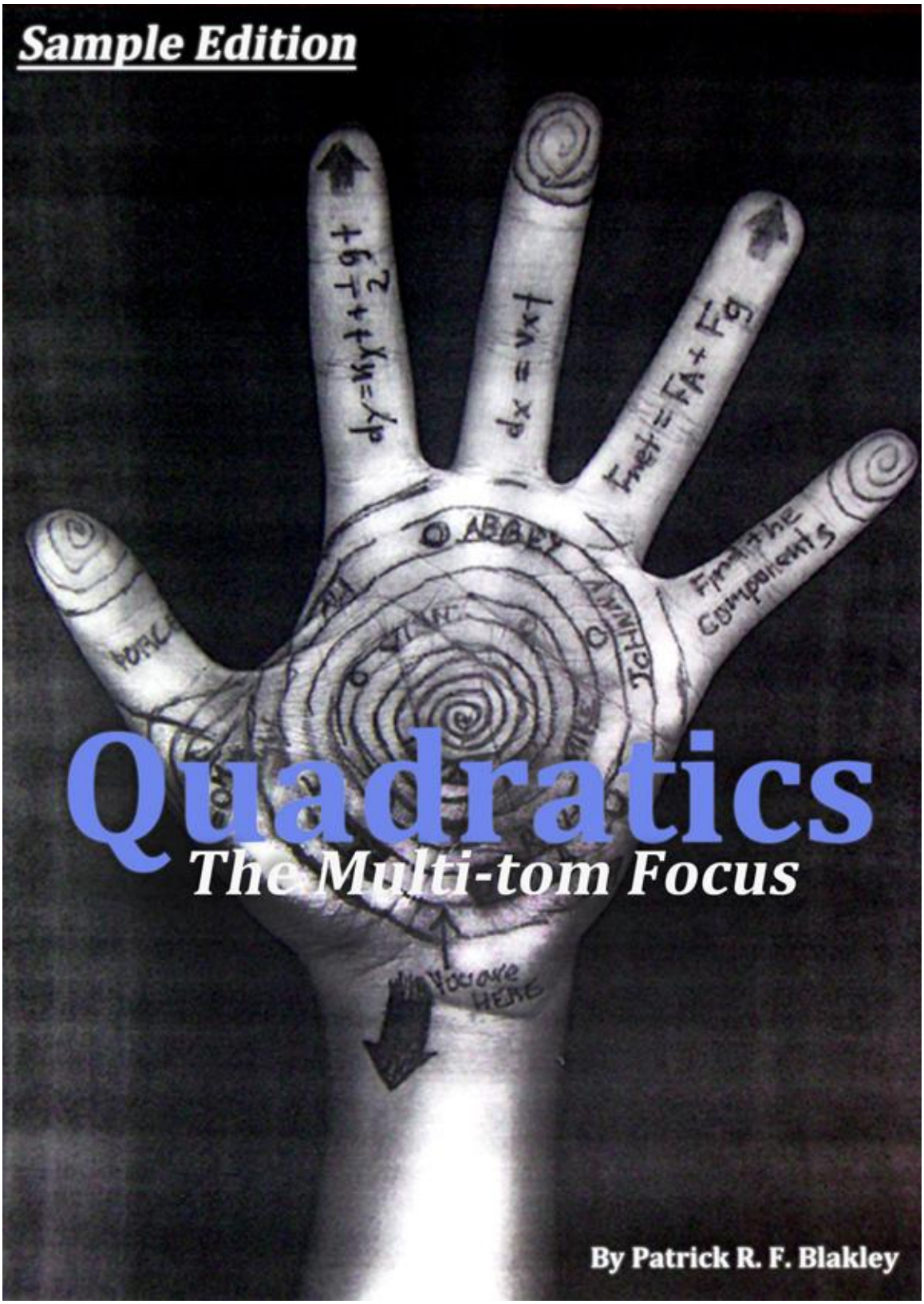

Sample Edition
Quadratics
The Multi-tom Focus
By Patrick R. F. Blakley

Quadratics

The Multi-tom Focus

Sample Edition

By: Patrick R. F. Blakley

In memory of...

Ramona Blakley
who bought me my first drum set

and

Sara Vincentore
who taught me to play it.

Quadratics:

The multi-tom focus.

Patrick R. F. Blakley

2010

The varying degrees of style, technique, and especially personality that are all involved with playing this fashion of percussion instrument creates an immeasurable diversity among members of this community. You probably know already that there is no precise way to learn or teach an instrument; tenor drums are not any different. This book's purpose is to give the reader an assortment of concepts and possibilities toward learning, and instructing, all of the facets of tenor drumming. The following chapters include several blueprints to successful tenor drumming and range from advanced to expert with commonly found patterns and ideas to help guide this variety of musicians.

Chapter selection:

In the company of this book you will be capable of not only discovering an organized style but you will gain knowledge of instructing tenors as well as fine tune your abilities behind the tenor drums.

- Patrick R. F. Blakley

Complete Chapter Outline and Table of Contents

Suggestions for the use of this book

This book has numerous uses with focus on playing and writing both emphasized. The obvious of the two foci is playing. The player will easily gain important skills behind the tenor drums with both symmetrical and asymmetrical styles. Muscle memory will easily be built from within the framework of the book and will develop into the unconscious thought process which then allows the player to focus more clearly on the next steps. Rudiments are necessary but basic underlying patterns (rudimental patterns) are just as essential. This will allow the player to learn to flow behind the drums and especially recognize patterns in music quicker which will hasten the memorization rate as well.

A warmup based structure and terraced sequence of lessons will not only instill basics but push for more advanced ideas that any skill level can learn from. Combination studies will complete the information recall and teach the player to use what they had learned and open their minds to the 'real world' of tenor drumming.

But this book isn't just for the player. Writers can also examine the placement of notes relative to hand position or drums to teach themselves to recognize how parts are written to flow. Flow is not something that can just simply be expected from the player, it needs to be written for the player first. Some parts are impossible to flow, due to sticking, placement of notes, change in velocity, and many more reasons as well. This is what the writer can take away from this book.

There are many other uses for different types of people still. The instructor: Notice the arrangement progression of warmup ideas. There is specific order such as plain 'eights' to adding hand to hand to changing rhythms to adding accents and eventually double strokes and flams. This is the basic structure and is in the order for specific reasons, if that isn't obvious. So the instructor will be able to take notice of the behind the scenes ideas that will allow the player to progress the most.

There are still plenty of uses that this book will go along with. Anything involving tenor drums is obvious but percussively in general there is always something new to learn and all facets of percussion can be important to each other. There are definitely more places to which we can progress.

Preface

Quadratics was written for two different levels of tenor drumming, advanced and expert. It was also written with the instructing community in mind, in order to give more tolls to someone who may not specialize in tenor drumming. We'll be looking at different aspects of tenor drumming such as technique, muscles, notation, rudiments and patterns, control, modulation, dynamics, accentuation, multiple strokes, paradiddle patterns, rolls, flams, and hybrid rudiments. The order of the book was chosen to always build on the previous chapters, this way the material can be learned with the greatest of ease.

The most important and general ideas are found at the beginning of the book. A more experienced tenor drummer may already know much of the information found at the beginning and might be able to skim across and skip ahead. Though, since the book does build upon itself the expert tenor drummer may want to still review some ideas presented because the later elements will utilize the specifics of the beginning, you may even find a new way to think about old things that could potentially help you or accelerate your ability to learn later on.

For instructors, with or without a tenor drumming background, you should skim through the entirety of the book and then go back and look carefully at specifics of note placement and flow as well as other things that seem foreign. As you do this watch for reoccurring patterns and try to use them to your advantage within teaching style and even allow them to persuade your composition. Remember that the goals of these teachings is to be able to apply them to music and plug them into your marching activity.

Each of the types of tenor drummers reading this will have a different kind of personal goal with this book. The advanced reader will have the goal of understanding how to take the next step into an even more advanced area within tenor drumming. The expert tenor drummer will be able to take that next step and maybe be able lead their own tenor line with the information attained from this book. The instructor will be able to teach in a more organized and successful way and receive more from his tenor line. He also may even dig deep enough to apply these teachings to another section of a drumline or percussion ensemble.

Overall everyone, from every level of learning, will gain the same style of thinking to understand tenor drumming the same way and everyone will certainly find more appreciation for the tenor drums.

Chapter One: The Tenor Drum Equation

In this chapter…

Te first chapter reveals the methodological foundation specific to marching tenor drums. The chapter not only lays down the groundwork for tenor drumming but also introduces some slight mathematics behind it all. In order to understand what good technique and ability is you need to know how the little details add up to the whole and this chapter will not leave anything untouched. Whether you are a beginner or an advanced tenor drummer, you will certainly learn something new.

What is a tenor drum equation? The equation is what allows us to do what we do. The equation is made up of everything we put into playing the instrument and the result is our performance; **it all adds up**. Being able to physically play the tenor drums one should understand a minimal amount of the computation behind them. An interesting relationship between math and percussion starts when we look at the *quadratic equation* or *quadratic function*. The quadratic equation is an algebraic mathematical equation in which the quadratic function $\boldsymbol{f}(x) = ax^2+bx+c$ is used to find a variable (x). What is produced when graphing this equation is what we call a parabola. A parabola is a locus of points that bend around a cone (or conic section). What it shows us is basically a natural arc that is created between two points in three dimensions. This can be explained much more simply and we will come back to this shortly.

When you play tenor drums you use four dimensions. The first dimension tenor drummers use is the *x-axis*: tenor drummers use the x-axis to move side to side to play on multiple drums and pitches. The second dimension is the *y-axis*: the implement travels up and down *almost* perpendicular to the drum head, snares and basses also use this dimension in the same way. The third dimension the tenor drummers use alone is the *z-axis*: this axis allows us to move in and out with the implements in order to play the two inside drums.

One dimension that is often overlooked is the dimension of time. It may seem too obvious to mention but this dimension allows every musician in the world to play rhythms or sustain notes. So in order to play tenors effectively we utilize space and we utilize time. Seems apparent, but do we think about all four dimensions when we play? Let's continue…

We'll now remind ourselves that the parabola drawn by the quadratic equation is also using these same dimensions. The first dimension, the *x-axis*: which allows us to play on multiple drums and pitches. The second dimension uses the *y-axis*: this is where we define heights and volumes. We'll stop there for a moment. When you have a parabola in two dimensions it is called a hyperbola (principally speaking). But think about how a stroke's path really follows; we don't push the

bead forward as we lift away from the drum head to keep in completely perpendicular to the playing surface; we pull back with the natural wrist turn: thus creating that natural arc. Now, since that natural arc does not stay directly on the y-axis we must begin to talk about the third dimension, the *z-axis*.

It is easiest to think about us using this axis to play on the inside drums but that is not the only time we use it. The stroke we produce at our maximum dynamic or volume will be closer to our bodies than to the x or y-axis, therefore every stroke manufactured by a drummer uses the z axis. Now, we will begin to incorporate the parabola into our picture. When playing on multiple drums on the tenors, keeping in mind the stroke pulls back into the z-axis, draw a line (which follows the natural turn of the wrist) from the playing zone on one drum through the natural stick stroke and to the playing zone on a different drum. That arc you have just created is the parabola in which every stroke utilizes.

