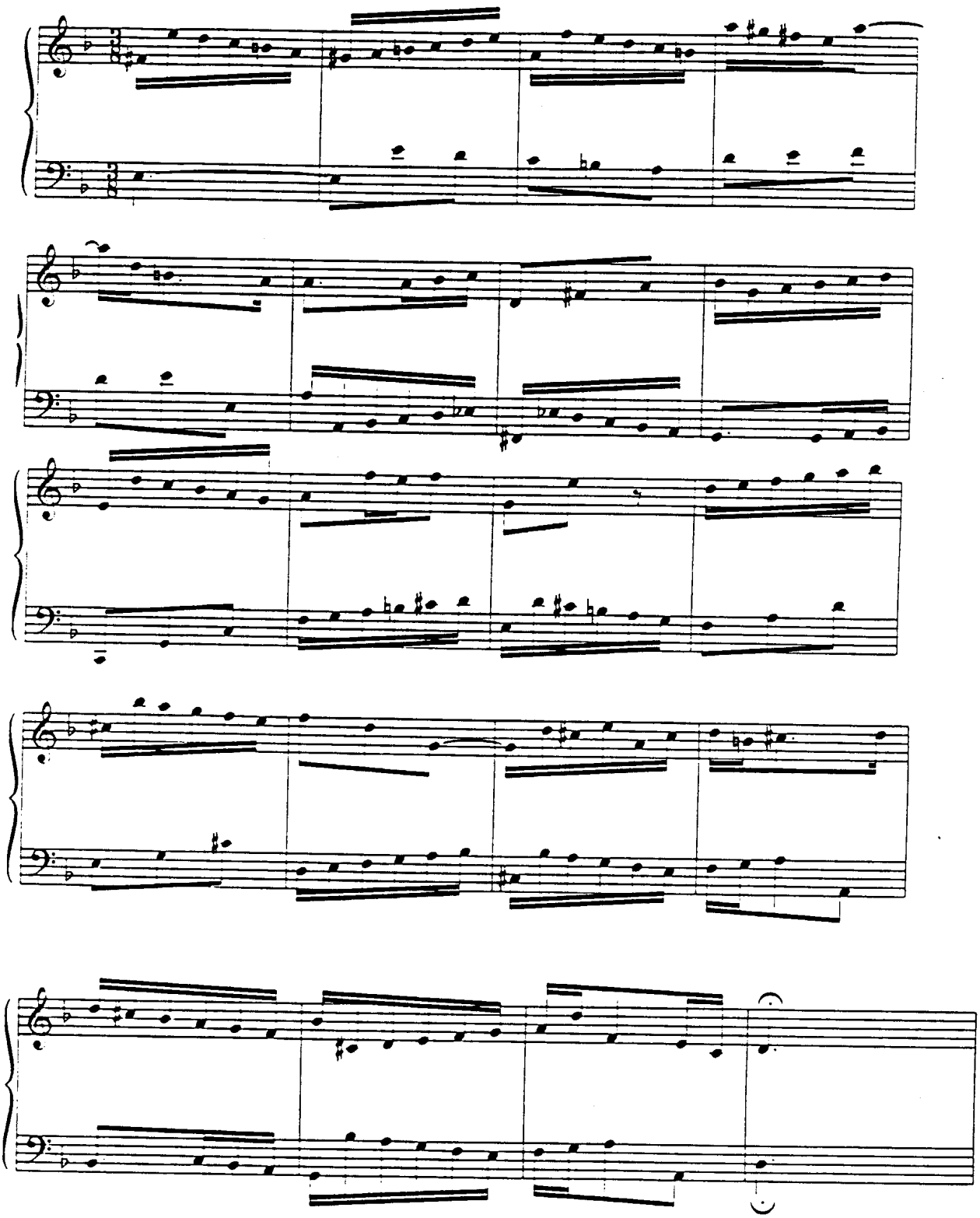
Let us examine the following piece by J. S. Bach for its rhythmic makeup.

EX. 6

INVENTION NO. 4 IN D MINOR --
The Two Part Inventions







Now let us view this same two voice composition just from its rhythmic aspect.

EX. 7

As you can see, this piece is entirely made up of running sixteenths against running eighths, which is at a two against one ratio.

The monotony of the rhythmic pattern of sixteenths against eighths is broken by Bach by an occasional suspended note such as in bar 14, or a dotted note rhythm such as in bars 17, 37, and 48. Some of this monotony is nullified also by the shifting of sixteenths in the top voice with eighths in the bottom. This is followed by the reverse of this with occasional moments in which both voices are in sixteenths or eighths simultaneously. Rhythmically, aside from these modifications, this piece consists of running sixteenth notes against running eighths, which strongly resembles levels 4 and 5 in the following illustration.

EX. 8

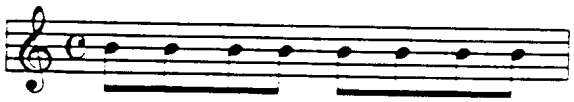
As you can see, the forward propelling rhythmic line is maintained by a symmetrically grouped pattern of running sixteenth notes.

EX. 9

One might say this music is polyphonic (more than one melody), but not polyrhythmic. It is the interplay of the two melodic lines with their harmonic implications that hold your interest in this piece and show the mastery of J.S. Bach.

The concept of symmetrical groupings of the rhythms is fairly consistent throughout Western music. That is to say that in a bar of 8 eighth notes, they will be accented to produce the following grouping.

EX. 10



As you can see, this is grouped together or accented as 2 groups of 4 eighth notes -- a symmetrical grouping. Sixteenth notes will be accented as 4 groups of 4 sixteenths as in the following.

EX. 11

Sometimes the monotony of this symmetry in classical music is broken by occasional and infrequent uses of , "syncopation" -- the temporary shifting of the down-beat to a weak beat as in the following.

EX. 12

Temporary lapses into 2 against 3 patterns are also used infrequently as in the following example by Mozart.

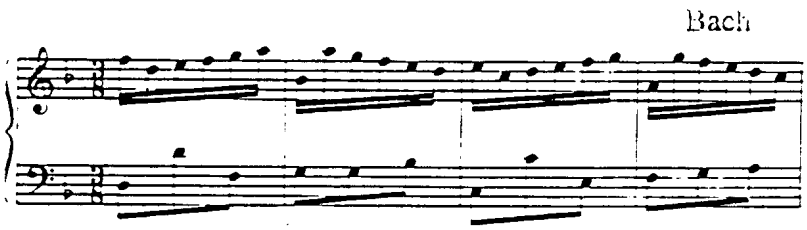
EX. 13

(X)

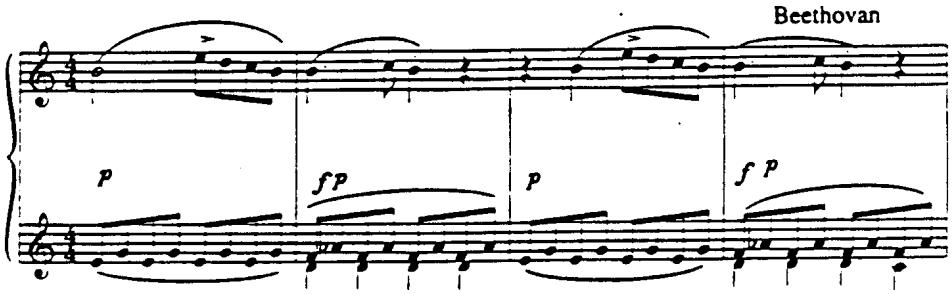
However, for the most part, the rhythms of Western classical music will be symmetrical divisions of the pulse unit as in the following examples.

EX. 14

Bach



EX. 15

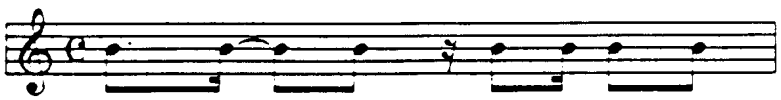


EX. 16

EX. 17

Let us now examine an example of rhythm as it may appear in a jazz composition.

EX. 18



Since the smallest note value in example 18 is a sixteenth note, we will consider this rhythm to represent a bar of 16 sixteenth notes. As we saw earlier, in classical Western music, a bar of sixteenth notes is accentuated as follows.

EX. 19

This type of accentuation -- 4 groups of 4 sixteenth notes -- does not seem to be present in the jazz example.

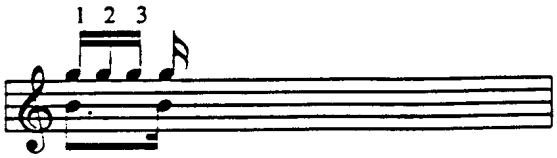
EX. 20

On the contrary, there does not seem to be anything symmetrical about this bar of sixteenth notes in terms of how the notes are accented. In fact, they seem to be grouped asymmetrically as they accumulate horizontally across the page. This concept is called ***additive rhythm***. It can be more clearly understood if you notice from example 20 how many attacks occur in the bar. The points of attack are indicated by arrows in the following example.

EX. 21

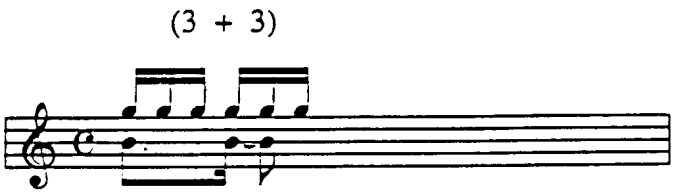
Our next task involves counting the number of sixteenth notes contained in each attack. What this means simply is "How many sixteenth notes elapse before another attack occurs?". Let us look again at example 21 and notice that the first attack is a dotted eighth which occurs on the down-beat. You will notice that three sixteenth notes have elapsed by the time the second attack is heard.

