

# **THE NEW RHYTHM BOOK**

DON ELLIS

(With Additional  
Chapters by Milcho Leviev,  
Dave McDaniel, Ralph Humphrey)

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Dave McDaniel, Ralph Humphrey)

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**DON ELLIS**

#### **ABOUT THE AUTHOR**

Don Ellis, a leader in the new rhythms, is a musician in the most expansive sense of the word.

Don Ellis is a prominent jazz trumpeter; he is the leader of the highly successful 22 piece Don Ellis Orchestra; he is an up and coming film composer (*French Connection*, *Kansas City Bomber*); and he is, as well, a musical scholar who is continually searching and expanding.

Don Ellis has a rich musical background that reflects his varied talents and interests. Starting as early as the fifth grade (with his own group the *Jive Five*) Don was playing jazz. In 1956 he received a Bachelor of Music Degree, with a major in composition, from Boston University. After graduation Don joined the Glenn Miller Orchestra under the direction of Ray McKinley.

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A stint in the Army brought Don Ellis to the Jazz II and III Orchestras in West Germany—he was first trumpet player and arranger. Here he had a chance to work with musicians such as Eddie Harris, Leo Wright, Cedar Walton, Lanny Morgan, Lex Humphries and Houston Person.

Later Don, making his home in New York, toured with most of the New York based big bands such as Charlie Barnet, Claude Thornhill, Lionel Hampton, Ralph Marterie, Sam Donahue and Woody Herman.

Don, with an old friend from Boston, Bill Chase, had just joined Woody Herman's band when Joe Zawinul and Slide Hampton heard him in a jam session in Harlem. This resulted in an offer to join Maynard Ferguson's band. Don accepted and was soon playing with Frankie Dunlop, Joe Zawinul, Slide Hampton, Jimmie Ford, Willie Maiden, and Jimmie Rouser to name a few of the all-stars in Maynard's band. While a member of the band, Don introduced a young tenor just out of the army, Wayne Shorter, to the band and later brought Jaki Byard, his friend and teacher from Boston out of "retirement" to take Joe Zawinul's place.

After leaving Maynard to form his own group Don went to the Lenox School of Jazz. There he met George Russell who later asked Don to join his sextet. This was a very fertile period for Don: he performed in jazz-classical concerts with Gunther Schuller; he recorded albums under his own name and he also recorded with Maynard Ferguson, Charlie Mingus, and George Russell. In 1962 Don Ellis won the New Star Trumpet Award in the International Jazz Critics Poll.

In 1963 Don returned to his original home, Los Angeles, to do further study as a graduate student at the University of California at Los Angeles. The first year at UCLA was highlighted by a New York concert with Leonard Bernstein and the New York Philharmonic. In this concert Don performed in Gunther Schuller's *Journey into Jazz* (along with the late Eric Dolphy) and Larry Austin's *Improvisations* (which he had performed earlier with the National Symphony Orchestra of Washington, D.C.).

Lukas Foss who was then director of the Buffalo Philharmonic heard of Don and

invited him to be one of the original Creative Associates at the Center of the Creative and Performing Arts in the State University of New York at Buffalo under a Rockefeller grant (1964-1965). It was here that Don had an opportunity to work out many of his concepts of rhythm and to perform various avant-garde chamber works.

After the year with Lukas Foss, Don returned to Los Angeles and started his big band in earnest. While getting the band started he earned a living by teaching privately and at UCLA and San Fernando Valley State College. He also played evenings with various Latin Bands such as Rene Bloch.

During this time he started doing some studio work. The electric trumpet work in Dave Grusin's score for *Candy* was his, as well as that in Christopher Komeda's score for *Rosemary's Baby*. Lalo Schiffrin (who had played briefly in an experimental large group Don had in New York) also used him for some of his movie and television work. Many people first heard of the electrasonic trumpet through Don's work in movies and television.

It was also during this period that Stan Kenton commissioned Don to write *Synthesis* for his Neophonic Orchestra. This was performed at the Los Angeles Music Center in 1966 featuring Don and the Hindustani Jazz Sextet with the large Neophonic group. This was followed with a commission from Zubin Mehta and the Los Angeles Philharmonic at the Los Angeles Music Center in 1967 (*Contrasts for Two Orchestras and Trumpet*). Charlie Byrd also commissioned a piece, *Byrd of Paradise*, and Charlie recorded this on Columbia Records (Charlie Byrd *Let Go* Columbia CS9869) in the quartet version and performed it with the National Philharmonic in an expanded version, in 1968.

Don Heckman, the noted critic for the New York Times once asked Don, half jokingly, after his artistic triumph with Leonard Bernstein and the New York Philharmonic, "This looks like the end of the movie. Where do you go from here?"

Don has since not only expanded the scope of his playing and composition, but he has become a proficient drummer as well.

One of Don's most recent ventures is into the educational publishing field. The publication of stage band arrangements (pieces the Don Ellis Orchestra has recorded) has been **a tremendous success. This** has lead to new expansion: a book and record on the new rhythms.

This exciting set seems to be just the beginning—a door opening to a whole new field for Ellis to share with others his creative and provocative insights as one whom Leonard Feather five years ago described as "probably the most typical symbol of all-encompassing musical involvement".\*

the editors

\* Los Angeles Times, "Don Ellis: *The New Symbol of Total Music*" (March 12, 1967).

# THE NEW RHYTHM BOOK

Don Ellis

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## INTRODUCTION

"How do you learn to play in all those rhythms?"

Ever since 1963 when I first began concentrating on exploring new rhythms, this question has been posed to me in many forms at the end of each concert or clinic. It is asked not only by students, but also by their teachers and professional musicians. It is in response to this question that this book and the companion record, *New Rhythms*<sup>1</sup>, were brought into being.

It is an interesting fact that techniques which took me years to discover and master **can** now be learned by the average musician in a few short months. This book is a distillation and exposition of ideas gathered from many sources, but by far the biggest credit should go to my teacher of Indian music, Hari Har Rao. It was he who first exposed me to the treasures of the Indian rhythmic vocabulary and the techniques for its mastery which have been brought down generation to generation over the centuries.

When I first started my big band, almost every meter we did was new to the musicians and I found I was forced to be in the position of a teacher in showing them how to deal with the new rhythms. It is through working with these musicians and with many students in various clinics all over the country that the techniques presented in this book have been refined and codified.

I would like to express appreciation and thanks to each and every one of the musicians who has worked with me over the years in developing these rhythms. Without their willingness to learn, patience and belief that here was something new and worthwhile trying (even though the learning may have been difficult) the tremendous rhythmic advance we have seen in the last few years would have been impossible.

That there has been a tremendous advance in rhythmical abilities in this country

1 EME Records ES1  
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may be illustrated by a story that I've often told:

In first starting my band, we held auditions for drummers to try and find someone that could think in the new meters.

One of the auditions was held in a rehearsal room of Musicians Union Local 47 in Hollywood. The well-known vibist Emit Richards was involved with me at that time and between him and me we had almost every well-known studio drummer in Hollywood at that audition trying to play in the odd-metered time signatures. I won't mention any names because I don't want to embarrass anyone, but after an hour or so of struggling with a 9 (2+2+2+3) one well-known drummer who had been sitting on the sidelines listening very intently, jumped up and shouted, "I've got it!" We welcomed him at the set of drums and he sat down. I counted off the tune and we had only gone a bar and a half before the familiar cry, "Where's one?" welled up!

We didn't find any drummers at this audition and I was despairing that I would be able to find anyone who could do it, when a young student of mine, Tom Scott (who is now a well-known jazz/studio musician in his own right) told me of an organist in a group he had at his high school who played some drums. Tom thought that he might be able to do it. I was skeptical but set up another rehearsal and the young Steve Bohannon came by.

For the first tune I decided to do a pattern in nineteen. He asked me, "What's the subdivision?" I replied, "Three, three, two, two, two, one, two, two, two." He thought for a brief moment and then nodded and said, "Ok, let's go." I counted the tune off and Steve took charge and never missed a beat from then on until his tragic and untimely death in an automobile accident just after he had entered the Armed Services.

Steve paved the way, and now rhythm sections all over the world are getting free and loose in the new time signatures, and audiences as well as musicians have discovered a new world of rhythm that is incredibly exciting.

Welcome to this world.

## Chapter One

### HISTORICAL BACKGROUND

I have recently become very interested in folk dancing and have been attending some classes in Balkan dancing at the "Intersection", a local Los Angeles club devoted solely to the folk dancing of other cultures. It has been an incredibly opening experience to begin to learn how to dance in many complex meters and rhythms, and to learn that these dances have been a part of other cultures since before history. I, of course, have read about such things, but it is one thing to read that the Greek national dance, *Horos Zalongoy* is in a 7/8, (a 3 2 2 Pattern) and it is quite another thing to learn how to dance it and to experience it in your whole body and to realize that in other cultures millions of people feel this and even much more complex rhythms quite naturally. The Bulgarian culture, especially, has some truly beautiful and intricate folk dances in all kinds of unusual meters, such as 7, 9, 11, and 33.<sup>2</sup>

It is to North India, and the school currently led by Ravi Shankar, however, that we must look for the most sophisticated and complex uses of rhythm. More of this later.

In our own culture, at the end of the 14th Century (around 1400), we find that music was very polymetric.<sup>3</sup> Subsequently, however, the more harmony-oriented Western music became, the less rhythmic it became, until with the romantic composers such as Brahms, a steady rhythmic pulse almost entirely stopped, and instead a rubato type of rhythm took over, with a conductor becoming more and more necessary to "pull" the orchestra along.<sup>4</sup>

if                    As composers became more and more concerned about harmony it proved expedient  
to have all the voices of a composition merge into a given chord at the same time. This  
£                    led more and more to the downfall of polyphony and more and more to a rather stodgy

<sup>2</sup> See Appendix II, *Odd Meters in Bulgarian Folk Music*.

<sup>3</sup> Willi Apel, *Harvard Dictionary of Music*. 2d Ed. (Cambridge, Massachusetts: The Belknap Press of Harvard University Press, 1972), Rhythm, p. 729-731; Polyrhythm, p. 687, 688.

<sup>4</sup> See Henry Peasants', *The Agony of Modern Music* (New York: Simon and Schuster, 1955).

rhythmic conception (of regularly moving chords.)

There is another theory that the demise of rhythmic interest in the Western culture had to do with the influence of the church. Rhythmically exciting music has always been felt to be rather sexually stimulating, and if not that, it certainly (in every culture) buoys the spirits. Both of these ideas were an anathema to the old church which promised joy and fulfillment in the next world and not in this. Even today certain fundamentalist sects write books and papers denouncing rock and roll and other rhythmic musics as being "of the devil". However, with the birth of jazz in this country less than a hundred years ago, the music of the whole Western culture was rhythmically revitalized.

The rhythmic innovations of Stravinsky and Bartok in the classical field are well-known, less well known perhaps is that G. F. Handel in his *Rinaldo* (1717) Volume 58 of the complete works, alternates as 3/8 and 2/4 at random. Also, in *Orlando* (1732) Volume 82, 5/8 and 4/4 are alternated. And, of course, there is the famous example of Tchaikovsky's *Symphony No. 7, The Pathétique*, composed in 1893 with its beautiful 5/4 theme.

Classical music, however, probably because of the emphasis on harmonic innovation which later led to the emphasis on orchestration and sound for its own sake, has all but destroyed a regular rhythmic pulse.<sup>5</sup> It is only in the fields of "pop" music, including jazz, rhythm and blues, rock and roll, that we find a regular pulse surviving. And these are the areas I believe where real rhythmic interest and revolution are taking place.

Since the beginning of jazz, jazz musicians have been refining and expanding their rhythms. Sometimes in the refinement, the element of swing has been all but lost (as in the Cool School associated with the West Coast), and then in reaction to this, sometimes the swing has been put back, but most of the rhythmic subtlety and complexity lost (as in the Funk music period of jazz). However, the overall pattern from the beginning has been to expand rhythmic horizons. Recently rock has added new dimensions to rhythm.<sup>6</sup>

5 Ibid.

6 See Appendix I: *Rock: The Rhythmic Revolution*.

## HISTORICAL BACKGROUND

Originally jazz was played in 4/4. One of the rare exceptions to this was Fats Waller's *Jitterbug Waltz* (1942). More recently, especially through the efforts of Max Roach and Sonny Rollins, 3/4 (or 6/4 and 6/8) was introduced into jazz. At first this was a novelty, but now almost every organ-tenor group plays a number of things in three. This may not seem so startling at the present time, but just a few years ago debate was raging as to whether it was possible to swing in anything but 4/4. In fact, in the early 60's, one of jazz's leading educators, John Mehegan, made the statement that anything that was not in 4/4 could not possibly be considered jazz!

Another break-through was made **with Dave Brubeck's *Take Five***, which showed that it was possible to play jazz in 5/4. The great popularity of that tune indicates that a large segment of the population is interested in hearing music in meters other than 4/4 and 3/4.

Rhythm was the main thing that attracted me to jazz: both in the excitement of swing and the complexity of its cross-rhythms. For many years now I have been trying to conceive of new ways to expand jazz rhythms. Alternation of 4's and 3's was one of the first things that occurred to me,<sup>7</sup> and then I tried experiments of "stretching" the time by means of accelerandos and ritardandos.<sup>8</sup> "Free" rubato time (so common to the avant-garde today)<sup>9</sup> also proved interesting as did the possibility of having several tempos going on at once.

The next step was to attempt to play things in 7/4 and 9/4. Arif Mardin, the Turkish jazz composer, gave me a chart in 9 (divided 2 2 2 3) that was based on a Turkish folk rhythm, and this made me more aware of the fact that the odd-numbered meters which at first seem so exotic and difficult to us, are really very natural and a part of the folk culture of much of the world. As a matter of fact, friends have told me of playing Greek club dates where all the main dances were in 7 and 9, and even little children could dance to these rhythms — and would get annoyed at the musicians if they missed a beat!

