This example is from an old reference: Have 3 people sing the word "Hello!" and hold it, singing the Do-Mi-So of a major chord and hold it. I always want to add the minor 7<sup>th</sup> above (from an old Three Stooges show).

### Intervals going up and down

Intervals going up are the exact inverse of the interval coming down. They add up to nine: Up a 2<sup>nd</sup> is down a 7<sup>th</sup>. Up a 3<sup>rd</sup> is down a 6<sup>th</sup>. Up a 4<sup>th</sup> is down a 5<sup>th</sup>. Up a 5<sup>th</sup> is down a 4<sup>th</sup>, Up a 6<sup>th</sup> is down a 3<sup>rd</sup>. Up a 7<sup>th</sup> is down a 2<sup>nd</sup>.

One way to remember intervals is to come up with a song for every interval, so that you can think of that song, or play it, and then you can remember the interval.



Play an octave, ask students what song it makes them think of. Let them sing it if they like.

# Intervals Add Up To Chords

The major chord is composed of a major third and a minor third. The minor chord is a minor chord and a major third. The top and bottom notes of these chords are a perfect fifth. The diminished (Co) chord is made of two minor thirds and the distance from the top to the bottom note is a diminished (flat) fifth.



All chords are made up of intervals.



Can you think up other ways to add intervals together and get chords? Share them!

Hint: a  $6^{th}$  is also a  $3^{rd}$ ... If you start on the note G and go up a  $6^{th}$ , then do it again, what chord is that?

### **Ranges and Transpositions**



These change depending on the singers capabilities, but this is a good general rule.

## Piano Range, Keyboard with Staff lines and ledger lines

The piano has 88 keys, and let's see what the exact range is. Each octave (from C to C) has 12 steps. 88 is 7\*12 (84) plus 4, so four more than 7 octaves. The lowest note is "A" technically notated: "A0." It is interesting that it's frequency, in times per second that it vibrates, is the same as the low of our alternating current, AC voltage is 55 to

60 Hz, Hertz, times per second. The A above that one is A1, 110hz, A2 is 220hz, A3 is middle A, 440. The piano goes up to A7 and then the C above that, so the piano keyboard we know goes from A0 to C7.

See that above C3, middle C, are the 5 lines of the treble clef. The letters E G B D E =

See that above C3, middle C, are the 5 lines of the treble clef. The letters E G B D F = **Every Good Boy Does Fine**. The bass clef G B D F A = **Good Boy Does Fine Always**.

### Instrument Ranges & Transposing for them

C Piccolo written: D3 – G b 5 actually: D4 - G b 6

C Flute: C3 – C6

C6

C4

C2

C1 -

C0

C3 = "Middle C"

Oboe: B b 3 – F5

English Horn written: B3 – F5 actually: E2 - B b 5

Bassoon: B b 1 - B b 4

Contra-Bassoon written: B b 0 - E b 2

B b Clarinet written: E2 – G5 actually: D2 – F5

B b Clarinet (French system, most common) written: E2 – G5 actually D1 – F4

B b Clarinet (German system) written: E1 – G4 actually: D1 – F4

B b Trumpet written: F#2 – D5 actually E2 – C5

French Horn written: C2 – C5 actually F1 – F4

Tenor Trombone: E1 - B b 4

Bass Trombone: B  $\flat$  1 – F3

Bass Tuba: E0 - B b 3

Violin: G2 – C6

Viola: C2 – E5

Cello: C1 – E5

String Bass written: E1 – G3 actually: E0 – G2

B b Soprano Sax written: B b 3 – F5 actually: A b 3 - E b 5

E b Alto Sax written: B b 3 – F5 actually: D b 2 - A b 5

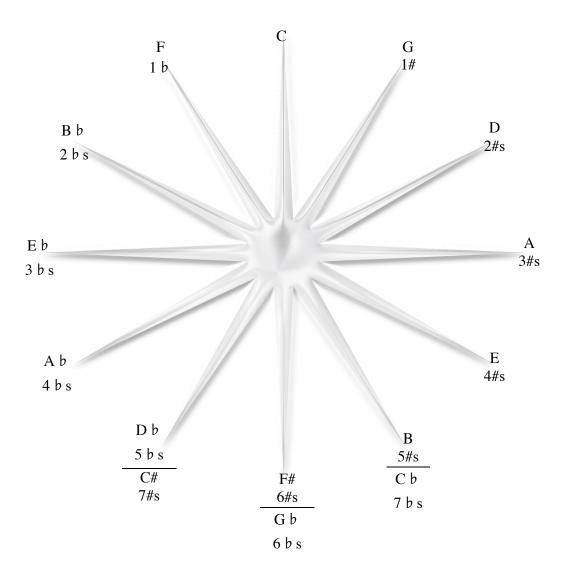
B b Tenor Sax written: B b 3 – F5 actually: A b 2 - E b 4

E b Baritone Sax written: B b 3 – F5 actually: D b 1 - A b 4

B b Bass Sax written B b 3 – F5 actually A b 1 - E b 3

## The Circle of Fifths

### **Circle of Fifths Graphic**

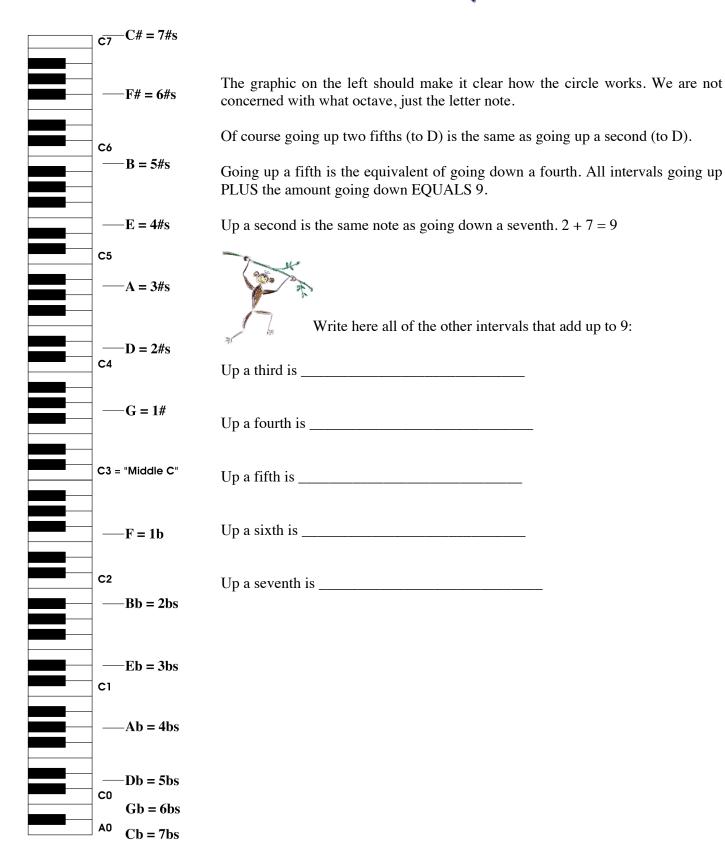


D b is the same as C#, it is said "ENHARMONICALLY" they are the same. Also F# = G b and B = C b.