EX. 22



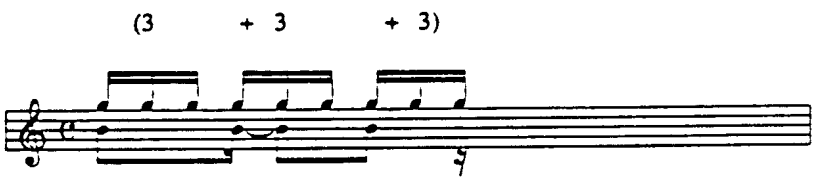
The second attack involves a sixteenth tied to an eighth. Again, this is the equivalent of three sixteenth notes.

EX. 23



The third attack is an eighth followed by a sixteenth rest. This also is the equivalent of three sixteenth notes. Do not be confused by the rest. It must be considered as a sixteenth note which elapsed before the next attack occurs. All rests shall be included as part of the attack which precedes them.

EX. 24

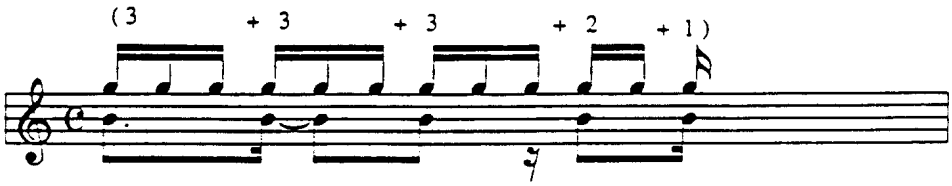


The fourth attack is an eighth note and is the equivalent of two sixteenths.

EX. 25

The 5th attack is a lone sixteenth.

EX. 26

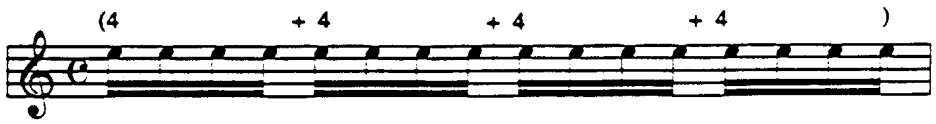


The last two attacks are even eighth notes and add up to two sixteenths each.

EX. 27

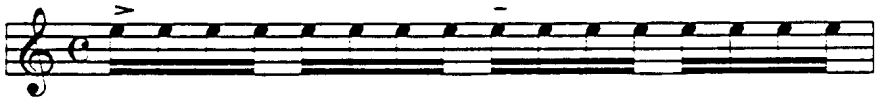
So now we see that the rhythm in example.27 adds up to the following additive number scheme: 3+3+3+2+1+2+2. This number scheme actually represents the accentuation of the rhythm and will help you perceive the exact interpretation of the rhythm. Let us examine this further. Since the rhythm we are examining involves one bar of sixteenth notes, let us examine how a bar of sixteenth notes appears traditionally in Western classical music.

EX. 28



If we apply the "additive" principle to this rhythm we would yield the following number scheme: 4+4+4+4. As you can see, this is symmetrical and square rhythmically. In this concept the accentuation is produced primarily by the meter such as 4/4 in the following example.

EX. 29



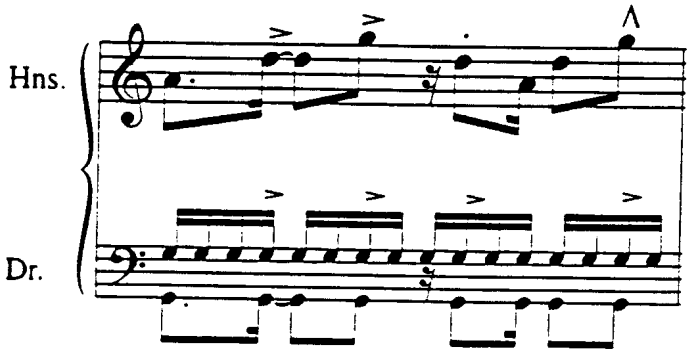
In this style, rhythm is used primarily as a propellent for the harmonic and melodic behavior which is where the sophistication of this concept lies. In the Eastern concept, rhythm is used as a language of its own.

Returning now to an original rhythm from example 18, let us view the sixteenths in this bar with the stems and flags grouped according to the additive number scheme.

EX. 30

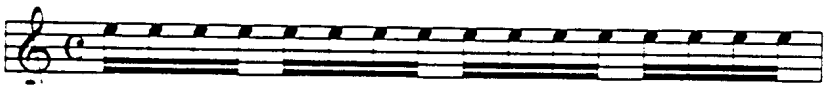
This looks like a strange notation. However, in terms of interpretation it is more accurate than our present notation system, as you will see in a later chapter. The rhythm in example 30 is precisely what a jazz drummer might play behind horns which are playing the rhythm in its original form.

EX. 31



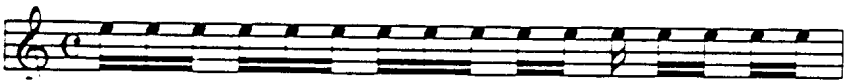
Now we might be able to get some insight into why musicians have problems reading and interpreting these types of patterns. A problem arises when a musician is thinking this:

EX. 32



but is feeling and hearing this:

EX. 33

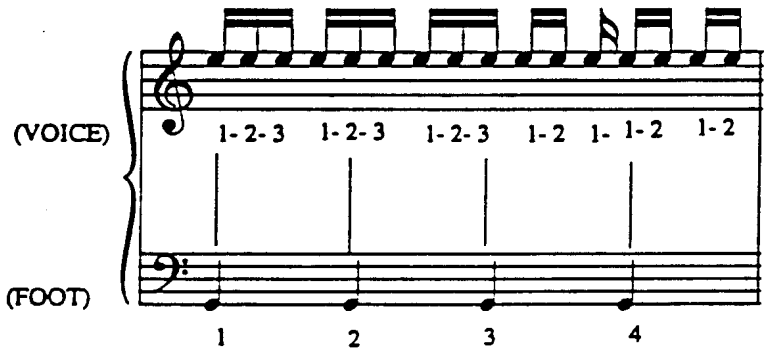


Let us examine this concept further. Count the rhythm in our example in the following manner.

EX. 34

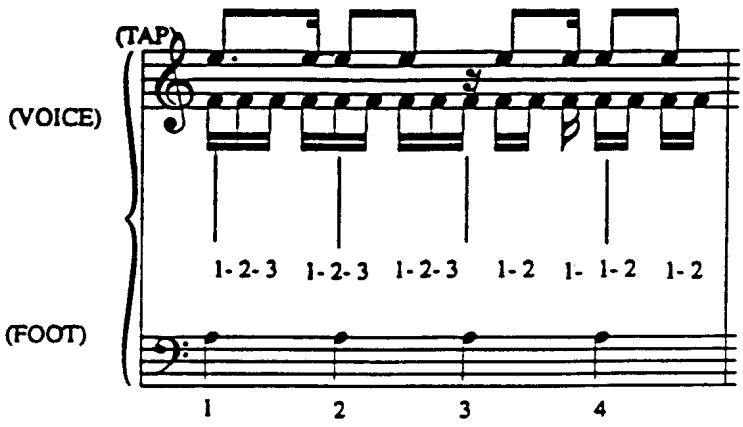
Now let us superimpose this count orally over the regular four/four count, which you will keep with your foot in the following manner.

EX. 35



Now let us repeat this same process with the following variation. With the index finger of your right hand tapping on a table top or other hard surface, tap every time you say the number one in the following example.

EX. 36



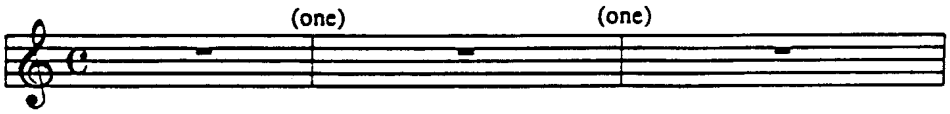
What you are hearing from your finger tapping is the exact interpretation of the rhythm with the notes falling in the proper places with the proper accentuation.

CHAPTER III

THE DOWN-BEAT

One peculiarity that seems to be consistent with music of all cultures is the sound of a down-beat being designated as the number "one" in the counting process. This sound is indicated in our Western notation process by the appearance of a bar line.

EX. 37



This means that whenever we see a bar line we know that a down-beat has occurred and the number "one" is the count. The down-beat has a definite and distinctive sound to it, which is the heaviest beat in the bar. It is actually physically produced by "beating down" on something, whether this is represented by the conductor of an orchestra bringing his baton down or a pianist playing down into the keyboard. If a pianist were to produce a sound as he lifts his hand off the keyboard, this would be the sound of an up-beat. The following example represents the normal placement of down and up-beats in a traditional bar of eight eighth notes in the Western concept.

EX. 38

You will notice that all of the down-beats in example 38 fall on the beat, while all of the up-beats occur between the beats or on the "off-beat". In the Western classical tradition the

idea of an off-beat being an up-beat is the norm. Musicians from that school even refer to an off-beat as the up-beat. The occasional appearance of syncopation, defined by Western thought as the temporary shifting of the beat over to the position of the off-beat, is used by classical composers to break the monotony of the normal down-beat/up-beat pattern.

Let us use a very simple rhythm to clarify this idea. The following rhythm is idiomatic of American music and, if repeated over and over, sounds like the beat from an old American dance form called the Charleston.

EX. 39

Now if we ask a Western-trained musician to count this rhythm, more than likely he or she will verbally say "One and Two and".

EX. 40

However, most jazz-oriented musicians would play this rhythm in the following manner.

EX. 41

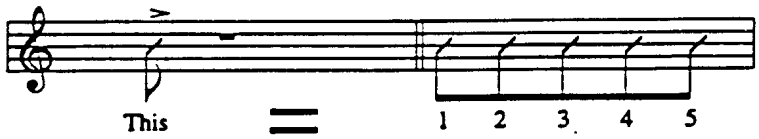
What is occurring here is that the second attack in the bar will be played as a down-beat by the jazz musician rather than as an up-beat by the classically-trained musician. This coincides with a statement made earlier that the sound of a down-beat is consistently referred to as the number "one" in all cultures. This can be seen here by converting the rhythm

in example 41 to its additive breakdown. You will notice that there are two attacks in this bar and that the smallest note value is an eighth note. This means we will subdivide this bar in terms of eight eighth notes. The first attack consists of a dotted quarter note which is the equivalent of three eighth notes intervening before the second attack is heard.