I reasoned that since it was possible to play in a meter such as a 9 divided 2 2 2 3, it

7 See Don Ellis: *New Ideas*, Prestige Records PR 7607, the track titled *Four and Three*.

8 See Don Ellis: *How Time Passes*, Candid Records Candid 8004, the title track.

9 See Don Ellis: *Essence*, Pacific Jazz PJ-55, the track titled *Slow Space*.

should then be possible to play in meters of even longer length, and this led to the development of such meters as 3 3 2 2 2 1 2 2 2 (19).

To arrive at this particular division of 19, I tried many different patterns, but 3 3 2 2 2 1 2 2 2 was the one that seemed to swing the most. The longest meter I have attempted to date is a piece in 172. But this isn't so far-fetched as one might think at first, because at the Department of Ethnomusicology at UCLA I learned of one folk song with a 108 beat cycle!

In the beginning there used to be two arguments against playing jazz in these new rhythms and meters: 1) They are not "natural". And my answer was: not natural to whom? They are natural to a great portion of the world's peoples. 2) You can do the same thing in 4/4. This is ridiculous; if one can't play comfortably in 5 and 7, for example, how can one hope to superimpose these correctly over 4/4? Also, superimposing any other meter over 4/4 is NOT the same thing as playing in that meter exclusively.

In the midst of all my thinking and experimenting with these rhythmic ideas a very fortunate event happened: I met the Indian musician, Hari Har Rao, and began studying with him, both at the Department of Ethnomusicology at UCLA and privately. He opened up un-dreamed of new worlds of rhythm that he and his teacher, Ravi Shankar, had worked out. I learned exercises for developing the ability to superimpose complicated rhythmic patterns one on the other, and ways of counting to be able to always keep my place in a given cycle, no matter how long or involved. He showed me how to arrive at new rhythmic ideas and the proper ways of working these out and practicing them. It was a tremendously exciting and rewarding experience.

From that time on I have had two main goals in the realm of rhythm: a) to develop my playing and writing to the highest possible level rhythmically and b) to set the wheels in motion that will send these new rhythms permeating through our whole musical culture.

My big band was started in the summer of 1964 in Hollywood but temporarily disbanded when I went back to New York for a year. The original idea to form a big band was suggested by Emil Richards as a means of communicating our excitement at the discovery of

## HISTORICAL BACKGROUND

the new rhythms to as many of the top musicians as quickly as possible. Hollywood was the only place a band like this could have been started because of the excellent free rehearsal studio facilities of musician's union, the high caliber of musicians, and the fact that the musicians here are not so transient as in New York. In a project such as this, having a relatively stable personnel was an absolute essential. In the beginning, one new person coming in a little wrong could throw the whole band off.

The original idea for the expanded rhythm section (3 basses and 3 percussionists) was both musical and practical.

I had been doing a lot of playing in Latin bands and became very fond of the sound of having 3 and 4 percussionists, each doing something different. The rhythmic polyphony excited me. Also, on the practical side, I realized that if only one drummer and bass player knew my book and they had to leave for some reason, I would be stuck. So I tried the big rhythm section, fell in love with the sound, and have used it ever since. The only modification being that now I use one electric bass instead of three acoustic basses. (When I started the band very few jazz bassists played electric and it took 3 acoustic basses together to get the solid bottom needed to support the extra percussion).

In teaching the band these new rhythms I have found that the hardest thing is to learn to tap one's foot unevenly. Usually the 5's come most easily (patting in a subdivision of 2 3 or 3 2), then the 7's and 9's follow — each one usually being progressively more difficult. However, once one is used to patting one's foot unevenly, the longer, more complex patterns are relatively easy.

The band had been working steadily every Monday evening for almost a year, and I remember our delight when, after struggling like mad to feel comfortable in a fast 7 (divided 3 2 2). I brought in a chart in three and two thirds over four time (11), and the band played it at sight! That was a big turning point because we realized that now they could count and play almost any rhythmic pattern at sight. The time barrier had been broken.

## Chapter Two

### WHAT ARE THE NEW RHYTHMS?

The "new rhythms" comprise two parts: (1) complexities within regular meters (such as 4/4), and (2) the so-called "odd" meters.

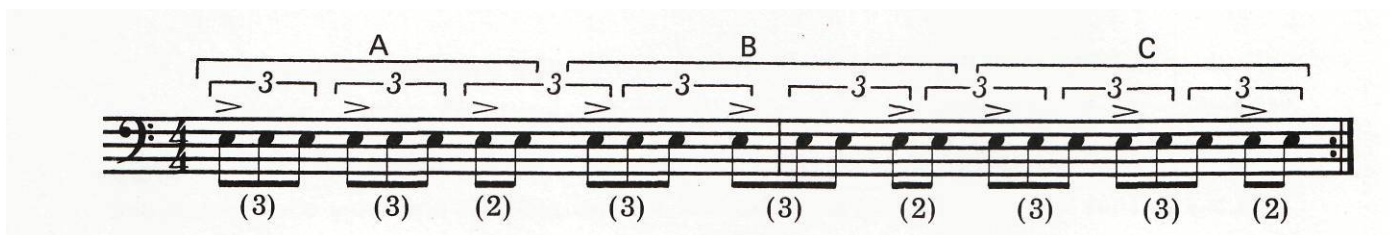
Complexities within regular meters include such devices as Indian music's *Tihai*, which is a thrice-repeated rhythmical phrase constructed so that the last note of the phrase becomes "one" of a new cycle. In its most rudimentary form, an example would be a familiar phrase played by many jazz and rock drummers:

Example 1



Another type of rhythmical complexity is an over the bar line exercise taught me by Ravi Shankar.

Example 2



or: (3 3 2) X 3 as triplets.

A more complex example would be:



Example 3

Example 3 shows three staves (A, B, C) in 4/4 time. Each staff contains a sequence of eighth notes grouped in threes, with a '3' above each group and a '12' over an '8' below the first group. The notation is in bass clef.

or: 3 (2+4, 2+4, 4, 3) X 3 as triplets.

Complexities within regular meters would also include superimpositions such as three notes in the space of four:

Example 4

Example 4 shows a single staff in 4/4 time. It contains a sequence of eighth notes grouped in threes, with a '3' above each group and a '12' over an '8' below the first group. The notation is in bass clef.

and across the bar line groupings of threes:

Example 5



This type of phrasing has been popular in jazz since the very earliest days and was one of the main rhythmic devices of ragtime:

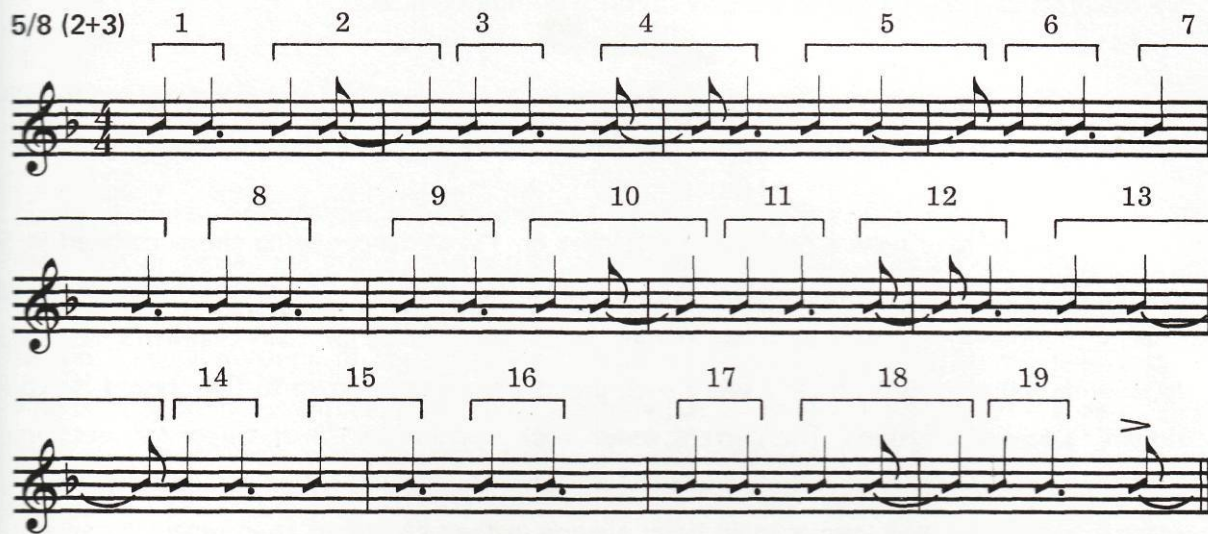
Example 6



Tony Williams in Miles Davis' album *Miles Davis in Europe*<sup>10</sup> plays an incredible example of 5's across the bar line — taking up a whole twelve bar chorus of the blues:

<sup>10</sup> Columbia CS 8983. See the tune *Walkin'* near the end of the tenor solo.

Example 7



These types of complexities are a subject for another book which I have written: *Rhythm*. The present book deals basically with the odd meters.

The term odd here does not mean that the meters are strange or weird (although to some it may appear that way!) but rather that they are derived from odd numbers: 5, 7, 9, 11, 13, etc.

Are these odd meters natural and practical? As pointed out above, they are natural to many cultures, and even peasants (who may be illiterate and uneducated) dance to them and perform musically in them. It has now been proved that these meters can also be natural to us.

It was not easy when jazzmen learned to play 3/4 for the first time. They found that it was difficult to learn a new meter. However, the basic difficulty is only one of mental inhibition. That is why I have found it much easier to work with younger and relatively minimally trained musicians. They are much more fluid in their responses. A professional musician who has been playing all of his life in 4/4 and is completely geared to that, finds it much harder to shift mental gears and play freely and comfortably in 5/4, for example.

But — it can be done, and is being done today. Which brings up the question: What are the practical applications of the new rhythms in today's music?

The rock, jazz and commercial (i.e., the TV and movie fields) are all taking this direction (not to mention the rhythmic complexities of contemporary classical music).

There have been a number of instances on TV of dances being choreographed in 5 and 7. There are many commercials that have beats other than 4/4. The theme music for many television programs is now in other meters (note the success of Lalo Schifrin's *Mission: Impossible* theme in 5/4). Nearly every rock group from *Cream* down to the present is experimenting in new rhythms. The current smash rock opera *Jesus Christ, Superstar* uses some effective 7's and 5's. And rising popularity of John McLaughlin's *Mahavishnu Orchestra*<sup>11</sup>, (probably the best and loosest small band playing in the new times) is an especially encouraging sign.

There is no question about it—the new meters are here, and they are fun, exciting and challenging. In the next few years they are going to become even more important and therefore anyone who wants to call himself a musician must master these rhythms.

<sup>11</sup> The *Mahavishnu Orchestra* with John McLaughlin: *The Inner Mounting Flame*, Columbia KC 31067. :

## Chapter Three

### THE BASIC CONCEPT

When Arif Mardin, the Turkish jazz composer who is now Aretha Franklin's A & R man first presented me in the early sixties with a piece he called *Turk's Works* (in a Turkish **folk** rhythm of 9 divided 2 2 2 3) I was forced to fall back on my own resources. This was before I knew anything of the Indian techniques of rhythmic mastery, and through a slow agonizing process I eventually discovered that one has to approach a new time signature and learn it in exactly the way one learned to originally count in 4/4.

You have to first count it out loud, then in your head (tapping your foot on the main accents), and then sing phrases along with your physical and/or mental tapping (time-keeping). The difficulty, of course, is that after years and years of conditioning to tapping your foot evenly, all of a sudden (in being presented with a fast nine for example,) you have to learn to tap your foot unevenly! However, with patience this is mastered.

Learning to improvise in a new time signature is much more difficult than reading a pre-composed piece in a new meter because you have to learn to keep your place in the new meter as well as think of something creative to play.

The way I recommend learning to improvise in the new times is as follows:

The first step is to sing a simple phrase (usually one bar long), which will outline the main accents of the basic rhythm very clearly. After this phrase is decided upon and committed to memory, play it on your instrument over and over until it becomes completely natural.

At the point where it becomes completely natural, start inserting slight variations, **but** not too many, as you do not want to lose your place. Because in learning to play a new meter, if you get lost, you are simply practicing a mistake and instead of getting better you will get worse.

A good idea at this point is to go back to singing: Take the basic phrase, sing it, and keep the original pattern of the meter in your hands and feet by clapping and tapping, then sing the variations against it. Singing is very important, because if you cannot sing a phrase and feel it correctly, there is no way you will be able to play it on your instrument. I find that if you keep practicing in this manner, progress comes relatively quickly. By using the basic phrase and varying it, you never get lost and eventually you are able to go on to completely new and freely associated ideas on the basic phrase, knowing all the time exactly where you are within the bar.

It was at an early point in the experimenting with new time signatures that I found that it was esthetically necessary to make a break with traditional jazz practice. At the time when my original experiments began, modal jazz and free jazz was just being invented. The common practice was still to improvise upon tunes with a great number of chord changes. I found that using a complicated time signature on top of a complicated chord progression created esthetic confusion. It was not just that it was extremely difficult to improvise in a new time signature and a complex pattern, but it seemed more a basic musical problem that when you become tremendously complex in one area it appears necessary to simplify in another area.

In another way this is exemplified in the history of music. When harmony came into Western music, rhythm — except for the most rudimentary — seemed to go out. It appears to be a general principle of art in maintaining the esthetic balance between tension and relaxation, that when the level of complexity in one parameter is increased, the level in other areas must be correspondingly reduced to achieve an overall balance. Therefore, it turned out that very rudimentary progressions such as simple blues or a modal approach (sometimes using Indian ragas and scales), proved more satisfying.

I would recommend that the student start out with any mode or scale of his choice and work with that in the new meter until the meter is well set within his mind, and then go on to a simple twelve bar blues progression (which will give the feeling of motion within the meter).