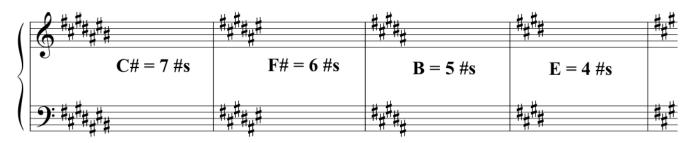
Some people would say that keys with flats are for horns, horns are usually in B  $\flat$  or E  $\flat$ . Guitars, and the string music family are generally in E or A, songs written on them will be in these keys, so those instruments and their songs are in sharp keys.

A song can be in any key though. From the above you can see there is a system to how many sharps and flats a key has. For each additional sharp or flat you go a fifth -7 half steps away - up for sharps and down for flats.

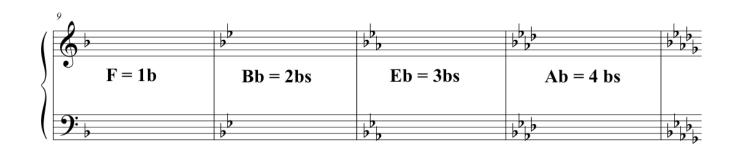
# Circle of Fifths on the Keyboard

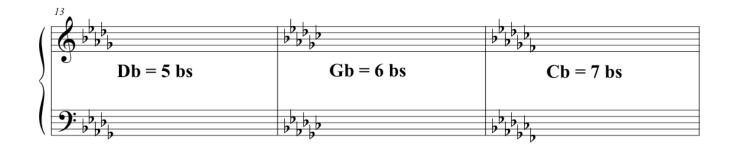


# Key Signatures

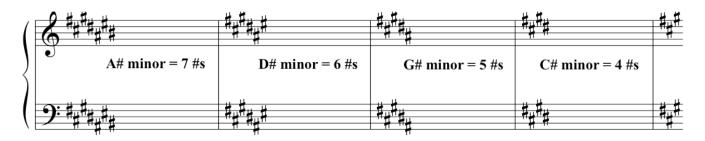




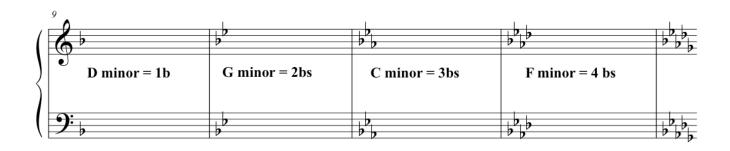


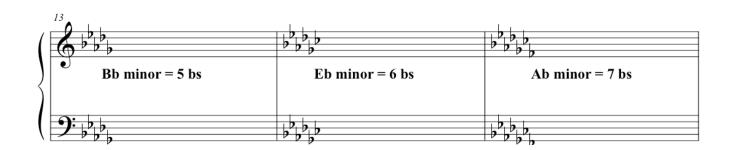


## Minor Key Signatures



(	\$ ## <sup>#</sup>	##	#		<b>&gt;</b>
}	F# minor = 3 #s	B minor = 2 #s	E minor = 1#	A minor	_
	9: ##	##	#		<b>-</b>





A double flat simply looks like two flat symbols like this: b b

A double sharp is a funny kind of x and looks like this:

#### Harmonics

# The Harmonic Series



**Root**, A open string = 110 hz, hertz, times per second



 $1^{st}$  Overtone, an octave above, A = 220 hz



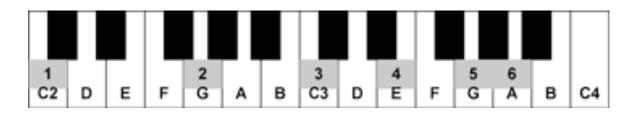
**2<sup>nd</sup> Overtone** is a 5<sup>th</sup> above, E = 330 hz.

Can you guess what the note, and frequency of the  $3^{rd}$  overtone is? The hint is this: You divide the string into 4 parts.

Did you guess it yet? Well, the frequency is 440, that should tell you that like halving the open string (110) gives us an octave above, (220), halving the half, or dividing it into equal quarters gives us the next overtone, the next octave of A, and in this case the most common note: "La equals 440!" All instruments tune to.

Here is the **harmonic system**, also called the **overtone series**, on a piano keyboard, starting on the note 'C,' and you will see where the **major chord** comes from:

- \* ROOT NOTE = C1
- \* FIRST OVERTONE = C2
- \* SECOND OVERTONE = G2
- \* THIRD OVERTONE = C3
- \* FOURTH OVERTONE = E3
- \* FIFTH OVERTONE = G3
- \* SIXTH OVERTONE = A3



### **The Science of Harmonics**

# Tuning with harmonics / overtones

Reviewing regular fretted tuning:

5<sup>th</sup> fret of E is A. 5<sup>th</sup> fret of A is D. 5<sup>th</sup> fret of D is G. 4<sup>th</sup> fret of G is B. 5<sup>th</sup> fret of B is E.

From the above you know where the  $5^{th}$  fret is (or would be). Also you must know where the  $7^{th}$  fret is (or would be) – it gives you the perfect  $5^{th}$  if you hold it down OR get the harmonic, the overtone.

When you have string 1 tuned: Using overtones, tune string 2 7<sup>th</sup> fret to string 1 5<sup>th</sup> fret. Next tune string 3 7<sup>th</sup> fret to string 2 5<sup>th</sup> fret. Next tune string 3 5<sup>th</sup> fret. Next tune string 5 open to string 1 7<sup>th</sup> fret. Finally tune string 6 open to string 2 7<sup>th</sup> fret.

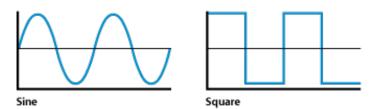
# Playing "Revile" with harmonic overtones

The song that wakes the troops up, "Revile," is made up of the same notes as the harmonic series we are describing. The first three notes are (overtones of) 7<sup>th</sup> fret, 5<sup>th</sup> fret, 4<sup>th</sup> fret. Later there is one higher note, 3<sup>rd</sup> fret.

# Sine and Square waves, the mouth as a filter



When you make the "oo" sound with your mouth, that is a pure sine wave, as we imagine it. The "ee" sound is the square wave, yes, it looks square. As you open your mouth from "oo" to "ee," if you go slowly, you will hear the overtones / harmonics show up. First the octave, then the 5<sup>th</sup> above that, just like the keyboard graphic just above.