This may seem over the top for an explanation of the implement's path but parabolas give us clues to things we want to stay away from when writing. The clues are important so that drummers can play smoothly and without tension. We will come to understand that most issues, with regards to the approach to tenor drumming, can be traced to the parabolas.

"Shifts" are the main things that we aim to avoid. A shift occurs when one hand pushes the other hand out of the way of a drum and causes problems at high tempos and can be the source of tension. These strokes are awkward and very unnatural. This is not, by far, a basic idea but to explain it thoroughly we need to watch two parabolas interact and really look at their intersections to define the problem more specifically. *End of Sample Edition Excerpt.*

Chapter Three: The Movable Fulcrum & Muscles

In this chapter…

You may be asking yourself, “what in the world is a movable fulcrum? My teachers have only taught me that the fulcrum is always found where the stick is gripped by the index finger and thumb.” Well you’ll learn why this isn’t always true and also what muscles are affected by the moving fulcrum.

First of all we need a more in depth definition of the words fulcrum and lever. As you read in the previous chapter a fulcrum is the point at which a lever will pivot. It is in fact very true that the fulcrum exists only where the lever pivots, but it is also true that the fulcrum isn't always in your fingers. What is the 'lever' for a drummer? The stick? Only some of the time. There are a few levers that you use when drumming, and you already know what they are, you just don't call them levers everyday. There are four possible levers used during drumming. The first and most obvious is the drum stick itself, this lever's fulcrum is in between the index finger and thumb; this will be known as fulcrum *A*. The next lever is the hand and stick together pivoting about the fulcrum in the wrist, the wrist's fulcrum will be known as fulcrum *B*. The third lever is that of the forearm, hand and the stick together rotating about the elbow which will be referred to as fulcrum *C*. The last lever is the combination of the upper arm, forearm, hand, and drumstick all together. This last lever pivots at the shoulder (while maintaining a slight bend at the elbow), the final fulcrum is called fulcrum *D*. The fulcrum is the only point on the lever that remains stationary, all of the other points rotate around the fulcrum. On a seesaw the fulcrum is the only part that the beam touches and also the only stationary point.

In order to understand what influences the fulcrum to move you need to know what the direct cause is: velocity. The fulcrum that is between your index finger and thumb exists when the speed is faster because you are using your back fingers and their fast twitch to move the stick. The fulcrum moves back as the pace slows, so when you don't need the fast twitch of your rear fingers the wrist becomes the fulcrum as all of your fingers maintain a firm grip on the stick. At a very slow tempo or during an open heavy section the fulcrum can move back even further to your elbow. When you use all arm to play into the drum head or when you are playing giant hits from over your head it is possible to push the fulcrum back even further while keeping your elbow bent normally the shoulder might sometimes be a fulcrum with the assistance of the elbow; this is rare but feasible. The shoulder works with the elbow when it becomes the

fulcrum, if it didn't the sticks would create an obtuse angle to the drum head and go behind your head, which is bad. The elbow bends to allow the sticks to maintain an upward stroke while the shoulder rotates back. The most common fulcrums are either between the finger and thumb or in the wrist.

Is it possible to have two fulcrums at the same time? Almost, but not quite. If you are playing an accented diddle with the primary stroke initiated with the arm and the diddle with the fingers then you have put two fulcrums very close together but not quite the same time. The primary stroke's fulcrum would be in the elbow and the instant that the bead of the drum stick strikes the drum head the fulcrum changes to the index finger and thumb to allow the fingers to create the diddle. Drummers shouldn't over-think this idea of multiple fulcrums because when drumming you want to change as little as possible; for example you wouldn't play eighth notes with a different technique than sixteenth notes. The fact of the matter is that the fulcrum follows the laws of physics, when playing an accented diddle it is uncomfortable and tense to play both notes from the wrist. When relaxing the wrist it becomes physically impossible to play the notes with only one fulcrum. Look carefully at the examples (fig. 4.3-4.5). The primary stroke comes from nine inches and the instant that the bead hits the drum head the fingers must loosen to relax and from there the second stroke of the diddle is played. The arm and stick act as the initial fulcrum and for the secondary note the stick pivots about the index finger and thumb.

One thing that goes hand in hand with fulcrums are the muscles that are effected by the different fulcrums. There are two main types of muscles in your arm, the flexor and the extensor muscles. Most of the muscles in your hands and arms are used at all times when drumming (such as gripping the stick, flexing back the wrist, etc…), but certain ones are used more than others when the fulcrum changes to different parts of the lever.

Next time you warmup really pay attention to the parts of your arms that feel worked out. You should see that at slow tempos you feel it in the entire arm, even sometimes (depending on how slow the tempo is) in your upper arm. To describe this more fully, when your warmup you want to get the biggest range of

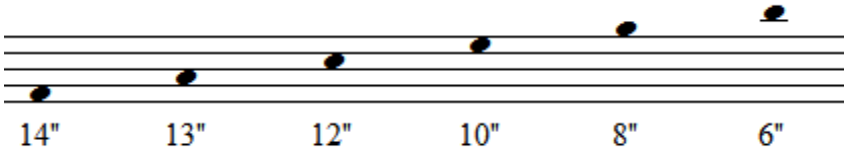
motion between notes as possible (this is the case for a true ‘warmup’, but it may not always be the case when working on achieving proper stick heights *during* the warmup, which is popular). The bigger the space you cover the broader the muscle groups are that you are activating. And as you’ll see there is a certain point to which a huge motion is needed to cover the space of slower tempos. For example, if for some reason you were to play eighth notes at 60 beats per minute the range of motion for the arms is massive and even the stick reaches a certain point where it is already vertical and so the arm has to lift directly up to achieve a bigger range of motion. Now, that being said, your upper arm really needs very little warmup time and it can actually achieve this time while playing the actual music (not in warmup). What you should be concentrating on is the forearm in warmup. Find a tempo that activates the forearm without activating the upper arm, this is usually somewhere around 100 beats per minute. Now as you increase tempo the muscles in your arm will be activated more specifically and when you finally switch to the fulcrum in your fingers you will be toning your ‘chops’. As you increase tempo you will notice that you are specifically targeting muscles which will then, over time, allow you to play faster for longer periods of time which works the same way as strength training. Toning your muscles in the right order (broad to specific) will increase their receptiveness to training and you will always find yourself settling comfortably in faster tempos. *End of Sample Edition Excerpt.*

Chapter Four:
Tenor Drum Notation

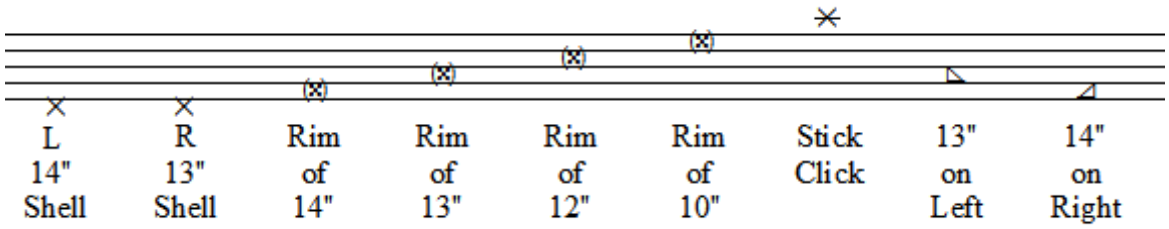
In this chapter…

You learn how to decipher the different drums from the percussive notation used and see how different sounds can come from each drum as well as how those sounds are notated on a sheet of music or written on the staff. These notations will be used in the remainder of this book and play an important role in universal tenor drumming so it is important to understand everything in this chapter before moving on to upcoming chapters.

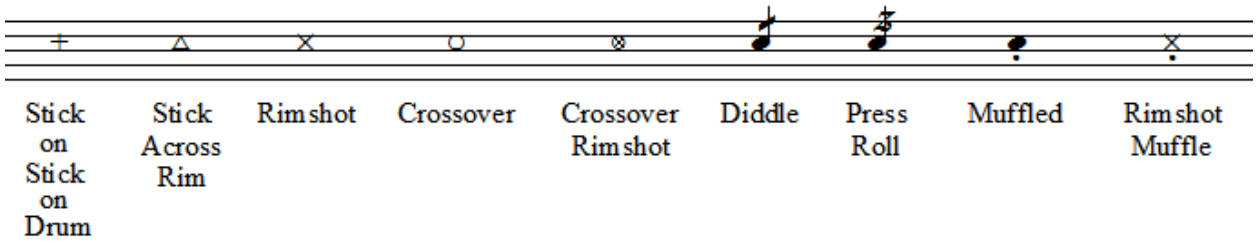
As you probably already know tenor drummers use a specific style of percussive notation. The notation in this chapter is crucial to understand the remainder of the book because it is the way the music is notated throughout. This is why it may seem too basic to be included, simply because it might add confusion later if neglected. Notes are written on a five line staff but none of the lines are used, the spaces are what we look at. Each of the six drums has its own space, as seen below. (Drum sizes are notated as the typical size tenor drums, the sizes may vary according to personal tastes.)



You can see that, like any other instrument, as the pitches become higher the notation moves vertically. The drums aren't the only things that can be played on though; here are some other played items:



Now, there are other ways to play each of the drums. In fact, there are *very* many ways to play each drum. Below is a short list of the notation used for the common ways of playing the drums.



Most of the time there will be an accompanying text that explains specifically how to use the notated style of less common notations. Another thing to be aware of is that many writers and arrangers will not use the same notation from above and instead just explain their notation to the drummers. It is important to always know what the writers' notation style is when learning their parts. Many of these concepts should be familiar to you at this level but some ideas may be new and hopefully some have opened up some possibilities for you in the future. Some of the notation in this chapter has been typical tenor notation which is used universally. A lot of it is notation that has previously gone undefined. *End of Sample Edition Excerpt.*

Chapter Five: *A Musical Learning Note*

In this chapter…

This is a quick chapter about some things to remember when learning music. Specifically it reminds you to check your technique as you learn a part because technique will become more stable if you learn music with good technique. Also this chapter reminds you to learn everything on one drum rather than jumping into the deep end and trying all six at once. This is the final preparation for the exercises.

Any time you learn something musical you should always be thinking about a few things. The first thing is your technique. If you learn a piece of music while thinking of technique then your technique will grow as you get better at the piece. If you neglect technique until after you know the music that you planned on learning then you are almost doubling your learning time because your technique still has to be fixed after the music is learned (which will take the same amount of time usually.) It takes time for your technique to become comfortable and settle into a piece of literature and until your technique is very finely tuned it is malleable and will tend to change if it isn't thought about or kept in check. This actually isn't hard to do either: once you are able to play a measure or phrase properly try it a few more times while only thinking about your technique. Even go so far as to watch one hand at a time while you play a phrase, this will be the most critical you can do for your technique. Also, if you can, practice in front of a mirror because technique looks a little different from the other side of the drums. It can be easier to fix when you watch yourself from the front.

