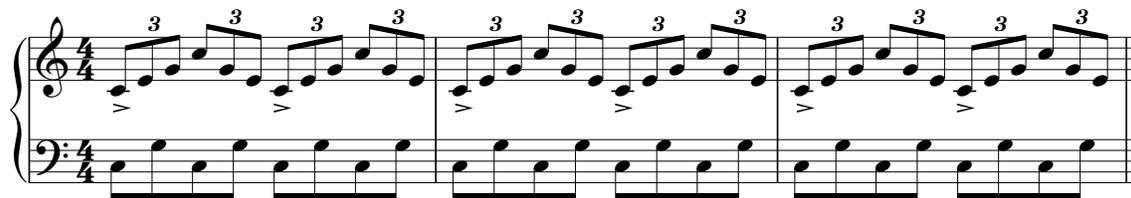


Essential Polymeter Studies in 4/4: Introduction

The Concept

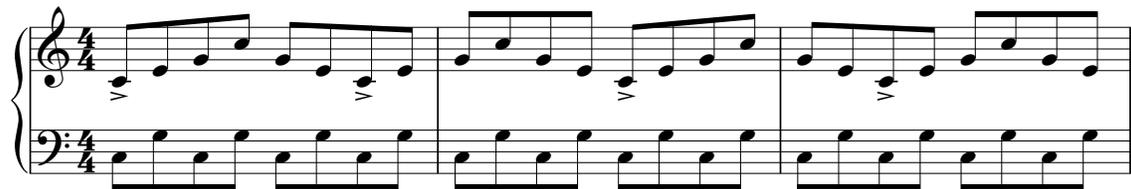
Both *polyrhythm* and *polymeter* have been a part of the jazz language from the beginning. I define them as follows:

In *polyrhythm*, two or more distinct beats are played simultaneously. For example, three notes played against two:



In effect, you can hear and feel two different *tempos* being played at the same time.

In *polymeter*, the beats remain constant, but the organization (subdivision) of the notes in the combined beats implies different *meters*. For example, 3/4 over 4/4, by virtue of the structure of the melodic line (in treble clef):



This, in effect, maintains the same *tempo* between the two voices (pulses), but suggests *two different meters* being played at the same time. (I've placed the accent marks in to help clarify the contrast between meters.)

One of the staples of the jazz sound is this juxtaposition of meter, as it enhances the feeling of syncopation that is at the heart of the swing feeling. It creates a friction, a kind of energy and tension that invites resolution. From the very beginning of the jazz tradition, through the bebop revolution and all the way to the most sophisticated artists improvising today, polymeter is interwoven into the jazz language.

You can hear polymeter in many classic jazz recordings. Lester Young's ground breaking solo on *Oh! Lady Be Good* provides several excellent examples. Here's one:

The image shows two staves of musical notation in treble clef with a key signature of one sharp (F#). The first staff begins with a B7 chord and contains a melodic line with a dotted quarter note, an eighth note, and a quarter note. The second staff begins with an E7 chord and contains a melodic line with a quarter note, an eighth note, a quarter note, and a quarter note. The third staff begins with an A chord and contains a melodic line with a quarter note, an eighth note, a quarter note, and a quarter note. The fourth staff begins with a D chord and contains a melodic line with a quarter note, an eighth note, a quarter note, and a quarter note. The fifth staff begins with a D#07 chord and contains a melodic line with a quarter note, an eighth note, a quarter note, and a quarter note. The sixth staff begins with an A/E chord and contains a melodic line with a quarter note, an eighth note, a quarter note, and a quarter note. The seventh staff begins with a D chord and contains a melodic line with a quarter note, an eighth note, a quarter note, and a quarter note.

Notice how he displaces the “E” (starting here in the 3rd measure) to create an interesting thematic/rhythmic tension, which resolves nicely to the “A” in the 6th measure. Depending on how you look at it, you can see metric organizations of threes and twos (implying a 5/4 meter starting on the 4th beat of the 3rd measure), emphasized by the placement of *one single note*. This polymetric tendency in Lester Young's improvising contributed significantly to his legendary “floating” time feel and phrasing, as he seemed to play “across the bar lines” in a more “horizontal” manner.

Though the use of polymeter grew to become an element of the bebop lexicon, it was Lennie Tristano and his disciples who took it to a whole new level. Besides his compositions (e.g., *Lennie's Pennies*), Tristano's improvisations reflected an exploration and mastery of polymeter. (His solo on *Line Up* is a great example!) But it was his student, the brilliant tenor saxophonist Warne Marsh, who used polymetric phrasing and control to create some of the most consistently surprising, free and imaginative improvisations ever played over chord changes.

And certainly, many classic jazz compositions employ polymeter. (The final measures of Thelonious Monk's *Blue Monk*, and the bridge of Monk's *Played Twice* immediately come to mind.)