The 'naturally occurring' overtones help to see how notes are added up to create chords. A chord is a series of notes on top of each other, generally using a 1 - 3 - 5 - 7 - 9 etc.. system.

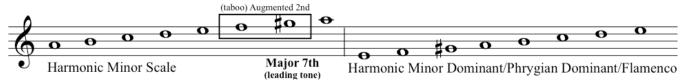
#### **Greek Modes or Scales**

Johann Wolfgang von Goethe said "Architecture is frozen music." Columns were **Doric**, then **Ionic**, then **Corinthian** (as Rick Steves the travel guide says, each era added a syllable ©). Our music modes system is different but similar. Yes, these were modes of music used even in Greek times. Some names are different.

Greek Mode	Roman Letter	Solfege	White Notes	Also Known As	Scale Degree	Quality
Ionian	I	Do	C to C	Major Scale	Tonic	Major
Dorian	ii	Re	D to D	Dorian Minor	Supertonic	Minor
Phrygian	iii	Mi	E to E	Phrygian Scale	Mediant	Minor
Lydian	IV	Fa	F to F	Lydian Major	Subdominant	Major
Mixolydian	${f V}$	So	G to G	Dominant Scale	Dominant	Dominant
Aolean	vi	La	A to A	Natural Minor	Submediant	Minor
Locrean	vii	Ti (Si)	B to B	Locrean Scale	Leading Note	Diminished

The following scale doesn't fit into the above list, for one thing it has the sharp  $2^{nd}$  or augmented  $2^{nd}$  interval.

### Harmonic Minor Dominant - (Flamenco / Middle Eastern / Phrygian Dominant / Freygish)



This scale is tons of fun! You'll sound like a Genie, or Andalusian Gypsy King! Play around with it!!



#### Make a fun game of who knows the song!

This song is a perfect example of the Middle Eastern / Harmonic Minor Dominant scale. Do you recognize it? It is the best example of this scale ever, and truly a beautiful, fun song.



The following is a form figure that goes around a circle of fifths (called a *sequence*) in an interesting way. Sure it looks complicated with all the chords completely spelled out, but you'll see that it is not really that difficult to play. In the title notice the Re=D, sol=G, mi=E, la=A, fa=F and ti=Bb. The 8vb with the dashed line means play it an octave lower. The Ped. and star symbols mean sustain pedal and release. They look like pretty flowers ©.

This can be a building block for a song, or improvisation, or ensemble work (fun playing together). Enjoy it!



Spelled out: The 1<sup>st</sup> 4 notes up and down is a <u>D minor 9</u>, the next 4 is a <u>G 13 over D</u>, the next 4 an <u>E minor 7 with a flat 5<sup>th</sup> and flat 9<sup>th</sup>, the next 4 an <u>A 7 with a sharp 5<sup>th</sup> and flat 9<sup>th</sup> over E</u>, the next a <u>F Major 9</u>, the next a <u>Bb Major 9 over F</u>, the next 4 an <u>E minor 7 with a flat 5<sup>th</sup></u>, the next 4 an <u>A 7 with a sharp 5<sup>th</sup> and flat 9<sup>th</sup> over E</u>, then <u>D minor 9</u> again (you see that **m**inor is lower case, **M**ajor and **S**eventh are uppercase). How nice that playing these simple 18 bars above, all the chords you'll know. © Try this intro: start by repeating bars 9-12 (F & Bb chords), then play 13-16, then start at the beginning.</u>

The song is *modal*, in a mode. The "Do" is C Dominant (the Bb), Mixolydian, not Ionian. Funny how it sounds like: "He's in a mood, his resolution is odd." It is as if music is the true understanding of moods (*they are modes?*).

### **World Music Mastery, Building Blocks for Playing With Anyone!**

Start with just the left hand, soon you will see and know how a chord is 1-3-5 and how to make the common ones.



\* Quarter tied to eighth note is more correct. \*\* Bass can be 1-3-5 as in bar 1 or 1-5-1 as in bar 15.

Notice the ROMAN NUMBERS for each chord. Lower case are minor. A "Progression" is a set of chords. You should be able to play I-IV-V in any key, as in these examples. Also i-iv-V=minor. Continue on your own up chromatic as the last three staves/staffs here do. The next is iv-i-V-i in C minor, then C# minor. Notice with these that go iv-i-V-I, f you start on the 4th bar it is i-iv-i-V! Songs can shift like this in the middle! Learn every key.

## **Common Chords**

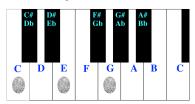
# Triads, chords that are 1-3-5

Here are the common chords on the treble clef of the musical staff, in C:



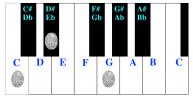
On piano keyboard:

C or C Major (in classical harmony "C+") = C - E - G.

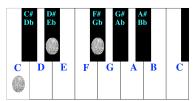


(Try major chords in circles like C, F, Bb, Eb, Ab, Db, Gb, B, E, A, D, G, C whala! Great practice!)

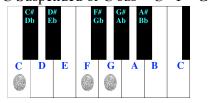
C minor or Cm or C - Eb - G.



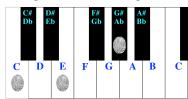
C diminished or C dim or  $C^{\circ} = C - Eb - Gb$ 



C Suspended or C sus = C - F - G



C Augmented or C aug or C+ = C - E - G#

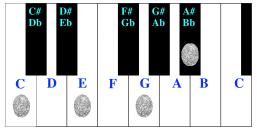


#### Seventh Chords 1-3-5-7

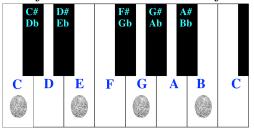
Notice: if someone calls out "**F Seven**" it is the *Dominant Seventh* chord that is they mean, not the *Major Seventh* chord – unlike how with Triad chords, *Triads*, above, if someone calls out "F!" or "F Chord!" they mean F Major. With 7ths you have to specify if you want a Major Seventh. The default, if you just see the letter and number, is a dominant 7<sup>th</sup> chord, which has a major third and a minor or flat 7<sup>th</sup>.