Another thing you should always do when learning tenor music specifically is to learn a measure or phrase all on one drum first. This way you can be rhythmically accurate and completely understand the stickings and how they will help you navigate the drums eventually. Once you are comfortable with the rhythms and sticking as well as dynamic variances, you can begin to move the notes around the drums. Slow down if you need to or even try just moving chunks of it at a time and complete the remainder on one drum. Add on beats or measures to the movable chunks and eventually build yourself up to being able to move the phrase around the drums. Once you are able to move it all you should still play it on one drum occasionally to make sure the rhythms and dynamics aren't suffering because of the arounds. Keep in mind that rhythmic accuracy is the most important factor of drumming; don't let the arounds change the rhythm and you should also note that dynamics should not change due to arounds.

These ideas should always be in your head when playing, try to be aware of these things while playing and your learning time will be utilized effectively.

Chapter Seven: Controlling Your Notes

In this chapter…

Basic control of volume and spacing will be fine-tuned. The performer will control every note and, after some practice, it will not have to be thought of as much when playing more advanced musical items. These are the most basic musical items that you will play and they can and should be used during a warm-up session.

Every note that is on a sheet of music needs to be completely in control of the performer. These exercises will help you learn how to gain control of the notes on the page; there are many ways to do this. The easiest ways involve patterns found in the music broken down to the rudimentary level. There are four different types of control exercises in this chapter: *Eights*, *Stick Control*, *Sixteenth Notes*, and *Modulations*. Each of the four steps become more complex and require you to fine tune your control skills. All four exercise groups focus on the control of every note and each of the four have different challenges that require different types of control. The best way to learn these exercises is to break them down into chunks of measures or even into individual beats. Take each exercise very slowly and learn them all on one drum before trying the around patterns. Look for some basic rudiments hidden in the stickings to help you learn the parts faster.

Finally, the two main goals of these exercises are to maintain equal note spacing and to preserve a consistent balanced volume that is equal to each hand. Both hands need to be equally placed within each note value and throughout the entirety of each exercise both hands must be played at the same volume level. Keep in mind that if you can't play something, like and around pattern, you can move on, but do note that the chapter builds upon itself and without knowing the base building blocks it will be harder to move on through the chapter.

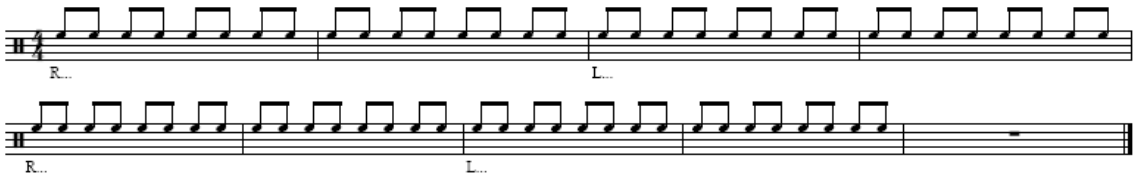
When you play through the next page of eighth note patterns you need to try to only think about where the stick is being placed. This may be difficult to do at first but try to ignore your ears and don't listen for any sort of melodic phrasing because the goal is to feel the notes and the placement and mirror it with each hand across the drums. The first pattern will always be the skeleton rhythm played on one drum. This is important in learning the part before you attempt to move it around. No matter how easy this may seem it is always the first step.

One last thing to note when playing through this chapter, and the remaining chapters, is the last drum each stick plays. You should get in the habit of leaving the stick exactly where it is last used, letting it idle over the playing

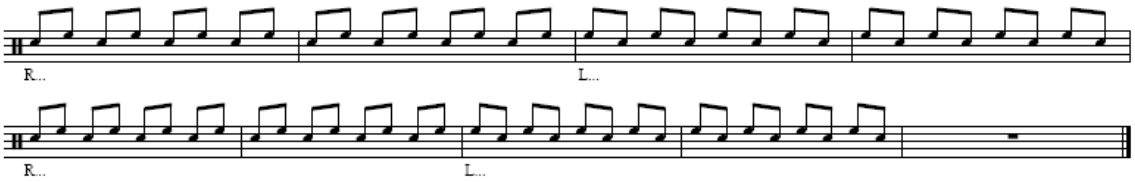
zone of that drum. For example, if your left hand plays on the 14” drum just before the right hand begins to play you should leave the bead of the left hand stick in the playing zone of the 14” drum. This process allows for smooth transitions and less tension within the arms. Transitions are more difficult when attempting to move the left hand somewhere while the right hand begins to play.

Feeling Eights

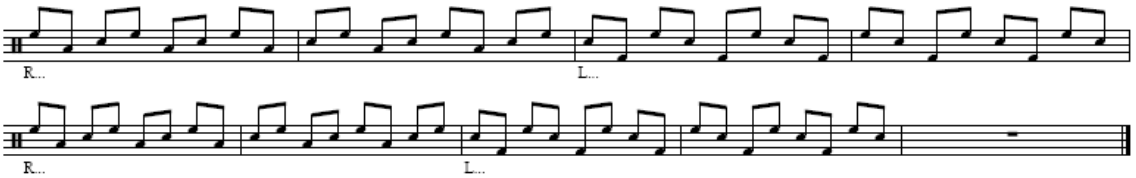
Pattern #1: (Skeleton rhythm with hand changes)



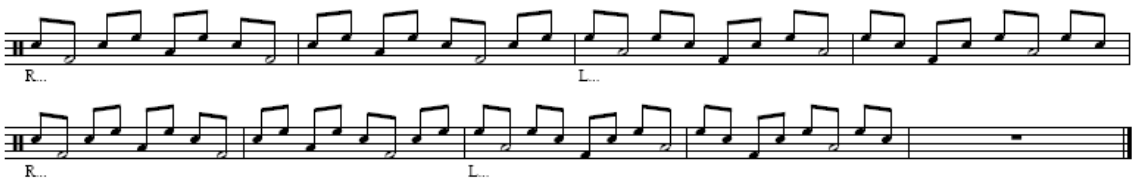
Pattern #2: (Two drum feel and mirror)



Pattern #3: (Three drum feel and mirror)



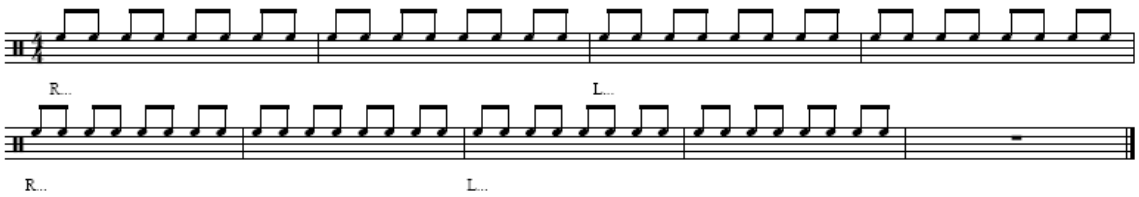
Pattern #4: (Four drum feel and mirror)



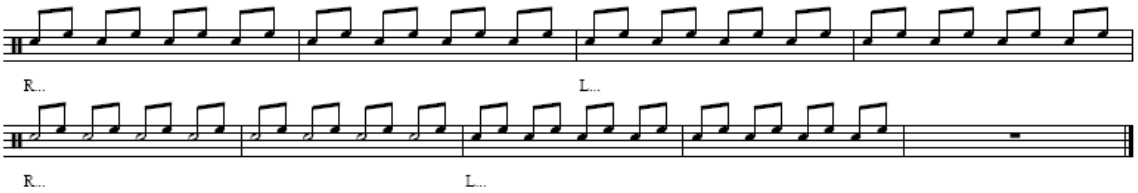
In contrast to the previous page you now need to try to only hear the melodic part being produced in these next exercises. There is no mirroring in them, the drums are creating a repeated melody and the hands simply change in the middle of the melody. Do not try to feel these exercises, you need to hear them.

Hearing Eights

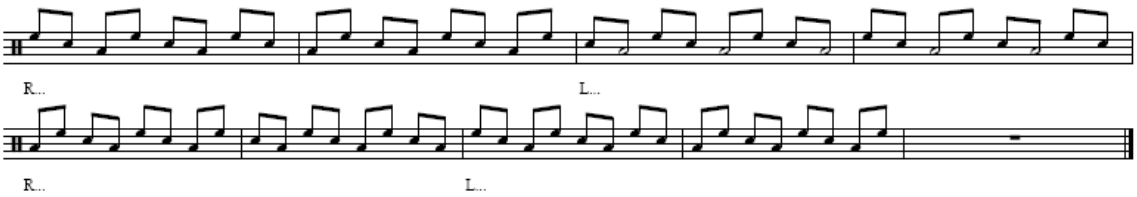
Pattern #1: (Skeleton rhythm with hand changes)



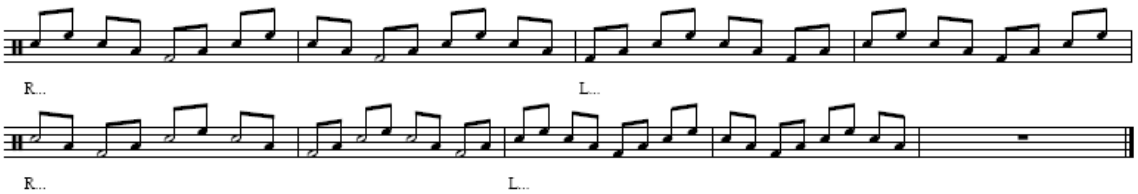
Pattern #2: (Two drum melodic repetition)



Pattern #3: (Three drum melodic repetition)



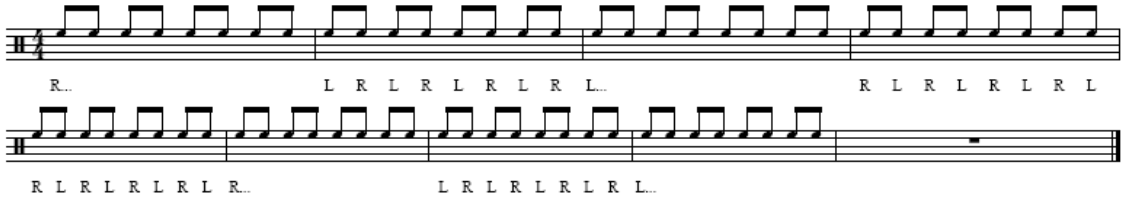
Pattern #4: (Four drum melodic repetition)



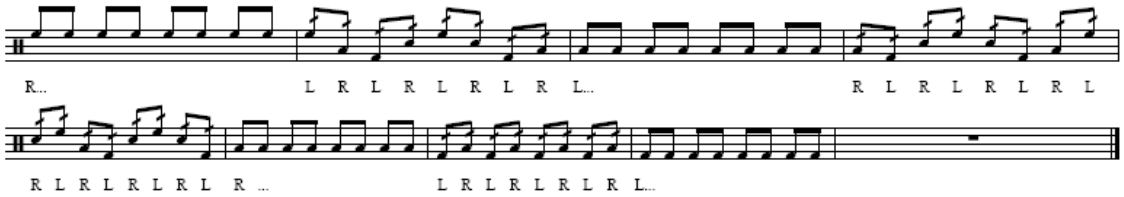
Variations can now be given to the previous concepts in order to either understand how certain note values fit or to hasten a warmup. We begin to see some rudiments being utilized in these exercises and should take note of movement across the drums. The movement is more sporadic and should be taken slow. Each of these variations should be played on one drum before attempting to move them around.

