

*Drumming For Life*TM

By Mike James



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A life-altering experience

I began playing drums in 1964, at the age of 10. My father was a drummer, and my mother was a keyboardist/vocalist, so I grew up in the music business. When I was 12, my parents were on the road full time, and so, out of necessity, they sent me to a private, military school. This is when I started playing in the usual assortment of school bands, including marching bands, the orchestra, and the jazz "stage band". My intentions at that time were to go into aviation, probably as an Air Force pilot. Music was important, but not my life. The band director was a "cool" jazz trumpet player, and we became friends. In 1967, he took me to hear Buddy Rich. I had only heard Buddy on TV a couple of times, and really didn't know his history or how great he truly was. This night changed my life.

We arrived at the concert in Langley, Virginia early. The program was a performance by the Langley High School Jazz Band, followed by a short intermission, and then Buddy and his band. We were in the front row. During the intermission, I went into the hall, looking for the restroom, not realizing that it was actually the backstage area. The curtains had been closed, for Buddy's band to get ready, and when I glanced onto the stage, Buddy was sitting at the drums.

He would lightly tap out four or five notes on a drum or cymbal, listen, and then maybe adjust it. I felt as though I had been struck by lightning. Just hearing and seeing Buddy play a few simple quiet notes, I instantly knew that this man was a giant. It wasn't what he played, but how he played it. I remember that sound and feeling today, like it happened five minutes ago.

After being announced as "The World's Greatest Drummer", Buddy and his band played a spectacular performance that had all of us literally hysterical and screaming by the last standing ovation. Until that night, I

didn't even know that music like that was possible, and it truly changed my life forever. My standards and expectations became so highly elevated that nothing would ever seem the same to me again. That's "the good news"...

Almost involuntarily, I jumped out of my seat as the curtains were closing, ran through the same stage door I had entered before, and intercepted Buddy as he exited the stage. I was a 13 year old little boy, standing there in my military school blazer, shaking uncontrollably, gasping something like "Gee, Mr. Rich, you were really GREAT !", and holding out my hand to shake his. He stopped, smiled, and shook hands, and as he did, said "You've got a pretty strong grip there." I thought "Cool !" Dad always said "Give a man a firm handshake."

Just as my band director and a crowd of fans joined us, Buddy jerked his hand away, stepped back and said "How'd you like to get knocked on your ass?!" ... I remember getting physically dizzy. At that time, I had no idea what I had done, and just stood there frozen, with about 30 fans staring at me like "What have you done ?!" My ears rang and my head was spinning. I still don't know what I did. My only guess has been that, in my nervousness, I may have reacted to Buddy's "firm handshake" comment by squeezing his hand harder, and he reacted as though I meant something aggressive by it.

After being interrogated by my band director, and still not knowing what I had done, I got at the very end of the line of fans waiting for autographs, and decided to apologize. When I finally got to him, I said "Mr. Rich, I don't know what I did wrong, but I'm REALLY sorry." He said, in a surprisingly friendly way, "Got a ticket ?". I gave it to him and he autographed it, smiled, and said..."That's ok kid. Just remember... Don't be a smart ass. There's always somebody smarter." Then he left.

Odd psychology... This was obviously a negative and scary experience for me, but it made me think. In one 2-hour period, I learned about a great "new" way of drumming, heard some incredible music live, was awestruck by a star, verbally punished by the same man, and learned something about respect. You never walk away from a Buddy Rich concert bored!

I appreciate, study, and follow the accomplishments of many great drummers. This presentation is, however, largely based on my observations of Buddy Rich. I make no claims as to being any kind of Buddy Rich "expert", or to having any particular insight into his approach. I'm just one of his many fans, and a lifelong drummer who would like to share what I've learned. I don't profess to know any deep "secrets", and this is **definitely not** a book on "How to play like Buddy Rich.") I simply enjoy sharing information. After all, if you're protecting "secrets", in order to be more successful, you're on the verge of failure anyway. Since this book is free, and I have no publishers or editors to please, there are no restrictions on it.

My Background

I always wanted to be a drummer, but when I became interested in writing, I found it useful to also study piano, saxophone, and trombone, while in high school. In addition to all the school, orchestra, and big band projects, I spent 22 years on the road, full-time, as a working musician. Much of that was a combination of the pop music of each era, and the usual assortment of shows. I was an arranger for the Air Force for a short time, where I got some additional training in the form of college arranging and composition courses, while studying with another Air Force arranger. Although not a keyboardist by trade, I understand music, and play enough to be an arranger, write scores and parts, etc. I also use "Finale" on my computer.

Aside from the usual nightclub work, I spent 5 years, devoted to casinos in Atlantic City and Las Vegas, and worked (mostly on cruise ships) playing with "Motown" acts, including Chuck Berry, Little Anthony, Dee Clark, Coasters, Drifters, Ace Cannon, Diamonds, Ink Spots, Platters, Barbara McNair, and many others. I've been lucky enough to see all of the USA, and have traveled to Canada, Europe, Mexico, the Caribbean, and Saudi Arabia.

Due to the influence of Buddy Rich, Count Basie, Duke Ellington, Maynard Ferguson, and countless other artists, big bands have always been a big part of my thinking. I like the extremes in texture and dynamics that you can only get with those instruments. I enjoy "gadgets" such as digital keyboards, and use them myself, for writing...But there is no keyboard on the planet that sounds like 15 individuals blowing real air through real horns! And, regardless of how many people you have in a big band, you always have the choice to play with just a trio, or a single instrument, so nothing is lost. When it's done right, there's nothing more exciting to me than a big band. Specifically, I like to write for 4 trumpets, 3 trombones, (including 1 bass trombone) 5 saxes, (2 altos, 2 tenors, and

bari) and a rhythm section consisting of piano, bass, and drums.

In about 1995, I got off the road and settled in Anchorage, Alaska. That may sound surprising for a jazz-oriented person, but I can assure you that there are world-class jazz players here, and I'm quite happy. You'll find freely-downloadable samples of some of my projects, including both trios and big bands, on my page at www.nextcraft.com/dfl_projects.html . I publish them honestly, including the errors. They're all live recordings. (www.nextcraft.com)

Enjoy the presentation, have a great time creating music, your own way!

Dedication

This presentation is for those of you who simply refuse to give up. Everybody occasionally gets discouraged, and/or feels that their playing is not "good enough". Patience and repetition are the key to recovery, and both of these come after you've decided to be dedicated. If you truly endeavor to perfect anything, you have to realize that it's going to take a lifetime, and that you'll never be "done". You may not become the best, but you'll surely become your best.

Here's the secret of success:

1. Decide what you want to do.
2. Start.
3. Don't stop.

You'll see the phrase "repetition" used a lot in this book, but it's not meant in the usual way. There are *moments* from time to time when it's appropriate to play a pattern over and over, for the purpose of refining it. We all do it. But I think that pattern-oriented practice leads to pattern-oriented playing. This too can work at times, but in this book, I'm more concerned with sharing ideas about *moment-by-moment* thinking and reacting. So here, "repetition" means "play more", and not "play the same thing over and over". Have you ever felt "fresher", and more creative about your playing, after actually taking time off, without practice? What does that tell you?

One of the most inspiring and poignant quotes attributed to Buddy Rich is "You'll never get it right, if you live to be a hundred years old." Buddy made this statement at a time when he had been an incredible "star" drummer for over 60 years ! He was deadly serious about wanting to get it right, and it's the reason I will always respect him. Never stop developing !

Treat music with dignity and sincerity. Play what you play because you feel that it's really contributing something to the music. Then, no matter what the results are, you can take pride in having given it your best effort, and the audience will recognize it too. If you exhibit integrity, the audience will listen in a more abstract way, and not be too critical of minor details. They'll trust you. On the other hand, if they believe that you "don't care", or that you're "cocky", you'll find them listening critically, and it makes your job a lot harder. Listen hard, and figure out how to be better every time you play. This is "PLAYING", as opposed to "playing".

Maturity is an evolving, relative condition that teaches us that "The more we learn, the more we realize how much more there is to learn." This allows us to perceive and hopefully create *depth* in an experience. Applied to music, depth is the quality that keeps you coming back to a recording over and over, hearing something "new" each time. As a rule, you're not going to create depth in live music by "thinking it out". Real artistic depth, (excluding what the tune's written parts contain) comes from the lifelong repetition of absorbing your experiences, to such a high level that what you do becomes purely emotional and instinctive. Repetition is what transforms your abilities from cerebral (things you have to think about) to temporal. (things that have become "natural") If you've played and thought enough, your body will know what to do.

There are no secrets. Ask a martial arts instructor "How do I break a brick ?", and you're likely to hear an old Japanese saying, "To begin to learn how to do a thing, do it one thousand times." This simple truth will never change. When you can't physically play the drums, spend time thinking about it. Visualization is a proven technique. Play patterns if you need to, but playing, as a reaction to *music* is something that will help you more.

If you're paying attention, you'll probably find that you constantly aspire to a standard that is higher than what you are currently playing. Keep this as positive motivation to get better. Concentrate on "I'm getting better", rather than "I can't play".

I'm not an expert in "free form" music, and my approach has always been to try and play everything in time. In other words, I never intentionally play anything "random", and always try to construct what I'm doing in a musical way. Why should everyone else in a band play 24 bar solos, for example, and then let the drummer just "take it", into some totally different feel ? Solos of this type always seem weak to me, because it's as if the drummer "gives up" any hope of concentrating, and just flails away, making noise.

That's a fundamental concept of this book. Always think in terms of musical ideas, not "noise". Your fellow musicians, your audience, and your employer will all appreciate it.

Certain mechanical techniques for playing the drums are simply true, without a doubt. The proof of this is that consciously or not, many of the world's greatest drummers continue to use them. By all means, be creative but don't waste time reinventing the wheel. *How* you play is one thing, but *what* you play is quite a bit more important.

Some of my drum teachers were great players, and that was often enough to keep my interest. But some of them were at times, a little vague in explaining how things work. This isn't an uncommon trait among "natural" players, and certainly doesn't diminish their skill. For some, such as Buddy Rich, his technique came instinctively, naturally, and he often said that he didn't know how to (and/or didn't want to) verbalize what he was doing.

On the other hand, those with a more traditional schooled background are often accused of being stiff. Maybe they understand and can verbalize a way of doing something, but their execution of it is sterile, and perhaps too technical. Well, we're all different, which is the really beautiful thing about life.

This much is certain...

You need to develop enough technique to express your ideas. Since your ideas will mature with experience, it makes sense to keep developing your technique, so you can play what you feel, as a mature musician. It's not about "chops", although they are the icing on the cake. Nobody gets hired to play drum solos! What will make you a great drummer is your ability to contribute something to the music that makes everybody feel good.

Technique is your toolbox, and *development* is what you do with it. Once while discussing this difference, Buddy Rich said that development is "where all the hatchin' starts". More than once, when someone in his audience yelled "Keep doing it, Buddy !", he yelled back "I'm gonna keep doin' it 'till I get it right !". ...And he meant that ! Possibly the best goal you can have is simply to try and play better the next time.

Sometimes we look at someone with a particular skill, and are overwhelmed. You might think, "I could never do that". Don't! While it's true that not all of us will end up being "super geniuses", it's also true that all of us can improve ourselves, and get better.

From an old Clement Stone article in "Success" magazine:

"The emotions are not always subject to reason...but they are always subject to action. When thoughts do not neutralize an undesirable emotion, action will!"