EX. 42

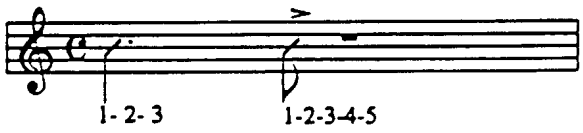
The second attack is an eighth note followed by a half rest which is the equivalent of five eighth notes.

EX. 43



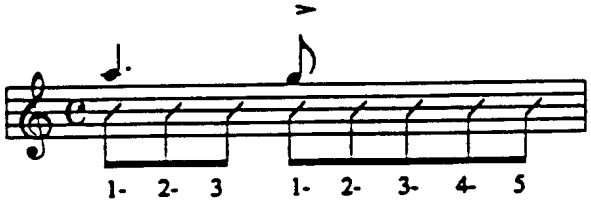
Obviously this is a 3+5 bar and should be viewed as if the count were as follows.

EX. 44



Now you see, the number "one" is actually falling on the second attack and in fact is played exactly like a down-beat in this concept.

EX. 45



Notice the difference in feeling and interpretation when you tap the rhythm to the count as it appears in example 46a as opposed to 46b.

EX. 46a

EX. 46b

Now you can see why classically-trained musicians sound stiff and unswinging when they attempt to play jazz arrangements. If we ask a classical string player, for example, to interpret the Charleston pattern properly, we might get better results if the rhythm were notated as follows.

EX. 47

This is precisely the way composer Bela Bartok achieves the accentuation of Hungarian gypsy music in his compositions. Much of the world's folk music, or music of

the people, seems to accentuate the off-beat consistently. Bela Bartok uses an asymmetrical metric scheme similar to the concept expressed in example 47. Notice this principle in the following two Bartok examples.

EX. 48

EX. 49

Now compare the following examples of the same rhythm notated two different ways.

EX. 50

CHAPTER IV

APPLICATION OF THE ADDITIVE PRINCIPLE

Please bear in mind that what we have covered so far is not yet the sight reading technique. That will be presented in Chapter VII. The additive principle is primarily a tool for interpretation.

In the first chapter, we defined sight reading as the ability to produce a performance at sight. We then made reference to the New York studio musicians who are called upon to do this sort of work several times a day for recording sessions or TV broadcasts.

Since much of the music being played on these types of engagements is dominated by the rhythms discussed thus far in the course, the ability to interpret and perform them at sight becomes a prerequisite for this kind of work.

How does a musician guarantee a perfect performance or a close to perfect performance on the very first reading? In New York City, musicians on a recording session arrive about ten minutes early and find their individual parts already set up on the stand. Or, occasionally the parts are handed out one at a time at least ten minues before the down-beat.

It is during that most important ten minutes that the musician is able to guarantee a near-perfect performance on the first playing, for that is when he or she is actually "reading" the music. When the down-beat hits, he/she is then playing the music.

This is a very important concept to grasp as a professional because at the highest levels of our profession, what really takes place is not "sight reading", but "sight playing".

Let us examine what goes on in the mind of the professional studio musician during that important ten minutes before the down-beat.

1. He/she examines the music for the time and key signatures.

2. He/she then looks through the part for any changes of key or time signatures. If there are changes, notations are made where they are and in some cases a pair of glasses will be pencilled in two bars before the change occurs as a reminder.

EX. 51

3. Next he/she observes any repeat signs, del segno signs, and coda signs. This ensures an understanding of the exact form of the music and the exact reading sequence.

4. Now he/she looks through the part for any difficult rhythms, and it is at this point that the additive principle becomes applicable. Let us suppose you are this hypothetical musician and you encounter what appears to be a difficult-to-read rhythm in your part. We all know how much easier it is to read something which we have heard previously as opposed to reading something "cold". Once you have applied the additive principle to a rhythm, you are able to actually hear and feel the exact interpretation of the rhythm. By the time of the actual performance, you are not forcing yourself to have to "read" that rhythm, but are simply repeating something you have already heard.

5. The last step is to scan the part for anything that looks mechanically difficult in terms of fingerings or awkward intervals. Those little spots are what you hear the musicians of an orchestra practicing during the cacophony of sound that exists prior to the conductor tapping for silence.

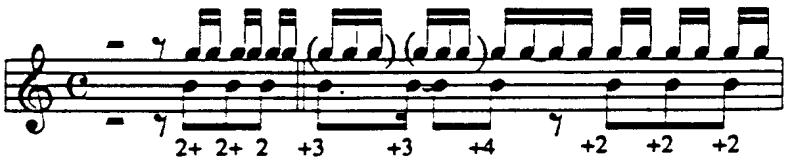
On a New York recording session, by the time the conductor is ready to give the first down-beat, he is gazing out at a sea of grinning faces, all with a look that says "We've got this one covered, Jack."

As you can see, the additive principle helps you to break down a rhythm to its exact interpretation and understanding, enabling you to "see inside" the rhythm for the "hidden rhythms" necessary for the perfect placement of the notes. For example, look at the following rock rhythm.

EX. 52

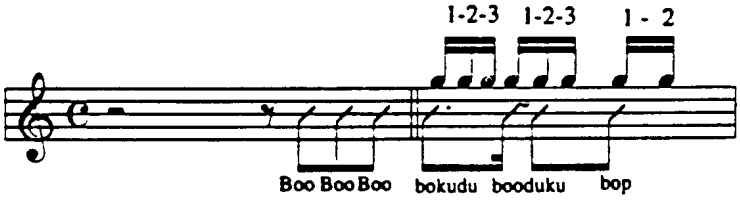
By applying the additive principle to this rhythm, one is able to perceive a "hidden triplet" pattern at the beginning.

EX. 53



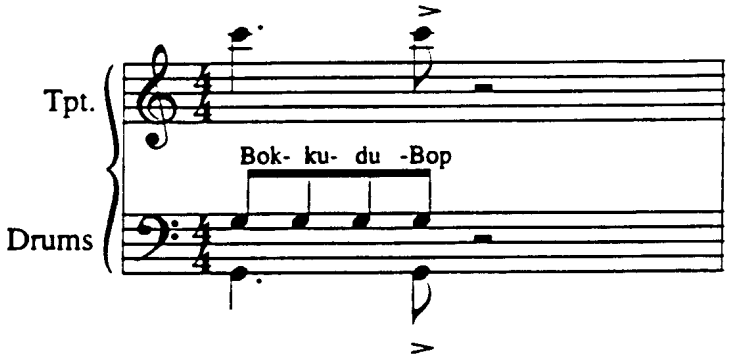
After you have broken a rhythm down to its additive makeup, you should then replace the numbers with "drum sounds" as in the following.

EX. 54



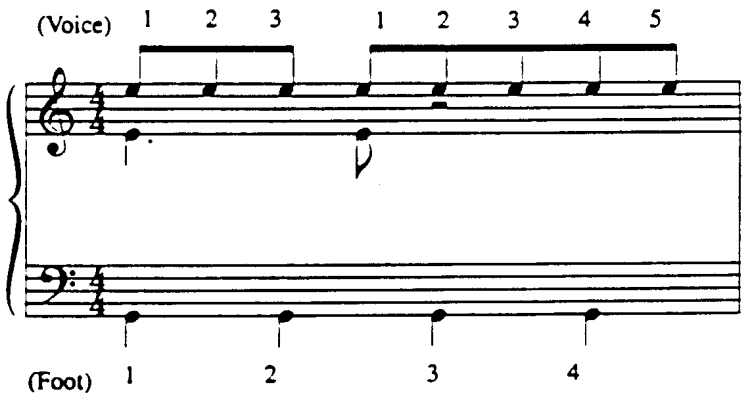
This is exactly what you hear jazz drummers doing when they "fill" figures on a big band chart for example.

EX. 55



The following exercises are for you to break down additively. Always make sure that the additive count is happening simultaneously with the regular meter count by your foot as in the following.

EX. 56



With regard to the pulse being expressed by the foot beat, care must be taken here to ensure that you are keeping time according to a jazz time conception. When the rhythm is broken down additively and expressed to fit jazz pulsation, the exact interpretation will manifest itself naturally.

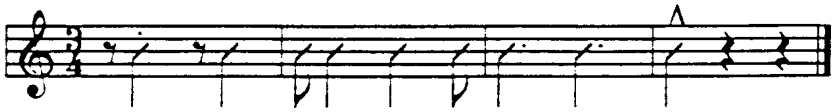
Before doing the following exercises, it is recommended that you read page **XXXXX**, Chapter VIII, on how to set a pulse.

EXERCISES

1.

2.

3.



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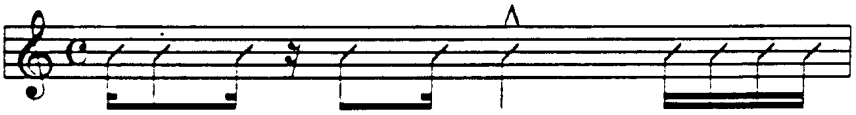

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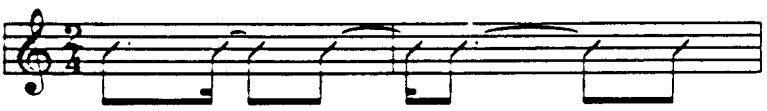


6.

7.

8.

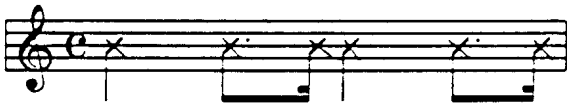
CHAPTER V

TRADITIONAL AMERICAN PRACTICES

Much confusion has arisen out of the practice of notating jazz rhythm. This is due mainly to the fact that in the European tradition a sort of musical "shorthand" has evolved in which, for example, music that is actually in 12/8 time is notated as if it were 4/4. In this case the pulsating unit in jazz is actually a three part unit (a dotted quarter note), while it is notated as if it were a two part unit (a quarter note). Accordingly jazz is notated in one concept, but played and felt in another. Musicians who have a true jazz conception are able to read the European notation and transform the music to a jazz conception as they play.