Variating Eights

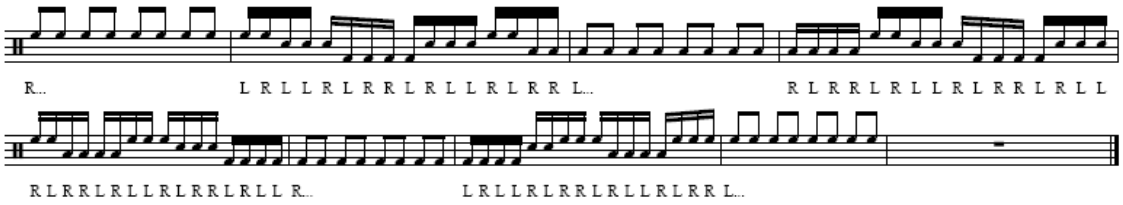
Variation #1: (Basic skeleton with variated sticking)



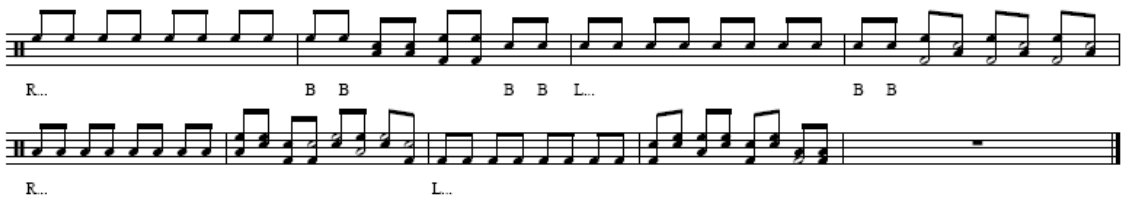
Variation #2: (Diddles)



Variation #3: (Paradiddles)



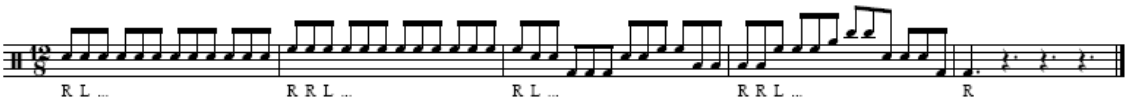
Variation #4: (Doublestops)



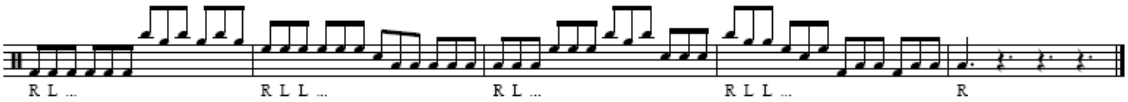
The next step in this chapter will be focused on placement of the notes around changes in sticking. This will be important later when more complex note values are written over complex sticking patterns. We begin to alternate hands and need to be more careful to maintain rhythmic accuracy. Make sure rhythms don't change over the changing stickings.

Stick Control

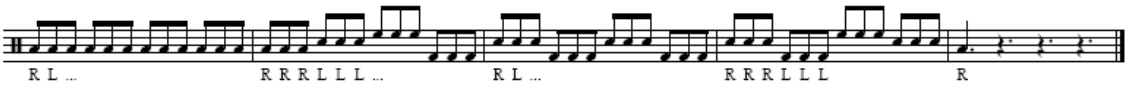
A. "Tadapas:" Focus on the left hand to keep rhythms in time.



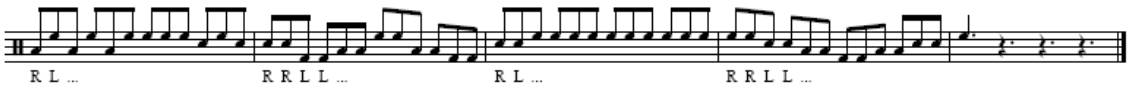
B. "Padatas:" Now focus on the right hand.



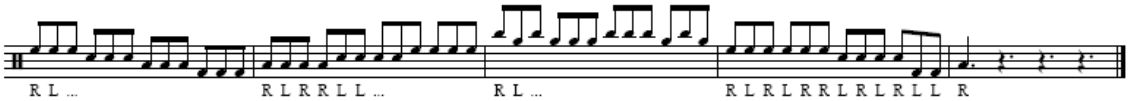
C. Triple Strokes: Be very careful in placing the secondary and tertiary strokes.



D. Double Strokes: Think about the quarter note when playing doubles.



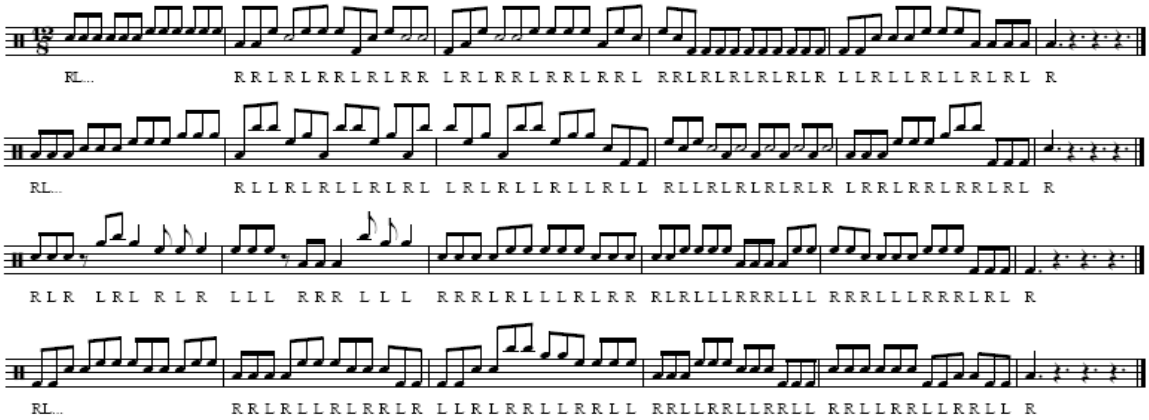
E. Paradiddle versions: Play to beat one and seven to stay in time.



When you can play through each of these versions of stick control try playing the entire page straight through (with and without the measure of rests).

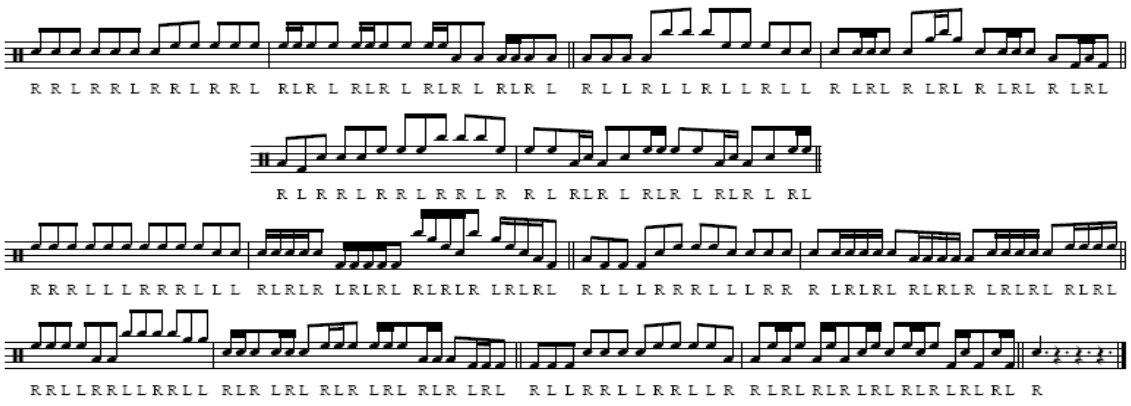
This next section will incorporate more difficult passages with more difficult sticking variations. It also introduces some rests, make sure the rests don't effect tempo because they need to be controlled as well.

Mind Control



Also in the realm of control and placement of notes is sixteenth note insertion. Try to fit the sixteenth notes exactly between the eighth notes. In the next exercise the eighth note stickings set up the sixteenth note insertion.

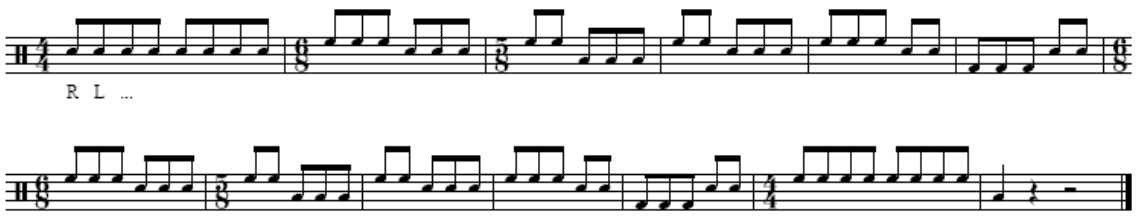
Sixteenth Note Placement Control



Now that our hands our in control we can take a closer look at our feet. This is a marching activity and because of that we need to be careful that our feet have a solid pulse. Once we establish the pulse in our feet we can begin to rely on them as our metronome and play anything we want on top of their steady pulse. To do this we first need to be able to rely on them, so to do that we can try the following exercize.

Foot Control

Mark time to the quarter note and do not let the changing time signatures effect your feet. This exercise has an even number of beats and you will end on the left foot on the last note of the exercise.

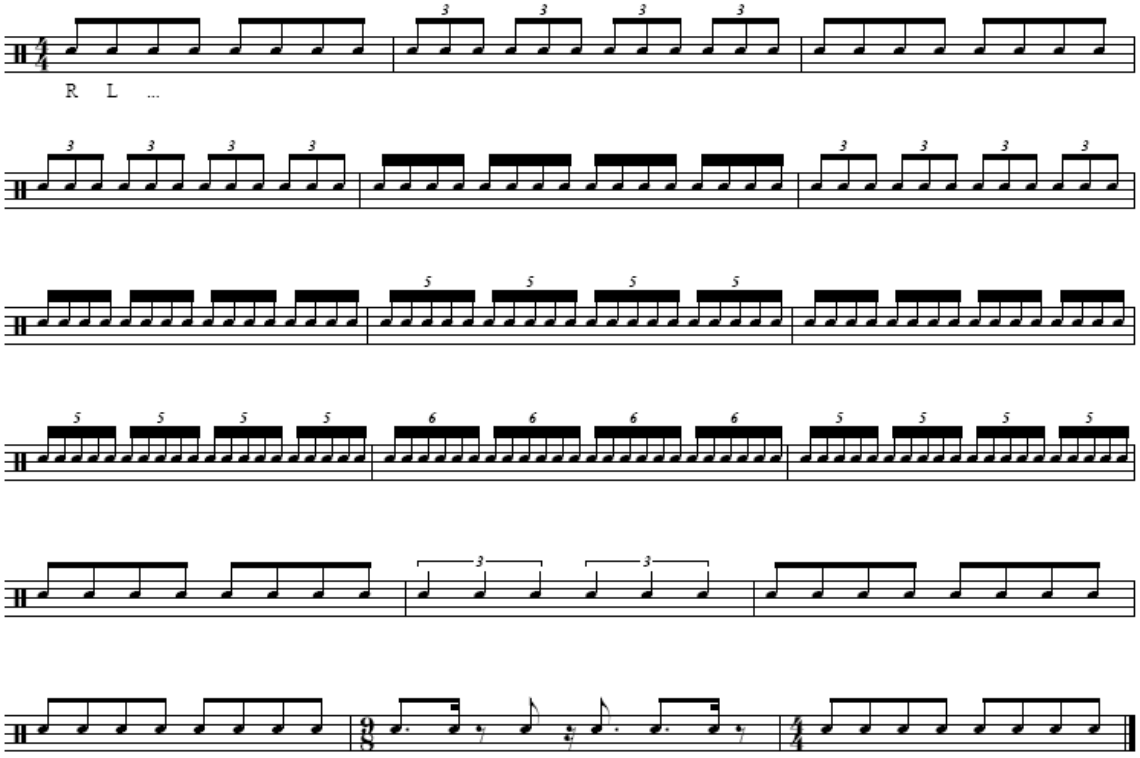


That little exercise will work wonders for your feet. Use it at all tempos from very slow (below 100bpm) to very fast (above 200bpm). Some other ideas you may try to give your feet an even better workout is to add accents to the first beat of each measure, or the second beat of each measure, or the third, etc… These accents will help you become more precise with your feet and they are probably the most beneficial thing you can do with this little exercise. So experiment with accentuation and then continue from there by adding flams, cheeses, flam fives, long rolls, etc. The exercise is short for a reason, you can add so many rudimentary entities to it very easily.