Strangely enough, I found that the faster the rhythm the easier it is to learn to play. The reason for this is one of memory. One of the most difficult time signatures for me to learn **was** a straight ahead 5/4 in which the beats were all equal and there was no subdivision of two plus three or three plus two. It was so easy to fall back into 4/4 and so difficult to remember when you had passed five beats at a medium slow tempo. I finally figured out (in learning to play this rhythm) that if I tapped two feet alternately, the first downbeat would be on the right and the second would be on the left, and so forth. This served as a guide to help me keep my place when improvising. Of course it becomes much easier when you are playing with a rhythm section because you can listen to them and get your cues as to exactly where you are. **But** I firmly believe that a soloist should be able to keep track of and play most complex meters by himself without getting lost.

Today there is a device that helps immensely in learning the new rhythms: the Trinome. The Trinome is a metronome which you can set up to keep track of downbeats from one through eight and have up to three tempos going on simultaneously.

For a general practice schedule I would recommend the following:

1. Count out loud, clap your hands, tap your feet in the new meter.

Example 8

3+2+2

Count: one two three four five six seven

Clap and tap foot:

2. Sing a simple phrase that outlines the meter against this clapping and tapping.

Example 9

Tap foot

3. Play the same phrase on your instrument.
4. Go back to clapping and tapping, sing the basic phrase and start adding embellishments.

#### Example 10



5. Do the same thing on your instrument, gradually embellishing until you are playing completely free within the meter.

#### Example 11



6. Practice with records that use the new times. When I first started out there were no records to practice with — the only exception being Dave Brubeck's famous *Take Five*. Now, fortunately, there are many more records (see the discography at the end of this book) and this simplifies matters a great deal for the student.



## Chapter Four

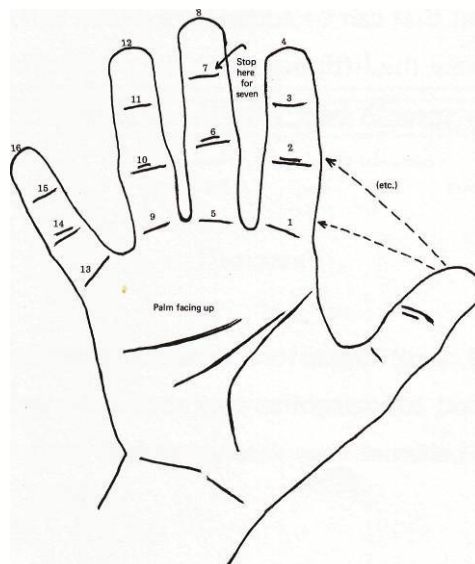
### THE INDIAN WAY OF LEARNING NEW METERS

In the following chapter I would like to give credit to my Indian music teacher, Hari Har Rao, who first acquainted me with these ancient Indian techniques for keeping time and developing facility in any new meter.

I'll use the meter of seven for our example, not only because it is one of my favorite meters (probably the most played in by my band) but because five is more common today (and therefore too easy) and because the odd numbers above seven are much more difficult to keep track of (and perhaps too difficult). Seven seems like a good place to start.

The Indians have devised at least two unique ways of keeping track of a rhythm with the hands. The first of these is to count on the fingers of your right hand. By touching the thumb to the joints of each finger you have the possibility of keeping track of anywhere up to sixteen beats. And by starting all over again you can accommodate as complicated a meter as is desired. The main thing you have to remember is at which joint you stop in your counting. Seven, for example, would go to the top joint of the middle finger.

Example 12



This is especially useful in working out complicated rhythmic patterns that may stretch over four or more bars. You can sing the pattern, watch your hand, and know where you are at any given moment.

For our purposes in learning to count a new meter for this book we will use a slightly different Indian method whereby we clap our hands for the main subdivisions or accents within the meter and tap the fingers against the palm of the other hand for the weak beats.

There are three basic ways to divide seven:

3 2 2

2 3 2

2 2 3

For now we will use the most common Indian pattern: *Rupak Tal* which is a subdivision of 3 2 2. Our claps, therefore, will come on one, four and six. In actual Indian practice there is a wave of the hand on "one" (*Kali*), but it will be easier if we use the clap. In order to keep track of the "three" as opposed to the following "twos", the second beat is indicated by touching the little finger of the right hand to the palm of the left. The third beat is done by touching the third finger (the finger next to the little finger) of the right hand to the palm of the left hand. The fifth and seventh beats are again the little finger of the right hand to the palm of the left.

A further refinement that can be added here which will prove useful in keeping track of even longer meters is to make the fifth beat with the middle finger of the right hand against the palm of the left and the seventh beat with the first finger of the right hand against the palm of the left.

### Exercise 1

The first step is to count one, two, three, four, five, six, seven and to clap as indicated above, clapping on one, four, six, and touching the appropriate fingers to the palm on the weaker beats. Do this awhile until it becomes completely natural.

Example 13

Count: one two three four five six seven

Clap little finger touches palm of opposite hand

Clap little finger (opt: middle finger)

Clap little finger (opt: first finger)

Exercise 2

If we assume that we have been counting and clapping quarter notes, what happens when we go to eighth notes and double the speed of the count against the original claps? You will notice a very interesting thing happening. Count twice as fast as you are clapping in 4/4 and the middle of the bar comes on a strong beat. However, since seven is an odd number, the 1 (or downbeat) of the second bar in the double speed comes on a weak beat (the "and" of four — or four and a half). This is one of the hardest things to learn and feel but it is the key to rhythmic mastery.

Therefore, begin clapping as in exercise one. Then, keeping the claps exactly the same (a trinome could be of invaluable assistance here) recite exactly twice as fast as you are clapping: One, two, three, four, five, , six, seven - One, two, three, four, five, six, seven.

Example 14

Count: one two three four five six seven one two three four five six seven

Clap: X

little finger touches palm of opposite hand

Clap little finger (opt: middle finger)

Clap little finger (opt: first finger)

Remember to accent the ones so that you get the proper feeling. Keep doing this until you start to get the swing of it. It is a good idea at this point also to begin tapping your foot on the main accents of one, four and six together with the claps.

## Exercise 3

When the above has been mastered, you are then ready to go back to exercise one but this time count the actual subdivisions: One, two, three; one, two; one, two. Keep the claps exactly the same. You will now be counting in the same subdivision as you are clapping.

## Example 15

1 2 3 4 5 6 7

Count: one two three one two one two

Clap: X . . X . X .

This will be relatively easy after the first two exercises.

## Exercise 4

The next exercise, however, becomes slightly more difficult, because now we are going to count in double speed against the original claps using the subdivision 3 2 2. Keep the claps the same as in the single speed and begin doing exercise three. When that becomes comfortable then double the count against the single speed claps!

## Example 16

1 2 3 4 5 6 7

Count: one two three one two one two, one two three one two one two

Clap: X . . X . X . X .

Now you are really learning to execute and feel two separate rhythms at once. Your hands are clapping a 7/4 and you are reciting two 7/8's against the original 7/4. When you can do this you have broken the time barrier and are a long way on the road to mastery of the new rhythms. It is a good idea to stop here and try and apply some of these techniques to your

instrument, tapping your foot where you would be clapping (1, 4 and 6) and creating simple phrases against that.

### Example 17

Exercise 5

Now that you have come this far, let us try two final steps. First, we will take the retrograde of 3 2 2 (that is 2 2 3) and use it against the original 3 2 2! Start by counting and clapping 3 2 2 in the single speed, then recite 2 2 3 against the original 3 2 2 clap.

### Example 18

Count: one two, one two, one two three

Clap: X . X . X .

Don't cheat! Keep the accents on the ones! (One—two, one—two, one—two—three.) There is a natural tendency to put the accents where your claps are (one—two, one—two, one—two—three,) but by keeping the accents on the "ones" of the 2 2 3 and the claps on the "ones" of the 3 2 2, you gradually get the feeling of the two separate rhythms going on at the same time. When this feels comfortable, go on to the next exercise.

### Exercise 6

This exercise will seem very complex at first but if you have mastered exercise five you will

find that this one will come very easily after a few tries. The idea here is to keep the original claps of 3 2 2, then after that is established begin clapping 2 2 3 against it. When this is established then you do 2 2 3 in double time against the single speed claps of 3 2 2!

Example 19

Count: one two one two one two three, one two one two one two three

Clap: X                      X                      X                      X

Did you find that difficult? Well, do not be discouraged. Some of the finest professional musicians in the country, myself included, really scuffled with that one until it finally became like second nature. At this point, pause once again and try to apply what you have just learned to your instrument. Create simple phrases in the new superimposed meter and keep the original meter by tapping your foot in the main subdivisions.

Example 20

Tap: X                      X                      X                      X                      X                      X                      X                      X

(1 2 3, 1 2, 1 2) (1 2 3, 1 2) (1 2 3, 1 2) (1 2 3, 1 2) (1 2 3, 1 2) (1 2 3, 1 2) (1)

You are probably wondering, at this point, is it really necessary to go through all this just to learn to play in a new meter? I submit the following:

From time to time as I get a new musician in my band there will be those who rebel at having to learn the new meters methodically by counting (as outlined above). These musicians simply jump in and try to "feel" the new meter. They eventually "get it" but their grasp never seems to be quite as secure as those who learn it the hard way (from the ground up with the rhythmic clapping exercises) and I have observed that it takes them much longer to learn.



In all of my experiences I have run across only two musicians who never had to stop to learn to count the new rhythms. These musicians had the ability to feel the new meter and apply any type of subdivision seemingly without prior thought. I am speaking of Joe Cocuzzo, the amazing drummer now based in New York, who was part of my quartet for experimenting with these concepts in the early sixties, and Steve Bohannon, the original drummer for my big band mentioned earlier. It seems that they had an ability to feel in spaces of "time" rather than actual counting.

In the case of Joe Cocuzzo, he could "feel", for example, a time span of 19 (divided 3 3 2 2 2 1 2 2 2 or any other way), put any type of subdivision against it and always come out right on one — and this without any prior practice or knowledge! Most of us, however, do not have this type of genius and creative gift. It is, therefore, absolutely essential that we learn these rhythms from the ground up.

The exercises given in this chapter will start you on the way to a total mastery of rhythm. I would suggest going back and in each exercise where you went into the double time now try to do quadruple time (the same counts four times as fast — in sixteenth notes) against the original single speed.

#### Example 21

Example 21 is a musical exercise in 7/4 time, consisting of 7 measures. The notation is as follows:

Measure	1	2	3	4	5	6	7
Count:	1 2 3	1 2	1 2, 1 2 3	1 2 1 2, 1 2 3	1 2	1 2, 1 2 3	1 2 1 2
Clap:	X			X		X	

The notation shows a bass staff with eighth notes. The first measure has 7 eighth notes. The second measure has 6 eighth notes. The third measure has 7 eighth notes. The fourth measure has 8 eighth notes. The fifth measure has 6 eighth notes. The sixth measure has 7 eighth notes. The seventh measure has 6 eighth notes. The count and clap pattern are written below the staff.

When you get into the quadruple speed you will find that it becomes very difficult and awkward to say the numbers "one—two—three, one—two, one—two" in a very fast tempo.

The Indians have an answer for this also! — a unique combination of syllables which

can be articulated with practice so fast they become almost a blur to the ear. They are similar to the double and triple tonguing exercises that wind players learn. The following chart lists the common syllables used:

### Example 22

2	=	TA	KA						
		(tah)	(kah)						
3	=	TA	KI	TA					
			(kee)						
4	=	TA	KA	DI	MI				
				(di)	(mee)				
5 (2+3)	=	TA	KA,	TA	KI	TA			
7 (3+4)	=	TA	KI	TA,	TA	KA	DI	MI	
9 (2+2+2+3)	=	TA	KA,	TA	KA,	TA	KA,	TA	KI TA

Try each one of these over and over working up to as fast a speed as possible on them. Their tremendous value will become obvious. For example, many musicians have trouble in learning to play perfectly even quintuplets (five). By saying Ta/ka, ta/ki/ta over and over, an absolutely even quintuplet will be produced. Very often some of the rhythms my band uses are played very fast and the syllables are the only way in which to learn the proper feel of them.

It is interesting to notice that our major scale provides a natural exercise for seven in that it has seven notes.



Example 23



Therefore, some interesting scale exercises can be devised and you can accent them with 3 2 2, 2 3 2 or 2 2 3:

Example 24



Example 25



Example 26



Example 27



Example 28



A more complicated example taught me by Hari Har Rao:

Example 29

Example 29 is a musical score for a complex Indian meter, presented in ten staves. The notation includes a treble clef and a key signature of one sharp (F#). The meter is defined by the sequence of beats: (3+2+2), (4's), (3's), (2's), (1's), (1/2's), (1 1/2's), and (2 1/2's). The score is written in a style that combines Western musical notation with Indian rhythmic notation, featuring a series of 'x' marks and 'z' marks below the staff lines, indicating the timing and duration of the notes. The notation is complex, with many notes and rests, and a large number of 'x' and 'z' marks below the staff lines, indicating the timing and duration of the notes. The score is written in a style that combines Western musical notation with Indian rhythmic notation, featuring a series of 'x' marks and 'z' marks below the staff lines, indicating the timing and duration of the notes.

Once the idea of sevens as expounded here in this chapter has been thoroughly mastered you can go on and apply exactly the same thing to 5 (2+3 or 3+2), or to 9:

2 2 2 3

2 2 3 2

2 3 2 2

3 2 2 2

and on up to as large a number as you care to go.

You will find that once you have mastered the 7, the other rhythms become fairly easy, and each new meter becomes that much easier to learn.

## **Chapter Five**

### **EXPLANATION OF THE RHYTHMS USED FOR THE RECORDING**

#### **'NEW RHYTHMS '**

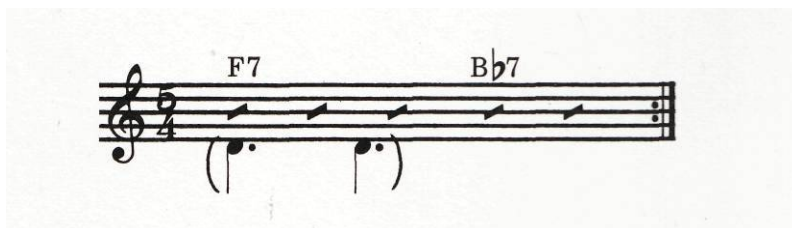
**"NEW RHYTHMS"**

The following chapter is an explanation of the companion record to this book *New Rhythms*<sup>12</sup>

I recommend when practicing with this record that you purchase an infinitely variable speed turntable. Bogen makes a relatively inexpensive one and this will enable you to play the record in any key and at any tempo — an invaluable aid for learning. Also, this record was made so that drummers can play with bass and piano only eliminating the drum track by switching off the speaker that contains drums. Piano and guitar players can use the channel which has only bass and drum (and no piano).