In this book, my aim is to introduce polymeter in a mindful, methodical and practical way, with the hope that it will help you find greater freedom and control in your improvisation.

Because the harmonic structures of most standard songs and jazz compositions are based upon two-beat and four-beat cells, it can be a strong stimulus for the improviser to hear, think and imagine within this structural framework, often to the point of stating the

structure of the composition at the expense of expressive freedom. Besides adding an unwanted sense of predictability to an improvised solo, this can also place considerable limits on the structure of melodic lines. It can tend to put your playing “inside a box”, so to speak. (Or as I sometimes describe to my students, “hardening your phrasing”, as opposed to letting it stay free and flexible.)

Gaining freedom with meter can open up many possibilities, and will give you seemingly endless ways of organizing melodic content when you improvise. In fact, you’ll find that you’ll use your harmonic knowledge in surprisingly new ways to create melodies when you are “free from the bar line”.

There are essentially three ways to *imply* polymeter. (Each example below demonstrates 3/4 over 4/4.)

One, by rhythmic content and organization (rhythmic patterns):



Two, by the organization of pitches (contour of melodic line):



Three, by articulation:



This book deals with first two exclusively: That is, polymeter implied by either rhythmic patterns and/or organization of pitches. (Polymeter by means of articulation is an entire topic unto itself, which I plan to address in another book.)

One thing I learned from studying Balkan folk music some years ago is that all odd meters are really just combinations of twos and threes. For example in one of the Bulgarian dances, called the *Kopanitsa*, the meter is 11/8, which is typically subdivided as: 2, 2, 3, 2, 2.

And so it is with all odd metered music. **For that reason, I've presented what I think are the most common polymetric subdivisions over 4/4: 3, 5 and 7.** Specifically, 3/4 (and the 3/8 cell found inside 3/4); 5/8 (and the combination of 5/8 cells to imply 5/4); 7/8 (and the combination of 7/8 cells to imply 7/4). Through a series of notated exercises, I've attempted to present these metric subdivisions in a logical, methodical way. In doing so, I've aimed at keeping things simple, approachable and ultimately practical. That's why I've chosen to limit the rhythmic content of all exercises to eighth notes and quarter notes (including any ties):



The above pattern (5/4 over 4/4) of eighth notes and quarters can easily be varied and made more complex, still maintaining the basic polymetric pulse:



I consider the eighth and quarter note structure as the “skeleton” of the pulse.

To become fluent in using polymer, you'll need to develop two things: *cognition* and *imagination*. For you to become confident in “going over the bar”, or otherwise “turning the time around”, you must have a sense of where you are with respect to the time and the form, *at all times*. For that too happen, you need to be able understand what I call the “math”. In essence, you must have a cognitive knowledge of how an odd-metered pattern *returns* to its starting point. In 3/4 over 4/4, for example, if you begin on beat one, the cycle returns to beat one every three measures, as follows:



Once you develop this cognitive knowledge, and start working through some patterns with it, you'll go from “thinking the math”, to *intuitively* knowing/feeling where you are at all times. **This is a vital first step.**

As you develop this skill, your imagination can grow alongside it. You can start *hearing and feeling* the push and pull of odd over even meters.

To help you along in cultivating these skills, I've included lots of exercises that challenge, strengthen and clarify your cognitive ability, while at the same time giving you lots of patterns to practice to help feed and spark your imagination. By devoting sufficient time to this work, you'll likely be amazed at how your improvising transforms, opening up (and even surprising you!)

The aims of this book

I've developed and practiced the material in this book with specific aims in mind. I offer this work:

- To help you establish a clear understanding of basic odd-metered subdivision cycles over 4/4 (and how these cycles return to their starting point).
- To demonstrate to you a simple and effective approach to playing in odd meters (in general).
- To broaden your rhythmic imagination in both odd *and* even meters as you improvise.
- To deepen your sense of structure and form as you improvise over chord changes (and other closed-ended forms).
- To give you more tools to create tension and release in your improvisations through time, feel, and rhythm.
- To inspire you to organize the harmonic/melodic materials you've already mastered in surprisingly new ways.
- To challenge your sight reading of rhythms.

Format

I've organized this book into four chapters. The first three chapters address each of the *three specific* odd-metered polymetric subdivisions over 4/4: 3 (3/4); 5 (5/8, 5/4); and 7 (7/8, 7/4), one chapter per metric subdivision.

Each of these first three chapters has four sections:

1. The chapter begins with an exercise laying out the basic rhythmic subdivisions of the odd meter (e.g., 3/4) as it fits over 4/4 (and how it completes its cycle by returning to its beginning).
2. Next are exercises constructed upon some of the most basic rhythmic patterns in the odd meter (as they are rhythmically displaced over the measure in 4/4).