A good example of this can be seen if we view the traditional way that the ride cymbal rhythm is notated for jazz drummers.

EX. 57



In actuality a jazz drummer would play the notation in example 57 as if it were notated in the following way.

EX. 58

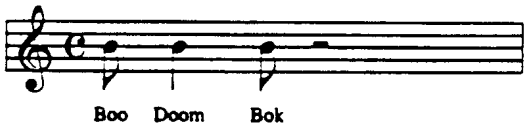
Further confusion exists in terms of accentuation in the jazz idiom for there is no way at present for the different sounds the drum makes to be included in the notation

system. For example, referring back to our Charleston rhythm used earlier, a musician may look at that rhythm and phrase it as if it were the following.

EX. 59

Now let us assume that the actual sound the drum makes when playing this rhythm is the following.

EX. 60



The last example feels entirely different than the phrasing in the previous example and would have to be considered as a "different" rhythm, yet the notation remains exactly the same for both.

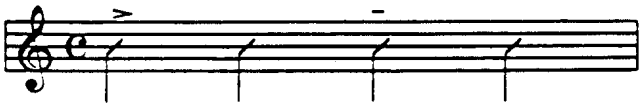
Much of the confusion pertaining to notation practices stems from the unclear understanding of what jazz meter really is. In European or Western tradition, meter is defined as the scheme of regularly recurring accents indicated by a time signature which underlies the particular rhythm of a melody or harmonic progression. Music in which the rhythm was directly related to the meter of petry was written in the early 16th century by Western composers. However, since then the rhythmic design of melodies and harmonies in Western music has been contained in and related to the underlying metrical scheme of each composition which is indicated by the time signature.

From a performing musician's point of view, meter may be described simply as an underlying rhythm upon which the time in a piece of music is measured and the rhythmic behavior is based.

For example, all of us who went to music schools were taught that 4/4 meter is based on a pattern consisting of a strong beat on one -- the down-beat -- followed by a weak beat on two, followed by a less strong beat on three and

another weak beat on four. If one listens to this scheme performed, one will hear the following rhythm.

EX. 61



If one listens to several repetitions of this pattern, one will hear what might be construed as a "primitive drum beat". It is not hard to imagine that the time in primitive music was measured by a musician actually playing a beat of this type on a drum while melodies were placed over it to conform or agree with it in terms of accentuation.

For example, twenty bars of music would represent twenty repetitions of the basic pattern. Now we arrive at one of the major reasons that confusion exists pertaining to jazz notation. If we examine the rhythm of traditional Western 4/4, we notice that the strong beats are falling on one and three. But when modern jazz musicians play in 4/4, the strong beats are in reality falling on two and four. This indicates that 4/4 meter in traditional Western music is not the same as 4/4 meter in jazz. In other words, jazz musicians are organizing and relating time to a different concept and underlying rhythm than the Western or European-based musicians. This basic fact seems to have eluded many journalists who have written books on jazz. For the most part these well meaning souls have had a tendency to explain or analyze the jazz rhythmic concept in terms of European or Western musical logic rather than view it as a totally unique concept quite unlike the underlying rhythmic conception which propels Western music.

CHAPTER VI

JAZZ METER

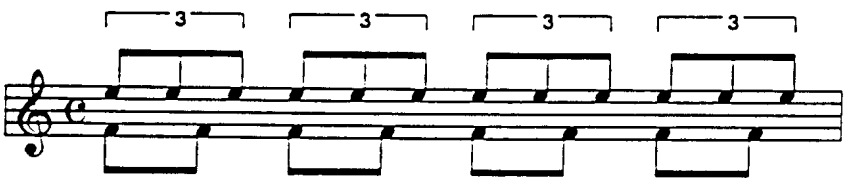
As we saw in the last chapter, meter is basically the underlying rhythm on which a musical composition is based. We also saw how the concept of 4/4, for example, is different in jazz than in Western classical music. We will now focus our attention on these differences.

In his book "The Story of Jazz", Dr. Marshall Stern points out that the rhythmic basis of West African music is based on a combination of 6/8, 3/4, and 4/4. This is true in a sense because African music, from which the rhythm in jazz stems, is polyrhythmic as well as polymetric and polypulsative.

Although this phenomenon is dealt with in depth in the book "The Rhythmic Nature of Jazz", we will present some of that information here in an attempt to clear up some of the confusion stemming from current notation practices.

What is polyrhythm exactly? Literally it means the presence of more than one rhythm. In African music this may translate into several rhythmically independent lines. The African ***Hemiola Style*** is quite a bit different in nature than that of Western classical music. ***Hemiola*** in Western music means the rhythmic relationship of three notes which take place in the time of two notes. This is another way of saying 3 against 2 as in the following example.

EX. 62



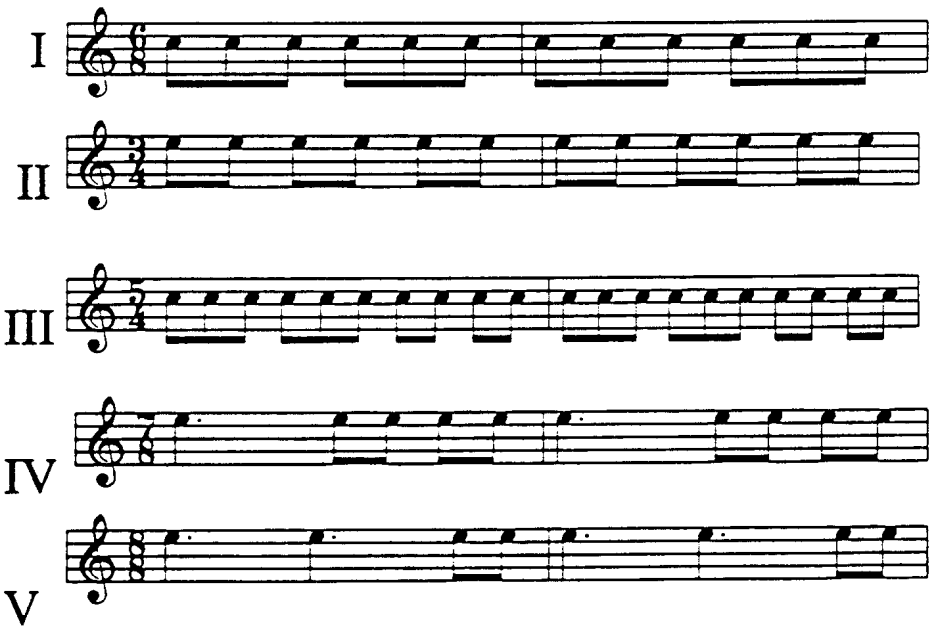
In African music the hemiola is much more intricate and complex than the example above. The only thing the African and European styles have in common with regard to hemiola

is the interplay of two and three. For example, if we were to notate the independent lines played by two African drummers, they might resemble something similar to the following.

EX.63

What you can observe here is that these two lines make sense when played separately as well as when played together. Yet, the bar lines and meter appear to be different. Also, if this music were conducted in the classical sense it would actually requre two conductors. In fact, if the presence of several of these lines of rhythm existed and were related to conducting in the Western sense, the likelihood of a separate conductor for each independent line would exist.

EX. 64



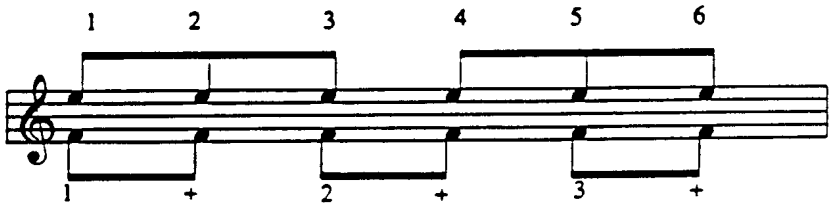
Example 64 may be described as the vertical coexistence of independent rhythms which when heard simultaneously are in agreement with each other. This produces a phenomenon which may be described as ***overlapping down-beats***. That is, what consists of a down-beat for one part may be an off-beat for another part.

This overlapping of down-beats is the type of behavior that produces the accentuation in jazz and not "syncopation" as misinterpreted by the Western thinker.

It is when this type of rhythmic behavior from Africa is superimposed over the regular structured meter of European music found in the tunes jazz musicians play that the rhythmic behavior of jazz is produced. This is by no means the entire picture with regard to jazz as a musical form unique unto itself. This does not take into account the melodic behavior or the blues phenomenon among other things uniquely related to jazz. For example, ***where*** a master of jazz, such as Dizzy Gillespie, places his melody notes within this rhythmic concept is of tantamount importance. However, this is beyond the scope of this book, which is geared exclusively toward the reading of rhythms.

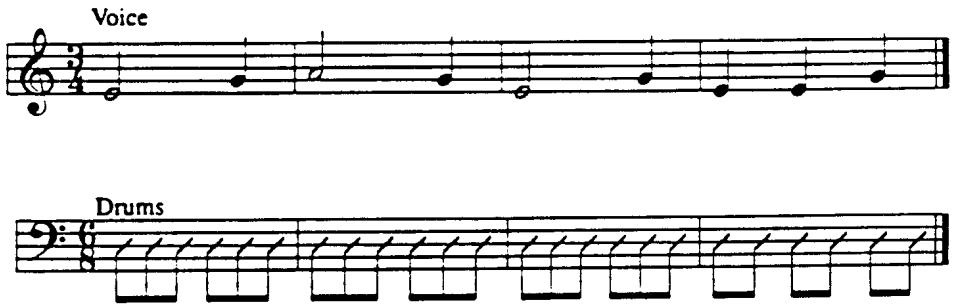
Regarding meter in jazz, we can see that the underlying metric scheme is something far more complex than the simple monorhythmic meters from classical music. Referring back to Dr. Stern's statement that the foundation for West African music seems to be a combination of 6/8, 3/4, and 4/4 meters played simultaneously, this gives us some insight into what type of underlying rhythmic scheme propels jazz music. To better understand this phenomenon let us view the following two accentuations of the same six eighth notes.