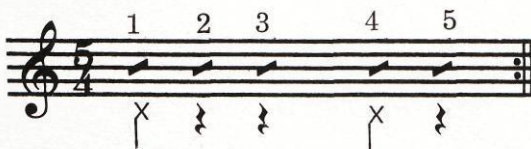
**J A Z Z 5 / 4 (3+2)**

Example 30



The first track on side one *Jazz 5/4* is based on the most famous of all odd-metered patterns: a jazz 5/4 (divided 3 + 2). Dave Brubeck was the first one to popularize this rhythm in his recording of Paul Desmond's *Take Five*. The easiest way to feel this meter is in two: a long beat followed by a short (3 + 2). If you pat your foot on one and four while counting one, two, three, four, five you will soon get the swing of it.

Example 31



<sup>12</sup> Don Ellis: *New Rhythms*, EME Records ES 1.



The three beat portion of the bar is often subdivided into two main pulses of 1 1/2 beats each.

Example 32

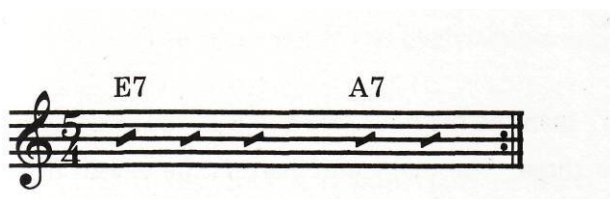


The feeling here is similar to that of a jazz waltz (in which this subdivision is prevalent) plus adding two beats at the end. Refer to page 15 for suggestions on a practice routine to apply to this and the following tracks.

This rhythm is one of the most easy to grasp and therefore I recommend practicing it thoroughly to get the idea of keeping track of 3's and 2's before going on to the more complex meters.

## ROCK 5 / 4 (3+2)

Example 33



This track is very similar to the jazz 5/4 with exception of the changed feel and key. The main difference is that, whereas in the jazz 5 the feeling was basically one of triplets, the feeling here is one of straight (or even) eighth notes. The piece begins simply and gets gradually more complex. When you are first learning to play the rock 5/4, I suggest you use only the first minute of the track and keep putting the needle back to the beginning. Then as it be-

comes clearer gradually go further into the track until you are finally able to play with the complete track without getting lost.

The key to playing successfully with this particular track (and most of the others on the record) is listening to the bass line. The bass is usually playing some type of ostinato (a repeated figure) which will be a valuable aid in helping you keep your place.

I would like to suggest at this point that (on this and the other tracks in the album) you practice with the track several times, and then try it on your own. You should be able to keep your place without having the aid of a rhythm section, and practicing on your own will help you to become stronger in the time feel within yourself.

### 5 / 8 DRONE (2+3)

Example 34



In this track the rhythm section plays only the open fifth (A and E) thus allowing you thousands of different combinations of scales and ragas. I suggest the student make up his own scales. They will usually have seven notes in them including the A and the E, but also experiment with more or less than seven notes.

This piece is more "Indian sounding" than the previous two and is in the most common North Indian subdivision of 5: two plus three. The main unit here is the eighth note rather than the quarter note of the first two tracks. This track will provide a good background for practicing the rhythmic exercises as outlined in chapter four and the tempo is slow enough that it should be relatively easy to practice the exercises in single, double and quadruple speed. I would recommend that you first practice by clapping and counting as indicated in the previously mentioned chapter. Only after the scheme and feeling is set in your mind should you then apply it to your instrument.



# FAST 5 / 4

## Example 35



This is in a 3 + 2 subdivision and is a jazz feel which means that at this tempo the eighth notes are going to be very fast indeed.

The progression is very similar to that of *Indian Lady* so please refer to *Electric Bath* and *The New Don Ellis Band Goes Underground*<sup>13</sup> for further recorded examples of this type of rhythm.

The rhythm section really gets cooking on this track and I find it a joy to listen to, as well as to use as a practice track. Analyze what each of the three players is doing. Notice Milcho Leviev's syncopations and "over-the-bar-line" comping. Milcho plays several solo spots to give the student an idea of some of the possibilities in soloing in this rhythm.

When you are practicing with the record, you can either rest and listen to Milcho when he is soloing or try and construct a line that fits with what he is playing.

The piece starts relatively simple and gets more and more complex as the players get into it.

I feel that it is important to learn to play fluently with a rhythm section that is throwing you all kinds of polyrhythms and syncopations, because almost any good musician can play a new meter when it is spelled out "baby simple" to him, but it is another thing to be able to play fluently when the players are doing all kinds of cross accents. This track does not pull any punches and Milcho Leviev, Dave McDaniel and Ralph Humphrey play at the top of

<sup>13</sup> Don Ellis: *Electric Bath*, Columbia CS 9585; *The New Don Ellis Band Goes Underground*, Columbia CS 9889.

their form.

**ROCK 7 / 4 (2 + 2 + 3)**

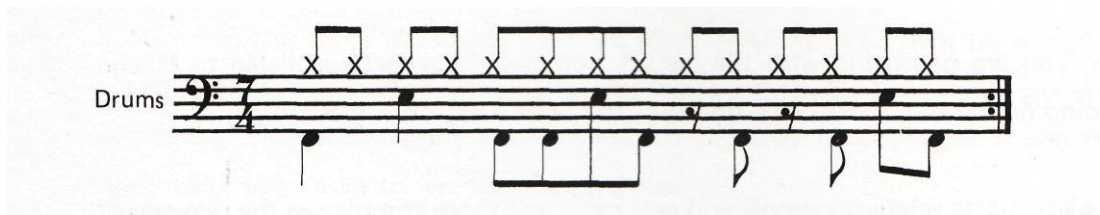
Example 36



This is a laid back syncopated 7/4 feeling. It is basically a straight ahead 7 although you can subdivide it 2 2 3.

Example 37

The drums open up with the following pattern:



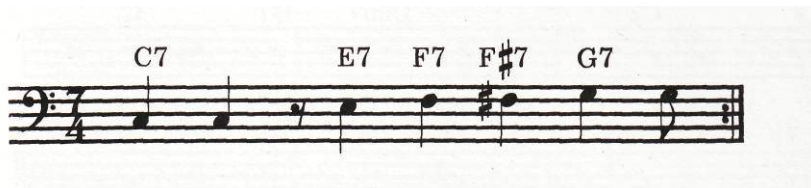
The bass and piano join him with the bass playing this ostinato:

Example 38



At the end of the track the bass and piano play a kick figure which drummers should find very exciting to practice with.

### Example 39

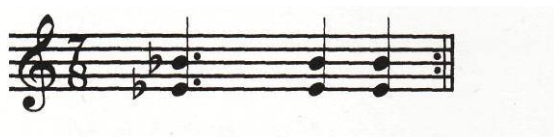


Solo horn players can soar right over the top of this for a very exciting finale to their solo.

In a rock 7 such as this I find it easiest to listen to the bass player as a help to keeping my place, but here also, the soloist should practice without the record just imagining the rhythm section and keeping his own time. When you can do this it makes it just that much easier when you have the rhythm section to help you.

**7 / 8    DRONE    (3+2+2)**

### Example 40



This track which is in a basic subdivision of 3 2 2 is perfect for practicing the exercises learned in chapter four. The same comments would apply here as to the 5/8 drone in that you should practice in single, double and quadruple speed. I very often use a similar rhythm section background in our clinics when I am demonstrating how to learn to improvise in a 7.

## J A Z Z 7 / 4 (2+2+3)

## Example 41

This is a medium fast 7/4 that begins with a feeling of half time with the bass playing "2" (on one, three and five). It then goes into a walking (7 to the bar). The pattern is similar to that of *Pussy Wiggle Stomp* which we recorded both on *Autumn* and *Don Ellis at Fillmore*<sup>14</sup>.

Once again the track begins relatively simple and progresses to more and more complex variations. I think it is worth your time to analyze Milcho's soloing and comping on this track. Notice the way he sometimes shifts the positions of the chords but manages to come out on "one" every time. Here again when he solos, the horn player that is practicing can either listen or construct lines to fit with and against what Milcho is playing.

I think this track is a model of how to play freely and creatively within a new time signature, and that it bears repeated listening until you know exactly what is going on with each instrument.

14 Don Ellis: *Autumn*, Columbia CS 9721. *Don Ellis at Fillmore*, Columbia G 30243.

SIDE TWO

JAZZ 9 / 4 (2+2+2+3)

Example 42



This 9 is divided 2 2 2 3 and the bass keeps this basic pulse all the way through as in the example. This should make it easy to follow and easy to practice with.

The rhythm section really gets cooking and the progression is a basic blues in G so there's lots of opportunity to play a modern jazz type solo to this background.

SCHEME IN 9

The following scheme is one similar to that used in *Strawberry Soup*<sup>15</sup>.

<sup>15</sup> Don Ellis: *Tears of Joy*, Columbia G 30927.

## Example 43

## 2. Scheme in 9

2. Scheme in 9

1

Dmi7 Dmi7 Gmi7 Dmi7

B $\flat$  C D B $\flat$  C D E $\flat$ ma7

2

Fma7 A(sus)

B $\flat$  C D Gmi7 C Ami7 B $\flat$ ma7

Cma7 D D(sus) D D(sus)



Milcho Leviev discusses this type of scheme in his chapter (page 59). The basic feeling is one of 9/4 in even eighth notes, but there are two 9/8 (3 2 2 2) bars superimposed into the 9/4. In the 5th bar it goes into an almost 3/4 type of feeling and the 6th bar actually begins one beat early (the last beat of the 5th bar). I think of bars 5 and 6 as being two 3/4 bars and a 2/4 bar and then three 3/4 bars. Bar 7 and 8 have two 5/8 bars (2 + 3) and then a 4/4 bar (or 8/8). Bars 9 and 10 are really one long 9/2 bar in which there are four groups of 7 (2 2 3) and then a 4/4 bar (or 8/8). You can see that while the scheme is all in 9/4, there are many different subdivisions and permutations of the 9 going on within the scheme. It is up to the soloist to add his own variations on top of this.

The above scheme is the most technically difficult of the record but it was included to give the student an opportunity to improvise on a fixed but varied and challenging pattern within the new times.

$$\frac{3 \frac{2}{3}}{4} (11) (3+3+3+2)$$

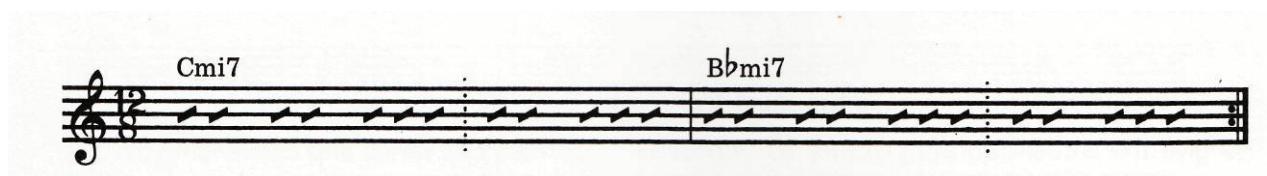
Example 44

Example 44 is a musical score for three staves, each containing four measures of music. The time signature is 3/4. The notation includes eighth notes, quarter notes, and half notes, often beamed together in groups of three. Chords are indicated above each measure: C7, F7, C7, C7 on the first staff; F7, F7, C, A7 on the second staff; and Dmi7, G7, C7, C7 on the third staff. The music is written in treble clef.

Don't let the complicated time signature throw you. This is nothing but a simple funky slow blues. Once you catch on to it it is one of the easiest and most natural time signatures in which to play, it's simply a slow 4/4 (triplet feeling) with the last eighth note left off — giving a slight push to each bar.