When you can play variations over this short exercise with your feet in perfect quarter note time then you'll have no problem marching to anything else in this book or even outside it.

Congratulations, you are now in control of eighth notes. But there is far more to music than one note value. Now we'll look at modulating to different note values from eighth notes within a strict time signature (unlike the next page of modulations).

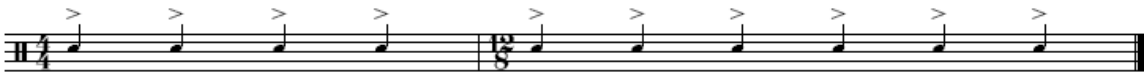
Metric Modulations



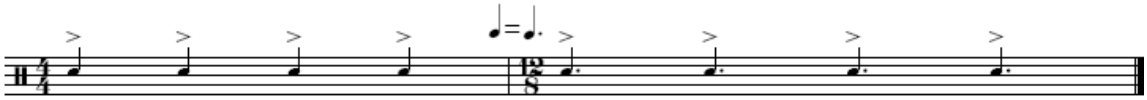
This page should be very familiar to you. Each note grouping (grouped by measure) has specific note values and durations set by the tempo; they are all relative. You can jump from one measure to any other measure on this page and beats one and three will always line up perfectly together *with the exception of the last line*. The last line is included to be compared to the one before it (in how they differ). These two lines get confused many times when playing modulations because dotted eighth notes follow more naturally than triplets from a duple based rhythm. However, in the case of the last line, it takes an extra eighth note of space for the same amount of notes to fit in the measure. A Turkish 9/8

measure (4/4 + 1/8) is needed to fit the six notes, which shows that the two examples are not equal. Take a second to see and understand why.

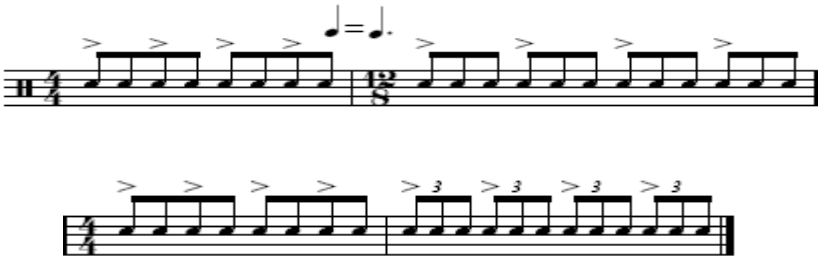
Another form of modulation occurs when changing from a simple to a compound time signature (and vise versa). The transition can be made two different ways: The first way is basic and not a modulation; the example below shows this first possible way.



The quarter note maintains the spacing and does not change the rate at which it is played. This next example is the modulation and does change.



The quarter note rate changes at the bar line and speeds up in order to make the dotted quarter in the second measure equal to the speed of the quarter note in the first. Written as eighth notes with accents on the quarter note in the first measure and accents on the dotted quarter in the second measure we can see what this is equal to in comparison. These two examples sound the same:



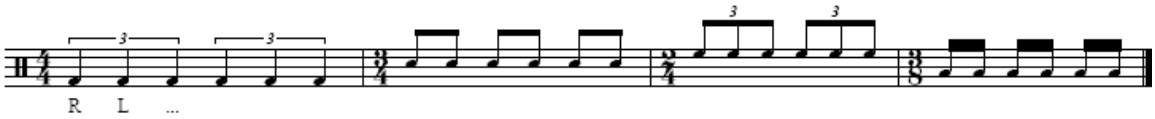
The second example is from the previous page (now with accents).

Take a look at the next page to see these modulations in an exercise that you can use to fine tune your modulation abilities.

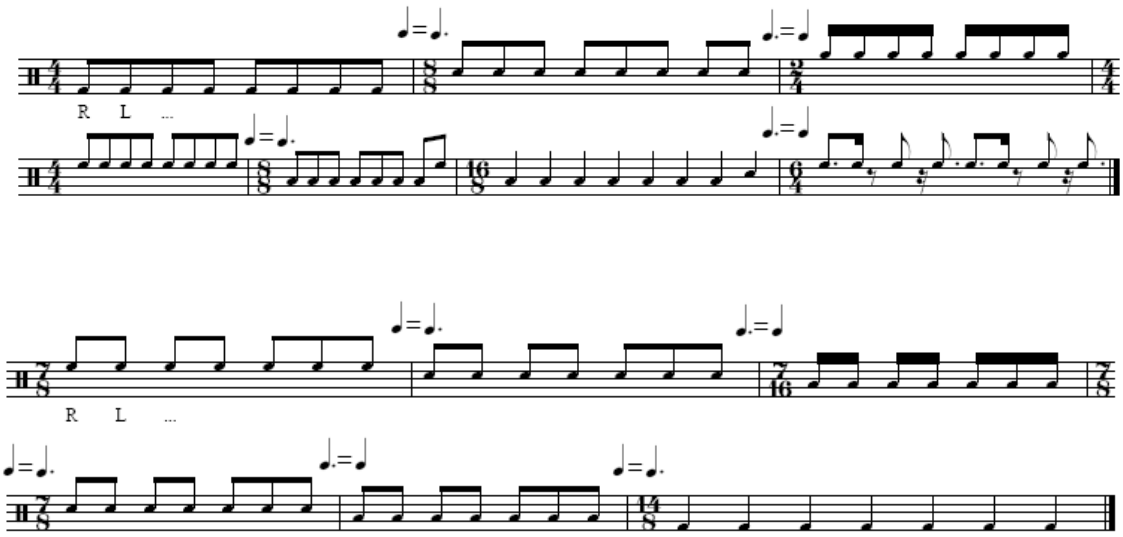
This page will focus on your ability to understand modulations using measures. Look carefully at what each example shows because each example depicts a specific number of evenly placed notes within a given mesasure.

Measuric Modulation

This first example is actually a metric modulation for the previous exercise and it is going to help you get into the Measuric Modulation exercise a little easier. Each measure has six notes, so as they modulate the measures become relatively shorter in duration.



The next two use meter changes to achieve the modulation with eight notes per measure and seven notes per measure respectively.



The complexities above are not usually found in music but they will prepare you for anything. Take the time to see how each transition occurs.

A quick note on rare time signatures…

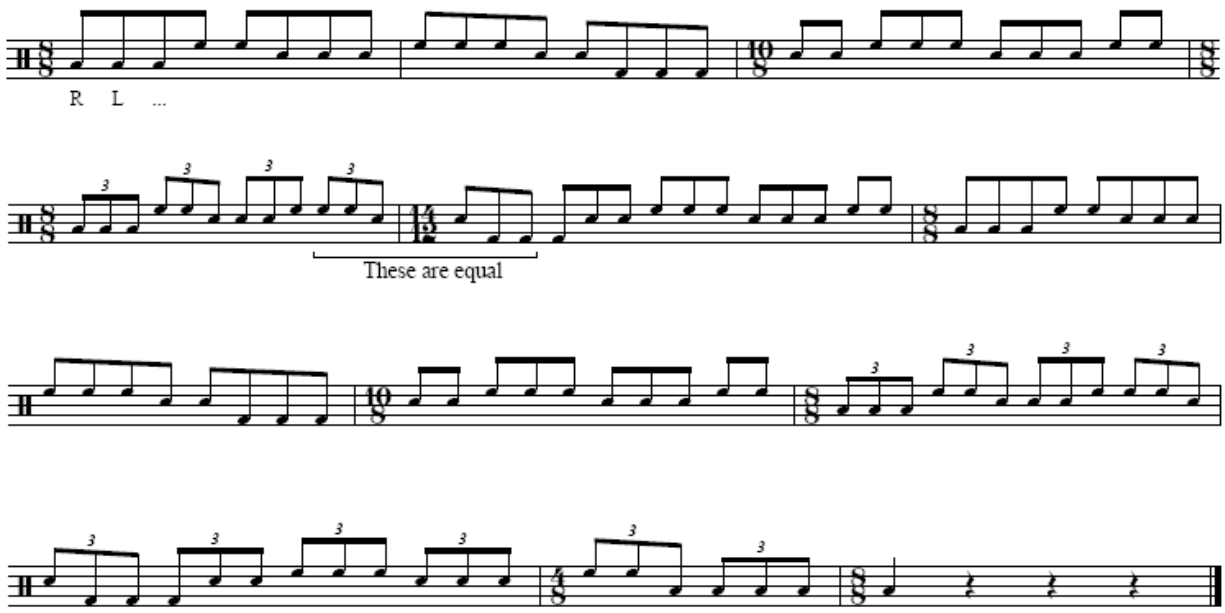
When you first learned the basics of music and time signatures in general you found that basically (and the most simple definition) the top number is how many of the bottom numbers you want in a measure. That is an over simplification but it will prepare you to understand the next material in the easiest way. For example the 4/4 time signature has four quarter-notes (so a 4 = quarter-note). Likewise 5/8 has five eighth-notes. So you can see how eight eighth-notes can fit in a measure of 4/4 as well as four sets of triplets in one measure. But what happens if we want to use an uneven amount of triplets in a singe measure? Well there are two extremes…

If you want nine eighth-notes in triplet form you could simple write 9/8 coming out of the 4/4 previously (with a quarter = dotted quarter note). The same can be done for three eight-notes in triplet form by using 3/8. However, now lets look at something like seven eighth-notes in triplet form; that's two and one third sets of triplets. There is not a designated time signature that you can think of from the top of your head is there? This is because certain note values are rarely defined. That being said eighth-notes in triplet form are actually "twelfth-notes". So it is perfectly acceptable to have a time signature of 7/12, which is what you'd need to use seven eighth-note triplets in one measure. If we delve deeper we find that it isn't only uneven amounts of notes either, if you wanted four eighth-note triplets in one measure you'd run into the same problem. 4/12 will suffice as a time signature in that instance.