So, pick up some sticks and try, before you give up. And keep trying it... a lot ! Repetition is a vital step in fully learning any skill.

A final thought before we begin. The only reason to use any technique, any piece of equipment, or any particular setup should be to make the *sound* you want to hear. It doesn't matter greatly how much gear you have, what color it is, or how flashy your setup looks. Think always about producing sounds, not producing images. If you're really PLAYING, the images you leave will be wonderful, because of the sounds you create. Yes, a visual "gag" is an effective device to draw the audience's attention, but these should only be used momentarily, and for that purpose. How do your "showy" techniques *sound* ?

Mike James

Reading Music

Learn how to read music! If you think it might be too difficult, stop and think about the school band director who can take a bunch of beginners and teach them the basic skills in just a few short weeks. You can definitely learn how to read !

Reading won't necessarily make you a better player, but it enables you to try music that you don't know... even music you've never heard before. This is good for you, and it's also good for your fellow musicians, because it gives you a common standardized language.

You'll find that when you read, you probably don't react to the music as instinctively as you like. Does this mean that "reading has affected your playing"? On the contrary, it's perfectly normal.

Think about *why* you're reading. It's because you're playing music that you don't already know! Once you know it, you'll react to it perfectly normally, as you would with a known tune. The old wives tale about "reading ruining your playing" is a world-famous pet peeve among educators, and simply not true.

You may find other advantages...

- You'll learn what the standard forms in music look like on paper, and this is another way of visualizing what you do. As you evolve from staring at every note to simply recognizing whole patterns, you become better able to interpret what you see.
- You'll find that there are many different ways to write music that sounds the same.
- You'll learn what other musicians (especially arrangers) expect from you, by seeing the written parts
- You gain the ability to write music, or at least the power to take notes.
- A new world of "how to" becomes available to you, through studying written music.

There are interesting differences in how drummers must react to written music. Reading is, in a manner of speaking, "following", in that you're "following" the written music. You may also be "following" a conductor. But always remember that your primary role in most music is to *lead* the rhythm. That doesn't mean you have to be loud or oppressive in any way. It simply means that you've got to take responsibility for the biggest part of the cohesiveness of the band. It's got to *sound* like you're leading it, even if you're "following" a conductor.

Every standard keyboard on the planet has the keys in the same order. Not so for drummers...

Think for a moment about a written part labeled "Snare Drum". The vast majority of the time, the writer has no idea what drum will be used, but had a certain sound in mind. Your snare drum may be small or large, brass or wood, tight or loose, resonant or muffled, in a live or dead room, etc.. You might use sticks that are wood or synthetic, big or small, soft or hard, etc.. Your playing style will affect the sound, too. And yet, we are expected to convey what the writer meant, in a reasonably consistent manner. Multiply all these variables by the number of items in your drum set, add the same number of variations produced by the other musicians, and you realize that drummers, more than other musicians, must interpret everything and react to the music, moment by moment.

So, some judgement on your part is called for, to make it "right".

Energy Conservation

If you're new to the drums, or haven't done much experimenting, there are a few facts that you should know about how much effort it takes to create a given sound. There are things you might have to do in a recording studio or elsewhere, (having to do with microphones) that are exceptions to what follows. Otherwise, if you take away microphones and electronic effects, this is what you are left with:

DRUMS produce the most sound (volume and resonance) when they are two-headed, use light to medium-weight

heads, and are free to vibrate. When you change any of these variables, you increase the amount of energy it takes to make a sound. Using thick heads, muffling the drums in any way, or even your own muscular tension will make your job harder. Later, I'll show you how to use technique to control the sound, moment by moment, giving your instrument more *range*.

CYMBALS basically fall into three general categories, which would be to use them as ride surfaces, crash surfaces, or as both. All cymbals have the same general qualities. That is, at any given size, these facts are true:

The meaning of "thin", "medium", or "thick" is rather subjective, and you just have to learn this by being around a bunch of cymbals. One you've played a while, it's a non-issue. So...

A thin cymbal produces more frequencies, responds faster, and decays faster than a thick one. So, you'll generally want crash cymbals on the thin side, ride cymbals a little thicker, and hi-hat cymbals are a combination of both qualities. Usually, the bottom hi-hat cymbal is thicker than the top cymbal, giving you a wide variety of sound possibilities. Cymbals that will be used as both ride and crash surfaces will usually be of medium or medium-thin thickness.

When you play a drum or cymbal in a music store, realize that it'll probably never sound that way again. Think about how it will sound with a band. The sound you may perceive as "noise" in the store may be frequencies that will help you blend with a band sound. Remember that you'll be playing with instruments that will (hopefully) produce every pitch and tone you can imagine. You don't want a cymbal or drum that has such a definite or obtrusive pitch or tone that it will interfere with the music. A nice thing about thin to medium cymbals (and drum heads) is that they are more easily controlled with a drum stick. Since they have less mass, you can easily muffle them and change their pitch as you play, by selectively applying a little pressure to them. More on this later.

The Perfect Tone

The perfect tone is the one that you're trying to create, at any particular moment.

If your instrument doesn't sound good to you, it becomes difficult to feel good about playing. You must decide what you want your instrument to sound like. Some will like it, some will not. I don't like to muffle the drums, and I'll describe why shortly, but here's the thing that makes so many people muffle their drums... It's "safe", commercially-speaking, because it's common.

Here's what I mean. If people like your unmuffled sound, they will call it "resonant". If they don't, they'll call it "ringy". Rather than risk a confrontation with a sound man or another musician, many drummers will muffle the drums to a point where they are only serving as "triggers", and the sound man is virtually (artificially) creating whatever the audience hears. That's one approach, but I suggest another... Get a great acoustic sound first, and reduce the soundman's job to simply amplifying what you play. This takes a little more effort, but is something that is, in my opinion, a fundamental of drumming. It's a much better approach than trusting others to create your sound.

See the "References" section for some "tuning" ideas which will help you get started, if you're new to the drums, or want to do some experimentation.

You can, moment by moment, control the sound of your drums by using your wrists. However, you've got to start with an open and resonant sound. It's relatively easy to muffle a drum as you play it, to decrease the resonance. It's impossible, however to *increase* the resonance of a drum that's already physically muffled by thick heads, tape, or other means.

Also, resonance is power! If you're playing muffled drums, you're definitely using more effort than you will when playing on unmuffled drums. Yes, it takes more control to play unmuffled drums at a low volume, but the goal of this project is to help you achieve that control.

Any accomplished drummer will show you that it's possible to play most techniques on a surface that is moderately-loose. This is important to know, for two reasons:

1. Drums heads (snare drum heads in particular) DON'T have to be tight, either for response, or to enable you to

execute precise techniques. The control must come from your wrists.

2. Drum heads (bass drum and tom heads in particular) DON'T have to be extremely loose, in order for you to get a deep, powerful tone.

What then ? For most playing, you'll find that a medium tension head works best.

3. A medium tension head can resonate, but is not so loose as to be "papery" in sound.

4. It gives the right amount of physical resistance without being "hard".

5. Finally, it won't become "used up" as quickly as either a tight or loose head. Loose heads tend to dent, and tight ones tend to break.

Although "best" is a subjective word, most pros agree that drums sound best when tensioned in their midrange. Don't waste too much of your career trying to prove them wrong. It's wasted effort.

Realize that your sticks also have an effect on your sound. Let's talk a little about that before going deeper.

The Perfect Drumsticks

The perfect drumsticks are the ones that help you create the sound you want to hear.

The size and shape of your sticks has to be determined by the size of your hands, and by the sound you want to produce. For any given size though, here are some guidelines you can depend on:

The more dense a stick is, (the harder the wood) the higher pitch it will produce. Also, since it's more rigid, it will transmit more shock to your hands. Very soft sticks, on the other hand, can actually take energy away from you, by absorbing it. So my preference, and suggestion would be that you use a medium size, medium density stick, for most playing. Most manufacturer's "5A" model is the type I'm speaking of. Further details must be decided by your experience.

It's important that when you buy a pair of sticks, that you really get a pair. Do this by listening to the pitch of the sticks. Take each stick, and with a very loose grip, tap it on a rubber practice pad. You'll hear the stick "ping". I don't think it's important that every pair of sticks you buy should be the same pitch, but I do think it's helpful that both sticks in a pair have the same pitch. Otherwise your audience may hear something "uneven" in your playing, that's just a result of a mismatched pair of sticks. (Especially true if you're playing into a microphone one inch from the drum head !) One of the technical goals of this presentation is to enable you to achieve this "ping" at will. It'll double your power!

I prefer and recommend higher-pitched sticks, because, when used properly, they can increase the range of your instrument. When you play a rimshot, rim click, or a stick shot, (the sound you get when you lay one stick on the drum and strike it with the other stick) the pitch is quite high compared to the actual pitch of the drum. It's like adding another drum to your kit, and gives you more contrast.

Don't overlook brushes, mallets, and any other tool that enables you to get the sound you want. Each of these tools will require it's own techniques to sound right, so spend time with them all.

The Perfect Drum Sound

The perfect drum sound is the one that makes you feel good.

If you're not happy with your sound forget about it. (not counting the occasional times when acoustics in a particular room are just "bad". In those case, you just have to deal with it.)

I prefer to use the term "tensioning", rather than "tuning", here because, although pitch can be used as a reference, you usually won't be "tuning" drums to specific pitches, the way you would with another instrument,

such as a guitar. What you need is a variety of low to high tones that enable you to blend with a band and compliment the sound. The last thing you want to do is spend all your time sitting at the drums with a drum key, worrying over every little detail.

I don't muffle any of the drums, except for a narrow (about 3 inches wide) felt strip behind each head of my bass drum, off-center, crossing at about the "1/3rd" point on the drum. It's my opinion that you should first learn to control the drums with your hands and feet, before doing any muffling. It's a fact that unmuffled drums have more range and tonal possibilities than muffled ones, and that says it all for me. As your experience and needs change, you may find that you want or need to muffle your drums, but learn to control the sound first.

Pitch is used here as a reference in these tensioning examples. It's only used because it's a more specific reference than "medium" or "tight", to a new drummer. The exact pitches do not matter. If you don't have access to a musical instrument, go to a music store and get a "Chromatic Pitch Pipe", for just a few dollars. It'll fit in your pocket, (or snare case) doesn't require electricity, and will last forever.

Describing a drum sound is subjective...If you like it, it's "good", and if you don't, it's "bad". Be aware of how your drums and cymbals project, and if applicable, how they sound through the speakers. Most of the time, what you hear will be quite a bit different from what the audience and your fellow musicians hear. We'll begin with general guidelines, then move on to details. (A chart showing several different "tuning" options is in the "References" section.)

One-headed drums generally produce a more definite pitch, and are generally less resonant than two-headed drums. There may be times when you select single heads, but two-headed drums will give you more potential sounds.

Using thin to medium-weight heads will give you the most flexibility, because they are more resonant and responsive. It's true that they're a bit less durable than thick heads, but that's the price you pay for tone and range. You can always muffle a drum if it's really needed, but if you use thick ("dead") heads, you'll be stuck with that one sound. Tension them evenly, (more on that later) and in their midrange. Extremely tight or loose tension limits the range of sounds you can produce. The feel of a drum is usually better in it's midrange, too.