EX. 65



A typical practice in African music would be something like the following, with the drummers playing in 6/8 and the singers singing in 3/4.

EX. 66



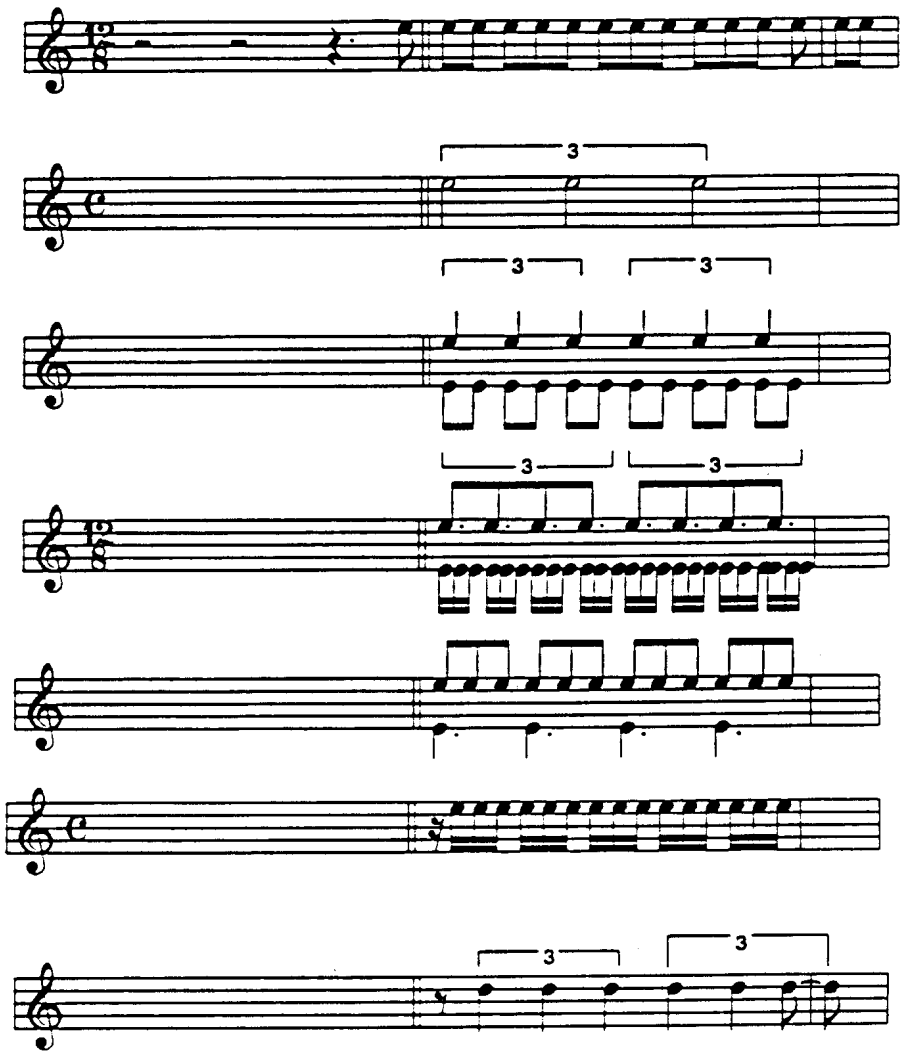
If you listen to the above example, in actual practice you can also feel an underlying pulse in units of dotted quarter notes in 4/4 time.

EX. 67

(Pulse =  in 4/4 time)

The above, however, is an oversimplification of the rhythmic behavior of jazz. As we saw earlier the presence of other meters such as 7/8 and 5/8, etc., can exist when several polyrhythmic lines are combined in the African hemiola style. This becomes even more complex when one considers the fact that jazz musicians employ faster note values such as sixteenth notes or thirty-second notes in the same hemiola-type relationships. If it were possible to catagorize all the rhythmic patterns employed by jazz artists and designate them to separate independent lines similar to what African drummers play, the metric scheme may resemble something like the following.

EX. 68

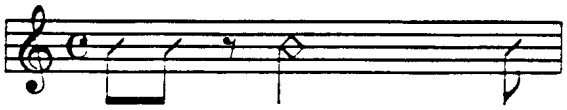


A common practice of jazz notation has evolved from jazz composers and arrangers in which rhythm is notated to include an imaginary bar line in the middle of the bar, with four equal eighth notes on either side.

EX. 69

This can be better understood if we notice the difficulty encountered when reading the following rhythm.

EX. 70



Now let us view the same rhythm notated correctly, or according to the principle stated above of four equal eighth notes on both sides of the imaginary bar line.

EX. 71

As you can see, the rhythm in both of the previous examples is exactly the same. However, the notation in example 71 is a much more logical notation and is easier to read.

There are two exceptions to the four even eighth notes principle. One is when a whole bar is taken up by even off-beats. This is frequently notated as follows.

EX. 72

EX. 73

The other obvious exception is when triplets are involved as in the following.

EX. 74

Because of the fact that jazz rhythm has evolved from African music and the notation system has evolved from European music, certain idiomatic peculiarities have arisen.

For example, many scholars of jazz have noticed a peculiarity in the notation of jazz in which the accentuation and time conception appears to be running "backwards" as compared to classical notation. This can be seen in the following example of simple 4/4 meter in the classical sense with the strong beats on <u>one</u> and <u>three</u>.

EX. 75

If we were to turn this book upside down and view example 75 as it would appear backwards, it would look like the following.

EX. 76

Now you see, the accents are falling on the second and fourth quarter notes, as it does in contemporary jazz.

Another peculiarity of jazz notation seems to exist with regard to a bar of consecutive eighth notes. Contemporary jazz artists appear to be accenting the "second eighth note" of the beat as opposed to the first, as it is traditionally done. This type of accentuation became particularly prominent at the advent of bebop.

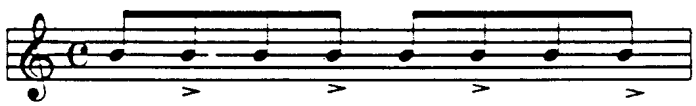
EX. 77

The following example represents the same bar of eight eighth notes as they are traditionally accented.

EX. 78

Again, if we were to turn the book upside down and view the same eighth notes they would appear as the following.

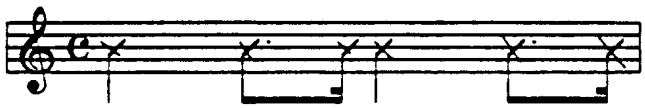
EX. 79



This appears to be the same accentuation as the bebop example.

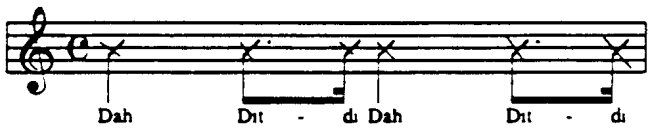
The concept of accenting the notation properly is the transformation process we spoke of earlier which is practiced by jazz artists when they read. For example, let us view the ride cympal beat as it is traditionally notated in jazz arrangements.

EX. 80



Now let us assume that a musician phrases this pattern with the accentuation falling as it is suggested by the following lyric.

EX. 81



As you will notice in the above example, the strong beats are falling on <u>one</u> and <u>three</u> as they do in European music.

Now view the same rhythm with the following lyric.

EX. 82

Now, you see, the strong beats are felt on <u>two</u> and <u>four</u> as they do in the bebop conception. Yet, the notation appears exactly the same in both styles.

The above example is simply an illustration of how the accentuation of the second and fourth beat in the modern jazz tradition is the result of a rhythm and not just a matter of accenting "two and four" as it is frequently thought of.

The <u>phrasing</u> of this rhythm, however, is an altogether differnt consideration conceptually.

During the 1960s I had the honor and privelidge of being a private piano student of Oscar Peterson and I recall a

particular lesson in which the jazz cymble beat was expressed by Oscar in a phrasing which begins on the last eighth note of a bar of 12/8 time preceeding the down beat bar. Example 83 is an illustration of what Oscar sang to me.

EX. 83

During my many years association with Dizzy Gillespie as his pianist and musical director I had the distinct honor and good fortune to have had many conversations with Dizzy about his musical conception. One of these conversations was concerning the cymble beat which Dizzy described as a phrase that started on the fourth beat of the bar preceeding the down beat bar in 4/4 time. This "4/4" time however is played in a "12/8" conception and exaple 84 is an illustration of the phasing that Dizzy sang to me notated in 12/8 time for clarity.

EX. 84

It is of extreme importance to notice that in both the Peterson and Gillespie examples the phrasing of the cymble beat begins in the *bar before the down beat bar.*

This produces an entirely different "feel" than the common interpretation begining on the first beat of bar one and should be considered as an important conceptual distinction.

Another peculiarity with regard to eighth notes in terms of accentuation lies in the concept of grouping the off-beat with its respective on-beat eighth note. For example, the traditional way of counting a bar of eighth notes in classical music is as follows.

EX. 85

The following way of counting the same eighth notes is more conducive to *sight reading* the accentuation heard in bebop.

EX. 86

The above example reveals that the two eighth notes involved with beat one are in reality the up-beat of four and the first half of the down-beat, or one.

EX. 87

Likewise beat two actually begins on the and of one, and so forth.

EX. 88

For simplicity's sake we will describe this principle by saying that the two eighth notes involved in any beat include the eighth note which falls directly on a beat and the eighth note from the off-beat which immediately precedes it.

EX. 89

Beat One

This concept of the beat actually starting, in a melodic sense, a half beat sooner than in the traditional method of notation, will be the key to the sight reading technique which follows in the next chapter.