Triplets are not the only things that cause rare meters like this, quintuplets do this too. If you wanted to use eight eighth-note quintuplets in one measure you'd have to use the time signature of 8/10. These time signatures can be found in many more forms and though they are extremely rare they are still worth knowing, especially since you are a drummer and you will run into more advances time meters since your instrument is more suited and capable of handling extremely precise situations such as these. There are only a few examples of these rare meters in this book and they are both noted for the reader to play with greater ease. But don't stop here, go find other excerpts with rare meters and test yourself by writing some of your own!

Take a look at the following exercise. It uses the rare time signature of 14/12 to use an uneven amount of ‘triplets’ in one measure. This is a great exercise for modulations as well because it uses metric modulation to make the same part faster, then back to the original note values and finally faster again at the end. This is also a great exercise to check the tuning across a tenor line.

Slow Fast



The only downside to rare time signatures is that it is impossible to mark time evenly through them because your foot would end up behind the beat by an eighth note triplet (in this example) every time you played it. At that point it is basically impossible to mark time and maintain a triplet offset and even then it would take four times through the exercise to get your feet back on the beat. In other words, marking time to this will only be a detriment and condition your feet to adjust to the hands (which should never be the case). That doesn’t mean that rare time signatures like this should be avoided, they break down barriers in music and allow for huge possibilities! *End of Sample Edition Excerpt.*

Chapter Eight: *Dynamics & Accentuation*

In this chapter…

Dynamic marking and accentuation bring the first implementation of musicality to you. This chapter brings musicality to your playing and allows you to perform different volumes, which brings music to life and gives you a wide range of shapes that will be worked with in every other chapter. This chapter is the gate to musicality.

Everything you've played so far in the last chapter was played with the same volume. In this chapter we are going to add some musicality by utilizing some different volumes. Each dynamic marking has a defined stick height, which you should already know, but most people don't understand the correlation between dynamics and stick heights. Piano is played at three inches from the drum head, mezzo piano is six inches, mezzo forte is at nine inches, forte is at twelve inches, and fortissimo is at fifteen inches from the drum head. Another thing that sometimes is unclear is this: dynamic markings apply themselves to entire phrases. If one note is to be played louder an *accentuation mark* will be used.

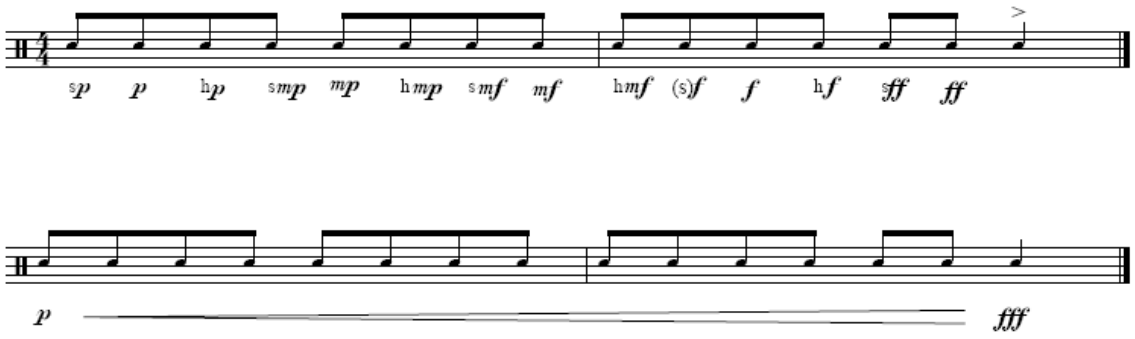
An accent will increase the height of a note by one dynamic marking, a v-accent will increase it by two dynamic markings. Accents are only applied to one note at a time and are used hand-in-hand with dynamic markings.

The next variation of volume will raise or lower a dynamic by one inch only. Any basic dynamic marking preceded by an "h" will be played one inch higher than the dynamic shown, in contrast, a dynamic marking preceded by an "s" will be played an inch lower. The "h" stand for "happy" and the "s" stands for "sad". These words are usually found before the number of inches in a dynamic such as "happy nine" would refer to a ten inch stroke. These items are important for the advanced and expert tenor drummers because they can then explore a full range of volumes instead of standard ones only. This same concept is applied to tempos as well, a well rounded musician should be able to play at 120bpm as well as 121bpm. The more precise you know dynamics the more sensitive you are to hearing them, allowing you to master the full range of volumes.

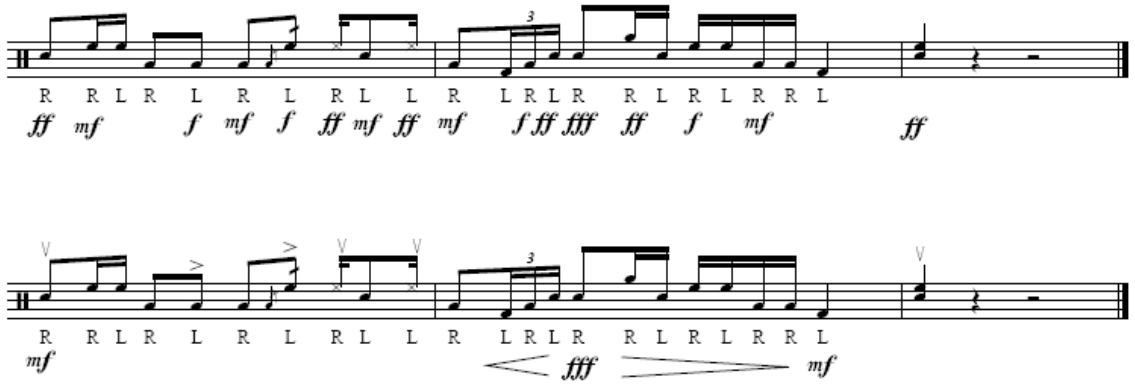
The last volume variant is a smooth gradient change from soft to loud or from loud to soft. During a crescendo each note is louder than the one before it, but not so loud that it passes the final dynamic, just enough to get to the destination dynamic. A crescendo could be written phonetically with dynamic

markings alone but that puts more pressure on the brain and clutters up the performer's thoughts, not to mention the page itself.

For an example of the interchangeable dynamic markings, accentuations, and crescendo/decrescendos, the following phrases are played exactly the same way. Compare each note with its corresponding note and see how each of them match. (Note the 'sad forte' marking in the first example. The 's' is in parenthesis because 'sf' is already a notation marking.) These markings are not common but they do serve their purpose well.



In common music the comparison looks like this:

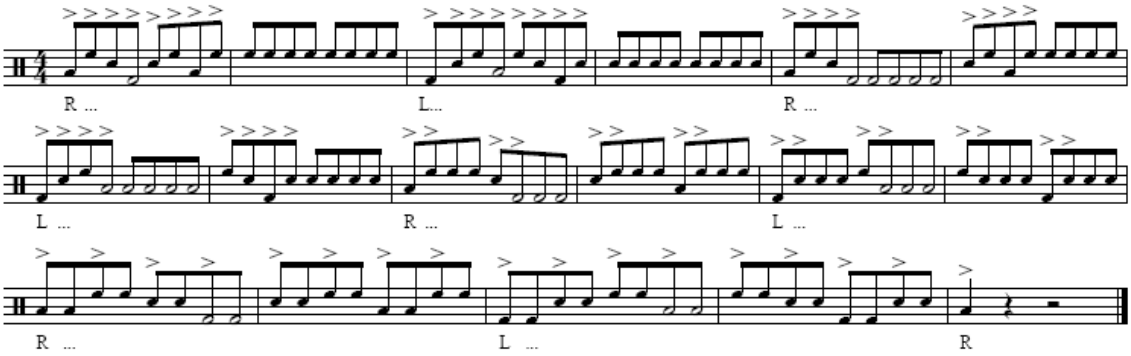


Now, there are two different types of strokes we need to define. The first type you have already been using, it is called the *legato stroke*. The legato stroke is the most natural stroke, it is used when the stick doesn't change heights or

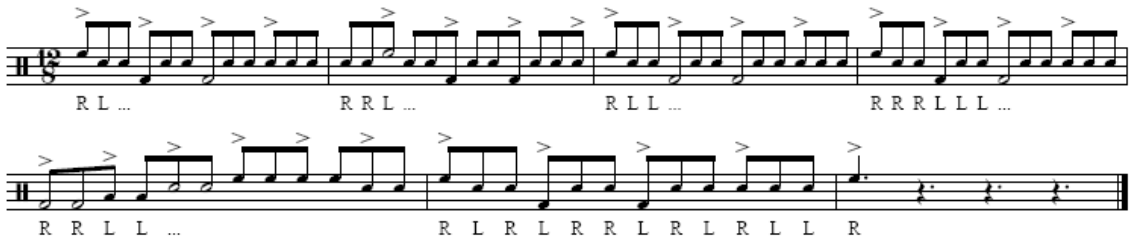
when the heights become greater. Throughout chapter seven you used legato strokes in order to maintain one volume level. When the volume gets softer by more than one dynamic levels a *staccato stroke* is used. The staccato stroke is created when an accent or louder note is played quickly followed by the tightening of the rear fingers in order to keep the stick down at the drum head. We do this so we can then initiate the second, softer stroke which is a legato stroke again.

So staccato strokes are found in only one place: where the dynamic changes by more than one level. When you change from one dynamic to the next lowest (only one dynamic level) you will use a mix of a legato and a staccato stroke, however, it is still considered a staccato stroke. The rear fingers still tighten (which is why it is considered staccato) but they do not tighten as much as they would for a greater change. Much of this dynamic change is created in the wrist turn. The best way to perfect this hybrid stroke is to play a measure of sixteenth notes at mezzo forte (nine inches). Add a twelve inch accent to the downbeats and see if you can use both a wrist turn to create the accent and the fingers to slightly catch its rebound. If it is difficult at first try skipping ahead to the exercises in this chapter and come back and try it again later.

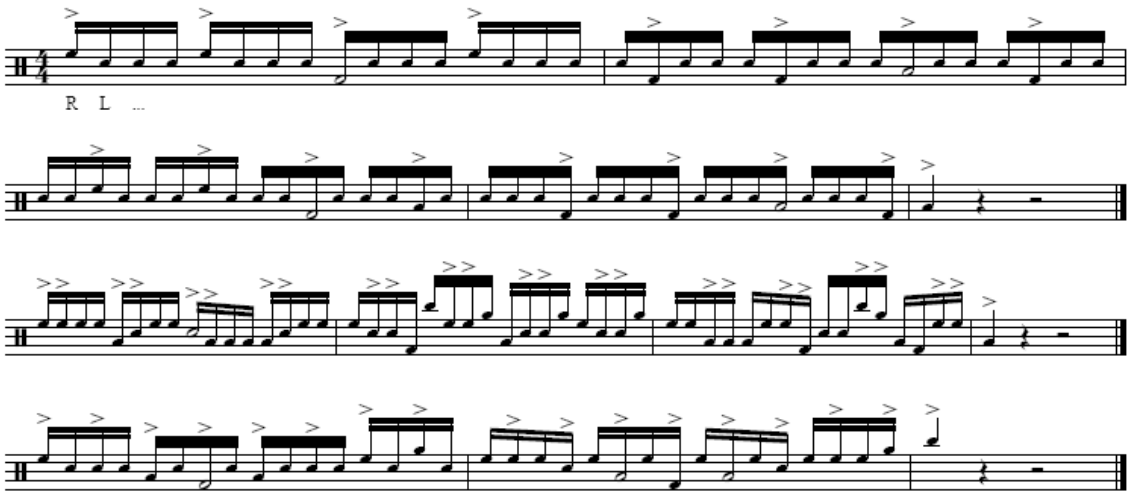
These next exercises will help you focus on locking in at least two stick heights at a time (two distinct dynamics) as well as concentrate on the staccato strokes.