On toms and the bass drum, begin with both heads tensioned the same, as a starting point. On the snare drum, tension the bottom head a little tighter than the top head. (musically, a 4th to a 6th interval) For example, if the top head is tensioned to approximately an "A", then tension the bottom head to approximately an "F#" above that. (If you like a tighter sound, try the top head tensioned to a "C", and the bottom head tensioned to an "F" above that.) Depending on how many drums you have, try tensioning them so they are equal intervals apart. The most popular intervals with 3 to 4 tom setups seem to be minor 3rds, fourths, and fifths. I prefer 5ths.

(If you don't understand these terms, see the "References" section)

Remember, drums that sound too resonant up close will probably be just right when you play with a band, and have to blend with and project through everyone else's sound. Resonance is power.

More on "The Perfect Drum Sound"

I prefer to write short articles, which are easier to read. But since I'm not a world-famous drummer, whose past history is widely-known, a little background is in order for this one, so you know where my opinions come from.

Although I play jazz almost exclusively today, this article is based on my experiences since 1964, as a full-time working drummer who has played mostly night clubs, performing the usual range of pop music in each era, along with traditional "show band" types, where the motif was typically a lot of medlies, covering virtually all styles. In each case, it was important to play these things authentically, so there were many approaches to both the drum sound and the way the drums were played. For clarity, this discussion is mostly about the drums themselves, and not about various amplification methods and special effects. Those things matter, but you cannot depend on "special mixes", "special drums", your "personal engineer", and so on. When I worked in casinos, for example, there were sometimes up to 6 different acts per day, and we had about 15 minutes between acts, to do simple things like adjust cymbal stands, and perhaps use our own cymbals, snare drum, and bass drum pedal. No time to

switch an entire drum set, re-mix, etc..

The evolution of drum sounds in pop culture

There have been many variations on what is expected from the drummer, due to changes in pop culture, and changes in electronics. My father was a drummer, playing everything from jazz to Beatles tunes, on a simple acoustic drum set. As a young man, I was exposed to many great drummers, through recordings, and attending concerts, trade shows, and clinics. These drummers all played relatively-simple acoustic drums, and each had unique sound... something that is often lacking today. There are a huge number of great technical drummers today, but to me, their drum sound is mostly very generic. Business-wise, there is an advantage to that... It's "safe", and is generally "what people expect".

To be competitive, you have to play a variety of styles, in a relaxed enough way that you don't hurt yourself, and often without any amplification. (Hence, my interest in powerful big band and rock drummers.) If you play in symphony orchestras, they often demand very quiet, yet controlled playing. Unmuffled acoustic drums lend themselves well to those differences, but "specialized" equipment often does not.

In the 1970's, playing pop music, we started to mic. the drums, because "disco" became popular, and the sounds were expected to be more synthetic. Physically, I actually had to play harder, because we were muffling the drums to get that flat "disco" sound. In the 80's, there was a time when the drums in pop music were almost entirely electronic, and at one point, I played electronic drums exclusively, (except for the cymbals) It was interesting, from a "geek" point of view, but not satisfying musically. That drove me nuts, and only lasted a few months. To keep the sound acceptable for pop music, I went to a mixture of acoustic drums and electronics, then to acoustic drums with transducers, triggering an electronic "brain", then finally back to acoustic drums exclusively.

In the 80's, we were "simulating" some very hard playing, using electronics. Specifically, we were trying to achieve the sound of big concert acts, but in night clubs that wouldn't tolerate the actual volume of those bands. We weren't actually hitting these electronic pads very hard, because it made no difference. The physical realities of a vibrating stage made the "great dynamic range" of these electronics almost non-existent. (Dancers would trigger the transducers.) It wasn't necessary to play the acoustic drums hard either, since every drum and cymbal had a mic. on it, and usually some reverb. That eventually became boring to everybody, and "gated reverb" became popular, so we were then expected to play hard again, but were forced to sit in plexiglass "aquariums"... sort of an imitation of an studio-type isolation booth. Inside those things, the sound is horrible. Three pieces of plexiglass, usually set up on a piece of wood, creates a really harsh, annoying sound for the drummer sitting inside. Most of the casinos had this kind of setup. Lots of harsh, high-end frequencies bouncing around.

Here's a typical studio experience from my youth: (I hope your experiences are completely different.)

The phrase "fix it in the mix" was popular in those days. In the early 1980's, I was playing with a successful "show"-type band, and the leader wanted to do some recording of his original material... "soft-rock", FM radio-type stuff, at that time. So, the management company hired a producer of some very well-known "star" acts, to produce the album. We wrote and rehearsed the material, and took a week off to do the recording. I should mention a pivotal factor here, which is that "becoming famous" has never been my goal. I just always wanted to achieve a certain level of playing, and I have strong opinions about how the drums should sound. If you're more concerned with being a popular studio player, (which is admirable), then the following story won't be relevant for you. Do what the producer wants, and you'll be successful.

On day one in the Orlando studio, the engineer (who had never heard the band) emphasized that I should use the studio drum set, because it was "tuned to the studio". I went into the heavily-carpeted and isolated drum booth, to discover a small 4-piece drum set, equipped with thick, muffled heads. (completely "flat" sound... no resonance.) I tapped on them a little, didn't like the sound, and pulled out a drum key to adjust them. The engineer just happened to hear the sound through his headphones, when I clicked the drum key onto the first lug of a tom, and asked "What are you doing?". When I said I was going to work on the sound a little, he got extremely agitated, and told me that I shouldn't touch them, because they were "tuned to the studio". I asked "How are they tuned?", to which he responded, "They're tuned to a C sharp chord".

Well... I always carry a chromatic pitch pipe in my stick bag, so I pulled it out, played the notes of a C sharp chord, while tapping on both heads of each drum, and found absolutely nothing similar to a "C sharp chord". When I told

the engineer that, he ceased wanting to talk about it, but assured me that "These drums are tuned to the studio", and that "He knew what he was doing", and that "Regardless of the sound in the booth, the drums always sounded great in the final mix.". Separately from that, the leader became panicky, and asked me to "just go along with the guy", which I did. (I was about 25 years old, and felt obligated to do that.) The producer was apparently more interested in avoiding any "conflicts", than in the sound of these recordings, and so off we went. This restriction didn't affect the other players much, since their instruments were electronic.

During the week-long recording, I was never allowed to touch the drums, and I always thought they sounded like cardboard. What's interesting to me is that we were "bought" on the basis of our live sound, and my drums were completely unmuffled, and used thin, coated (Remo "Diplomat") heads. Still, I was constantly reassured that the final mix would be great. When we finished, and later, when the records were produced, the drums sounded exactly like what I had heard during the recording... It was a terrible, flat, cardboard sound, which no one liked. Live and learn.

I'll spare you the details, but this same kind of experience was repeated several times in my early career.

So, what is best approach?

We're all different, so only you can decide. Personally, I would rather be hired with "my sound" being considered as part of "why", than to be hired for reading ability, applied to what I think is bad-sounding drums. Today, if I can't have a say in the way my drums will sound on a recording, I would rather sit at home, and will happily refer the studio to another drummer, with no bad feelings.

Young drummers go through a lot of trauma about getting the sound they want. When I was in my 20's, I spent many band breaks sitting on stage with a drum key i my hand. As I've grown older, I think that the details of "drum tuning" are less and less important. A "good sound" is hugely important, but it's not based so much on details. Personally, I like clean-sounding acoustic drums, with high and low tones, and that's about it. I don't care about specific "pitches", and in fact, don't want any specific pitch to be heard during the music as a rule, because I think it interferes with the band.

Just be your own person, enjoy music, never stop listening and learning, and contribute to whatever music you play, in the most positive way that you can. If you do that sincerely, everyone will know and appreciate it.

Space, The Final Frontier

Buddy Rich once said, in regard to drum tone, the he wanted to "make the drums sound like the band."

Listen to many of the things he played, and you'll hear this approach exemplified. For example, play the snare drum with the high brass parts, play small toms with trombones, and cymbals to add various textures to all the sounds. This is the extreme simple example, but you get the idea. We're talking about matching similar tones.

You might also play the bass drum with the bass player. In pop music, this is done to the extreme. In most other playing, including jazz, you probably want to back off on the bass drum. Most modern bass players find it annoying, and since the advent of electric bass, it's really not necessary. Buddy liked to feel a strong pulse from the bass, and when it wasn't there, he has been known to play the bass drum rather loudly. But if the bass player is providing the pulse, loud bass drum isn't required. A compromise, which a lot of drummers still apply, is to play bass drum with the bass player, but only tapping it lightly. Remember also that low bass drum frequencies, like those from the bass player, are long waveforms, and take some distance to fully develop. The effect of this is that, acoustically, your bass drum may come across to the other musicians and the audience as being louder than you intended.

Good arrangers are acutely aware of the frequencies that various instruments produce, and will write in such a way that each instrument (or group of instruments) are in their own idiomatic frequency range. A little foresight here creates the difference between "muddy" sounding music and "transparent" music. If several instruments are pounding away on the same frequencies, which is too often the case with amateur musicians, the music can easily become a battle, with each instrument fighting to be heard. The problem isn't volume, it's frequency. In big

band music for example, the arranger will typically "stack" the parts so that bass is on the bottom, followed by trombones, then saxophones, then trumpets. In pop music, the "stack" is generally bass, followed by keyboard and guitar, then vocals, and finally higher parts, such as horns or strings. This is of course a very simple explanation, and not all charts are written like this, but it will get you thinking. Each instrument must have some space, frequency-wise, to be heard.

Another common trait among young (non drummer) players is the tendency to play percussive "chops" or other sounds on 2 and 4, because that's how they feel the beat. You might suggest to them that they leave a space there instead, so that your (usually snare drum and hi-hat) hits are heard more clearly. This would also allow you to produce the groove at a lower volume. If EVERYBODY is playing on 2 and 4, the music can get pretty messy, as if the whole band is playing "flams", and the more important chords and notes on the primary beats can become vague. Everyone has a role to play in creating music that sounds right.

So, be thoughtful and considerate as a drummer. Since the same rules apply, you may realize, for example that you don't have to play a ride cymbal or the hi-hat very loud, to be heard, because most of the time, there's nothing else being played in that frequency range. If you feel that you're fighting to be heard, and are playing in an oppressive way, like "LISTEN TO MY BEAT!", you're not going to sound very musical. Actually, the opposite approach works well at times. If there's a problem, try playing *quieter* and perhaps everyone else will calm down too.

Frequency is not the only issue regarding "space" in music. Sometimes the most powerful thing you can play in a drum fill is NOTHING. The silence is every bit as powerful as a blazing fill. Don't feel that you must fill every space. Give the audience's ears a break, your hands a rest, and put some thought into the music.

Relaxation

Have you ever walked into a dark room, and hit something with your arm, perhaps even breaking it, and then find that you didn't even feel it ? Have you been impressed at the power that can come from the tip of a well controlled whip ? Have you had the common experience as a musician of playing something "hard", only to find that you screwed it up when you realized what you were doing ? These are just some everyday examples of the speed and power you gain through relaxation and flexibility.

Assuming we're all in reasonable shape, the feeling of stiffness or technicality that comes from some drummers is usually the result of too much thought. (translated, not enough repetition) You're better off doing your "thinking" at home, and adopting a more reactive, creative approach on stage. No matter what speed, volume, or complexity you are playing, it can sound relaxed, natural, and funky. You simply have to develop your technique, by repetition, to a level where you do things instinctively. When you can execute most of your ideas from an abstract, rather than a mechanical point of view, these things cease to be hard for you, and will sound better to everybody.