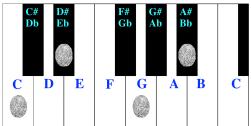
C Seven or C Seventh or C Dominant or C Dominant 7th or C7 = C - E - G - Bb



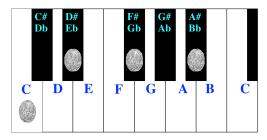
C Major  $7^{th}$  or CM7 or C $\Delta$  or CMaj7 = C - E - G - B



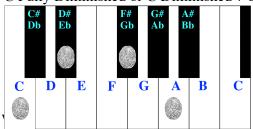
C minor 7<sup>th</sup> or C min 7 or Cm7 or C-7 = C - Eb - G - Bb



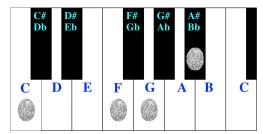
C Half Diminished or C minor diminished 7 or Cm7(b5) or Cø7 = C - Eb - Gb - Bb



C Fully Diminished or C Diminished 7 or  $C^{\circ}7 = C - Eb - Gb - A$ 



C Seven Suspended or C Seven Sus or C Seventh Suspended or C Seventh Sus or C7sus = C - F - G - Bb

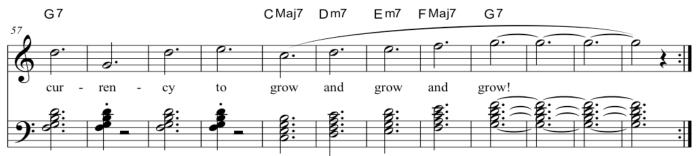




In the space next to the keyboard graphics above, write out each interval. For example: C to F = perfect fourth. F to G = perfect  $2^{nd}$ . G to Bb = Minor Third.

You can additionally do all the other intervals, such as C to Bb, C to G and F to Bb.

One of the best exercises you can ever do is to go around the circle of fifths and at the same time practice ii-V-I or 2-5-1. A great way is like: Am D7 GM "Gm C7 FM "Fm Bb7 EbM "Ebm Ab7 DbM "Dbm Gb7 BM "Bm E7 AM "Am D7 GM etc.. First just do one hand, then when you feel you understand the system put the roots in the left hand. This is truly one of the best exercises you can do. Here are some good basic 7<sup>th</sup> chords from the affirmation song "My Successes Are Here" later in this book:



In this section from Johan Sebastian Bach's Prelude #1 you see the G7(sus) to G7 is noted below (in *figured bass* style) as **V** 7/4-----3. Try playing the G7sus4 and then G7 to see what Bach is showing us here.



### **Heuristic Music Learning**

Here our intention is to teach you how to learn music by yourself, starting with being able to write down melodies you hear or know, then writing down the chord progression so that accompanists can play it too.

#### heuristic

As an adjective, heuristic (pronounced hyu-RIS-tik and from the Greek "heuriskein" meaning "to discover") pertains to the process of gaining knowledge or some desired result by intelligent guesswork rather than by following some pre-established formula. - <a href="http://WhatIs.com">http://WhatIs.com</a>

We at Givnology with our Educational and Media Technologies look at what makes a superior trainer, helping students know how to learn by themselves. Encourage them to bring in whatever manuals or instructions they have, and show them ways to utilize the resources that they already have to their optimum. This would mean showing them sections of instructions they should take care to learn thoroughly, or sections of reference materials that they should keep handy and use frequently. In addition supply students with lists of shortcuts, and techniques to make step-by-step instructions for themselves or others.

In music, encouraging students to learn by themselves is a vastly different task, but has many of the same strategies. What makes it different is the extent to which people should find out how to find the music within, the traditional songs of their cultures, or even other people's cultures that they admire and want to honor (if appropriate).

Unlike other learning, there are things that one who wants to learn music on their own should do that are completely personal and have *everything* to do with their particular backgrounds and inclinations. The greatest advantage of learning music on one's own, being one's own teacher, is that one can study exactly what one wants to study!

If your are a Beethoven-head, you can immerse yourself endlessly in Ludwig's thoughts, emotions, stories and music. If you want to study the traditional music of your ancestors, you can dig deeply into it without having to be concerned with anything else.

Firstly, like any learning, prepare with plenty of paper, pens – erasables are great! Mechanical pencils are awesome, yellow highlighters and stick-it pads to use as notes and bookmarks so that your books are kept in tip-top shape while having many color-coded easy to find tabs with just-what-you-want, just-when-you-want-it! In addition, walkmans or small tape recorders are very inexpensive nowadays, we suggest having one or two so that you can sing or play any idea into it without having to go to a recording studio – to make sure you don't lose that genius amazing inspiration that came to you at 2AM. **Make sure to have plenty of supplies.** 

Always tell music students to learn enough to be able to write down basic music phrases on a musical staff. This only requires knowing the pitches, where the notes are vertically on the staff, and note values: whole notes, half, quarter notes, sixteenth and so on, and rests. All these things are very easy to get a basic grasp on.

The easiest way would be to have a friend help you write down a melody that you love. By seeing how the sounds and lengths translate into circles with various flags, rests between and put between bar lines, you will make the connection between what you know as music and how it looks on paper.

You can also find a score of a song you know well. When you can look at the score and see the same sounds that you know, you will have bridged the skills you already have over to this new task: knowing what written music looks like.

Once you can do the basics of writing a melody on a staff, which is no small accomplishment, you can basically start to analyze music on your own. The next step is to understand what keys or chords should be used underneath the melody that you have written.

Our goal here is that you can score music for your self and for others to collaborate or to help you play it better or together, in an ensemble. If you are to play with a solo instrument like a flute, simply writing the melody out is enough. If you want to play with accompaniment such as guitar, piano, accordion, ukulele or keyboard, etc., you will need to know what a chord progression is, and what the common ones are. Sometimes you will use a standard set of chords – whether or not the song originally had them! Common chord progressions are:

I - IV - V - I or "1-4-5." This is the most common in all songs! Some songs have less chord and may stay in I for most of the song, maybe going to V for a climactic type of finale, then back to I. Others may go I to IV, to ii, to VI, to VIb (flat six) to V to I or wherever it wants! Again, the above suggestion is best: have someone show you the chord chart for a song you like or know well. See how the root moves here and there, and see how you could sometimes use a different chord structure for the same song!

# Be A Useful Member Of Your Music Projects

You should always have a SONG LIST / KEY LIST / CHEAT SHEET for the project or group's songs. If you are blessed enough to keep it all in your head, fine. What about when your favorite other musician want's the same overview of CHORDS, STYLES, ARTISTS, and LYRIC SHEETS that you've prepared for yourself? Make these lists available to others too and the musical organization you do will come back to you.

You should also be extremely reliable, because musicians have a bad reputation for reliability that you should help overcome. Call people back, and promptly, so that they can know what's going on, if they can use you in their project.

Go over your material A LOT!!! It is always obvious at a session or rehearsal who has been doing their woodshedding (rehearsing on their own). That's the sort of negative way to look at this, let's look at the positives: The more you practice all the material, and other similar material, and work with other members on it, the more latitude you'll have in the session! If you've found another song in the same style that your project is working on and it really helps you get into the feel and vibe of the style, have the cats warm up on that song. It might make the difference between people doing the least that they can and a group collaborative learning and uplifting experience! Once you've done your homework, there is no reason you can't share all the tricks and techniques you've found with your co-artists.

So get a walkman tape deck (or 5) and be able to run over the material 24-7. If someone else in the project says they don't have time for that, make them a tape and loan them a walkman. You might just save the musical project, and you'll have others to learn with together. Making others in the project notes, tapes, charts and such really helps you all bond and they'll be sharing their chops with you too!