The staccato strokes are on all of the last accents in the group of accented notes. All the other strokes are legato strokes. Make sure your heights are precise (only two heights) and the staccato strokes are played accurately without it effecting volume (other than it being louder) or quality. Try this hand to hand accent/staccato stroke exercise next.



Here is another version of a hand to hand accent/staccato stroke exercise. When playing two accents in a row remember that they are now both staccato strokes because both hands have to play at a lower volume on each of their next notes.



Try these exercises at all tempos and really work the muscles involved in catch the stick and placing it on the next note. *End of Sample Edition Excerpt.*

Chapter Nine: Combines Stickings

In this chapter…

Welcome to Paris, not the city but the world of double strokes within sixteenth note phrases. Sound simple? Well there is a reason it is a world and not a tent. Paradiddles are perhaps the most popular rudiment as well as the most versatile attaching themselves to the way things are felt as well as filling in space like caulk. You will be amazed at how many different ways these seemingly simple rudiments can be used, but also at how much easier and musical they make everything.

Now that you can probably play pretty musically with dynamics we are going to add a bit of ease to navigate the drums and notes. This has been stated before but it is important to remember: percussive music is made up of the combination of rudiments. Perhaps the most popular rudiment is the paradiddle. Since it is the most common it should be the one you look for most often. When you sight read any bit of music you should always be glancing down at the sticking. You sight read much more easily if you find paradiddle rudiments scattered throughout the piece of literature. Then all you have to do is look for other rudiments and find out how to bounce from one to the other.

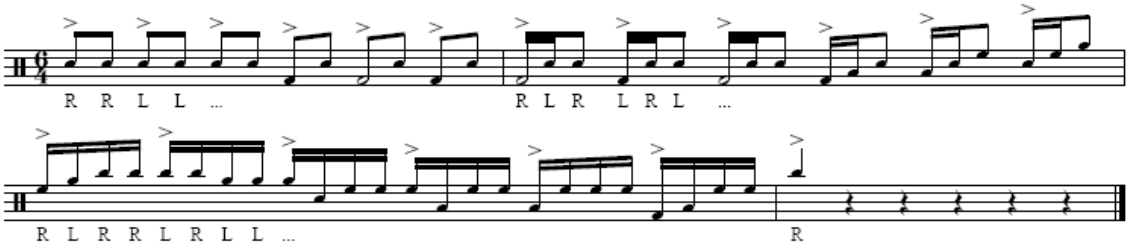
Not only is the paradiddle rudiment the most popular one it is also the most versatile rudiment, *especially* on the tenor drums. Not only are there paradiddles but there are also paradiddle-diddles, double-paradiddles and even para-paradiddles (not to mention inverting every version of them). You can conceivably add as many “paras” and “diddles” to the words as you like and it would be possible to play.

The paradiddle is a great rudiment to isolate in its own chapter and here is why. Not only does finding this rudiment in music add checkpoints to phrases even the interior of a paradiddle has checkpoints. As we dissect the paradiddle we find two things: two or more alternating single strokes and two or more double strokes. If you think about them like this you can glide through these with no problem. The single strokes are your checkpoints and the diddles just simply carry you through until the next single strokes. Usually the single strokes are even accented for you to easily find them and utilize them as a checkpoint.

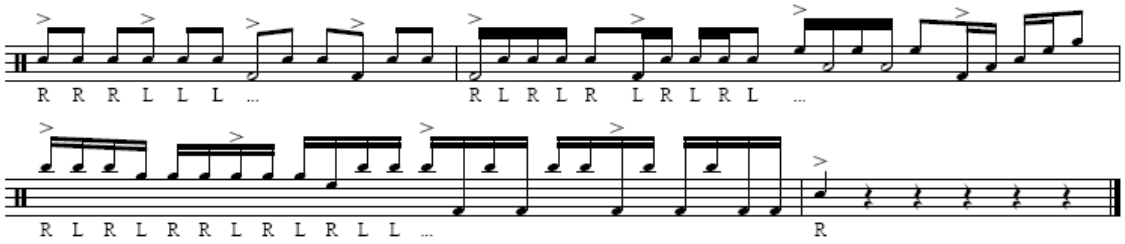
To learn any paradiddle phrasing you can do it two ways. The first way involves adding one note at a time like you would go about learning a musical phrase measure by measure. Or you can use this second way which involves starting with a skeleton and adding diddles to it. The better option is the second way (though both are perfectly fine if you prefer one or it works better for you) because starting with a skeleton gives you the most benefit and allows you to keep that in your head as you build onto it. The first exercise does just that.

To play these successfully you need to think about the measure previous to the one you are playing. So when you play measure three of any of these examples you should be thinking about measure two.

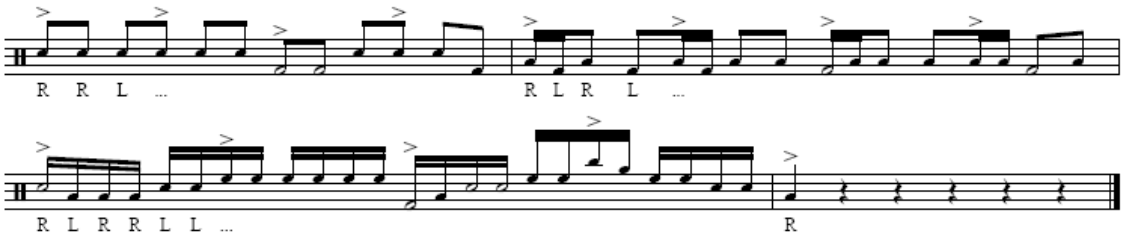
Paradiddles:



Double-Paradiddles:

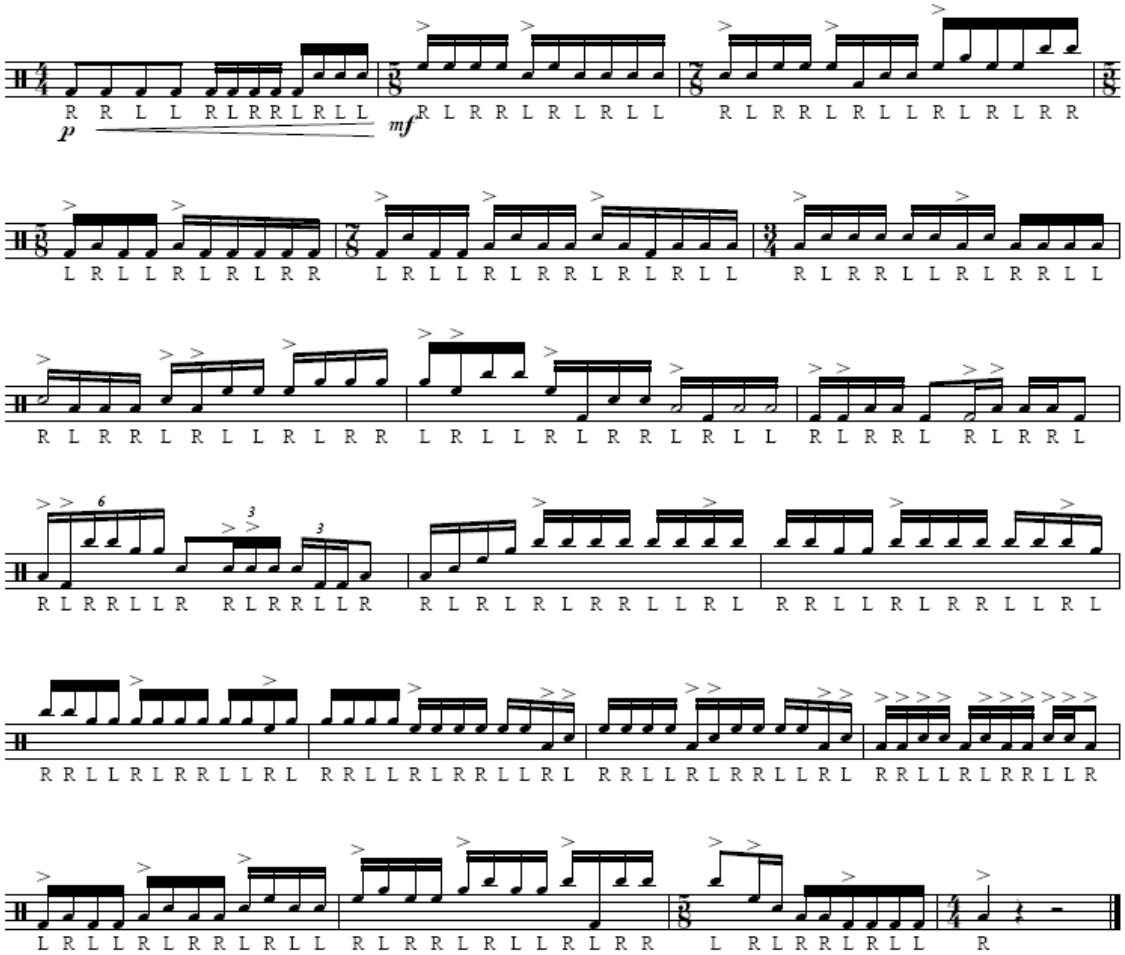


Paradiddle-Diddles



This exercise combines many paradiddle variations into one piece. Remember to sight read it by looking through the stickings and using as many checkpoints as you can find.

Paramedic



Keep in mind that when you have completed any exercise you can always add rudiments to them to allow them to build more than one thing at a time. For example this exercise can also build diddles on the accented notes. Remember that as you continue through any exercise book. *End of Sample Edition Excerpt.*

Chapter Ten: Multiple Strokes & Rolls

In this chapter…

Find out how important playing two or three of the same hand in a row can be and you will also see, with time, how easy it is to play fast using double and triple strokes. However, since the object of drumming is not speed but quality of sound you should take your time and learn these ideas slowly to ensure that the value of your understanding matches the quality of the sound you can produce with multiple strokes by the end of this chapter.

Tenor drummers, as well as percussionists in general, would be nowhere without double and triple strokes. Musicality and speed were both greatly effected through the use of double and triple strokes. The musician is able to feel the music more easily and interpret how the writer wants a composition to be felt. Speed was also achieved more easily by implementing double strokes. A good drummer can be fast with using only single strokes, but it takes great endurance and can be accomplished much more easily when using double strokes. At the time of writing this the world record for most single strokes in one minute is 1,203 (by Mike Mangini), this amount of strokes can be achieved by a novice drummer easily in a minute by implementing double strokes, these really are a great tool.

Triple strokes are sort of a big brother to double strokes in that they are harder to learn but can help the musician out in the long run when choosing them over single strokes. Triple strokes also help feeling parts that double strokes still could not.