3. Following that are exercises using some of these basic rhythmic patterns over four-measure ii-V7-I cycles.

4. The chapter concludes with scale studies that present various patterns of the odd meter as it is imposed upon 4/4.

The final chapter of the book is devoted to rhythmic displacement of 2/4 patterns (the displacement of 2/4 is another aspect of implying polymeter in 4/4.)

I've chosen to use tonalities common in the jazz language for most of the exercises: Specifically, the scales (major, minor, dominant 7, blues, diminished and augmented) and tensions over V7 chords (such as raised and lowered 9ths), as well as passing tones. My aim here is to give you a chance to take the *familiar* (these tonalities) into the *unfamiliar* (the polymetric pattern). This assumes you have at least a basic understanding and some experience with these tonalities, as I never offer to analyze or explain the tonalities. All but a few of the exercises are put into all twelve keys, usually moving in cyclical order.

The range of all the exercises is reasonably moderate. The lowest note is low Bb (below middle C) and the highest is F# (above the staff). Each melodic pattern is kept in a fairly narrow range (usually no more than an octave and a fifth), so if any pattern goes beyond your range, you can, of course, feel free to transpose the octave.

And as I stated earlier, the rhythmic language of all exercises is the quarter note and eighth note (and any ties).

How to practice this material

There are three *very* important guidelines that I want to stress from the start:

First, it is absolutely essential that you practice every exercise in this book with a metronome. You must learn to understand, hear and feel these odd meters as they are imposed over the even meter (4/4). Without a metronome this will be nearly impossible, as each exercise will simply feel like any other odd-metered pattern you've played before. But by placing the odd-metered pattern within the pulse and subdivision of the metronome in 4/4, you'll begin to transform your perception, and will start being able to think and feel two meters *simultaneously*.

Second, your aim should be to always know where the downbeat of beat “one” is in every measure you play. If you don’t know where “one” is, you’re not really feeling both meters at the same time.

Third, you must know how each polymeric subdivision returns to its starting point. Again, if you don’t know how and odd-metered pattern “resolves” (returns) you aren’t really feeling both meters simultaneously, and you’ll be reluctant to actually use the subdivision in your improvisation.

You should use the metronome in the following ways:

- **With the click on all four beats-** Start with this in order to feel the “pull” of the polymeric pattern against the 4/4 meter cycle. (Set your metronome to click loudly on beat one.)
- **With the click on beats one and three-** Move on to this and stay with it until you feel confident that you can always anticipate beat one. (Again, set your metronome to click loudly on beat one.)
- **With the click only on beat one-**As you gain more confidence, let go of the click on beat “three” and feel the 4/4 as one long pulse. Make this the standard to aim for in your practice.
- **With the click on beats two and four-**This is optional (just to give you a sense of how the polymeric feels against a swing backbeat), and I recommend doing it *only* after you are quite confident that you always know where one is.

You can also use a drum loop or other backing track (of various time feels) once you’re confident about knowing where “one” is. **All of the exercises should be played at first with a straight eighth-note feel.** Once the exercise is clearly in your ear and under your fingers, move on to a swing feel.

I strongly recommend that you follow the order of the exercises in the manner in which I’ve organized them. I’ve attempted to present this subject in a logically progressive order. The exercises at the beginning of Chapters One, Two and Three (Basic Rhythmic Subdivisions) must be mastered! (As I will emphasize at the beginning of each of these chapters), you must know with great certainty how each odd-metered subdivision fits into 4/4, not just from the downbeat of “one”, but also, from any other downbeat or upbeat in the measure. So spend lots of time speaking (the beats) and playing the simple melodic exercises that follow in these exercises.

You’ll find that some of the patterns feel very “polymeric” (i.e., more metrically “tense” and “over-the-bar”) and others less so. (This is especially true as you change from a

straight feel to a swing feel.) You might even be surprised to discover that you're already utilizing polymeter from time to time as you improvise.

After you've thoroughly practiced and studied the material from the first three chapters, you can view Chapter Four (Displacement of 2/4) as a sort of *suggestion* for various ways of taking patterns from within two-beat cells and reorganizing them polymetrically.

As I've already mentioned, most of the melodic patterns I've used in the exercises are quite familiar to the studied jazz musician. **My hope is that you play as much as possible by ear.** In other words, once you recognize a particular melodic pattern, your focus can shift to what's happening metrically/rhythmically rather than what's happening with the pitches. The idea is to start seeing and hearing patterns of the various ways odd meter can be displaced over even meter. (Again, this is why I choose highly familiar tonal material.)

Finally, take what you learn right into your improvisation. For example, once you've become skilled in the exercises in Chapter One (3/4 Over 4/4) start *consciously* incorporating some of these rhythmic patterns and metric subdivisions as you *practice* improvisation. Again, feel free to make variations from the eighth-note and quarter note language to add interest, complexity and excitement to your improvising. Ultimately, this is about changing how you imagine, hear and feel music. Make it yours! Enjoy!