### Fine Playing on Keyboard

There are many people who would never believe you can learn piano playing on an electric keyboard. They might be right! At the same time, they are extremely handy, and with more and more pluses and benefits than ever before like *They never need tuning*, *You can instantly play in any key*, *You can take them anywhere!* 

Children have become addicted to their techno-boxes. Get them addicted to Casio and Yamaha, off of Nintendo and Game-Boy. A financially strapped music budget can still afford these and not cancel classes! People can be asked to donate old keyboards as they get better ones.

If you are brand new to music, or thinking of starting playing again, there are many things you can do with inexpensive electronic keyboards. Considering their extremely low cost, **you can get started right away.** It is not **World Music Class**Page 26

uncommon for people to loan you (or even just give you) a keyboard. The range in prices is so big, and there are so many features and options you should know about.

First, let us overview what you can do on **Keyboard vs. Piano:** 

	Learn	Fingering	Learn E	asyPlay	Play with	Play	Extreme	Stays in	Requires	Take	
	Chords of Scales Songs Organ S		Sensitivity	Dynamics	Dynamics	Tune	Electricity	Anywhere			
Keyboard	Y	Y	Y	Y	?	?	N	Y	Y	Y	ſ
Piano	Y	Y	Y	N	Y	Y	Y	N	N	N	!

There are many other things Keyboards can do such as: easily change to another key (transpose), record MIDI files (".mid" are very small files you can send easily to people, and are easily made into phone ring-tones)

- 1) Velocity Sensitivity = you push harder, it is louder. Only very inexpensive keyboards are not velocity sensitive. In Classical music you might see *pppp* = very *pianissimo*, very quiet, *pp* = quiet. All the way to *ffff = fortissimo*, very loud. You can not really do this on a keyboard (not a cheap one anyway).
- 2) 16 not polyphonic = usually enough, unless you have to hold down a 5 note chord, sustain, and play 4 or more octaves of it (the top 4 notes won't sound, or the bottom 4 will stop being sustained). For beginners even 8 note polyphony is OK but on some keyboards some nice sounds (called tones) require doubling! To get a nice piano tone the 8 note polyphony becomes 4, too low.
- 3) Speakers or Amplifier. Most have speakers. Some people get a **Controller** (or master) keyboard that has nice action & playability, then a separate sound unit. It is easy enough to plug a MIDI cable in the MIDI out of the controller and the MIDI in of the sound unit (sometimes called slave). By default all MIDI operates on channel 1, and piano is the default sound. This option is nice because you can get an inexpensive sound unit like a Yamaha PSR for \$200 or so, then an expensive controller like the M-Audio which is weighted, 88 keys with many controls very easy to get to.
- 4) 61 keys = enough to learn the basic repertoire. Also enough to practice your scales. This is the standard 5 octave keyboard that is very inexpensive. You can usually switch octave and have it play as low as a real piano, or as high. Get 2 and you have more notes than a piano!
- 5) Sustain pedal = really required to sound reasonable at all on a keyboard. In the awful case that you forget one, you can stick a clothespin in the sustain jack and have all notes sustain all the time which at least is better than the lame sound with no sustain at all! Some people would just use a sustaining tone like church organ, but the best idea is keep an extra sustain pedal it really will save you!

# What you CAN learn on keyboards:

Fur Elise, Mozart Menuet, Bach Prelude #1, Satie Gymnopedies, Chopin A Major Prelude, Scales, Fingerings, Common Chords, etc..

You can learn much of the general knowledge about music, and keyboards from a keyboard. The name of the instrument: "Piano" actually means the word "soft." Going back in time to the evolution of the piano of today, the first ancestor was called the "Piano y Forte." This is because of it's amazing ability to get very very quiet, and also very very loud.

This exact difference in volume is one of the main things you can not really do on keyboards. It takes a very delicate touch, and even though keyboards might cost in the 10s of thousands, some pianos cost \$100,000 or more!

### The goal is to be expressive. Emotional. Sensitive. Play with feeling!

There have always been more and less expressive pianists. To be a real fine classical pianist, you will play parts of the song so quiet it is barely audible and some people will have to turn up their stereos, then some parts jump out

so loud that people will be leaping to the volume knob to turn it back down. This is music with full dynamics – very loud to very soft.

This ties in with another very important part of fine playing: phrasing. Each part should flow as if it was being sung. Try singing along with yourself while playing the part, it really helps. Overdo the quiet and loud parts.

Some pieces of some songs require brute force, jarring pounding and generally sounding like a mean person. Other songs, or parts of songs, can sound as delicate as a butterfly. Knowing how to express this vast range of emotions and moods is playing expressively.

Chopin was called "The poet of the piano." Poetics is the art of truly fine piano playing. He composed exclusively for the piano, except for a handful of pieces. He truly mastered an expressive, sensitive and emotion-

conveying technique that few others ever came close to, though his close friend Franz Liszt came close. They wrote Etudes (that word simply means studies in French) to

each other.

Can you be *POETIC* on a keyboard? Likely not. With everything we are telling you here, you can improve your piano poetics, and maybe sound OK. Still, when you get to a real piano you need to focus on the things you can't learn at all on a keyboard.



#### FINE PLAYING techniques when you have access to a real piano:

Extreme staccato (short punched sound) like Schumann's "Wild Horses" or peppy songs like Marches.

Dynamics (pianissimo and forte) like in Beethoven's Fur Elise's 3<sup>rd</sup> and 4<sup>th</sup> sections or other moody pieces.

Things that make the smaller fingers work out hard. Practice major 9ths in both hands, arpeggiate them, go up and down the keyboard until your fingers feel they have gotten a real workout.

Grace notes and trills as in many J.S. Bach pieces.

### MIDI = Music Instrument Digital Interface (5 pin din plug)

A few tips if you are using electronics. You will likely want a controller keyboard (or master) that has excellent "action." This means it is velocity-sensitive, and feels like a real piano. It is very easy to then connect a MIDI cable to a sound unit, you can get inexpensive little keyboards with great sounds very inexpensively! Plug the MIDI into the controller's MIDI OUT, and the sound unit's MIDI IN. Some excellent controller keyboards have a USB jack to connect to the computer, and that is all that you need!

MIDI sequences can be stored in keyboards, computers and sequencers. It is neat to record sequences from keyboards and play with them – change tones or loop various parts. They take virtually no memory – unlike audio recordings. They make ring tones as well..

In the case that you are using amplifiers, or any of the standard electronic gadgets – mixers, recorders, mikes etc.. it is suggested that you by very prepared by having many adapters and **Y-JACKS** just in case. If you are on a shoestring budget, RCA-to-Quarter-Inch adapters and RCA cables are cheaper and smaller! If you want to play parts into a computer or sequencer, then have it play back while playing along, you may need extra MIDI cables and a MIDI JOINER. It's the same as a Y-Jack, 2 people can

play the same sound unit. Make a practice of having plenty of adapters, including the 3-prong power to 2-prong, power strips and avoid worry!