CHAPTER VII

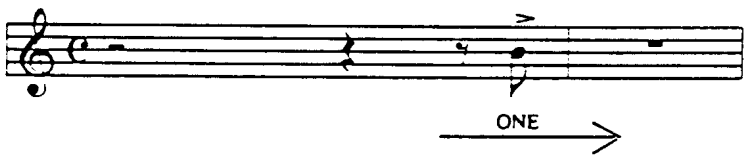
SIGHT READING TECHNIQUE

Before we begin dealing with the actual reading technique, let us make one thing very clear. The principles outlined in this book have absolutely nothing to do with the improvising or creating of jazz. Please bear in mind that these principles are geared entirely towards the *sight reading* of jazz which has already been created by the writer of the music. The technique iteslf is based on the observation made in the last chapter in which we saw that the off-beats actually belong to the beat which follows them and **are not** the "second half" of a beat, as they appear in the tradition of European-based music.

We will be using a system of counting which is the basis of the technique. The first principle in effect is the following.

1. An attack which occurs on an off-beat, which is then followed by a rest of any kind, is to be counted with the number of the beat which follows it.

EX. 90

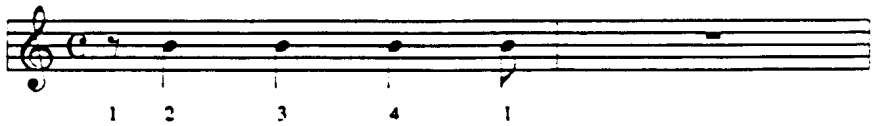


Keep in mind that we will be using the numbers of the count orally as if they were the "lyric" of the rhythm. For example, when reading the following rhythm, you will use the count as a lyric in the following manner.

EX. 91

2. An attack which occurs on an off-beat, which is then followed by another attack on an off-beat, is to be counted with the number of the beat which follows it.

EX. 92



3. An attack which occurs on an off-beat which is tied to another note is to be counted with the number of the beat which follows it.

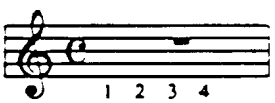
EX. 93

4. An attack which occurs on an off-beat which is then followed by an attack on the beat shall be counted with the letter "a" (pronounced "uh").

EX. 94

5. If an entire bar is occupied by a rest (silence) our count will simply express the meter as in the following.

EX. 95



Care must be taken here in avoiding a common mistake made by many musicians when first learning to read this type of music -- that is the recounting of a rest. For

example, let's assume an attack has occurred on the eighth note before one.

EX. 96

Many musicians make the mistake of counting one again as in the following.

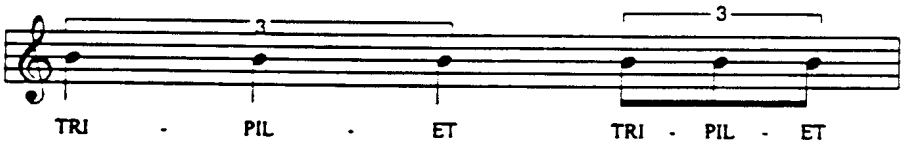
EX. 97

The count in the bar containing the rest must be picked up at two, for one has *already occurred* on the eighth note.

EX. 98

6. All triplet rhythms shall be given the lyric "tri-pi-let".

EX. 99



7. All sixteenth note rhythm, such as appear in rock or funk tunes, shall be counted in 8/8 against the regular pulse maintained by the foot.

EX. 100

8. Latin rhythms having 2/4 time signatures, such as many sambas, shall be counted in 4/8 against the regular pulse maintained by the foot.

EX. 101

The following eight examples represent this technique in actual practice.

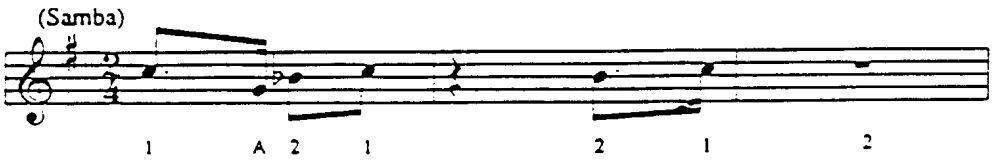
EX. 102

EX. 103

EX. 104

EX. 105

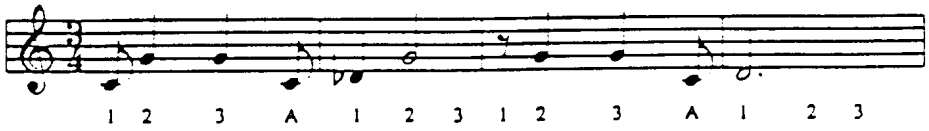
EX. 106



EX. 107

EX. 108

EX. 109



The principles of this technique shall be applied only up to the point in which the mind comprehends the reading principles. At that point, the "lyric" will change from numbers to actual drum sounds. The counting principle is intended to train you to visually organize the rhythm on the page a certain way, which is actually a technique for reading a fraction of a beat ahead. This fraction is sometimes an eighth note, sometimes a sixteenth, or whatever the particular musical situation calls for. The point is to read the off-beats ahead.

This technique, again, should be used only with slow tempi long enough until the mind begins to organize the page in this fashion. From that point on you will simply be singing rhythms with drum-like syllables. The training program for this is explained thoroughly in the next chapter.

The following exercises are for you to apply the counting principle in very slow tempi at first, and later in faster tempi as you begin to pick up the principle instinctively.

EXERCISES

#1

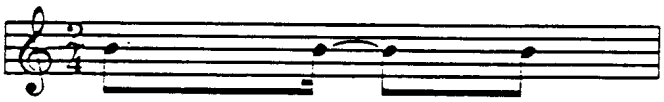
#2

#3

#4

#5

#6

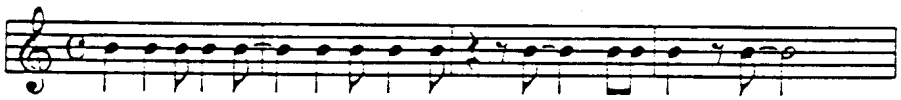


#7

#8

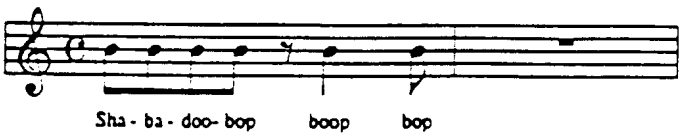
#9

#10



It is suggested that once you have begun experiencing these ten exercises on an instinct level that you abandon the counting principle and begin singing them with just "drum" or rhythm sounds.

For example, you should, by now, have developed a new way of organizing rhythms visually on the page. If you feel you have accomplished this, you would then read exercise #1 as in the following way.



Chapter VIII

THE TRAINING PROGRAM

The following techniques were developed as a tool with which you can train yourself to sight read rhythm as close to a professional level as is possible barring the obvious benefits you will gain from actual "on-the-gig" experience.

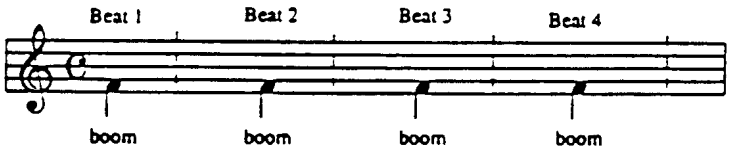
The very first principle of greatest importance in this program can be described in two very important words which eventually come to mean the same thing. They are *Tempoo/ Beat..*

In this concept, the beat or tempo is actually what you work on - *not the accuracy of the notes.* Your point of concentration will be the beat itself while you read and perform the music on an involuntary or instinctive level.

What this means exactly is that you don't actually read the notes per se, you simply watch them out of the "corner of your eye" so to speak. What you actually read is the pulse!

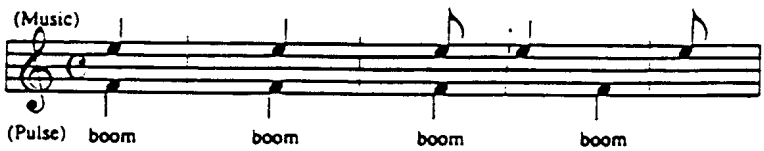
For example, in a piece of music in 4/4 time you should be reading as if the page looks like the following.

EX. 110



Example 110 represents what your concentration should be centered upon as you read. Assuming that at this point you have developed the habit of viewing the notes according to the counting principle we worked on previously, you should then "see" the notes as they group themselves around the pulse as in the following manner.

EX. 111



We will be referring to something we will call your *TCR*. This stands for the tempo at which you can read. This means that all of you reading this could read any of the exercises to follow accurately if you gave yourself a slow enough tempo. Even the poorest reader can read if the tempo is at a crawl. Once you have established the "beat" at which you can read, this is what you work on. That is, you gradually move that beat up over a period of time. This is the principle behind this concept. Rather than work on the accuracy of the notes, you work on your TCR. One very important aspect of this work must be adhered to religiously: *Once you have set a piece into motion, you must hold that particular tempo throughout the entire piece.*

This means you must strongly resist the temptation to speed up in the inactive parts and slow down for the intricate parts. This can be accomplished by keeping your concentration centered on the beat.

It is this discipline that must be adhered to as it will bring the quickest results. It is this discipline of tempo and beat which is at the very foundation of sight playing. Once you have established a TCR for yourself, you should read through the entire exercise in that tempo. The next day you repeat that same process at either the same tempo or one which is slightly faster. If this process is continued on a daily basis, your reading should be vastly improved within a six week period. In the beginning stages, we highly recommend that you start with the counting process described in Chapter VII as your lyric at a slow tempo.

If your TCR is a "crawl" for instance, those are the tempi at which the counting process is most applicable. Once your TCR begins to approach the performable tempi, however, this no longer works as a lyric. By that point your eyes should already be seeing the music in terms of this counting process as a matter of habit. It will be simply a matter of how you are mentally organizing the beats on the page. It is at this point when you should begin to replace the count with a lyric that mimics the sound of drum rhythms. For example let us view the following rhythm.