Buy a good seat !

If you don't feel relaxed and balanced on your drum seat, adjust it until you do ! My opinion is that sitting at least high enough that your upper legs are level, or better yet, slanted slightly downward, is the best bet, to keep you feeling balanced, and improve circulation. It's a fact that sitting too low can cause you back trouble later, so whatever your preference, be careful. I prefer rigid seats, that don't swivel, rock, or otherwise move around. It makes me feel more solid. Stick with what makes you feel good.

Be creative, even at the risk of being wrong, but do learn from your mistakes. There's an old saying that "The best recording will not do justice to true genius, but even the worst recording will tell you a lot about what you're doing wrong." So, record all your performances, listen to them, and learn.

The cure for getting discouraged is more repetition.

Take Care of Yourself

To be great, you'll need to be charged up to 110%, and be alert. But this has to be a *relaxed concentration*, not just some "unbridled aggression". Great karate instructors say that you should be able to make a tight fist without

tensing your wrist. Likewise, you should be able to maintain a firm grip on your sticks without tensing up your wrists. To play in a fluid way, loose wrists are absolutely necessary.

If you watch any great drummer play dynamically and with texture, (using a variety of sounds) you'll notice that there's a LOT of body motion. You might even think that some of it looks silly, as though they're making "weird gestures". (Of course, some people are faking this.) But often, this is simply what it looks like when you really PLAY the drums. You're trying to make great *sounds*, not images, right ?

To get the maximum number of sounds out of any instrument requires changes in your playing position. You might play a drum loud or soft, at the edges or the center, loosely or stiffly, etc.. It just can't be done, using a rigid playing position. However you accomplish it, you've got to be relaxed behind your drums. You can't, for example, worry about how your "funny gestures" look. If a movement helps you make the sound you want to make, and you're not hurting yourself, do it!

Spend a few moments by yourself, to get ready to perform. Take a few deep breaths, relax, and "get hot"! Visualize what you're about to do, and warm up mentally and physically before you play! You'll find that this habit eventually lets you "get hot" by just *thinking* about playing. Your body reacts to your thoughts as a "get ready" signal, and will start to "get hot", before you even start to play. Buddy Rich has said "If you ain't sweatin', it ain't happenin'!"

You don't have to be a health food "fanatic", but you do need to be sensible, if you really aspire to excellence. You need to eat reasonable food, exercise, get enough sleep, and take care of yourself, in general. Avoid a lot of alcohol, caffeine, and any other chemicals that will affect your performance. You'll be more relaxed. Believe it. It's a fact.

Take care of your hands! Playing the drums should NEVER hurt ! (except for the little errors we all make when we bang our hands into something) If you're playing correctly, you should be able to play your entire life without developing any repetitive stress injuries or "syndromes".

Be aware that callouses aren't required to play great and powerful drums. You can use one of the "pumice stone" products available for foot and hand care, and, in the shower, remove callouses that you may develop. They are a sign that you're putting too much stress on that part of your hands, and you should learn from that. Observe what you do to cause the callous, and figure out a less damaging way to make the same sound. You'll then be more relaxed.

The Perfect Grip

The perfect grip is the one that helps you create the sound you want to create.



A QuickTime movie of the "wrist up, wrist down" single stroke roll is free to download at http://www.nextcraft.com/dfi_hot_topics.html

Drummers sometimes talk about rudiments, and a rudimental style of playing, based on their traditional experience with that phase of their schooling, which usually happens at the beginning. Rudiments are usually thought of as the 26 or so published "standard" ones that most of us are familiar with. In fact though, a "rudiment" is any bit of technique you repeat, to learn how to do something. In karate, you learn how to stand, (to make use of the energy derived from the floor) before you can "break the brick". That's a rudimentary skill.

One thing that the standard rudiments should teach us is that when you play an accent, (a note that's louder than the notes preceding it) you must raise your wrist somewhat. Therefore, most standard rudiments are organized to provide for a wrist rising stroke, just before the accent. There's something much deeper you can learn from this !
Read on...

A well known book called "Buddy Rich's Modern Interpretation of Snare Drum Rudiments" compiled by Henry Adler, gives another clue. At the beginning of the book, Buddy says "Upon striking the drum, see that the elbow is away from the body, and that the hand is at the same height as that of the elbow." And, "After striking the drum, return the hand immediately to it's original position." He says this about both the right and left hand, although he is playing "traditional" grip. and the book includes photos. You might look at those photos and think "Well that's the old way." After all, this book was first published in 1942. But get access to a video recording of Buddy playing one of those blazingly fast single stroke rolls, and you'll see something that may surprise you. He doesn't just "turn his wrists back and forth" or "move his hands up and down." In fact, you'll see that these rolls are played using two different strokes. Each hand will play one wrist-rising stroke, followed by one wrist-descending stroke. You get two wrist strokes for every one arm movement. The "elbow away from the body" is the body's natural reaction to a wrist-rising stroke !

A drum teacher of mine used to say, "Try and think of pulling the sound out of the drum." It was his way of trying to describe to me the wrist-rising stroke. This is one "secret" we should all know. Of course, we should be able to make all our strokes sound the same, both wrist-rising, and wrist-descending. Loose wrists are a must, and you get them through repetition. You'll find that the tip of the stick is almost always moving in the opposite direction of the wrist. If you miss this, you may end up with the idea that all drumming is wrist-descending strokes. The resulting stiff arm movement and tension leads to a stifled drum sound, an inability to play anything in a fluid way, (especially "fast" things) and a lack of endurance. Flexibility is much more important than strength.

If you're doing it right, the sticks will "ping", like they did when matching them, in the earlier example. When the sticks are pinging, you'll be getting the maximum sound out of the drum or cymbal, because you're not muffling it with your sticks !

You might realize that the opposite is true. That is, if you want to momentarily mute or muffle a drum or cymbal, all it takes is a slightly firmer grip, forcing the sticks to remain in contact with the surface a bit longer. In the extreme, you can dig the sticks into the drum, greatly muffling it and raising the pitch at the same time. With an unmuffled drum, this contrast is extraordinary, and enables you to sound like you have a lot more equipment than you really have. It's your range.

Use a grip that helps you create the sound you want to hear, moment by moment.

Forget about any dispute over whether to use "traditional" versus "matched" grip. They each have their attributes, so learn both, to give yourself the maximum potential. Don't bother with the old "wrists versus fingers" debate either. You'll be using both, if you're really exploring the drums.

Opinions vary about how tightly you should grip the sticks. This is a pointless dispute, that seems to be advocating one perfect way. Some great players have advocated the "Gladstone method", in which you are virtually "throwing" the stick at the drum. gripping it only tightly enough to keep it from flying away. Others recommend "always maintain a firm grip." With all due respect to both schools, I suggest that neither approach is it. Each variation will create a different sound, so try everything you can, while observing what others do, and focus on the



or this.



This same technique, once you get it down, can even be done at faster tempos, with triplets, for example. This is what most people will hear:



The way to do it convincingly is to play this:



Of course, to make these more interesting, you should alternate between different drums, and/or play some of the notes with your feet. This creates more musical, linear sounds. And, as with every drum technique, you should learn to play everything with both hands.

But there's more...

If you've seen the incredible cymbals-only portion of the solo that Buddy Rich played on the live concert videotape from the 1982 Montreal Jazz Festival, you've seen the left hand technique I'm about to refer to. At one point in his solo, Buddy begins playing what amounts to 16th notes, at a tempo of about 120 (or 8th notes at about 240) with his left hand, on the top hi-hat cymbal, while playing an entirely different "melody" with his right hand. Buddy had his own way of doing it, and it sounds GREAT...totally even, and obviously completely controlled. It's a useful technique in drumming, even if you don't execute it with the finesse or speed of Buddy Rich, and I'll explain why. Don't think about "how fast it is". Think about the *sound*.

When you hear and see something played in a drum solo, it has one effect on your ears. But this same technique has an entirely different effect when played as part of a tune, with a band. Buddy often played similar things sort of "in the background" while still providing a strong beat with his other hand and his feet. The softer notes lend a texture to that section of the tune that is subtle, until you really zero in on it. It's similar to the "white noise" you get from a cymbal. When you play a ride cymbal, you're usually playing a "beat". But without the "noise" from the cymbal, it would sound a lot more "clunky" and staccato. So, these little fast notes on the snare drum or whatever can lend a flavor to a section of a tune that is very, well... Buddy Rich-ish. (linear) You're filling up more of the space, but with an unobtrusive sound that makes everybody feel good. (if done right) This is an effect, not a "way of life".

Here's how to do it.

These instructions assume a "traditional" grip, so it's different for the right than the left. If you play only matched grip, then you have only one of these techniques to learn. First, put your right stick down, and think only about your left, for this first section. You need to be able to clearly hear every note you play, to learn to play this cleanly.

Think about playing a medium tempo shuffle rhythm, (constant swing eighth notes) accenting slightly on two and four. Don't play loud rimshots, just make a slight wrist accent. Raise your hand slightly just before the accent, and lower it slightly to make the accent. This is pretty normal. Now, the next part is really important. Play the same

sound, but REVERSE you wrist motions. *Lower* your hand slightly just before the accent, and *raise* it on the accent. Notice anything ? With most of us, the wrist rising accent produces a bigger acoustical sound from a drum. Although we should all be perfect, the fact is that most of us slightly choke the stick on a wrist descending accent. Some of this comes from the natural tendency to rest the stick on the drum head or the rim. Ok, now the second part of this technique...

Holding the stick normally, drop it onto the drum head and let it bounce 3 or 4 times. If you do this for a few minutes. you'll find that although this is a "gravity" technique, you can control this bounce enough to make all 3 or 4 notes sound even. Have you ever thought that if you could "jump in there" fast enough, say after 4 bounces, that you could make a quick wrist turn, causing the stick to bounce another 3 or 4 times, in tempo? YOU CAN! That's precisely the concept. And, combined with learning to do this with either a wrist-rising or wrist-descending stroke, as I just discussed above, you have the method of playing the "one-handed roll".

With these two things in mind, start playing the shuffle rhythm again, and gradually think about removing the "swing" from the notes. In other words, make the notes more and more even, until you're now propelling the stick playing straight eighths or sixteenths. You may find it useful to play this technique away from the center of the head, for a little faster rebound and a little more resonance. It takes time...Be patient.

It's important that you're willing to do this softly. At it's best, this is not a "powerhouse" technique, volume-wise. Used in combination with your other hand and both feet it CAN be, but by itself, it's a soft to medium volume technique, and that's plenty, for the effect it's used for.

What's In a Grip ?

There are a lot of references in this presentation to your grip (s). There are so many wonderful things you can do with just a small grip change, that radically expand your tonal possibilities. These examples are for sticks. Brushes, mallets, and other tools all offer their own possibilities.