### **Review of Chords**

#### **Triads =** 1 - 3 - 5

There are 2 **basic** types of triads: major, and minor. They are determined by the 3rd. A Major chord like C Major Triad is C - E - G. The C minor triad is C - Eb - G. The 3 less common types are the suspended triad Csus4 = C - F - G, the diminished triad Cdim or  $C^{\circ}$  = C - Eb - Gb, and the augmented triad Caug or C+ = C - E - G#.

Count the steps from the **root to the 3rd**. From C to E is 4 steps; a Major 3rd. C to Eb is only 3 steps, making the chord minor.

Common triads are M or m, Maj or min, for simple triad major chords just put the letter, like C or E or Bb; just add the minor to minor chords like Cm or C-.

From what you've just read, if someone asks what is the chord of Eb - G - C you should be able to tell them that it's C minor. G - C - Eb is also C minor. Triad chords are easy to figure out because there are only 3 notes and if they are in a different order it's just called an **inversion** of the chord.

**7th chords =** 
$$1 - 3 - 5 - 7$$

There are 3 basic types of 7th chords: **M7, m7, 7**. CM or CM7=C Major 7th, Cm7=C minor 7th, C7=C (Dominant) 7th.

As a Jazz Pianist one system is the three types are played as: **1** CM=C 6/9 (E-G-A-D) or CM7 add 9 (B-D-E-G), **2** Cm7=Cm9 (Eb-G-Bb-D OR Bb-D-Eb-G), **3** C7=C13 (E-A-Bb-D) or (Bb-D-E-A). If you can remember these 2 inversion of these 3 chord types, you can follow along most chord changes (other than diminished and altered).

$$Extended\ chords = 1 - 3 - 5 - 7 - 9 - 11 - 13$$

This is where it get's tricky. When you are dealing with TRIADS and 7ths you can figure out most any song's progressions or changes pretty easily, and there's some room, in case you like to do your 2-5-1's as 4-5-1's and so forth. When you venture into these chords you had better have your musical hat on and be ready to hear someone else's version on the circle of fifths, what a resolving chord is, and how songs are phrased.

Basically, you have the 2 types of triad chords above, and the 3 types of 7th chords above. In extended chords you have so many more because a C that is implying domanant could be C, C7, C9, C13, C6, C add 9, C7 add 9, C6/9, and other people might have other names for that type. There is a chord type called altered, and Calt could be C7, C7(b5), C7(+5), C7(b5b6), C7(b9), C7(+9), C7(b5b9), C7(+5b9), C7(b6b9), C7(b5b6b9), and there are still all those options for the 11th and 13th. I think the best scale to play over altered chords is fully diminished scale 1-2 starting right above the root, for example Calt being C-Db-Eb-E-Gb-G-A-Bb-C -- You'll have to practice a 9 notes per octave timing for your runs...

The best way to learn these chord types and progressions is to know, and play the circle of fifths. There are many ways, the most common being CM - Am - Dm - G7. That's 1-6-2-5 in C. The next circle or pattern to work on is Am - D7 - GM - CM - Gbm(b5) - B7(b9) - Em - E7. That is also called 2-5-1-4-7-3-6 (in the key of G). Practice these changes in all keys, all chord inversions, different tempos and you will sound great!

# Percussionist Roles

# Overview: Instruments' names are their roles

Percussion instruments and their musical roles are often the same. For example, the clave is the name of the instrument, and it's pattern. Playing correct is called being "In Clave" or if you are not, someone will say: "In Clave!" In the New World, African music understanding merged with the Europeans and created new forms that didn't exist before. The amazing thing about Latin Music is that it follows percussionist, therefore African, musical rules and approaches to composition, arrangement, and ensembles. A key component of this new mixture was that skilled percussionists have many techniques that are not found in the majority of European musics.



Some basic ground rules would be: Parts (and the people that play them) will all be on one rhythmic focus, or clave. Other parts will focus on another rhythmic tension, repeated pattern with another accent or focus. How these two groups interact, is what the composer, arranger and quality performer set up.

A main rule that is broken is the accidentally playing the other groups pattern or emphasis, and being told "turn it over!" or "turn it around!" Friendships have been stressed, parties made less fun and other un-fun things because people don't know where their part fits in the big picture. Am I to compliment the low drum tone, or the counterrhythm percussionist's part, or a melodic line?

It is better to know well and very clearly which side of the pattern you are supposed to be on, and who's musical toes to not step on!

### **Clavitos, Claves For Beginners**

Clave is the key. Quite literally! That's what the word means in spanish. The instrument is made of 2 sticks, about one foot long and one inch thick. They make the very loud click that is the metronome in salsa and latin music, and much more. They can be likened to the instrument "Wood Block" which usually has just about the same rhythmic function; a loud, clear and obvious tempo mark that is heard even when it is not there!

This section will include the project of having students get used drum sticks from a drummer that they like (they are always throwing away a lot of drumsticks!), then cutting them into halves, sanding them down, optionally painting them!



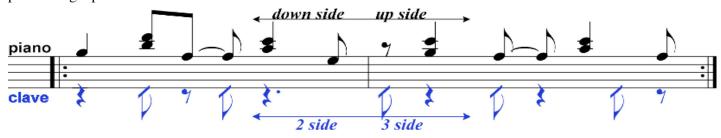
The Clavitos are perfect size for beginners, and they hardly have any sound at all unless you learn exactly how to palm one, then carefully tap it in the right way with the other one.

#### Rumba

Drumming and dance of the poorer people from the Caribbean, particularly Cuba and Puerto Rico, mostly of African descent. No melodic instruments (usually). Conga drums with 3 specific roles: Primo=basic downbeat, Segundo=basic pattern beats, and Quinto=improvised solo, a higher tone. The 3 forms of Rumba are: Guaguanco, Columbia and Yambu. Usually includes the following percussion instruments: Claves, Palito, Shekere, sometimes Agogo (or Cowbell). Each instrument has the role called by its name, for example, the palito pattern could be played on something else, like the quinto, or cowbell. Since it was developed in the Caribbean, the language is Spanish, as are the melodies.

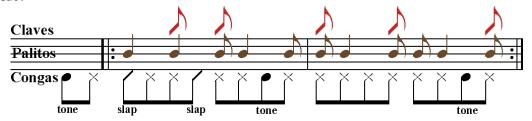
#### Montuno

Latin piano part, often on guitars, violins or horns. Has 2 distinct functions: 1) Usually has a "down-side" and "up-side," not always the same down side as other instruments. 2) Defines the chord progression, usually with the leading tone as the montuno's octave note (sometimes with both hands making 4 leading tones!) or the root, 3<sup>rd</sup> or 5<sup>th</sup>. Has to be rhythmically exact, and create the perfect rhythmic tension. It is a musical / tonal instrument performing a percussionist's function.