### 1 2 / 8 (7+5)

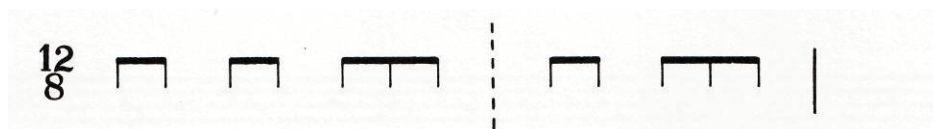
Example 45



\*

This is an excellent rhythm to use for learning how to combine different subdivisions of a meter within another overall meter. Twelve is an even number but it has been divided into two odd segments: a 7 and a 5. Refer to page 62 of Milcho's chapter for some possible subdivisions within 12. I would recommend that you first start practicing in the basic 7 + 5 subdivision:

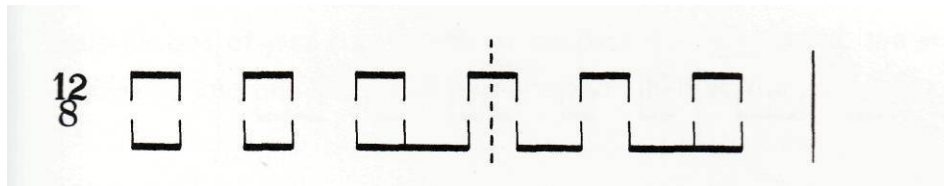
Example 46



And when that is set, try practicing in groups of two or six beats to the bar:

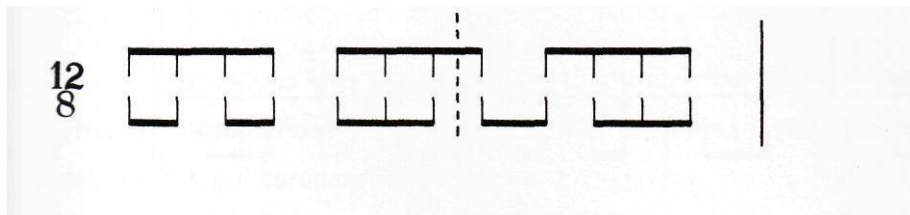


Example 47



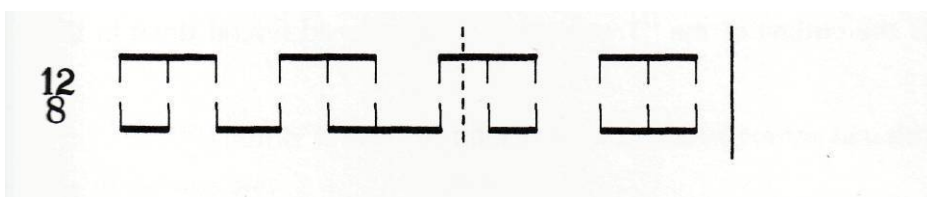
then further subdivide this into three groups of four:

Example 48



Then go to four groups of three which will feel almost like playing 4/4 with a triplet feeling:

Example 49

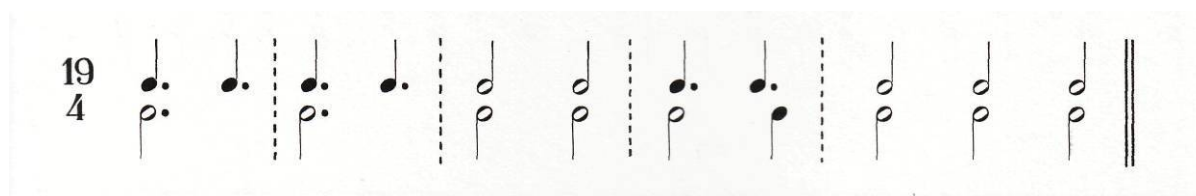


Try to be aware at all times of the underlying 7 + 5 that the rhythm section is doing. If you want to get even more complex, try lengthening some of the patterns and doing them over the bar line. For example try three whole notes in the space of two 12/8 bars:



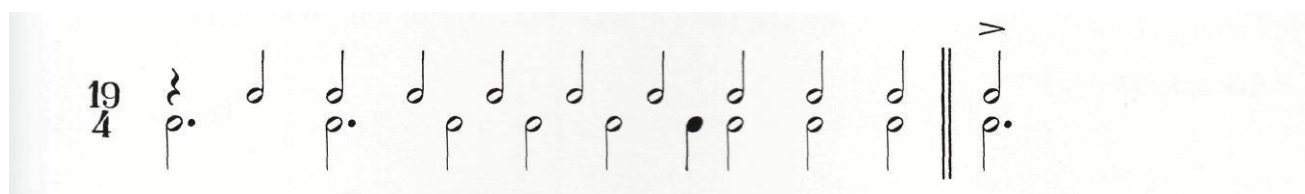
The bass line is an ostinato that continues for the whole track and can serve as an invaluable guide to knowing where you are within this rather long meter. The feeling is basically one of jazz (i.e. triplets as opposed to even eighths) and very often the threes are subdivided into one and a half plus one and a half as in a jazz waltz:

Example 53



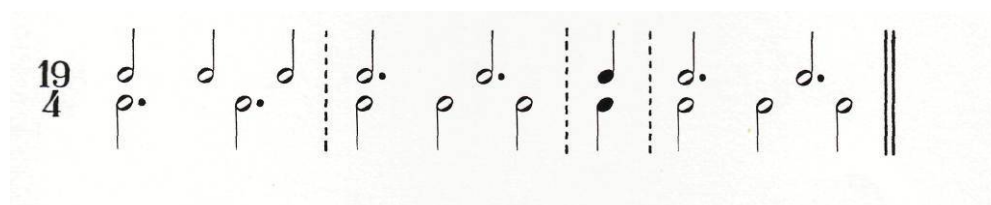
Once you can play freely on this time using eighth notes, go back and start using different combinations of 19 against it: For example, if you leave a one beat rest and play all half notes it will come out like this:

Example 54



Or another favorite of mine is to put twos where the two threes are and threes where the three twos are:

Example 55



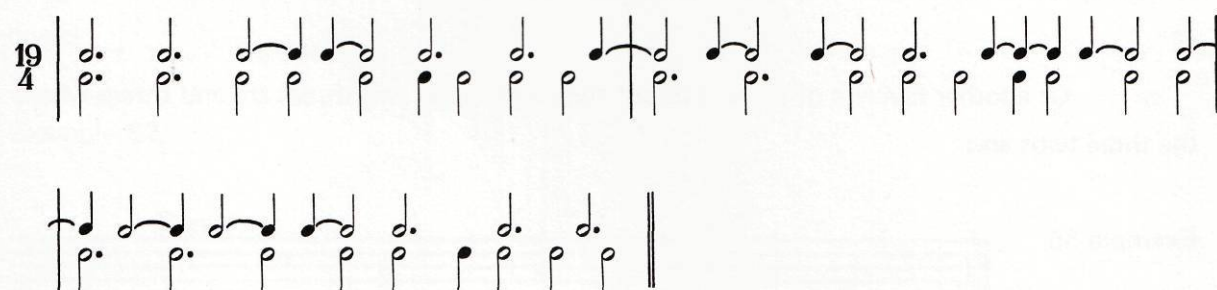
The longer the meter the more combinations and possibilities within a one bar span, but don't forget to try over-the-bar possibilities such as 19 whole notes:

Example 56



or 19 dotted half notes:

Example 57



This was the first long meter I invented and with the bass ostinato it is easy to keep your place. It is therefore a very good piece with which to practice various combinations of twos and threes.

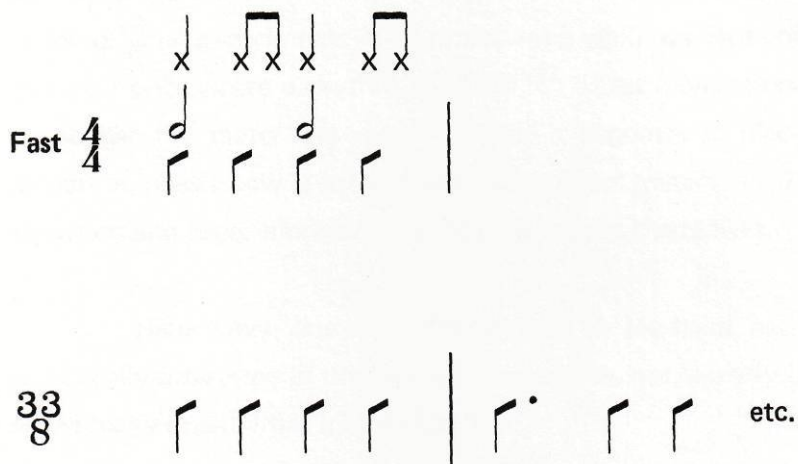
3 3 / 8 (2+2+2+2+3+2+2 | 2+2+2+3+2+3+2+2)

Example 58



This is a Bulgarian Folk pattern that was first brought to my attention by Milcho Leviev. It is in a very fast 33/8 time and the rhythm section gets a very interesting feel! going on it. Although it is in even eighths the quarter notes (as exemplified by the first four quarter notes) almost sound as if they are half notes in a fast jazz 4/4.

Example 59



The way I think of this is in terms of longs and shorts with the shorts being equal to "two" and the longs being equal to "three" (instead of "four" as would be the case if the longs were exactly twice the length of the shorts) then, because the pattern is so fast, it's almost like memorizing a melody, only in this case you are memorizing the feel of a rhythm. Usually the longs (threes) are stressed. Start out with this one very simply playing only the shorts and longs, then as you become more fluent try going to eighth notes against it. These will be very fast and you will discover it is difficult to put cross rhythms against the 33 at that tempo. But by now you should have the idea of how it is accomplished and, should you wish to do so, you now have the knowledge and ability. Welcome to the world of rhythm!

## Chapter Six

### ADVANCED CONCEPTS

By now it should be obvious that even the most complex meters can be broken down into combinations of 2's and 3's. The only exceptions to this I have seen are certain types of Bulgarian folk dances where the longs and shorts do not appear to be related with any steady underlying pulse, but where the rhythms (though they may be fast) are done in an almost rubato manner. However, since they are repetitive and everyone is doing exactly the same thing it becomes relatively easy once it has become established for everybody (the dancers included) to feel this rhythm. I strongly advise at this point that the student become intimately acquainted with the folk music from countries such as Bulgaria, Turkey, Greece, India. Not only will it be a musical revelation if you have never heard these musics, but it will be one of the most exciting adventures on which you can embark.

When I was originally exploring new and longer meter patterns I arbitrarily decided to do something in 19 and I wrote out many different combinations of 3's, 2's and 1's that added up to nineteen. I was in New York at the time, and the quartet I had played all these over and over again, but we found that one seemed to swing more than the others, and that was the 3 3 2 2 2 1 2 2 2 combination which has since come to be called the "traditional" 19! In the original experiments in rhythms, for a while we kept going to longer and longer meters. In fact, I once wrote a rhythm in 172/8 !<sup>17</sup> These long meters can be very exciting. However, the longer the meter the more difficult it becomes to place superimpositions over it. My current emphasis now is in working with shorter meters — 7, 9, 11, 12 — and using more variations and superimpositions within the meters themselves.

Hank Levy, one of the first writers for my band, and the first outside arranger to become really interested in the new time signatures, has recently become very fond of 12 because of the many possibilities inherent in it.<sup>18</sup>

<sup>17</sup> it was called *Where's One?* and the band never really did find "one"!

<sup>18</sup> See page 62.

There is much more to say about rhythm, and many more concepts which can be learned and applied. For the musician that is interested in going further I will soon be publishing a book titled *Rhythm* which will help fill this need. This book will have many examples and exercises (both counting and melodic) that will lead the way to further mastery of all aspects of rhythm. (In fact, some of the examples are so advanced I am still working on them myself!)

To give specific help to rhythm section players, I have asked Milcho Leviev, Dave McDaniel and Ralph Humphrey to contribute chapters relating, specifically to piano, bass and drums.

These chapters will be especially helpful in working with the *New Rhythms* record.



**Chapter Seven**

**AN APPROACH TO ODD TIME SIGNATURES**

**FOR**

**KEYBOARD AND GUITAR PLAYERS**

**BY**

**MILCHO LEVIEV**

Forward by Don Ellis

Milcho Leviev was responsible for my first becoming acquainted with Bulgarian music. Some years back I received a letter from a young man in Bulgaria who had heard my records over Willis Connover's Voice of America show. He indicated how much he liked the music and asked me if I would like to receive some Bulgarian folk music records.

I eagerly told him "yes", and was completely amazed at the records he sent me. Here was a new concept of odd meters! So fast, so complex, yet so swinging! I was so impressed I immediately transcribed one of the records and this became the *Bulgarian Bulge*.<sup>19</sup>

It was only later I found out that he, Milcho Leviev, was a musician, and not just any musician, but the leading jazz musician and film composer in all Bulgaria.

Sometime later when my pianist left the band I asked Milcho (who was now living in West Germany) if he would like to join the band. He accepted my offer — and six months later (after reams of government red tape) he flew into Los Angeles, stepped off the airplane into a waiting car, was whisked to a rehearsal (already in progress) of my band. He sat down at the piano and proceeded to amaze the whole band. He has been a creative spark plug for the band ever since.

This is probably the first time in history a major jazz musician has come to the fore whose native and natural rhythms are the "new" time signatures!

No one is better qualified to write on the new times than Milcho Leviev.

19 Don Ellis: *The New Don Ellis Band Goes Underground*, Columbia CS 9889; *Tears of Joy*, Columbia G 30927.

## Chapter Seven

### AN APPROACH TO ODD TIME SIGNATURES FOR KEYBOARD AND GUITAR PLAYERS

Milcho Leviev

Let's make it clear from the beginning: there is no special or "tricky" way for a pianist or a guitar player to play in odd time signatures. He should patiently learn "to think" in these meters, the way he learned to think in 4/4 or 3/4, and to apply the same technique of accompaniment or soloing we use in the regular meters.

Let's start with the simplest odd meter — 5. It could be 5/2, 5/4, 5/8, 5/16 and so on, but since we have become accustomed to dealing with quarters in the jazz and pop field, 5/4 is the kind we will meet more often.

The first time this meter appeared in jazz music was approximately 12 years ago when the Dave Brubeck Quartet performed Paul Desmond's composition of *Take Five*. The rhythmical pattern, which has since been exploited many times, is a combination of two simple meters: 3/4 (treated as a jazz waltz) and 2/4:

Example 60



There is no difficulty if our task is to maintain the pattern all the way through, as an accompaniment (the pianist plays the bass line and the chord changes; the guitarist only the chord changes). It becomes really difficult in case we want to play a solo over the pattern. My recommendation for pianists would be to try to play the pattern with the left hand,

Example 61



and the moment you feel comfortable with it, add the solo with the right hand. It is difficult, but not any more difficult than playing a boogie-woogie — you know that the left hand has to be completely independent from the right hand when playing this style. It is impossible for the guitarist to do a solo, and to play the pattern at the same time, so he should ask a pianist for help or try to imagine (or, better yet, sing) the pattern while practicing the solo. Never forget to think of the combination (3+2)/4.

The matter becomes another subject when we meet so-called "straight jazz feeling in 5" as it is in Hank Levy's *Simple Logic* and Don Ellis' *5/4 Getaway*.<sup>20</sup>

Now, if we try to subdivide the bar into two simple bars and put the accents on 1 and 3, or on 1 and 4 it would be against the concept, especially for Hank Levy's chart, which was designed to sound like a Count Basie type mood:

Example 62



<sup>20</sup> The *Simple Logic* has not yet been recorded. The *5/4 Getaway* is available on Don Ellis' *Tears of Joy*.