- Switch between "traditional" and "matched" grip, to play differently.
- Rotate your wrists while using matched grip, to facilitate different "mallet" techniques
- Play rim clicks, rimshots, stick shots, etc., using the rims and/or your other stick.
- Use one stick as the "controller" to change the pitch or muffle a drum, while striking it with the other stick.
- Apply a little pressure to the head or cymbal, rather than letting the sticks rebound, which results in a muffling effect. If done loudly, it offers a sharper, shorter tone.
- Hold one stick loosely, striking it with the other stick, to initiate controlled bounces.
- Use thousands of different combinations of body, arm, wrist, and finger movement, to create different sounds, and to enable certain techniques to happen.
- Cover the range between the loosest and the tightest grip, to selectively control the tone quality of the sounds you make.
- Cover the range between using your arms and upper body to amplify your power, and reducing your effort to small wrist and finger movements, for the lightest techniques.

You may have different names for some of these techniques, but these are common ones:

- "rim shot" the sound made by striking the drum head at the same time that the thicker part of the stick strikes the rim. It's what you often hear as the main "back beat" in loud songs, but can be done at any volume.

- “rim click” the sound you make by laying the stick on the drum, and striking the rim with the thick part of the stick. (for example, in Latin tunes)
- “stick shot” Hold the tip of your left stick on the head, toward the center of the head, (lightly) and strike it about 1/3 to 1/2 way up the stick, with your right stick. If done right, produces a very high-pitched “snap”

These are tools to help you expand your range.

Compare this to conversation, If you talk like a robot, you’re not going to sound very expressive. On the contrary, everyone universally hears those patterns as “robotic”, “stiff”, “dry”, etc.. So don’t play drums like that! Buddy Rich once said, while discussing what jazz meant to him, that “Those who emote the most are the best.” The tools we’re discussing will help you emote more, by making the sounds you produce more interesting. They give your sound depth.

The Basic Tools

It’s difficult to put into precise notatable terms, but the practical “apparent” range of your snare drum, for example, using the tools here, will be something like two octaves. Depending on your perception, it may seem like a lot more.

There’s something very interesting about the way a drum produces a tone, that seemingly violates a rule that applies to other instruments. The traditional “rule” about tone is that “The harmonic series diminishes as the fundamental generating tones ascend.” We drummers will obviously get different sounds from different size instruments, although you can defeat this by over and under tensioning a head.

If you press and hold a key around the middle of a piano keyboard, (A 440, for example) the note will resonate for quite a while. While you’re listening to the note, you should be able to pick out some of the harmonics or “overtones”. The same is not true for very high notes. BUT, on a snare drum, for example, you can play some “ringy” notes at the edge of a drum, which will sound higher in pitch, and those notes will have more overtones.

With strings, they’re caused by the waveform subdivisions that occur. You hear the primary note, which is due to the length of the string, then you hear other notes, which are the waves that are half as long as the first wave, etc.. How you recognize these overtones depends on the length of the string, how it’s struck, plucked, or bowed, the listener’s distance from the sound source, whether the frequencies are too low or high for your ear to detect, how these waves bounce around a room, (and into each other) and a LOT of other factors.

The same holds true for other instruments, except that we’re usually vibrating brass, wood, plastic and other materials, rather than a string. That is, for example, the reason that A 440 played on a trombone sounds rather energetic or “strident”, while the same note on a Bb trumpet just sounds “average”. When a note is played that has an abundance of these overtones, we say it’s “rich”. On the other hand, we tend to perceive notes with fewer overtones as being “flat”.(in tone, not pitch) The same can be said for staccato playing, regardless of the tone, because the notes are cut off before the listener gets to hear the overtones.

There’s another important factor, which is attack. Attack is the property of a note that describes how much of the sound apparently comes from the initial impact, and how much comes from the apparent subsequent vibration. The word “apparent” is used because other things come into play with sound. Attack, and other attributes of a note are exaggerated or diminished by things like the size of the room, what it’s made out of, microphones and sound effects that might be introduced, and so on. So, being familiar with these things may help you understand what your listeners are hearing at any moment.

For example, a “sharp” attack occurs when you smack a snare drum really hard with a stick. A “soft” attack (but one which could be the same overall volume) might be what you get when you strike a cymbal fairly hard with a soft mallet.

You’ll be happier if you learn as much as you can about all the things that affect your sound, so be sure you’re always paying attention to what’s going on around you. Listen and learn.

Acoustics

Drummers quickly realize that acoustic drums sound different every time they're moved, whether it be across the room or across the planet. Generally, big rooms will sound strong and powerful, while small rooms may sound "thin" or "tinny". There are two ways you can react to this, and of course part of your decision will be whether you LIKE the difference or not.

1. You can spend your life sitting at the drums with a drum key, constantly trying to achieve and maintain the "perfect" sound.
2. You can make small adjustments once in a while, mostly just ignoring the details, keeping the same physical feel on the drums.

Having done the first thing for many years, I suggest the second approach. There are simply certain rooms where you will not be able to get certain sounds. It has to do mostly with the distance that the sound waves travel from your drumset, what they run into, and how they get bounced back to you. Don't waste too much time worrying about it. Remember, if you're really PLAYING, your sound will be fine. Any of us will overlook a quirk or imperfection in the sound, when we hear great music.

Gravity Power

Here's how to begin learning some of the tools that were outlined. No notation is required here, because the sound you should attempt to produce, at first, is simply nice even straight eighth or 16th notes. This is a snare drum technique. The mechanical aspects of it will work on any surface, but if you want it to sound even, you need what a snare drum gives you.

Hold your left stick lightly, resting the tip of the stick on the head, just a bit away from the center. First, try striking the shank of the left stick at about 1/3 of the way up from the tip with your right stick and let the left stick bounce twice. Do this in time, so that each time you strike the left stick with the right, it bounces twice. Try and create smooth, constant eighth notes, at about a tempo of 240. (or 16th notes at about 120)

Once you understand how this feels, begin to expand the idea by letting the left stick bounce 3 times. Then try it with 4 bounces, and so on. Play this enough so that you can control it at will, using the sound of the right hand strikes as accents, and the left stick bounces as the "constant" sound. With patience and practice, you'll be able to do this at very high speeds, almost to the point of sounding like a closed roll.

Now add something a little different. As you strike the left stick, let the right stick fall naturally onto the drum, making it's own sound. Visualize it like a double-stroke roll. The right stick striking the left is stroke #1. When the right stick strikes the drum, that's your second right hand stroke. Then, with the energy you just imparted into the left stick, let the left stick bounce twice. Keep trying this until you can produce a double stroke roll, which will have a unique sound, since the first accent of each 4 beats is a "stick shot". I have seen Buddy Rich play this technique in both directions. That is, where the right stick strikes the drum head first, then is lifted up to the left stick "stick shot".... Very cool.

Here's where it gets really interesting. You can now combine everything you've just learned into endless, intricate patterns, and vary the sound by the amount of tension in your grip, where you strike the left stick, where you play on the drum head, (toward the center or toward the edge) and even combine tiny, light rimshots into the sound. Since this is another "gravity powered" technique, it's one that can serve well in the middle of a drum solo. It gives you a physical break, and is a relatively low volume technique, so it adds contrast to your solos, and it's interesting visually and sonically. It's something else that adds depth to your sound.

Duration

If you read a trumpet part, for example, you'll see a lot of symbols on the paper referring to, among other things, the duration of notes, not including their actual written value. A dash above or below a note means to play it "long"

and a dot above or below the note means play it “short”. You’re probably already familiar with these, but the idea brings up both the old issue of not muffling the drums, and a new one we’ll discuss next.

There are two ways to increase the duration of your notes on a drum. (We’ll discuss cymbals later) You can either strike the drum and simply let it “ring”, or you can play a “roll” of some sort. I sometimes think that the reason young drummers play so many notes (often too many) is that their drums are usually muffled, and simply don’t sound good when a single note is played. Their instinct then tells them to “fill up the space”. I suggest another approach, which is to let the drums resonate. You can muffle them with your sticks if you need to, but leave yourself the option of a nice full-bodied tone on each drum. Again, think about a conversation. If you talked in very short, clipped words, you’d sound like a worn out tape recording, where parts are missing or faded. It’s unnatural. We want to hear variations in pitch, tone, volume, tempo, and emotion. What’s “emotional” on the drums may be subjective, but you can at the very least, emulate emotional effects.

You should be able to play a smooth press roll. If not, learn how, at all volumes and intensities, and become comfortable enough that you don’t get cramped while doing it. You’ll need that for what’s next.

Pick any pattern you like, and try inserting one-handed and two-handed press rolls for some of the strokes. Don’t be frightened of the term “one-handed press roll”. What I’m referring to is one that only has a duration of maybe a second or less. Just lightly make a stroke onto the drum, and gently hold the tip of the stick against the head with enough pressure to make the “buzz” sound. I’m not talking about the “sloppy” sort of Dixieland sound we’ve all heard, but rather a very smooth silky sound played so that no individual strokes are heard. You’ll find this easier to accomplish this if you play away from the center of the head, and doing that adds some variety to the sound anyway, which is good. Here’s a pattern you could try. (Where there’s a tie marking, insert a roll.)



Play these with alternating stickings first (R, L, R, L) so that you’re beginning and ending the rolls with both hands. Then experiment with playing all the single strokes with one hand, and only rolls with the other. (both hands) Then begin mixing it up even more, adding accents at different places, and varying the volume. If you’re listening, you should start to hear that this technique gives you a much more expressive sound, if used where it fits. You could for example, play a section exactly in unison with the band, on only the snare drum, duplicating their expressions precisely. It makes your parts blend better, and sounds “tighter”.

You can also use what you learn here to play a constant press roll, with just the hint of a “beat”. by making accents as you wish. This is a great device for drawing the audience’s attention, and works well at all volume levels.

5, 4, 3, 2, 1, Liftoff !

At some point, all of us were inspired by someone or something that made us decide to be that. But of course, starting to play an instrument from scratch is an entirely different matter. You’ve got to learn to crawl before you can walk. And if you’ve been playing for a while without proper technique, then you may also have to learn some new habits.

It would be great if we could all play a perfectly smooth, blindingly fast single-stroke roll, and control it at any volume. The sound adds a texture and excitement to music that is truly unique. Generally, when the single-stroke roll is written, the notation simply says “R, L, R, L”, etc.. We get instructions to play it by simply making alternating strokes, and gradually build up our speed and endurance. Actually, this is a good method to practice, because it will build up your overall strength, but it is not enough.

The goal of practically every exercise and discussion in this presentation is to help you understand the simple concept of “Wrist rising stroke, Wrist descending stroke”. You won’t be able to do the “one-handed roll” for example, if you can’t don’t use that method. Playing exercises that emphasize multiple strokes with one hand at a

time will help enable you to do the single-stroke roll. That's why rudiments, in all their forms are so helpful. It's how you combine all these tools that makes a great drummer.

Hence the title of this section. If you can control patterns that have 5, 4, 3, and 2 strokes for each hand, then you'll be able to do the single-stroke roll. You must be playing "Wrist rising, Wrist descending" to play a single stroke roll fast and cleanly. The "Liftoff" means that if you've mastered all the rudimental-type patterns, including the single-stroke roll, you can play anything!

Mastering all these skills will take some time, so start now.

The Perfect Drum Setup

The perfect setup is the one that allows you to play what you want, with the least effort.

There is no one setup that is perfect for everyone, although there may be a perfect setup for you. Consider that most people learn to play on a single surface, whether it's a practice pad, a snare drum, or a pillow. So a drum set can really be looked on as simply a collection of surfaces. If you want to be able to play any item in your kit equally well, then it makes sense to keep the angles and distances between all these surfaces as "natural" as possible. You have to feel good at the drums, so make everything as comfortable as possible. Be energetic, but don't waste energy.