### **Clave Offenders**

Since the most common problem is playing on the wrong side of clave, we will focus on those areas to keep you from being a clave offender. Notice from the graphic below how the Segundo conga part focuses on the beginning of bar one. It's three beats are at the beginning, it is called "in 3-2 clave." The clave part, though, focuses on the other bar, in the first bar there are only the 2 notes! It is "in 2-3 clave." The palito part, and shaker parts, should be "on the same side."



## Percs1: Da-dada-da-da

What is the answer to "Da dada da da?" Let them guess for a while, and make it fun. No, it is not Morse Code, though it looks exactly like it. The answer is "Da Da!" which is the ending of many songs, symphonies and sonatas as well. Like the last 2 notes: Ta-da!

This is "Call and Response" that is famously in African music, percussion, and so many styles of music.

Also Solo and Chorus very often (and beautifully) do trade offs, "rounds" are like this as well..

This lesson's focus is that there is a "call" side of clave, and an "answer" side. The answer side is downbeats.

Have half of the students all do the **Call** part. Have the other half do the **Answer**.

Try other phrases that are designed as clave patterns:

#### "Shave and a haircut, two bits."

One phrase that we've designed that is very positive is in clave pattern as well:

"Peace ease and clarity, for me."

#### **Percs2: Clave Down!**

This graphic gives you a very clear demonstration of where the clave beats are in relation to the downbeat. The claves are the clapping hands images, the downbeat is the tapping foot image.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
But				Burn				Sem				Bur			

You can look at the clave pattern as  $16\ 16^{th}$  notes, making one bar, or 2 bars of  $8^{th}$  notes. A fast song usually is thought to have a "2 Bar Clave" and that is the best way for you to understand it. One bar – or side – has 3 pulses, the other bar has 3 pulses.

The above graphic is called a "3 - 2 Clave" and you can clearly see why. Sometimes you will think of the clave pattern "upside town" or "turned over" or "turned around," and that will be a "2 - 3 Clave."

First, get familiar with playing the clave and tapping the beat with your foot.

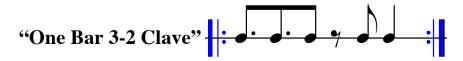
Next, be able to play the clave on a table or your leg in one hand and the pulse or beat in the other. Switch hands too!

Finally, be able to play the clave without playing the downbeat, or playing the beat in your mind only.

Listen to songs and play the clave pattern along with the song! See if you can stretch and slow down to make twice as many claves, or less longer claves. A clave can even be ½ bar, or 4 bars! Try it!

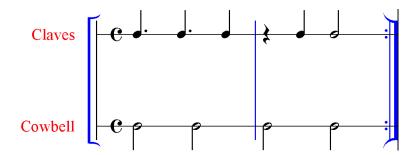
### **Percs3: Son Clave + Pulse**

If you are not familiar with music notation, try counting the units such as: 3, 3, 4, 2, 4.



This is one way to write a one bar clave, there are others but this will do. The following is written in 2 bars, and includes the downbeat on Agogo or Cowbell.

The pulse or downbeat should be in your mind, but you can play it as well if you like.



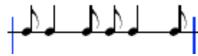
The "2 side" of the pattern is the "Down Side." It has more downbeats, and the down beat is pronounced. A "2-3" pattern has the down beat first, or the down beat side first.

Once you are playing the pattern, it will sound exactly the same, whether or not it is 2-3 or 3-2 **to you**. It **is** exactly the same to you, but in the overall arrangement it couldn't be more different.

### Percs4: Palito (Simple and Basic)

Again, just like the clave pattern is named after the instrument, the palito pattern or little stick pattern mean the same thing.

This is the simple – **one bar palito**:



In fact, you can see that it is a 2 beat pattern repeated.

This is the basic 2 bar palito:



Look carefully, surely you can see which side or bar is the 2 side, meaning which is the **DOWNBEAT** side. Once you can see in that palito pattern which side is the down side, you know where the clave goes.

This palito is common in many percussionist styles, including Brazilian, Calypso, Salsa and even Boleros – ballads. It is very nice to play by simply rubbing your palms together!

Once you can play these palitos with either hand, using various fingers, it is infectious! You will find yourself tapping really nice palitos almost anytime. Keep note of which side is the down side!

You may want to end your palitos playing with the "Da da!" we learned before, think of it as the flamenco dancers last move, hand goes up gracefully. Ole!

## Percs5: Clave & Palito in Binary (back and forth)

In the following example, the downbeat pattern stops for the palito part which is played with two hands.



"Binary" means that you play one part for a certain amount, then the next part, back and forth.

A good idea is 4 claves, then 4 palitos, back and forth. The trick is: don't play the last little leading note of the palito pattern! It's only necessary when going back into palitos, it's not necessary for the ending, or going into the clave part again.

### Percs6: Rumba Clave, Palito & Binary

Sides – claves against each other

The advanced clave is the "Rumba Clave" which is very similar yet very very different.



It's count is 3, 4, 3, 2, 4. The key is that the 3<sup>rd</sup> note, or "gulp," is ever so close to the 2<sup>nd</sup> half of the pattern! It is like an impossibly close note, just barely in front of the 2<sup>nd</sup> part of the pattern, and it need be accurate!

The easiest way to start learning this is to play the downbeat of the 2<sup>nd</sup> half at the same time. You can play it either with the clave pattern, or with your other hand on another instrument like a cowbell.

Eventually you can play this super-complex yet super-simple pattern without the downbeat and keep it super-tight!

#### **Percs7: Rumba Palito**



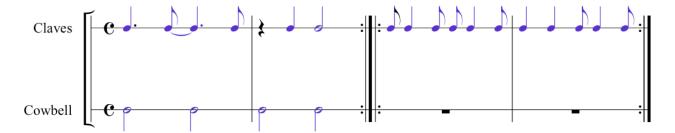
The following translation of percussion into melodic parts includes 2 opposing claves.

You will find that the Congas sounds like a 3-2 Son Clave pattern, in opposition to the Rumba Clave.

"Rumba Palito" a more syncopated little sticks (wood block) pattern re-envisioned into a tasty piano montuno



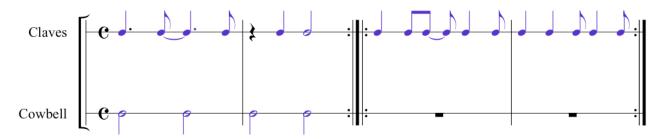
## Percs8: Rumba Clave & Rumba Palito in Binary



This complex Rumba Clave is similar to Son Clave but so much more exciting and fun!

"Binary" means that you play one part for a certain amount, then the next part, back and forth.