EX. 112

Now look at the same rhythm with the following lyric.

EX. 113

Now imagine yourself playing the same rhythm on a snare drum as you sing the same lyric.

EX. 114

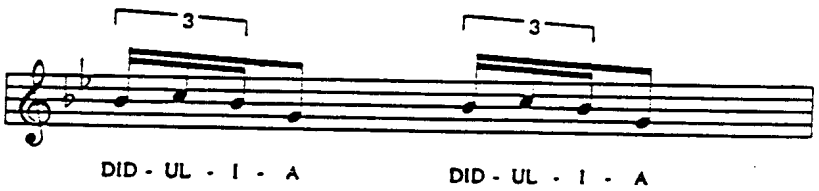
This may give you more insight into the way that bebop singers get their lyrics. Remember, *Think Drums!*

One way of expressing extremely fast rhythms such as sixteenth notes in succession is to make the "doodle tongue" approach.

EX. 115

The sixteenth note triplet attached to an eighth can be obtained with the lyric "didulia".

EX. 116



When you begin our exercises be sure and establish the pulse firmly in your mind, and then hear the basic rhythm or drum beat. That is, if the piece is a samba, you want to hear a couple of bars of the drums playing a samba rhythm before you begin to perform the piece. This will bring dramatic and quick results in the improvement of your reading.

How to Establish a Pulse:

As we established in an earlier chapter, the time conception of jazz is an entirely different organizational process than that of European-based music. Therefore, it is of extreme importance that you keep time a certain way for the techniques in this book to be most beneficial.

For example, it is not much help to break down an additive rhythm if you are trying to fit it over a European-style time conception. Once a pulsating unit is established, however, it can be moved up or down to any tempo required for your needs. Therefore, we have devised the following bass line to be used as a tool for establishing a pulse.

EX. 117

This is to be used by you either mentally, or physically on your instrument if you wish, to establish a pulse in your foot beat. Once you have established a "beat", this may be moved up or down in tempo and made to fit any meter you may require for any particular exercise.

Instructions for Use of Exercises:

1. Scan the part for any repeat signs, coda signs, etc., and make a mental note of where they are.

2. Scan the part for any rhythm you consider hard to read. Subject that rhythm to additive breakdown, or use the counting principle to gain the understanding necessary to perform it.

3. Set a groove for that particular exercise based on a tempo at which you feel you can read and perform the music accurately.

4. Perform the exercise by singing the drum rhythm. If you begin to make mistakes *do not lose the time*. You simply miss the notes and "catch up" to the beat later in the piece. Rememver, our prime concern is to *keep the beat*, not the accuracy of the notes.

5. If you encounter mistakes on the first reading, this means you need a slower TCR for that exercise. Your TCR for any particular exercise will be the tempo at which you can read an accurate performance. Once you have established that on a particular exercise, you might check the metronome marking and keep a record of the tempo so that you can move it up as you practice daily.

6. Once you can read these exercises at relatively fast tempi, you are ready to apply the *Tempo/Beat* concept to actual music played on your respective instrument.

This particular course is geared toward the reading of rhythm exclusively. If you also have problems in reading pitches, it is probably due to trying to read "by notes" instead of by intervals. I would recommend that you study another book of mine entitled "Theory and Musicianship for the Creative Jazz Improviser", which contains an excellent training program for interval work.

You are now ready to begin the exercises.

EXERCISES

EXERCISE 1

Med. to Fast Swing

EXERCISE 2

Fast to Very Fast Swing

EXERCISE 3

Rock

EXERCISE 4

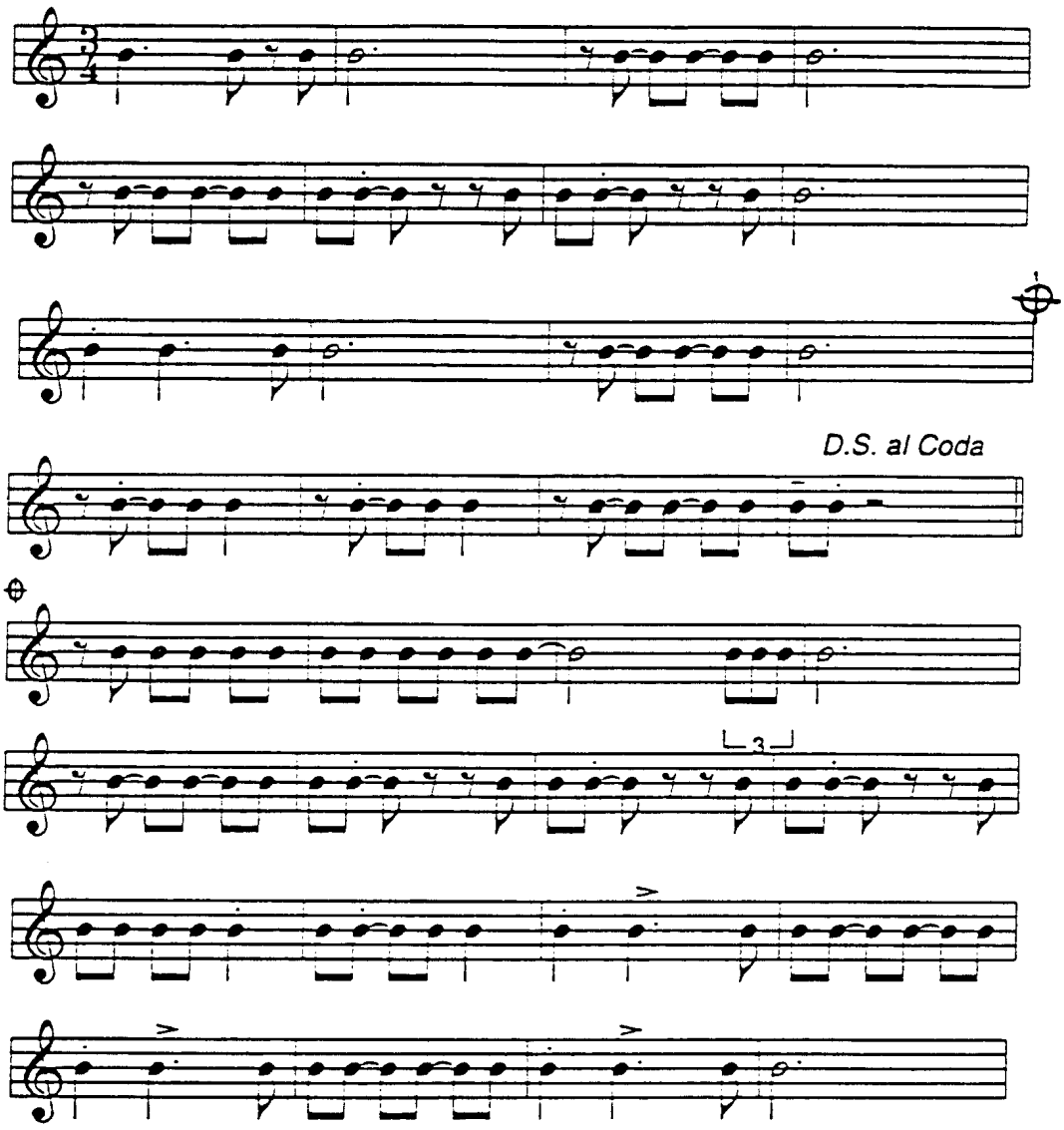
Samba

EXERCISE 5

Fast Swing

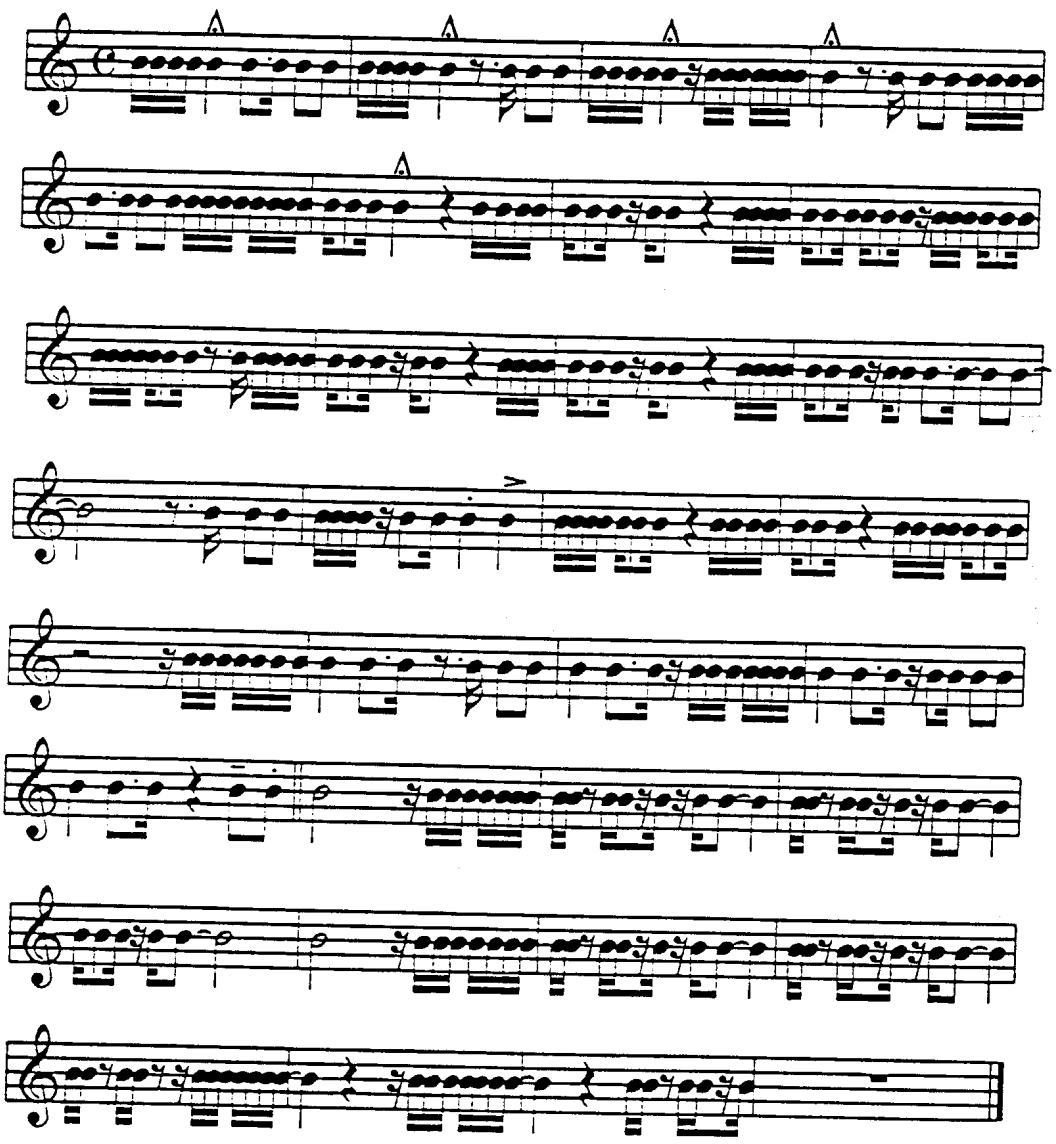
(MED. TO FAZT JAZZ WALTS)