As you notice, the chord changes occur twice per bar—on the first and fourth beat, which means that the mental (but only mental) subdivision could be again 3 + 2, and if it is very difficult for you to think from the very beginning of 5 even beats, start practicing 3 + 2, but do not put accents on 1 and 4. To do an accompaniment, the guitarist should try a "Freddie Green" style, i.e. smooth even chords on each beat. The pianist (in case there is a guitarist in the band) should accompany as simply as possible; let the guitar pulse with its chords and you fill the gaps between the passages with short links. In case there is not a guitar player, the pianist should not try to imitate "Freddie Green's" style on the piano. He should play sporadic syncopated chords, like:

Example 63



For soloing, accompany your solo with the left hand the same way, or with both hands — for the other soloists. To get the right swinging mood, think in triplets:

Example 64



Of course you could solo in any other subdivision, in sixteenths, for instance. But remember that the other members of the rhythm section will still think in triplets.

Don's chart *5/4 Getaway* is a be-bop kind of piece:

Example 65



Here also, the chord changes sometimes happen twice per bar, but this time on the 1st and 3rd beat, which means if we want to subdivide the bar it would be  $\frac{(2+3)}{4}$ . But if we really accent these beats, they will spoil the walking bass line. As in *Simple Logic*, this piece should sound to the listener as if it was in 4/4 — i.e. without accenting the down beats or any other main beats in the bar. Syncopate the accompaniment in the manner of example 63. For soloing, use as a model what Don wrote for the horns:

Example 66



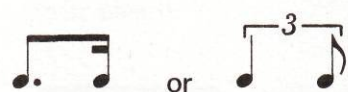
Time signatures in 7 seem to be one of the most exciting and definitely one of the most exploited odd meters in Don Ellis' orchestra. The reason, perhaps, is that this meter includes 4 and 3 together. What was said about the "straight" 5 applies, also, to 7, so let's have a look at a kind of 7 where we subdivide the bar. It could be subdivided in 3 ways, 2 + 2 + 3, 3 + 2 + 2 or 2 + 3 + 2. Don's *Pussy Wiggle Stomp* which has become a classic one for 7, has a 2+2+3 subdivision.

Example 67



This composition is basically in a jazz style, but, depending on the tempo and the arrangement, it could be interpreted in a rock idiom too. For instance, the jazz interpretation of the two eighth notes in bars 1, 2, and 3 should be:

Example 68



and the figure



in bar 4:

Example 69





In the rock idiom, the eighths should be played exactly as written:

Example 70



and the figure:

Example 71



As you see, all the principles for playing in 4/4 are the same here. Especially in this chart, thanks to the great possibilities it offers to the performer, you could solo on many different patterns played with the left hand, i.e.:

Example 72

Rag-time



Boogie-woogie



Swing



Bop



Rock





The time signature of 9 could be a regular one (3 + 3 + 3) or subdivided irregularly in 4 different ways: 2 + 2 + 2 + 3; 3 + 2 + 2 + 2; 2 + 3 + 2 + 2; 2 + 2 + 3 + 2. Let's examine this pattern:

Example 73

M. Leviev *Relaxing Todora*

Cymbal

G7 Piano, guitar

Bass

That is the rhythm section's open vamp for the solos. The rock bass line was derived from a more simple pattern at the beginning of the chart which shows the subdivision of the meter clearly:

Example 74

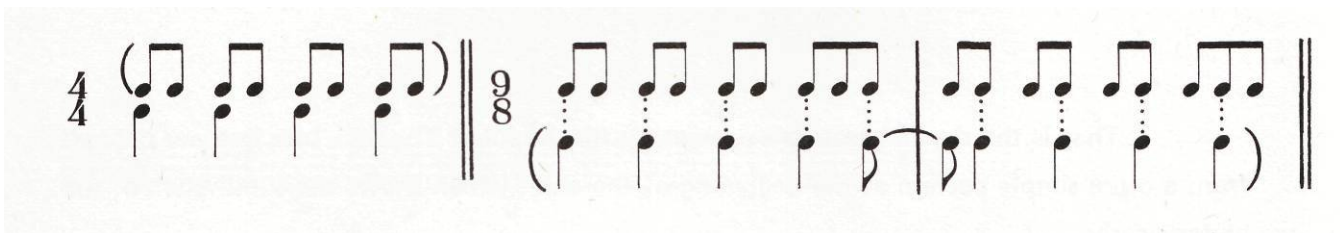
Notice example 73, what the drummer's cymbal is doing. It is playing even quarters which are on the heavy beats in the first bar and on the off beats in the second bar. If we cancel the bar between the two measures they will become one measure of 9/4. Remember this, because when we later begin to analyze *Strawberry Soup*, a composition in which the

measure of 9 is exploited in almost every possible way, we will see the basic concept is just the opposite. It is written in 9/4 and is subdivided in two bars of 9/8.

You might say all these things have nothing to do with your playing the piano or guitar, but that is not true. We have to be aware of everything the other players are doing especially the bassist and the drummer.

*Relaxing Todora* was written in 9/8 instead of 9/4, because the bass pattern and some of the horn figures would look very unclear on paper otherwise, and because the main feeling is one of rock. We know that in the rock idioms we think in eighths and even sixteenths, rather than in quarters. A parallel between a regular 4/4 rock and this kind of 9/8 would make the matter clearer:

Example 75



For soloing on this pattern, we should definitely think in sixteenths in order to get the driving feeling. A starting point could be one of the horn patterns:

Example 76



*Strawberry Soup* is one of the richest (musically and technically) compositions of Don's creativity and of the Band's bag, as well. As it was said before, here we have 9/4 subdivided into two 9/8 bars:

Example 77

Fr. horn

Piano


Dmi7

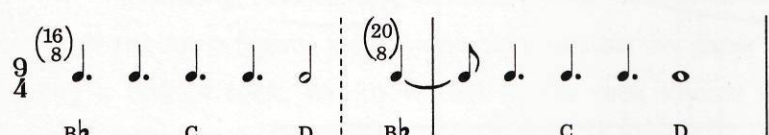
The 9/4 bar could be treated as having 9 even quarters or  $(3+3+3)/4$ . The two 9/8 bars obviously are of the kind  $(3 + 2 + 2 + 2)/8$ . Feeling the two measures together (9/4 and the same time the two 9/8's) is the basic task for soloing in this piece (if we have an open vamp — D-7). The challenge becomes much greater if we want to solo on the basic 10 bar — blues type structure of the piece.


For that purpose we need the following scheme:

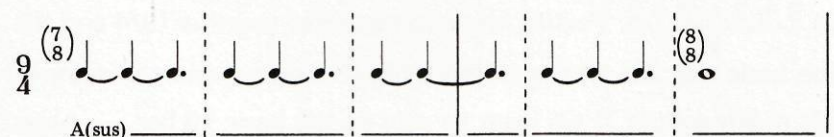
<sup>22</sup> Don Ellis: *Tears of Joy*.

Example 78<sup>23</sup>

9/4 (9/8)  Dmi7 | Dmi7 | Gmi7 | Dmi7

9/4 (16/8)  Bb C D | Bb C D

9/4 (5/8)  E♭ma7 | E♭ma7 | E♭ma7 | Fma7 | Fma7 | Fma7

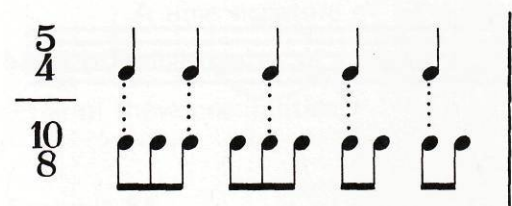
9/4 (7/8)  A(sus) | | | | |

<sup>23</sup> See also page 37.

If you are strong-willed enough to first understand and then to practice and feel comfortable in a structure like that, you won't have any problems playing in the "oddest" meters!

As a matter of fact, 5, 7, and 9 are the basic odd time signatures and understanding them will enable you to understand all of the others. For example, the most frequently used bar of 10/8 (6/8 + 4/8) is nothing else but a subdivision of 5/4:

Example 79



You could solo on a *Take Five*—like pattern thinking this way — as it might happen in a Paul Desmond solo:

Example 80



You are obligated to feel this subdivision playing in Don's *Indian Lady*,<sup>24</sup> a subdivision that appears back at the bridge of the theme:

Example 81a



<sup>24</sup> Don Ellis: *Electric Bath*, Columbia CS 9585; *Don Ellis at Fillmore*, Columbia G 30243.



If you combine this kind of feeling in your solo, playing rock-boogie type patterns with the left hand, the result would be exciting:

Example 816



11/8 could be treated in different ways. In Don's *Blues in E*<sup>25</sup> it appears as (3+3+3+2)/8. To practice this, play first on a blues in F with the right hand in a triplet feeling 4/4:

Example 82



and so on. Then omit the last eighth note of the last triplet:

25 Don Ellis: *Tears of Joy*.

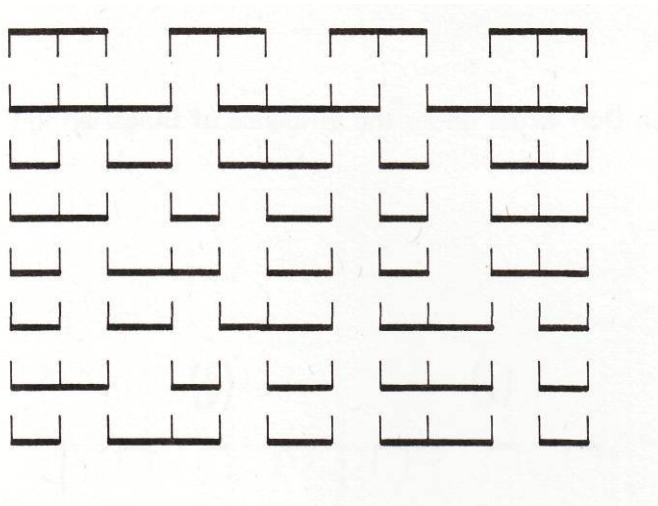
Example 83



and that's it!

A time signature of 12 is somehow close to that in 9 because it has the same possibility of being treated as a regular and irregular meter at the same time. Here is a scheme of some of these possibilities:

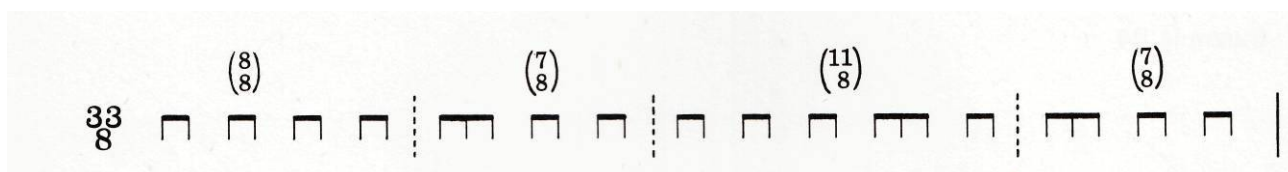
Example 84



Going further: in 13/8, 14/8 (which is nothing else but 7/4), 15/8, 17/8 and so on, we see the denominator of 8 is more proper than that of 4.

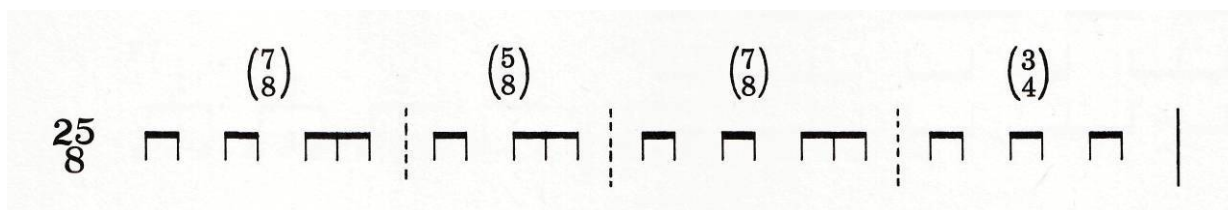
In some folk music, like the Bulgarian, the musicologists have found out that even in the simplest odd meter line, 5 or 7, a denominator of 16 (5/16, 7/16) was more appropriate to indicate the right feeling of this extremely fast and driving music. Of course, in our field it is better to use 4 as a denominator for 5, 7, 9, 11, 12, up to 13 (See Don's *Great Divide*<sup>26</sup>). As a matter of fact, since all of the odd meters are nothing else but combinations of twos and threes, the denominator is not of great importance, 8 or 16 would only make the picture clearer. You will notice that the subdivision of *Bulgarian Bulge*<sup>27</sup> is, for instance:

Example 85



*How's This for Openers*<sup>28</sup>, which Don wrote under the influence of Bulgarian folk music, has the following subdivision:

Example 86



<sup>26</sup> Don Ellis: *Don Ellis at Fillmore*.

<sup>27</sup> Don Ellis: *The New Don Ellis Band Goes Underground; Don Ellis at Fillmore*.

<sup>28</sup> Don Ellis: *Tears of Joy*.



In conclusion, I would like to say that dealing with odd-time signatures is a very exciting thing, but we should remember that the time signature itself (whichever one it may be) is only a tool used to put the music down on the paper, not a purpose. The golden rule of simplicity applies to dealing with odd meters, as well. We can combine, construct and play fantastic combinations like 73/16, but what the listener needs is grooving....not figures. So after you have learned a new meter, forget the mathematics and concentrate on the new and exciting groove the meter can offer.

**Chapter Eight**

**A PICTORIAL HISTORY**

**OF**

**HISTORICAL MUSICAL PICTOGRAPHS**

**BY**

**DAVE MCDANIEL**

Forward by Don Ellis

Dave McDaniel is one of the newest members of the band, and he comes to us by way of the Sonny and Cher Show. A "rocker" at heart, his strong sure sense of time and solid bass lines form the foundation of the band.

I was amazed at how quickly Dave grasped the feel of the new times and was most interested to see what he could contribute from his experience that would help other bass players to get into the new rhythms.