Take a simple thing such as how you position your ride cymbal (s). If you're going to play a four-hour job, would you rather hold your arm up in the air all that time, or in a more natural, relaxed position? It's a simple fact of human anatomy that blood has a harder time being pumped uphill than downhill. Also, blood flows more easily through relaxed muscles. Good circulation to both your arms and legs, and maintaining good balance has the benefit of giving you better endurance, since you can remain more relaxed, both physically and mentally.

Drummers play vastly different setups, but consider that, no matter how many drums, cymbals, and gadgets you may use, the biggest part of your playing, in most situations will be done using a bass drum, snare drum, some toms, and a basic "ride, crash, and hi-hat" cymbal setup.

You might also consider that having some highly unusual or "custom" setup can actually be a disadvantage. Why? Because these items might not always be available, or the transportation available to you might not work, or in fact you may be required to play a "house" setup. (In some situations, such as casinos, there simply isn't time or space to allow 4 to 6 different drummers a day to store their equipment, set it up, and get microphones set for each shift.)

Using a smaller setup gives you the freedom to travel light, makes it easier for everyone, including sound technicians, and allows you to have more repetition on similar equipment. This lifelong buildup of body language is invaluable. Regardless of the size setup you sometimes play, think about the things you always play, and set them up the same, every time, as much as possible. The less you have to think about what you're doing mechanically, the more you can express yourself emotionally.

There is an interesting exception. Sometimes a new way of doing things will be uncomfortable. Still, if you believe in the concept, then maybe you should tough it out for a while, and let new habits form.

Suppose you know for a fact that your favorite drummer uses a particular kind of cymbal. In your desire to sound like them, you buy a similar cymbal, only to find that it sounds totally different when you play it. Of course, some of this may be due to the acoustics at the performance, or something that was changed electronically during the recording, etc.. But what if this isn't the case?

If you know you're right about the cymbal, for example, you might take a different approach... Maybe you should play the cymbal until it does sound like your hero. You've then learned something much more valuable, like how to make a certain sound. You might say "The cymbal taught me" or "The drum taught me", and this is a wonderful experience!

Worst case scenario? You spend some time experimenting with equipment, try some new techniques, and learn how they affect your sound. Then, the issue of whether you have the "magic" cymbal or not becomes irrelevant,

because you've learned how to make different sounds using your hands and your brain ! This applies to all drumming, including your footwork. Play all the parts of your kit with the same finesse. Play the best instruments you can, but don't get too distracted by the search for some "magic " piece of equipment. When you're really PLAYING, everyone will know it, even if you're playing a cardboard box.

Arcs and Circles

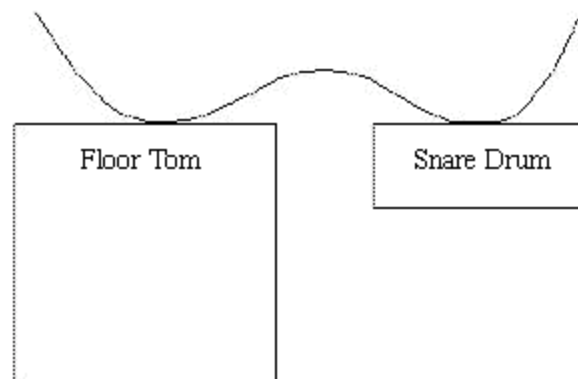
Often, we talk about make "up" and "down" strokes. But in reality, we rarely play this way. Instead, the tips of our sticks actually travel in arcs, with the center of this arc being the pivot point where you are gripping the stick. To be even more specific, the center of this arc really depends on the position and movement of your wrists, arms, and upper body, as you play.

When you make any stroke, you're imparting a certain amount of energy to the stick. Some of this energy gets absorbed on rebound from the drum head, and some remains. This energy either gets used in redirecting the stick for another stroke, or it gets absorbed by your body. Obviously, the best use of the energy is in redirection, and the worst use is in absorbing it. (putting excess wear and tear on your body) The goal here is to use the maximum amount of the energy you create, in producing sound and motion.

In it's simplest form, think simply about a soft stroke versus a loud stroke. If you lightly drop the stick onto the head, there won't be a lot of energy left after that stroke. (although there is probably more left than you think) But if you raise the stick high, and really whack the drum, then you'll have a LOT of energy left. You must either let the stick rebound further (higher) or convert some of it into redirection.

For this reason, realize that not all strokes are played in a strict up and down manner. If you are going to, for example, play one stroke on the snare drum, followed by one of your toms, it makes sense to plan the angle of the first strokes to bounce naturally from one drum to another. Again, this is where repetition becomes so important. You won't have time when you're on stage to think about all this. You've got to play all these techniques thousands of times, until they no longer require thought. You'll develop in such a way that techniques simply "feel" a certain way, and are a natural part of your body language when you play.

In this first exercise, use only your right hand. Make one stroke each on your snare drum and your floor tom. Begin the snare stroke with your right hand tilted very slightly, so that the palm of your hand is slightly facing the floor tom, and let the stick bounce from there to the floor tom. Keep your wrist loose, and think in terms of pulling your wrist over to the floor tom with your forearm and body. Now try it in reverse. Make a stroke onto the floor tom head with the palm of your hand very slightly tilted toward the snare drum, and let the stick bounce from the floor tom to the snare drum. With practice, you should be able to do this in any direction, making the most of the arcs you create to maximize energy conservation. This also helps prevent bruises and callouses, formed when you are absorbing, rather than using the energy. (The drawing shows the stick path as viewed from the front, or audience perspective.)



You'll find that doing this "side to side", as in the previous example, is easier than doing it "front to back", as you might when moving from your snare drum to a bass drum-mounted tom. This calls for a change in body language and arm position. You'll need to raise your arms slightly, and possibly lean forward a bit. You might also consider

rotating your arms a bit to the side, so that this motion becomes more similar to the "side to side" approach. If you care about doing these types of techniques, you'll soon start to see the value of having your drums and cymbals at similar angles. It simply reduces the number of grip changes and body motions that are required, and makes your job of creating sounds easier.

One "lick" often played by Buddy Rich at blazing speed, is maybe the prime example of this. (R, L, R, L) Buddy usually played it like this: (low notes are floor tom, higher ones are snare drum.)



This can be boiled down to the exercise below. Buddy's version sounded a lot more complex than it actually is, because he often chose to execute it as sixteenth notes, rather than triplets. (R, L, R, L)



These groups of three-note patterns, played as sixteenth notes, affect your brain in an unexpected way, and make an interesting sound.

Below is an example of the opposite effect, where groups of 4-note patterns, played in triplet form, have an equally unique effect. Buddy played this often: (R, L, R, L)



You can boil it down to this, for practice: Again, it's a lot simpler than it sounds. (R, L, R, L)



Playing any of these at a medium to high speed creates a startling effect, and has the added benefit of being visually impressive. Work on the sound first. The visual effect comes automatically. One mental advantage you have as the drummer, is that you can feel what you're playing, whereas the listener can only listen and/or watch. This gives you the "power to dazzle" your audience with "complicated" patterns that don't actually tax your brain too much. Be careful, though, because sometimes 'dazzling' the crowd can also break their perception of the "beat", and you can lose the rhythmic groove you may be trying to create. The audience doesn't necessarily need to know exactly where you are, but they do need to feel a "beat", so they can have some understanding of "what you mean".

Your fellow musicians DO need to know where you are. If the other players are expected to come back in after a certain number of bars, you want to be careful of these kinds of techniques. It's a judgment call, and depends greatly on how well you all know each other and communicate. One approach that many great drummers use is to play their "tricky stuff" toward the middle of their solo or fill, and provide a simpler, more obvious pattern for their fellow musicians to hear, at the end. A great solo or fill, followed by a sloppy entrance from the band, loses its impact and makes everybody feel embarrassed.... Not good.

There's another issue. What makes a rhythm (or any music) sound "tricky" really depends on the listener's perception. If you've heard and/or played something a lot, it ceases to be "tricky" to you. Again, repetition is the most important learning tool we have, and this means both the repetition of playing and the repetition of listening. A lot of us live in situations where we can't physically play the drums a lot, due to noise issues, for example. So when you can't play, spend that time listening and visualizing what you want to do.

Now that you've seen a couple of these examples, do some experimenting on your own, and create your own patterns. Think about letting it happen, rather than making it happen.

What Do You Mean By That?

There's an old saying that's been attributed to Duke Ellington, and that is that "People never really hear what you're playing." You know it's true. YOU always have something in mind when you're playing, but chances are that almost everyone hearing you is affected by it differently. Sit in the first few rows of a concert, and listen to the comments that people make about what's happening on stage, and you'll find a very wide range of opinions about everything up there.

So accept that, and just be sincere about what you're doing. Sincerity is the one thing that most people CAN agree on, and that's all you need from your audience. If they simply sense that you're sincere, then they'll listen in the abstract way that you want them to, rather than critically analyzing every note you play.

Goals, Expectations, Attitude, and Common Sense

Goals:

For this little discussion, let's use a typical "judgement scale", ranging from 1 to 10, with "10" being the best.

- All of us want to be "good enough", for the music we're playing, and that concept varies greatly from one person to another. Let's call this level of playing a "4" or a "5". This level is "acceptable", but probably shallow and boring.
- Most of us want to be at least a little better than "good enough". Let's say, a "6" or a "7". Here, people are seeing that you have "potential", but they're also aware of your weaknesses. This level will get you the usual "nightclub band" sort of work, and possibly a small percentage of local "studio work".
- Many of us want to be at least a step better than that. Let's say, an "8". At this level or above, you're one of the drummers in town who gets the most phone calls, and you could probably have the most students and the most recording time, if that was your goal. People think you are "special". You're consistent and reliable enough to be hired as a touring musician in a successful commercial band. Since you got this far, you'll probably continue to develop until you're at least a "9".
- A few of us want to be "the best", and that concept varies greatly from one person to another, too. (a "10") Here, you're one of the top people, with your recordings and appearances being "events", and you can probably play with anyone you want to. Don't worry... They'll call you.
- Separate, and above all these categories, there are a few extremely rare people who are a "20". They are truly "one of a kind" individuals, who clearly surpass everyone else. We say they're geniuses.

Expectations:

The topmost goals are not easy to achieve, so expect it to be a lifelong endeavor. We have to keep a positive attitude, so do your very best, and sincerely try to be better, each time you play. If you can do that, then it's only a matter of repetition and time until you'll achieve your goal. If at any point, you consider yourself to have "gone as far as you can go", you still have constantly improved, and that's admirable. Work hard, but be patient. **Attitude:**

So...

If you're realistic about devoting your life to being a great artist, then you will probably never feel that "you've got it". Keep that thought positive, too. Think about the idea that you're getting better all the time, rather the idea that "you're failing to be the best". Improving your thinking is at least as important as improving your physical abilities.

That's the kind of responsible attitude you can feel good about, and that other people will understand and appreciate. Feel good about what you do, and have confidence in your real abilities, but don't be cocky.

Common Sense:

There's a lot to be said about the old expression, "Don't believe your own hype." People will say both good and bad things about you. That's art! You have to decide what you want to do, and then just set out to do it. Just as important is how you do it. It's one thing to play a certain passage of music, for example, but it's a different thing entirely to invent it. (!) When you study the history of any art, your appreciation of creativity will grow.