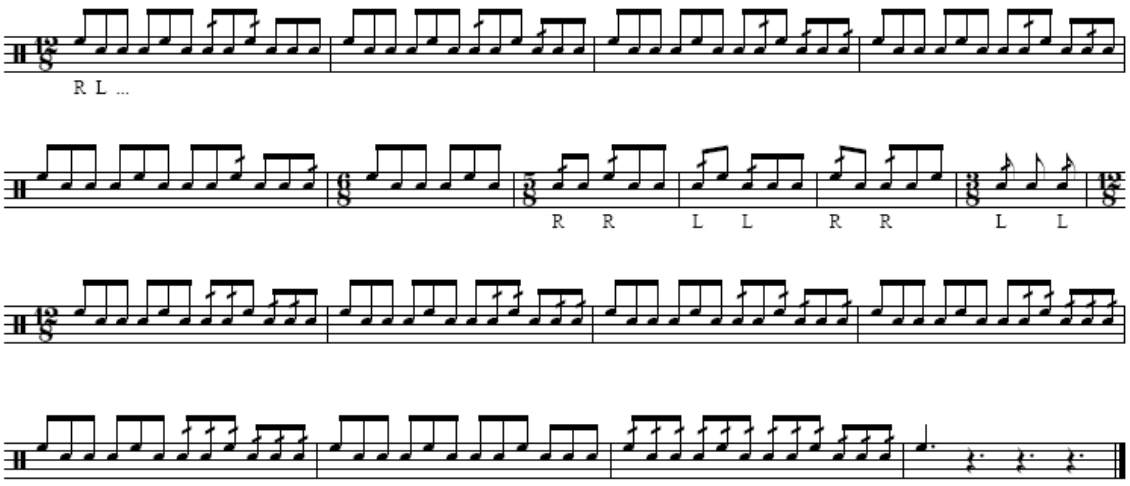
When playing the next exercises be sure to take note of the following things. When you are playing at a slow tempo you should always initiate the double or triple stroke from the wrist (for extreme slow tempos arms might be implemented). The quicker tempos begin to utilize fingers in creating the double or triple strokes and make sure you stay relaxed. The high speed might cause tension and so you need to be extra aware and compel yourself to stay relaxed. Lastly, and probably most importantly, listen to the sound of the secondary and tertiary notes. The volume should be the same as the primary stroke and they should have the same quality of sound as the primary stroke. Below are some short samples of notating double strokes and a small exercise for you to play through.

One thing to make sure you understand is the diddle notation. Many drummers think that any slashed note means to play a fast diddle. This is not the case and different not values create different diddles. A quarter note for example would create two eighth notes on the same hand. A half note diddle would create two quarter notes on the same hand. A sixteenth note diddle creates two thirty-

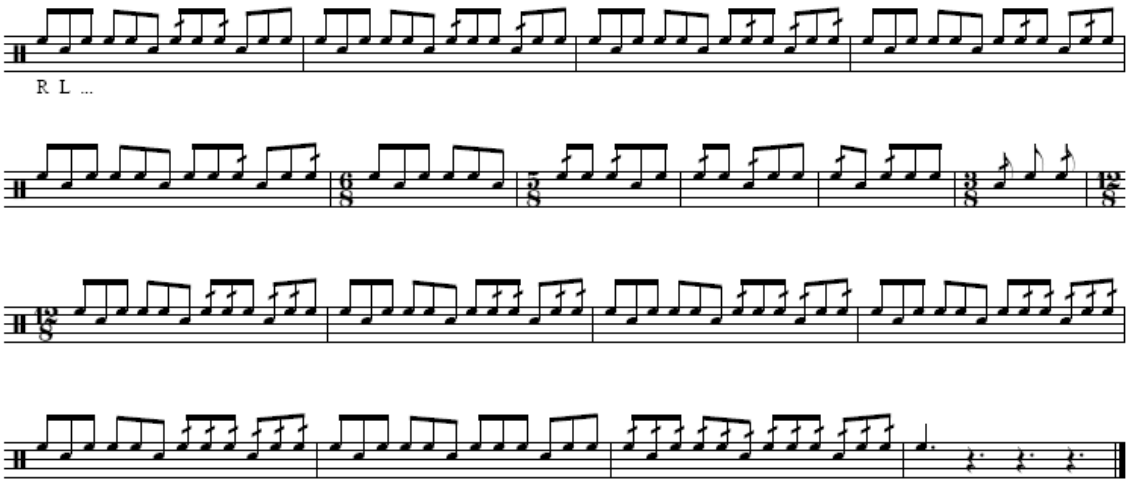
second notes on the same hand. So it follows that if an eight note is slashed and it is followed by a rest you would play two sixteenth notes on the same hand and then the rest. Do not try to fill the rest's space with any part of the diddle, this is a common mistake.

Here is a simple exercise (which you have seen previously in the accent form) that you can add diddles to quite easily. Start, as usual, on one drum and then look at the around patterns. All five of these patterns are the same warmup with a slight modification in drums. In the first one the right hand hits the 10" drum and the 12" drum alternating every time. The second pattern uses the left hand alternating from the 12" drum to the 10" drum. The third is the right hand on the 12" and 13" and the fourth one is the left hand on the 12" and 14" drums. The fifth variation is a little different but it is still a notable pattern. The around pattern repeats drums every 10 eighth notes. If you look at it carefully you'll see that you are playing a 5/8 around pattern over a 12/8 exercise. This is playable and the object of all these examples is to get you to subconsciously think of the pattern (with muscle memory) and actively think about the note values. Begin all these examples by just playing the pattern with no diddles. Then slowly add diddles onto the pattern by taking short sections of the whole. Learn them slowly.

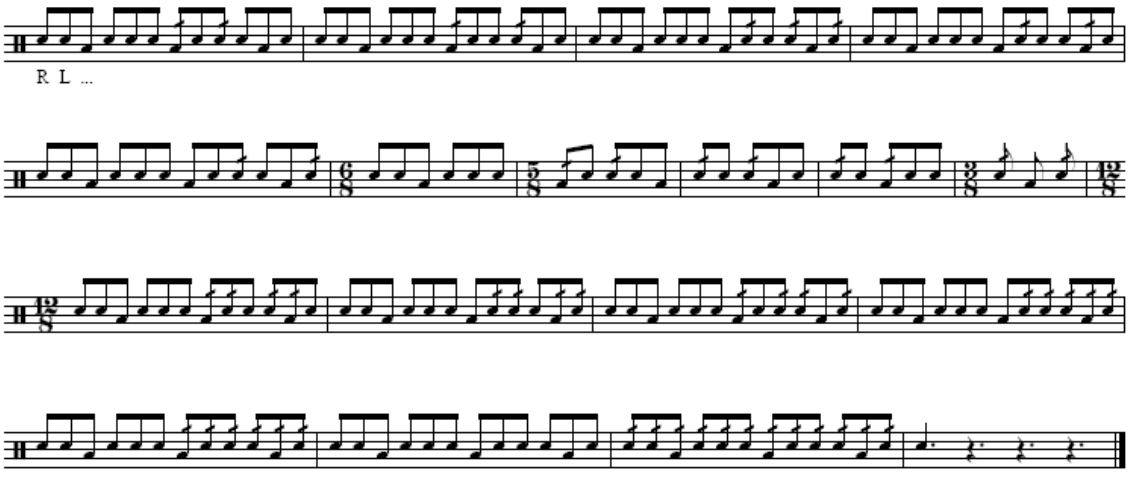
Pattern #1:



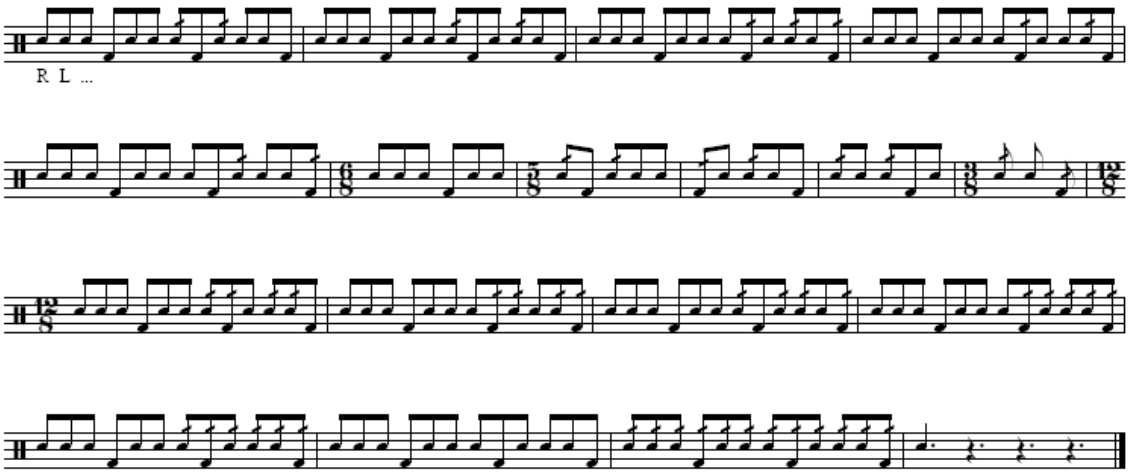
Pattern #2:



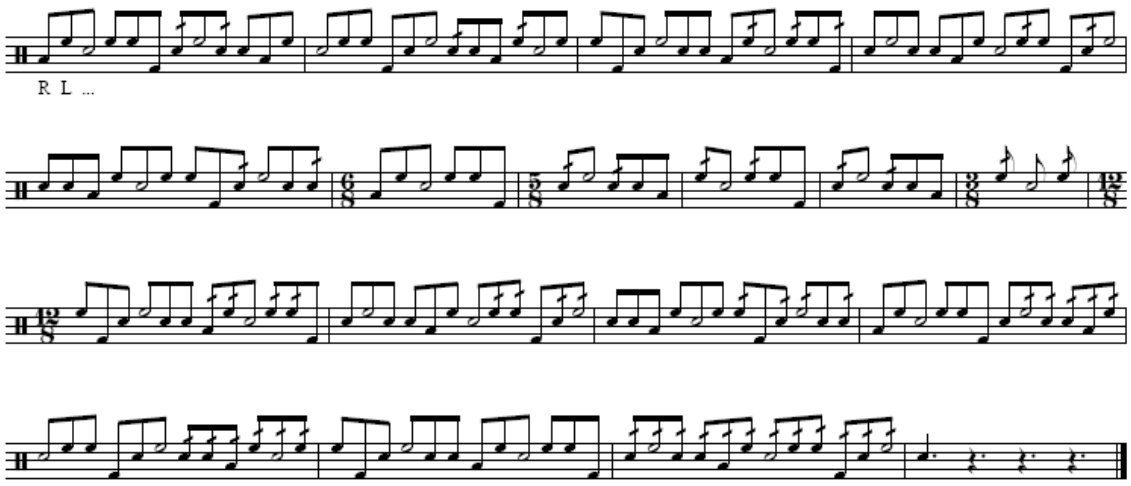
Pattern #3:



Pattern #4:



Pattern #5:



As you probably discovered, you can't learn these note by note. You have to learn the exercise on one drum then learn the pattern separately and finally you have to put them together at the same time. This is just another example of different learning environments and options. It isn't impossible to learn these one note at a time but it certainly isn't worth the time. These examples help us understand, and even seek out, easier ways of learning music. You should always be aware of your options when learning and should make sure you adopt the easiest and most efficient way to learn. *End of Sample Edition Excerpt.*

This concludes the Quadratics Sample.

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