Dave has come up with a chapter that not only does this, but gives a mint of valuable general information that should be most helpful to bass players. Even though I do not play the bass I find it fascinating reading — much of his advice can help musicians on other instruments as well.

## Chapter Eight

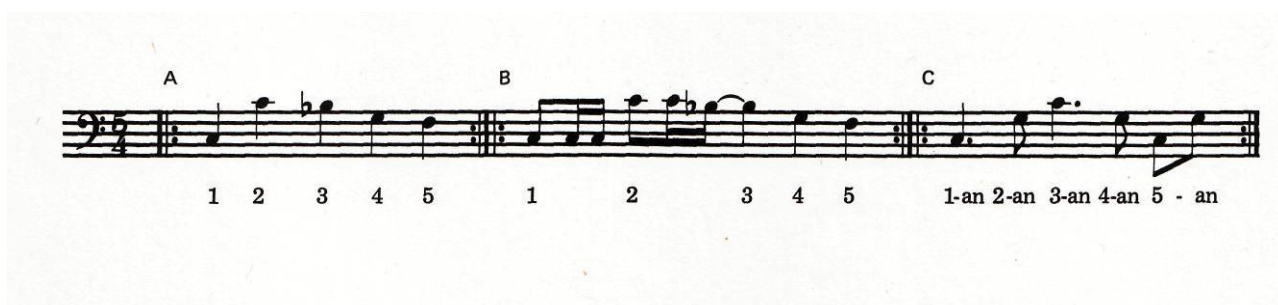
### A PICTORIAL HISTORY OF HISTORICAL MUSICAL PICTOGRAPHS

Dave McDaniel

Doing the bass work for the Don Ellis Big Band is one of the most musically rewarding experiences of my career. Prior to working with Don, my rhythmical domain was limited to the ever popular 4/4 - 6/8 signatures. I was aware that other time signatures existed but was never exposed to them often enough to obtain an understanding.

Not too long ago, when confronted with a piece in an unusual meter, I would frequently "lose" one. Playing a riff and having to count beats at the same time proved to be more than I could handle. I had no sturdy conception of how uncommon bars of time felt. However, in as little as one week's time, I noticed that I was gaining the "feel" almost automatically as a result of forcing myself to count while playing. In practically no time at all, I could create 7/4 and 5/4 bass lines just as easily as I could in 4/4. If you wish to familiarize yourself with unusual time signatures, the easiest way is by first working with repetitious rock bass runs in the meter of your choice. (5/4 is a good one to start with.)

Example 87



Example 88

Example 88 displays three staves of musical notation, likely for a bass instrument, with fingerings indicated below the notes.

**Staff 1 (D):** The first staff is labeled 'D' and shows a sequence of notes with fingerings 1 through 7. The second staff is labeled 'E' and shows a sequence of notes with fingerings 1 through 7.

**Staff 2 (F):** The second staff is labeled 'F' and shows a sequence of notes with fingerings 1 through 9. The third staff is labeled 'G Play It Hot!!' and shows a sequence of notes with fingerings 1 through 9.

**Staff 3 (H):** The third staff is labeled 'H' and shows a sequence of notes with fingerings 2 2 2 2 3 2 2 2 2 2 3 2 3 2 2 2 2 2 2 3 2 2 2 2 3 2 3 2 2. A tempo marking above the staff indicates  $\text{♩} = 210$  (felt in eight).

I believe by first dealing with repetitious riffs, the feel of the measure becomes most apparent and the player can seize it more readily.

I have noticed in my dealings with bass players that one of the most common

problems is that not enough attention is given to playing "in time". It is one thing to play the notes correctly, but a groove will never arrive until every note is played exactly in time, that is — every note must obtain its specific value from the length of the note preceding it.

I should also mention here that practice with a metronome is essential. It is the only way to really know if your judgments of time are accurate. It is the barometer by which good musicians develop their time because it is PERFECT.

### INTONATION

I am sure that most of you realize the importance of bridge placement on the string and its effect on intonation. However, I have developed a way to do this with 0% error. The theory is quite simple, but to explain it in words may not be quite so easy.

Starting with the G string, play it "open" and tune it to relative pitch. Now go to the D string and tune it slightly flat. You want it just flat enough so when you play a G on the D string together with an open G string, an oscillation will appear. Next go to the 19th fret on the G string and play the harmonic (it will be a high D). Let it ring and then play the harmonic at the 12th fret on the D string. Listening to the two notes sounding together will provide you with a clear oscillation due to the D string being flat. Taking careful notice of the "tempo" of the oscillation, repeat the procedure; except this time play the "actual note" at the 19th fret of the G string along with the harmonic at the 12th fret on the D string. If the tempo of the oscillation is faster, you know the note is sharp to the harmonic and the bridge of the G string should be backed off away from the pickups slightly. Repeat this procedure until harmonic/harmonic and note/harmonic have identical oscillations. Now move down to the D string and repeat using the A string 12th fret harmonic as your reference. (Do not forget to put the D string back in tune and lower the A string slightly.) Apply the same procedure to every string and your "Ax" will play perfectly in tune. It is an absolute must in the studio.

### ROCK CONCEPTS

For a long time I thought the bass was the least important instrument in a group and

had no direct bearing on the success or failure of a groove. I have now come to the realization that in rock-oriented tunes, the bass is usually the "identity" of a tune — with the drummer supplying the foundation. Everything else, including the melody, is "icing on the cake". It is the bassist's responsibility in rock to come up with an original tasty line. I used to squeeze as many different lines as I could think of into the tunes and, although the individual lines were good ones, the tune would come out sounding schizophrenic. Every time I changed a line, I, unknowingly, changed the "identity" of what was being played. After a year or two of self-study, I became more considerate of the song and less considerate about impressing people with my fingers. For me, playing simply is much more challenging than playing complex. And, that is the challenge of rock.

## JAZZ

A thorough knowledge of scales and modes is the key to good jazz (not to mention a good ear). Here is where your knowledge of scales and physical dexterity can really be applied. When playing jazz (especially up tempo), I use a considerably lighter pull on the strings. In rock, I pull as hard as I can, but in jazz you want to express a nonchalant, almost cocky, attitude instead of a domineering one. You will produce a more linear sound when playing lightning fast if you play with a light touch. Our goal in jazz is to be able to play these impossible lines coming out of our brains with no audible effort or strain (that should keep us fairly busy!). The most effective practice for jazz is scales.

## PRACTICE ROUTINES

You should devote at least half an hour a day to developing your awareness of different scales.

As I look back on how I learned to play, I think the time I spent playing with records was generally the most beneficial time I ever spent. Not only was I assimilating a good time feel, and an understanding of scales, but I had so much fun I would find myself playing about four hours a day. And playing IS practice! Obviously, the more fun you get out of something, the more time you will spend doing it. Get a record you dig with a challenging bass part

and learn it verbatim. Then make it boogie.

## STRINGS

I must have spent nearly \$400 looking for good strings. The problem was I could not find a good sounding set that was easy to play. I knew I wanted as light a gauge strings as possible because the lighter they were the faster they were. But light gauge strings never gave off as "clean" a tone as heavier gauges....especially "E" strings. I would get up to the 12th fret and I could hear about three distinctly different notes. It was not until I told my troubles to a music dealer friend of mine in Salt Lake City that I found the solution. He suggested that I try a set of Guild B-400 flat wounds. After I played one note on them I think I was the happiest bass player in the world! Not only were they incredibly easy to play, but they gave off an absolutely pure tone. Even with no bass on the amp. They are also a very versatile string and work well in both jazz and rock.

A fairly new string has come on the market from England. You are probably aware of the twangy bass sounds coming from the rock groups like Yes. They are using Rotosound Roundwound strings. They are a good string if you like a lot of sustain and funkiness. You can also get a mellow sound by removing all highs from the ax and the amp, making this a **good** "all around" string as well.

Also, I have discovered a way to keep that "new string" sound for months at a time. All you do is loosen the strings slightly and pull them hard straight up and let them slap back against the neck. Not only does it keep your strings sounding like new, it will also improve your stage presence.

I hope what I have written here will be of some help in furthering your knowledge of bass playing and I look forward to answering any specific questions you may have. You can write to me, Dave McDaniel c/o Ellis Music Enterprises

5436 Auckland Avenue

North Hollywood, California 91601



**Chapter Nine**

**THE ROLE OF THE DRUMMER**

**IN THE**

**MODERN RHYTHM SECTION**

**BY**

**RALPH HUMPHREY**

Forward by Don Ellis

A native Bulgarian, a rock and roll bass player and a jazz drummer with a Master's degree in classical percussion and mallet instruments — there is not much more that could make this a well rounded book!

Ralph Humphrey is a beautifully sensitive, well-trained, creative musician who happens to play drums. I first met Ralph when Steve Bohannon and I gave a clinic at San Jose State in 1967 and Ralph was the student drummer in the band. We were both very impressed and when it looked as if Steve would be leaving to go into the Army — it was he who suggested that Ralph take his place.

Ralph flew down, auditioned one Monday night right on the gig (at Ellis Island) and got the job. He played alongside Steve for a while, and then when Steve left — fell right in place without missing a beat. This was no little chore. Remember, up to this time there had been no one else on the West Coast that could do what Steve did. Since then Ralph has done that, plus adding his own unique ideas and conception to the times.

Ralph is gifted with a computer-like mind that can immediately sense the most promising rhythmic variations and "feel" within any given meter. He never misses!

I have personally felt him to be a challenge and inspiration. If the comments he makes in this chapter are taken to heart — the drummer who reads them will be a better and more sensitive player.

## **Chapter Nine**

### **THE ROLE OF THE DRUMMER IN THE MODERN RHYTHM SECTION**

**Ralph Humphrey**

In all musical situations, the drummer's first consideration is time, and, more specifically, a time feel. Feelings are very personal things. In an ensemble, however, the goal is to achieve a feel or feeling that is mutually satisfying. Otherwise, there is conflict. This requires full concentration on everyone's part, of course. But it is what you concentrate on that determines how you play.

A vital consideration is where to place the beat, or pulse, and how it relates to the other members of the rhythm section, notably the bass player. Generally speaking, the drummer should think "on top of the beat" when playing a triplet 8th note feel characteristic of jazz and swing music. To achieve that so-called "edge", I recommend stressing beats one and three in common time meter instead of the 2 and 4 emphasis that is normally suggested and also documented on countless record albums. An even better suggestion is to equalize all the beats in the measure so that one eliminates a downbeat emphasis. If you imagine that the barline does not exist and play through it, this will help you to begin thinking in longer phrases which in turn gives the music a more flowing feeling.

The bass instrument may also think on top of the beat, which increases the tendency to rush. This is something to be wary of. Usually, however, the bass will play right on the beat.

In rock or Latin music (or music characterized by a straight 8th note rhythm) the drummer thinks and plays more on the beat, or even slightly behind it on very special occasions when a laid-back feel is called for. The emphasis in rock music is the backbeat, so everything should revolve around and evolve from that.

Before you begin to play, or just after you have started, try to determine how you should play and what you can do to enhance the total feeling of the music. You may find that playing the simplest of beats or patterns will fit the task nicely. Whereas, on other occasions, you may be required to "take charge" and play aggressively to create the mood or match the one set by the other players. The question is: "How can the drummer determine these things?"

The drummer should be most intimate with the members of the rhythm section, which normally includes a bass instrument and one or more chordal instruments, plus, of course, drums. The bass usually sets up the rhythmic pattern upon which the piece is based. It may be a jazz walking pattern, or perhaps a Latin or rock pattern. The chordal instruments, guitar, piano, etc., will derive a rhythmic feel that fits with the bass in a comp-like fashion, but will also be able to expand both melodically and harmonically, so that he may dictate the direction and progression of the music.

The drummer also plays a pattern that is tied in with the bass figure so that together they may form a solid rhythmic foundation. However, the drummer is free to use rhythmic and melodic motifs played by the chordal instruments to help develop the flow, just as the bassist and pianist, or guitarist is free to borrow from the drummer. Which brings up a vital point: do not forget to contribute your share of imaginative ideas, of musical motifs, of rhythmic patterns. After all, this is what it is really all about; expressing, through the medium of drums, what is inside of you.

One thing that must not be overlooked by the drummer is an awareness of the dynamic structure or progression of the music. All too often, the drummer does not concern himself with light and shade, but instead crashes ahead without any regard to what is happening around him. Practice becoming a more sensitive player.

Playing in odd meters brings with it some special problems for the drummer to consider. Traditional stickings, or your favorite licks, may not work as you would like them to, unless of course you are not concerned with which hand you end the phrase with. If you are a right-handed player, and lead with it most of the time, you will either have to find new ways to stick the rhythmic phrase, or learn to lead with the left hand. I suggest doing both.

Regarding the former suggestion, you must begin combining single and double strokes more often in your playing so that the combinations of 2's and 3's are more easily played, especially if you wish to end phrases with your lead hand, which is usually the right one.

Example 89



When playing groups of 2's and 3's, I recommend that you accentuate the first note of each group since you will often want to catch these accents with the same hand. Also the accents will clarify the rhythmic structure of the phrase.

Example 90



As for the latter suggestion, I strongly advocate the matched-grip method of holding the sticks for several reasons.

First, it increases the power potential of the left hand. The traditional left hand grip is, for many drummers, his "Achilles heel". Drummers will spend hours and hours trying to bring the left hand up to the standard of the right with only limited success. I find the matched-grip particularly effective in rock music where a strong back beat and equality of the hands is essential.

Second, the matched grip enables the drummer to lead more easily with either hand, which seems to be a current trend in drumming, particularly in the rock field. You will also want to be able to lead with the left hand while playing the odd meters and the sooner you can do this with relative ease, the sooner you will be able to let the hands take care of themselves while you concentrate on things more pertinent to the music.

Finally, the matched grip prepares the drummer for other percussion instruments that traditionally require this hand position. The timpani and keyboard instruments are played this way. It is time to abandon the marching-drummer grip and begin letting the left hand be equal to the right in all respects.