Think about the audience's point of view...

If you're cocky, and you make a mistake, everyone will hate you for it. If you're confident, but realistic, and make a mistake, the audience will cut you a lot of slack, and listen more for your "intent". Perfection is beautiful, and it's noble to strive for it, but if you're sincerely giving your best effort, that's what matters most.

Have fun!

Musical Interaction... More on Dynamics, Texture, and Contrast

At some point, we become aware of the enormous emotion and beautiful texture that dynamics can add to our playing. When we're young, we tend to think of this as "loud", "medium" or "soft". If you're playing popular dance music, then you also tend to think of dynamics in terms of long phrases. For example, you might play the first 32 bars at one level, and then play louder on the chorus. I'd break down the term "dynamics" into two primary areas. One is the actual volume of a part, (amplitude) and the other one, which could be called "texture", is actually a dynamic "illusion"... meaning that the actual amplitude might not change, but the texture of the notes makes it seem as though it changes. (A simple drumming example would be switching the "ride rhythm" from a closed hi-hat to a ride cymbal.) You can create a similar texture illusion by simply varying the number of notes you play in any pattern, or by varying the frequency range in which you're playing.

In the context of a jazz trio improvising, these changes are more instantaneous, from one moment to the next, and will vary from one night to the next. So, for this conversation, I'll mostly disregard dance bands (of any genre) because that is more pattern-oriented, and orchestral works, where the music is preconceived, and not so improvisational. The dynamics are just as important in those settings, but they're fixed on paper. (or the recording)

Music can be like a conversation.

Making the example of a jazz trio, yes... Music can be thought of as a conversation of sorts. You have three people traveling together across the roadmap of a tune, but each one is inserting their subjective observations, as well as reacting to the other member's observations. It's intimate, and it's interactive, and tomorrow night, it will probably be different. When it's "right", it's really beautiful.

But there are many kinds of conversations...

There are intimate conversations between friends, and there are screaming gangs of fans at big events. (and everything in between) Is it any surprise then, that someone who grows up in a big, noisy, intense city, like New York, might prefer the kind of "conversation" that is a jazz big band, or a rock band, a big vocal choir, or an orchestra. More "information per second" delivered to your ears, but just as valid, and just as satisfying, depending on your mood.

The individuals are still doing essentially the same things as in a trio, but they're also playing specific written parts, and each of those parts (unlike a small trio) might be a rather powerful group of players. We think of these in

"layers", where 5 saxes can play one thing, several trombones can play another, and the trumpet section can play something else, with the rhythm section supporting the whole thing. And obviously, all of these parts can be at different dynamic levels. It's certainly not the only way to write for a big band, but you get the idea.

So, getting back to the more interactive types of playing, such as a trio or quartet, it really is true that music can be like a conversation. And in my opinion, those variations in dynamics, texture, and contrast should all be considered on a moment-by-moment basis. If you think about the many variations in your voice when you speak, and can relate that to your other art, then you're being more expressive. If you think of it like that, then you might also consider whether you "agree" or "disagree" during these conversations. Generally, the best etiquette calls for us to adopt the personality of the leader, and save our personal musical opinions for our own acts.

To play or not to play...

We sometimes describe a certain aspect of musicality as "Space... The final frontier". The contrast you can achieve by simply not playing is remarkable, and often is more dramatic than a blazing high speed fill of some kind...especially true if it occurs when you least expect it. A huge "wall of silence" overwhelms the audience... and you achieved it by simply sitting still. If you trust your fellow players, then no one should have to "keep a beat" during these spaces.

As a drummer who often plays in trios and quartets, the concept of "space" is hugely important. We sometimes play in situations where the volume is more like "background music" than a concert-like performance. You can be insulted by that if you like, but a more mature approach is to simply consider it another musical challenge, and work on ways to keep the energy up, regardless of the actual volume. Those people in the front row will appreciate your efforts, and those in the back row... should've gotten a better seat! Always play your best, regardless.

First, how "busy" your playing is has a great bearing on the perceived dynamics. If you're constantly playing a lot of notes, it will probably be perceived as "louder". This keys in with the second thing... the "white noise" factor. Aside from the actual notes you play, cymbals add "white noise". This seems louder, so use it as such. Press rolls, and the "swish" sound you produce with brushes are another equivalent. These tools are also what we use to simulate sustained notes on an instrument that generally only produces short tones. Try playing a swing rhythm on the snare drum with brushes, without the "swish" sound, for contrast.

Getting in the way...

Consider the frequency range of your playing. In other words, if you play your toms a lot during a (tenor) vocal, it will probably interfere, because you're in the vocalist's frequency range. As another example... If you are constantly playing complex figures on your bass drum, you will probably irritate the bassist. It's known by good listeners, including musicians and sound engineers, that each person, even in a loud band, can all be heard with remarkable clarity, if each person plays mostly in a separate frequency range. On the other hand, when everybody is "competing" in the same frequency range, (i.e., dueling guitarists and keyboardists) then no one gets heard clearly. Knowing this simple fact will let you adjust your playing on a moment-by-moment basis, so that you are heard without necessarily having to play louder. The highest quality bands play this way, either by their intention, or by instinct.

Rhythmic Contrast

There are some valid general rules you can use, that are often found in composition and arranging books, For example, "A slow-moving melody with a lot of sustained notes calls for a faster-moving supporting rhythm", and the opposite, "A fast-moving, rhythmically-busy melody can tolerate a less-busy supporting rhythm." So, when the pianist in your trio launches into a blazing fast riff, don't necessarily jump on that and play busy... Do the opposite. Play simpler, support them, and wait for an appropriate space for your busier parts.

Here's an example I give my students:

I'll play a steady "beat" on a rubber pad, and ask, "What rhythm is that?" It's a bit of a trick question, because without an identifying pulse behind it, there's no way to tell if I'm playing quarter notes, triplets, or anything else. That's the point! You, as a drummer, must figure out how to identify the pulse and the dynamics of the music, while

contributing something positive to the overall effect. Although it can be considered "hip" to momentarily make the audience wonder "where one is", it's not something you want to do all the time, because if the audience can't "groove" to it in one way or another, they will walk out the door.

The Smooth or Bumpy Road...

A female jazz pianist/vocalist friend of mine, whose trio I play with often, describes what she wants the feel of a tune to be as "smooth" or "bumpy". It's entirely valid, albeit a bit subjective. What she generally means is that "smooth" is the pattern-oriented "groove" approach, where the bass and drums are mostly supportive, and not too interactive.

"Bumpy" is more obvious in a trio... Why? In a big jazz band, for example, any one section of the band can be quite powerful... larger than an entire trio. So, there are times when they can carry the pulse of the tune, while others provide the "bumps", without being powerful enough to disturb the groove. As individual players, we have to be sensitive to that, and adapt our playing in all these situations. It's not complex, but it deserves some thought. What is a perfectly good approach for one kind of music may be totally inappropriate for another. So... Listen, and think! Everyone you play with will appreciate that.

Two simple steps to improve any band's sound:

Most of my life, (since the early 1970's) I've been involved in arranging music, which has included reading many standard arranging texts, and transcribing (copying) music from recordings. Having seen hundreds of hit tunes and big band charts in their written form, and being a good listener, I can tell you these facts about the most successful music, entirely based on two simple principles. For this discussion, we assume that you have the major problems solved, meaning that the music is in tune, in time, and uses sensible dynamics.

1. Frequency and Rhythm

Have you ever marveled at the clarity of certain music, noticing how all the parts are clear and easy to understand, and wondered how to achieve this with your own band? How is it that all the parts in a huge orchestra can be heard, when a 5-piece nightclub band sounds "muddy", or confusing? What about the tendency we see for bands to be too loud? Why do some songs just cease to "groove"? It's NOT just because "it was done in a studio". All of these issues can be resolved by adhering to two simple principles, which are:

- Each part should occur in it's own frequency range, and...
- Each part's rhythms need to be non-conflicting.

Here's what I mean...

Think about music (pitch-wise) from the bottom up. In most clear recordings of pop music, the order will be something like this:

- Bass parts typically occupy the bottom two thirds of the bass clef. (with an actual string bass sounding an octave lower than a standard electric bass)
- Rhythm guitar parts are typically just above that, and in a narrow range of about a 4th to a 6th.
- Chords (keyboard and/or guitar) are mostly above and sometimes below the rhythm guitar. (Keyboardists and guitarists need to keep out of each other's way, using differences in range and/or rhythm.)
- Vocals can occupy most of the treble clef, obviously varying from tune to tune, both in melody and harmony.
- Horn parts, strings, and other high parts at the top of the treble clef and higher.
- Like a piano, a drum set can cover a very wide frequency range. Since drums usually play short (not

sustained) notes, and typically don't have obvious definite pitches, their individual frequencies can include this range without interfering. It's up to the drummer to place these things in the proper time frame, relative to the other parts, to keep them from interfering.

Next, the "groove" is established. Listen to almost any successful piece of music, and you'll find that the parts don't interfere. Although the overall feel of the groove might be 16th notes, for example, it's unlikely that any one instrument plays that. As a simple example, bass plays on "1" and "3", drums play on 2 and 4, with rhythm guitar playing patterns in between 2 and 4, and/or sustained notes and chords. Vocal parts are often slightly off the beat, for added clarity. It's the combination of all of those parts that creates a forward-moving, good-feeling groove. *In a well-organized groove, no one person has to play loudly, because each person is in their own frequency range and rhythmic space.*

Remember that "dynamics" doesn't just mean "everybody loud" or "everybody soft". Sometimes, it's quite effective to have players at different dynamic levels at the same time. You might have the vocals and keyboard loud, for example, while the drummer plays something very lightly on the cymbals, along with a quiet guitar part.

Always think about the focus of the music, moment by moment. If you can't hear the vocalist, play quieter. Maybe you need to turn up the vocalist, but that comes later. In the meantime, be a good musician, and adapt to the music NOW, rather than burying the soloist. If your whole band has their ears open like this, you are on the right track. If not, you all lose.

If you're in a band where people aren't thinking about these things, then the only other way people can be heard is to play louder. Once someone starts that, then the other players will too, and pretty soon, the whole band is too loud, and you STILL can't hear anything clearly. Sometimes, the most powerful thing a player can do to improve a part in a song is *stop playing*. Experienced players sum this up by saying "Space... The final frontier".

What happens when a section of a tune calls for several instruments to play the same notes and/or rhythms, for special effect? Don't be surprised by the fact that you won't be able to hear yourself or others as clearly in this situation. It's actually a *good* sign that you can't, because it means that you're all playing exactly together. The phenomenon has a name, which is "acoustical phase cancellation". Don't play louder (or "off" rhythmically) in an effort to be heard during these sections. Just do your part, and know that it's right.

2. The groove is NOT "all about 2 and 4".

Sometimes, non-drummers get too involved in the drummer's part of the groove, which (in pop music especially) is sometimes perceived as the snare drum, being played on 2 and 4. Once, after joining a band, a keyboard player asked me, "Do you think that the bass player can lock in with your bass drum and snare drum?" My answer, having already played with this bassist, was "He should forget about my snare drum completely."

One sentence, "Don't slap your instrument on 2 and 4", should do it, but this isn't just some kind of an ego problem with drummers. There are many valid musical reasons that ought to be considered on this issue. As a rule, it's a huge mistake for anyone but the drummer to be playing accents on 2 and 4. This simple truth is backed up by a very large body of evidence...