EXERCISE 6



ROCK

EXERCISE 7



Latin Jazz

EXERCISE 8

Medium to Fast Swing

EXERCISE 9

Fast Swing

EXERCISE 10

Med. to Fast Swing

EXERCISE 11

Med. Rock

EXERCISE 12

EXERCISE 13

EXERCISE 14

SLOW BLUES

EXERCISE 15

Fast Swing

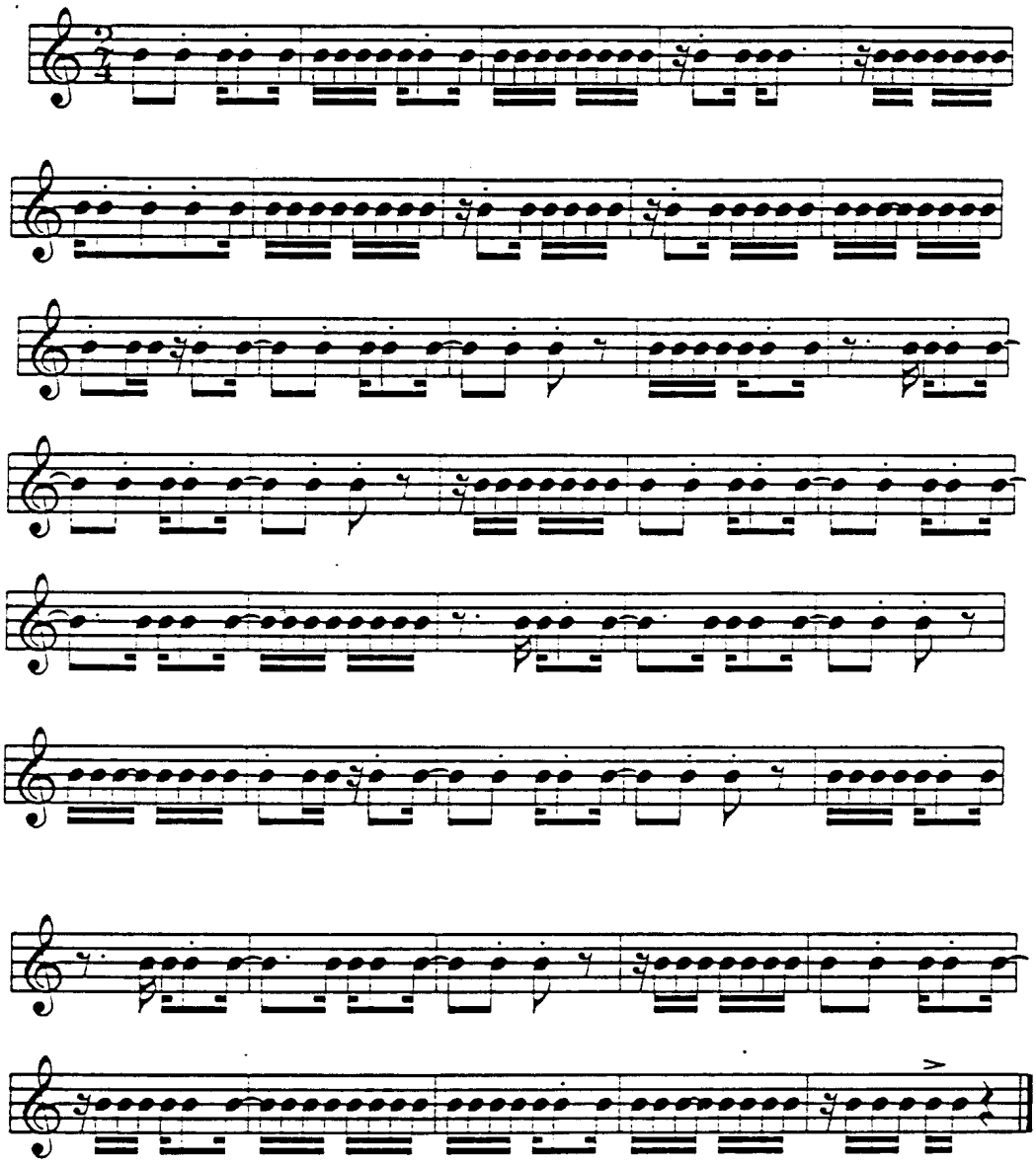
EXERCISE 16

Med. Swing

EXERCISE 17

Samba

EXERCISE 18



EXERCISE 19

Funk

EXERCISE 20

Med. Swing

EXERCISE 21

Fast

EXERCISE 22

Slow Rock

EXERCISE 23

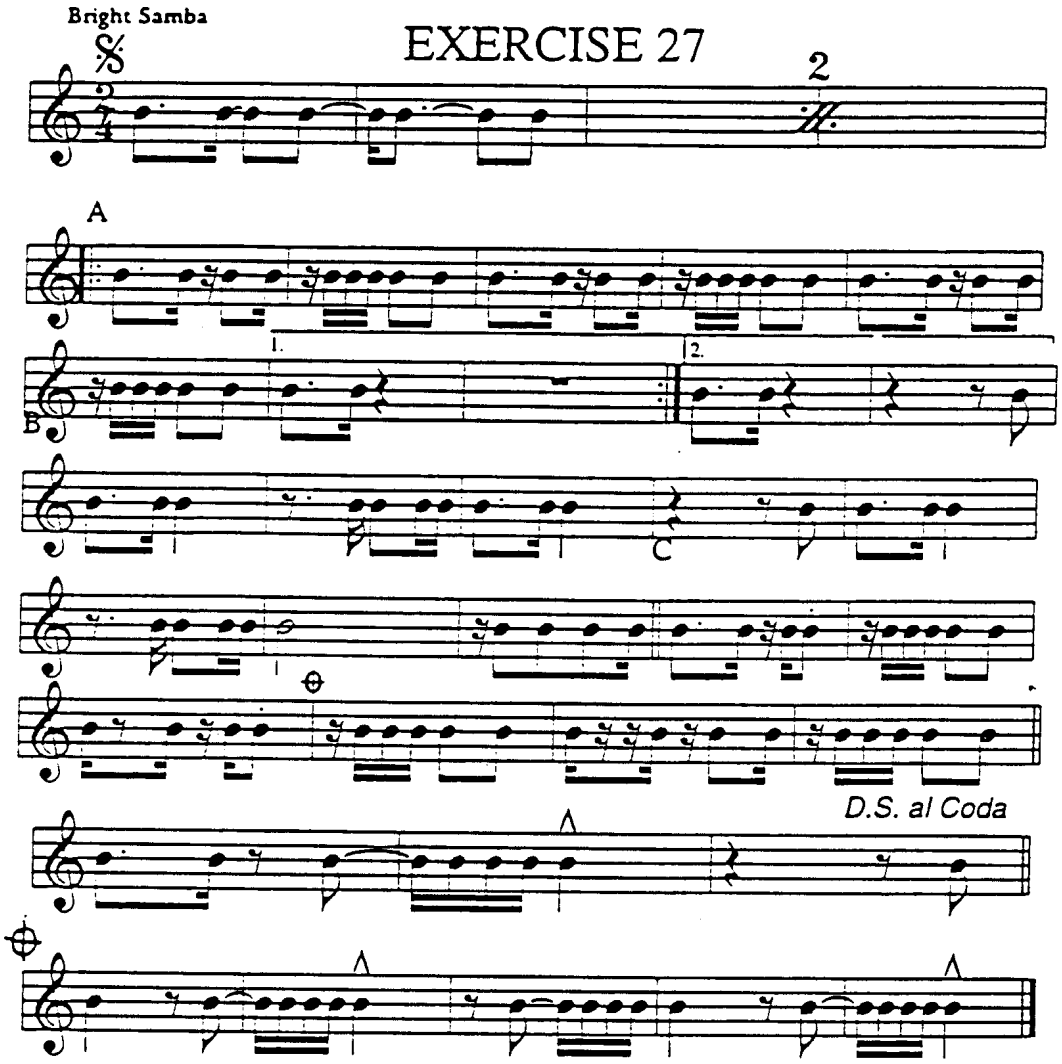
Latin

EXERCISE 24

Slow Ballad

EXERCISE 25

EXERCISE 26


Bright Samba
EXERCISE 27
2
A
1.
2.
B
C
D.S. al Coda

EXERCISE 28

Med. Swing

Med. Swing

EXERCISE 29

Med.

EXERCISE 30

Medium to Fast Swing

EXERCISE 31

Fast Jazz Waltz

EXERCISE 32

Med. Up

EXERCISE 33

EXERCISE 34

Fast Swing

Med. Slow Latin Rock

EXERCISE 35