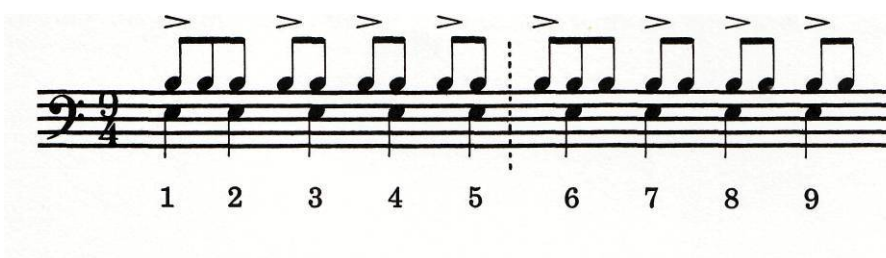
I have discovered that unless the player has a special gift which allows him to feel odd meters right from the beginning, he must think somewhat mechanically or mathematically, analyze the meter, to compute its permutations (variations). For example, a 9/4 meter can be subdivided as follows: variations: 2 2 2 3, 2 2 3 2, 3 2 2 2, 2 3 2 2, 3 3 3. This is just within one bar. If you wish to play 2 or 4 bar phrases, and eliminate a down beat emphasis, the possible combinations are staggering.

Example 91



(For example: a two bar phrase in 9/4 would include 18 beats, a 4 bar phrase, 36 beats, etc.) By doubling the quarter note pulse to 8th notes, one can play, for example, two 9/8 measures within one measure of 9/4 and so on.

Example 92



Keeping these things in mind while you play will perhaps be distracting at first. If so, I suggest sitting down with a pencil and paper and working out possible combinations of some odd meters that interest you, then try them on the drums. You will probably find it hard to feel the down beat, but with time and practice, this will eventually come.

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*The New Time Signatures in Jazz Drumming*, Ed Shaughnessy, Henry Adler, Inc. Pub., N.Y., 1966, 39 pages.

*Odd Times, A New Approach to Latin, Jazz and Rock, Applied to the Drum Set*, Joe Porcaro, Try Publishing Company, Hollywood, California 1970, 48 pages.

*Odd Time Reading Text*, Louis Bellson, Gil Breines for all instruments. Henry Adler pub., N.Y., 1968, 130 pages.



**Appendix I**

**ROCK: RHYTHMIC REVOLUTION**

**by**

**Don Ellis**

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**November 27, 1969 issue of *down beat*.**

I have been waiting for some time to see it said in print, but to my knowledge no critics seem as yet to have picked up on the fact that we have undergone a fantastic new rhythmic revolution.

Let me be perfectly clear: THERE HAS BEEN A RHYTHMIC REVOLUTION IN ROCK OF EQUAL SIGNIFICANCE **TO THAT WHICH** TOOK PLACE IN THE BEBOP ERA!

One of the most salient features of the bebop revolution was in the rhythm section: The bass player stopped playing a strict 4/4 or 2/4 and became more melodic and interesting rhythmically. The pianist began using syncopated punctuation chords at unexpected places rather than a strict boom-chik 4/4 pattern. The drummer got away from keeping time on the drums and went to the ride cymbals with syncopated accents interspersed on the snare drum and bass drum which tended to give the music a lighter feel.

A similar revolution has now taken place in rock music, but because it has happened in a "commercial" field (and not in the "serious" jazz field), jazz critics have apparently all but ignored this. However, if you open your ears and listen analytically to the best rock and rhythm-and-blues records around today you will find that the following has happened:

The bass player (because now he is playing the bass guitar rather than the more traditional upright bass violin) is able to move around faster and in general plays much more complex and syncopated lines than heretofore have been used in jazz.

In the drums, whereas in bebop the sound went to the cymbals, in rock music (although the cymbals are still used) the opposite has happened, and the basic patterns have gone back to the drums. One of the reasons, I suspect, is that because of the high level of volume at which a great deal of rock is played the cymbals give no definition to the time and merely add a blanket to the overall sound. So the burden of time-keeping has now come back to the snare and bass drums. This also gives it a more solid rhythmic feel. For anyone who likes to swing hard, I think this is a definite step in the right direction.

The patterns the snare drum and bass drum are playing, instead of being sporadic,

are now more regular in the sense that they are played continually. This is very significantly due, perhaps, to the heavy influence of Latin American music: the basic patterns are now in even 8ths (as opposed to the traditional triplet feeling of most jazz). This has made another extremely important development possible: some very complex polyrhythms.

If you analyze what is happening in rock music you will find the following levels of rhythms happening simultaneously: there is a half-note feeling, sort of a long two going on as a foundation. Over that, we have the traditional quarter-note feeling, but this is further subdivided now into even 8ths, and then the even 8ths are subdivided into sort of a double time feeling in 16th notes — and, depending upon the tempo, sometimes this is further superimposed upon with a double-double time feeling done in 32nd notes. Each of these five levels may be going on simultaneously with its own pattern and feeling, and the combination of all these levels at the same time is one of the things that makes the new music so exciting. (See examples 93 and 94.)

## Example 93

*"The Chicken" by Alfred Ellis, performed by James Brown on King 45-6240.*

Drums (rns)

Guitar (itar)

Bass (is)

Drums (jms)

H.H.

B.D.

Bb7

Bb7

1.

2.

3.

4.

Rhythmic Levels

Example 94

"Killing Floor" by C. Burnett, performed by Electric Flag on Columbia CS 9579

Vocal

I should have quit you a long time a - go

Solo Guitar

Horns

Guitar and organ pattern

A7

Guitar Pattern

A7

Guitar Pattern

A7

Bass

Drums

H.H.

S.D.

B.D.

*Note: Examples 93 and 94 are basic patterns only (these are further varied during the course of the pieces). The four rhythmic levels indicated on Example 93 also apply in the same way to Example 94. Example 94 includes patterns found in various sections of the piece.*

This was not particularly practical in bebop since the main feeling was one of triplets, because, of course, when you double time a triplet you destroy the feeling of the triplet. This is the reason why jazz can often be swinging along very well, and when a soloist goes into a double time feeling, instead of the rhythm becoming more intense (as you might expect) it becomes less intense because the soloist is conflicting with his double time feeling over the basic triplet feeling.

Also, the guitar has replaced the piano, and because of its nature, it very often plays the layer of rhythm in the 8th notes or 16th notes, and tends to fill up the holes left by the bass and drummer, cementing the whole thing together.

Critics seem to be puzzled, but I think this explains why the young people of today (and many older people) no longer find the typical jazz beat (ching-ching-ka-ding) exciting. Today much more is happening **in rhythm**.

**In** passing, let me mention that the melodies have changed considerably also. The melody that might be improvised by a guitarist in a rock or r&b group will tend to have less notes than a typical jazz solo and tend to be more emotional, making great **use** of wailing notes, reflecting the much heavier influence of the blues on the music.

The rhythms the typical rock and r&b band plays today would have scared the bebop innovators half to death! (Remember: Bebop started over 25 years ago!) Let me point out, so I am not misunderstood, that this does not invalidate bebop, but it certainly does make it "old-fashioned", just as bebop made swing sound dated. But each **music** has **its** own validity and excitement within the genre.

Many of the "new" jazzmen are concerned with getting away from the beat, but real rhythmic *excitement* in music is happening today in r&b and rock.

However, even some of the rock bands are getting away from the beat. This is a mistake if they think they are "hip" in doing so, because the hippest thing in the world is to really swing —<sup>L</sup> it is something not everyone can do. But very often in music, as in other arts, complexity is mistaken for profundity...

Among the most difficult things to do well in music are to really swing, and to compose or improvise a beautiful, simple melody. I maintain it is much easier to write or play a lot of fast notes which may appear to be very difficult but probably have little depth of meaning, than to do something really simple and beautiful, which is at the same time new and fresh.

To get back to the new rhythmic revolution in rock music: it *can* go much further, but I think it is important to see to it that it always swings.

The breakthrough has been made, and now it is up to all of us who really love music to see to it that it is developed and expanded.

## **Appendix II**

### **ODD METERS IN BULGARIAN FOLK MUSIC**

**By**

**Milcho Leviev**



## ODD METERS IN BULGARIAN FOLK MUSIC

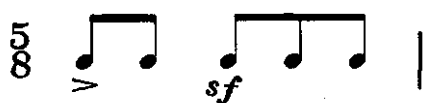
By

Milcho Leviev

The subject of Bulgarian odd meters is a very large one. There are thousands of different combinations in this unique folklore. (For full information refer to *Bulgarian Folk Music*, Volume 1 1/ *Rhythm and Metrum* by Professor Stojan Judjev, 1954, *Nauka i Izkustvo*, Sofia). It could be of some interest to us to look briefly at some of their characteristics in case we would like to use them in a jazz or rock idiom.

The difference between the Bulgarian type odd meters and those of other Eastern cultures (Arabian, Turkish, Macedonian, Indian, etc.) is the tempo. You can hear Bulgarian folk musicians playing 7/16 in a tempo J..= 100 m.m.! In general, the Bulgarian folklorists write down the odd meters in 16ths, due to the wildly-fast tempos. One of the other characteristics of Bulgarian folk-dance music is the heavy accents on each group of two and threes. The accent on the threes is always the heavier one:

Example 95

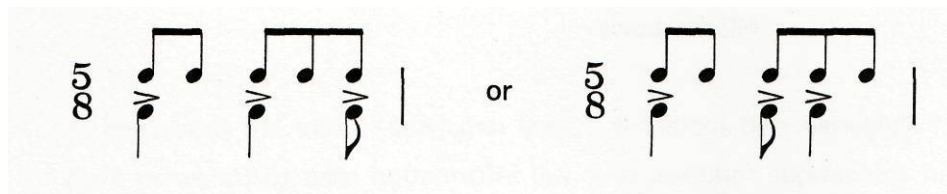


Furthermore, the Bulgarian percussionists<sup>29</sup>, usually accent alternately the last, or the second

29 The main Bulgarian percussion instrument is a "tupan". It's a big drum (like a bass drum) that the tupan player hangs around his neck. He plays with two sticks — a big one with the right hand, and a small one with the left. The accents of example 96 are played with the right hand. The left hand fills in at random with softer beats. He usually starts simply (as in examples 96 and 97) gradually getting more complex as in example 101, then finally he plays almost freely, sometimes even leaving out the main accents and adding cross rhythms according to his temperament.

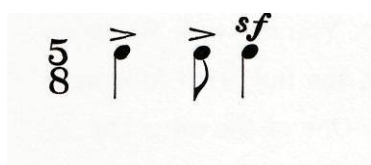
note of the threes:

Example 96



In the latter, the third accent sometimes is the heaviest one:

Example 97



But the feeling still is 2+3, not 3+2! That's one of the secrets of how to play this music. We have something similar in jazz or rock when we accent the 2nd and the 4th beat in 4/4 measure, and we never get lost, we feel the down beat. But in extremely fast tempos, an inexperienced jazz listener sometimes has the illusion of 1 and 3 instead of 2 and 4, in listening to the drummers hi-hat!

One of the most popular Bulgarian folk dances *Ruchenitza*, is in 7 (the meter that is of the greatest interest to jazz or rock musicians experimenting with odds). It's a wild and furious dance which starts relatively slow and heavy, but in the process of playing and dancing, it accelerates and reaches dizzying tempos. There are two kinds of *Ruchenitza*. The main one is called the "female *Ruchenitza*":

Example 98



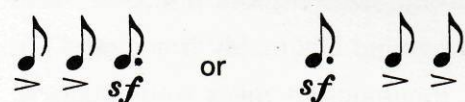
the other is the male *Ruchenitza*:

Example 99



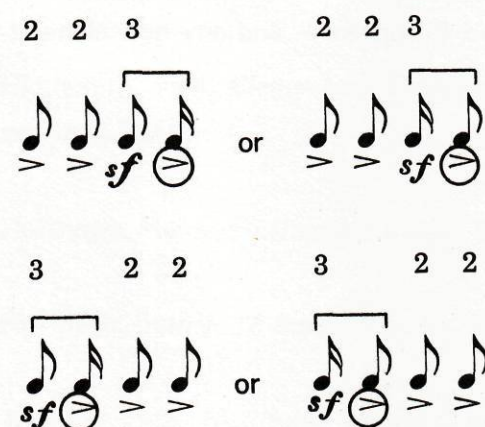
The accents are again on the twos and threes:

Example 100



and in the process of improvisation, on the second or third note of the threes:

Example 101



⊕ = special very heavy accent

We could go further and investigate 9, 10, and 11 and so on, but regardless of the different combinations of threes and twos, the downbeats of these groups of threes and twos are always accented.

This characteristic of the Bulgarian odd meters sometimes makes musicians think they are inappropriate for a jazz treatment. In general, that's true. But they have their own fascinating feeling, which may be used by jazz musicians. When I, myself, started to experiment with these meters in Bulgaria, back in 1963, I preferred to use mostly medium tempos and to try to put "even" sound in the odds.

However, one day, in 1968, I sent some recordings of Bulgarian folk tunes to Don Ellis. There were different kinds of odd meters in these records and among them a *Sadovsko Horo* in 33/16. (See the rhythmical pattern in the chapter *An Approach to Odd Meters for Keyboard and Guitar Players* page 48). I knew that this meter would excite Don's curiosity, but what happened was beyond my wildest expectations. He wrote me that he couldn't wait and he had written the *Horo* down immediately for his band. Several months later, I heard it under the title of *Bulgarian Bulge* which is on the *Underground* album. My friends and I in Bulgaria couldn't believe our ears. Here were musicians, thousands of miles from Bulgaria, playing this music as if it were native to them!

That showed me again and again the unbelievable, unlimited, cosmopolitan power of integration that jazz and jazz musicians had. I think it's time to stop any skepticism towards things "alien to jazz". There is nothing "alien" to a music that was born as a result of a mixture of two totally different cultures — African and European — and any new element coming is a natural part of the process.

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In addition, the latest recordings of Igor Stravinsky's *Rites of Spring* and Bela Bartok's string quartets and piano music are recommended.

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