Remember the above comments about "Frequency and Rhythm"? Well, the first reason not to do it is simply, "It's not necessary, and (for the sake of accuracy) "It's not on the recording". If your drummer isn't playing the snare drum loudly enough, then prove that to them with a recording, and ask them to correct it. Usually, that's not the problem, though.

In a typical nightclub band, where you only have 4 or 5 players, it's crucial that everyone think about THEIR parts, to form a nice groove. Unless you have an unusually-weak drummer, he doesn't need your "help" with the snare part.

A common way for people to "feel" a rhythm is to dance, or tap their feet, while clapping. Notice that most people tap their feet on the primary beat (1 and 3) and clap on 2 and 4. (the sound of "Boom, Clap, Boom, Clap") Notice that "Boom" is a low pitch, and "Clap" is a high pitch. It's a natural instinct for most people to think of the music this way. Have your drummer play the opposite, accenting the snare drum on 1 and 3, and it will drive you crazy in 5

seconds. The point is that the music should keep it's natural feel, with bass and other instruments where they belong, and drums where they belong.

How do people describe a country beat? "Boom, Chick". (not "Boom, Boom") Simple though it may be, that's a groove. Jazz is even more linear, with much less emphasis on 2 and 4. For that reason, it would be "double bad" to make these groove errors in that setting.

Accuracy:

If you care about doing a good job in a commercial band, part of that responsibility is to play the parts on the original recording accurately. You can modify them, but you shouldn't do that until you know the function of the original parts. Listen to virtually ANY successful commercial recording, and you'll find that the other players are NOT reinforcing the snare drum part. If you go into a recording studio and play that way, you're liable to irritate some engineers, too.

Not every accent is on 2 and 4. So, if the drummer plays an accent at a different spot, (very common in funk, for example) then you have these senseless "thumps" and "bumps" from the band in what should've been an empty space. Don't do it!

Rhythm "Feel":

Think about the expressions people use to describe "feel". We say "on the beat", "behind the beat", "laid back", "funky", and hundreds of other non-descriptive words. Who is the primary control of these things? In most cases, people look to the drummer. So... and this is VERY important... An educated drummer knows that the main way we control these "feel" things in pop music is by our placement of 2 and 4. (the typical snare drum hit) So, how can the drummer control the feel if everyone in the band is also accenting on the same beats? He can't. Leaving a clean opening for the snare drum is vital, sounds better, and is simply more musical.

Rhythmic Clarity:

No one, even the best musician on the planet, can identify a rhythm without a reference. In other words, if I were to simply take a single drum stick and tap out a series of constant-speed notes, you have no way of knowing "what I'm thinking". Is it quarter notes, triplets, an odd time signature, or what? Without an identifiable pulse to tell you "where the beat is", you have no way of knowing. Every player in the band needs to concentrate on THEIR parts, and not worry about "helping" the drummer.

Balance:

When non-drummers accent on 2 and 4, this has the effect of making the other parts of their groove quieter, since the inherent body language of making an accent means that suddenly the parts they should be concentrating fade to the background.

You end up with a band of people playing loudly on 2 and 4, and the primary parts of the music, including the sustained bass notes and chords, become weak. Sometimes, young players feel this weakness in the groove, and try to "make it groove" by doing it even harder, which just compounds the problem.

The "Fat" or "Big" sound, even at low volume levels:

This is something that young players struggle with, and often is related to them playing on 2 and 4. A bass player, for example, who should be playing sustained half notes on 1 and 3 is now cutting those notes short, in order to slap their bass on 2 and 4, thinking that they're "reinforcing" the groove. Actually, they're destroying the groove, because the "fat" bass sound is now cut short. The same goes for any other instrument. A "fat" sound is created by the use of sustain, (not volume) on the part of the other musicians. Remember that (excluding rolls, cymbals, and reverb) drummers don't play "sustained" parts. We drummers depend on the band to do that, while we provide a reference rhythm, reinforcement, and dynamics.

Pitch interference:

The young musician who is "reinforcing" the snare drum accents is really undermining the sound, because they're adding unnecessary frequencies that reduce the band's clarity. A bassist thumping on their bass is loading up the snare accent area with unnecessary low frequencies, and the guitarist or keyboardist who does it is typically adding mid to high range frequencies which are equally unnecessary. When the drummer is playing a "rim click", such as during a latin tune or a pop ballad, the effect is even more out of place.

Snare drums will "buzz", when other players in the band happen to play notes or chords that are in the same frequency range as the drum. The more random playing that's done on 2 and 4, the higher the chances of creating such a noise, and in the extreme case, they can actually "choke" the drum, by making it vibrate at these frequencies, rather than resonating naturally on it's own.

Suppose you had a drummer who had an electronic gadget (or even a triangle, for example) that produces a certain pitch. How would you feel if the drummer decided to "help" you with your parts, by playing that gadget over YOUR rhythms, even when the pitch of that instrument was the wrong one? I think it would get your attention very quickly.

The Tambourine Effect:

Another reason that players shouldn't duplicate the snare part is what I call "the tambourine effect". Have someone play tambourine on 2 and 4 during only the first half of the verse of a song, then stopping, while the band continues. Do you hear how it grabs your attention when it stops at such an odd place? That's what happens when those players who were duplicating the snare drum part suddenly stop, to play another part, a fill, or whatever. It's more disruption, adding to an already-clunky groove.

Wear and Tear on your body:

Here's a little simple math to consider... If you're playing typical pop music, most of it will be at tempos around 120 beats per minute. If you're playing 8 of those 4-minute songs per set, and the drummer plays snare drum on 2 and 4 on all of them, that's 1920 snare hits per set, or (in 4 sets) about 8000 snare hits per night. (not counting fills, etc.)

So, if you're playing something other than drums, that's close to 8000 extra notes per night you're playing, that are completely unnecessary. Save that wear and tear on your body, and take a break. Think of it as your reward for using good judgment.

Summing it up

If the players in your band remain focused on their own parts, with each person adding the appropriate part to the music, then everyone will be happier, and the band will sound much better. Everyone contributes something positive, everyone gets heard, and you can produce "fat", nice-sounding grooves, even at low volume levels. If you need any further proof, all you have to do is listen to successful recordings, because they're all made that way.

Improvising

I've come to appreciate a certain kind of reflex, and wanted to share my observations about it with you. These aren't new ideas by any means... just things I don't hear discussed much. It's just about maturity and using your ears in an intuitive way. You have to be completely comfortable playing your instrument for this to happen.

At the time I'm writing this, I've been working with the same pianist and bass player in a jazz trio for about 2 years. I've played with those same players in other bands over the years, for about 10 years. It's developed into something really fun and interesting. We're not "elevator music", but much more spontaneous and much more dynamic. Plus, we host a jam session, and have had quite a bit of repetition with the same, very good horn players, singers, etc.. It NEVER falls apart. The absolute worst-case scenario is that a particular improvised tune might sound "adequate", rather than "spectacular". Happily, the results are almost always excellent. Why is that?

Obviously, we all know each other, and in this case, we all happen to like each other. That helps a lot. We respect each other enough to pay close attention, be supportive, sense dynamics and rhythmic patterns, and so on. When one of us makes a momentary error, the others will cover it, rather than make it more glaring. These are the kinds of things we've all (hopefully!) felt, and although "nice", they're not particularly unusual.

Nope... It's not the "friendship" thing, it's not "chops", "speed", "time", "feel", or whatever. (but they help) What really makes all this work is that we all play positively. There's an old adage in music that "if you mistake, do it twice, so the audience thinks you did it on purpose". That's cute, but I think that's focusing on the error. After all, our role on stage is generally to produce great music, not to "look cool", right? What is past is past. What works best is to continue with your thought, and leave the mistake in the past. (but try not to do it again)

The other aspect of being positive is to play with genuine emotion. If you don't like the music you're playing, quit. But if you love it, then play it that way, and try and feel (and/or influence) the emotions of those around you. If they're not putting out real emotion, they're probably holding you up. The audience knows when you're a fake, and it's a lot easier to be yourself anyway. Luckily, in jazz, you typically don't have to be an actor.

If you do anything less sincere, the audience will sense, hear, and see this as the "clunky" feel that none of us want to be a part of. If you know the tune, play it! If you don't know the tune, use common sense, and support the band, listening hard. But moment by moment, decide what you want to do, and just do it. It gives everyone around you a feeling of confidence, and inspires them to do the same. As long as you're playing musically and listening to each other, things should fall into place. It has to be a team. The non-supportive or non-contributive member of the band is probably holding you up, or interfering in some irritating way. **From the audience point of view...**

If you're cocky, and then make a mistake, the audience will "hate you" for it. But, if you're sincere, and make the same mistake, the audience will "allow" it, and listen more for the big picture... your intentions. The search for perfection never ends, but just be careful about believing that you've "got it." There's always somebody better. ...Believe it.

Update Information

Visit my web site for the latest updates at www.nextcraft.com

This presentation might be considered as "software", in the sense that I will produce updates in the future. This update is "Drumming For Life™" Version 2.0

Mike James

References

Drum "Tuning" Chart

Remember that the precise pitches shown here do NOT matter. They're only a reference.

Here's the setup I use, and it's a fairly common one for the size drums I play. I don't touch the drums, as a rule, whether I'm playing in a trio or a big band, or a pop gig. The only difference is whether the drums are miked or not, and how loud the PA system is. It works!

I use white coated "Diplomat" heads (by Remo) on all the drums, and use these approximate pitches. The reason I mention the heads is that a different head may not produce the same pitch at the same tension.

Drum	Batter Head	Opposite Head
5 1/2" snare drum	A to C	F or F# (5th or 6th higher)
9" X 13" tom	D	D (same)
16" X 16" tom (1)	G	G (same)
16" X 16" tom (2)	C	C (same)

14" X 24" bass drum G

C (4th higher)

I tension the bottom snare head tight enough to get a crisp response, but not choke the drum. The snare wires are tight enough to enable you to define every beat, but still play a soft press roll, and get good response with brushes.

The tensioning method on the bass drum gives at least two distinct sounds. When you play the bass drum and hold the beater against the head after impact, you get a crisp tone, and the audience hears the FRONT head pitch. When you relax and let the beater bounce back from the head, you get a more resonant sound, and the audience hears the lower, batter head pitch. I use a wood beater, and use only a 2 to 3 inch wide felt strip behind each bass drum head, placed at about the one third point across the head. See the illustrations for an example of this approach.

By the way, this is the TIGHTEST tension I ever use. I often play the drums for quite a while before touching them with a drum key, and they do tend to become looser over time. I like the variety, and find that they all tend to loosen about the same rate, so they don't sound "out of tune" with each other. Don't become obsessed with exact pitches. It'll drive you nuts, and it's simply not that important. (Unless you are specifically called on to play PITCHES... a very rare thing for any drummer, and something I've *never* been asked to do.) Just get a good, flexible sound, and think about TONE.

If you find that any drum head is producing a pitch that is too definite, try this often-used tip. Slightly loosen only one or two tension rods on that head, which makes the drum head have a less definite pitch. It's equivalent to using a small amount of muffling.

The tensioning method above sticks to the "medium" philosophy discussed earlier. They're not too "stiff", yet they're not "sloppy loose" either. The drums get to resonate, and they're comfortable to play. Try it.

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