The following more advanced "Rumba Palito" should be learned after getting the basic one tight.

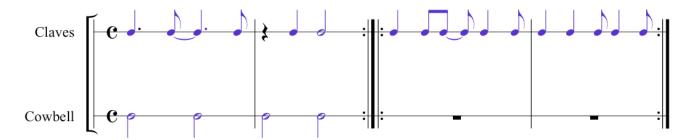


A good idea is 4 claves, then 4 palitos, back and forth.

The trick is: when going back to clave, don't play the last little leading note of the palito pattern. You may want to play it when going in to palitos.

It's only necessary when repeating palitos, it's not necessary for the ending, or going into the clave part again.

### Percs9: Rumba Palito in 2-3 and Conga Dance



Repeat the 2<sup>nd</sup> phrase, the "Rumba Palito" by itself, but leave out the last 2 notes of the first bar.

After a while, reverse it, start on the 2<sup>nd</sup> bar.

A fun text for this is:

"You can do the conga

**Everyone loves the conga** 

You can do the conga

Come and dance my conga!"

The word **conga** is the first two clave beats in the second bar. In other words the words go:

Every other phrase can be improvised as well, allowing call and response!

### Percs10: 6/8 Agogo & Cowbell Patterns

All of these patterns so far are in 4/4 time. The deeper African rhythms are in 6/8 (also called 12). There are 2 primary patterns played on **Agogo** bell, or in the new world, the **Cowbell**.



After understanding the 5 note clave, you will eventually see that those 5 notes are a subset, an abbreviation of much more complicated 7 note agogo patterns.



These are synchronized with the musical scales, the Do-Re-Mi of music in an amazing fashion. The octave is devided into 12ths, there are 12 actual notes between C and C. Of these 12 we use 7 for our scale, the 8<sup>th</sup> being the note repeated an octave away. When you play the major scale you are using whole steps and half steps. Between C and D is a whole step, but between F and G is a half step.

The Major scale is: Whole whole half whole whole half which if you look at the syncopated agogo pattern, is the same. The Lydian scale is: Whole whole half whole whole half which is the same as the downbeat agogo pattern above.

## Percs20: Entries - "Counting In" With Sides

If the song is in 2-3 clave then the clave player – and the other instruments in sync with the clave such as the palitos, shekere and so on – will need to know how to start on the 2 side of the pattern.

Since you have been practicing both 2-3 and 3-2 patterns, it shouldn't be very difficult for you to come in either way.

Take an obvious 3-2 song, and count in to the song with clave and percussion

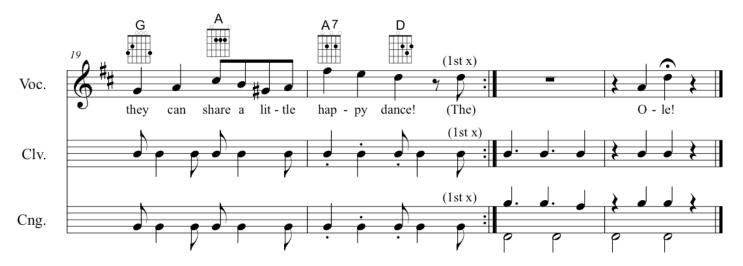
Take an obvious 2-3 song – probably a Rumba – count in and see the difference.

The part sounds the same, even though they are completely opposite. Funny how it is the same, and completely different at the same time hum?

### Percs21: Endings - Outtros in Unison

There need be a lot of eye contact to do endings or *outtros* together, and well. The person counting will need to be ahead of everyone else, and know when to get their attention but not too soon, and definitely not too late! Then he or she should be able to let everyone know how long until the ending.

Often people will end on the clave part all together. This excerpt is from Carmen at the end of the book:



Here is a common percussion ending from Brazilian music. This is great to have the whole group do together:

#### Brazilian Unison Outtro



### Percs22: Hearing Songs' Claves & Sides

Now when you hear a song you like, try playing various clave patterns and see which fits best! Then you can add the other perts such as palito, agogo, and perhaps even the conga drum parts.

Most songs will not have the opposing-claves technique, so don't worry about that. As far as pop or simple songs go, don't worry about being on the side of one percussion section or another, it can be considered all one unified rhythmic section.

### **World Music Stories**

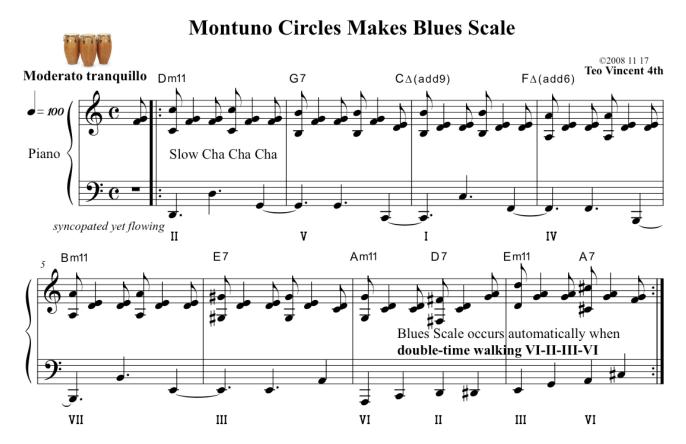
Salsa is Spanish and West African (mostly). Funny the Spanish already had an African influence from the Moors. It used the Middle Eastern Scale and interestingly, this scale *is not* West African like the rhythms of Salsa are.

Many *New World* musics are pioneers of World Music. The Trinidad people, from a great oil producing country, turned the ghastly old oil drum into, what? The amazingly beautiful Steel Drum Piano! What a gift this is!

Perhaps Wolfgang Amadeus Mozart was the first World Musician with his Turkish Rondo, but Johann Sebastian Bach had gathered suites of French and other dances and re-presented them, the great sharing of World Music.

### **Percussion Patterns Made into Melodic Phrases**

In the following song the Shekere pattern is turned into the piano montuno. It is a one-bar-pattern, the simplest way to do a montuno, and there is no wrong side to it. It is more of a Cha-cha-cha montuno.



## **World Music Definitions of Afro-Latin Music Percussion Roles & Rules**

**Bembe**: a religious event of the Nigerian Yoruba people. Drummers play 3 Batá drums. Batá have 2 drum heads. Each of the three drums has very specific roles. There are also usually agogo (or cowbell) patterns, shekere (or shaker) patterns, and clave patterns.

**Cha-cha** or Cha cha cha: slower Latin Music, also: the sound the feet make on 3-4-1 beats.

Clave: 1) wooden sticks held in a specific way to get good tone, 2) a rhythmic tension pattern, usually 5 hits. A seeming simple but quite complicated rhythmic pattern repeated endlessly. Must be accurate! One might say about your musical part: "You are not in clave!" which means that the part you are playing does not go well with clave (the montuno down side should not be on the down side of clave, see Montuno).

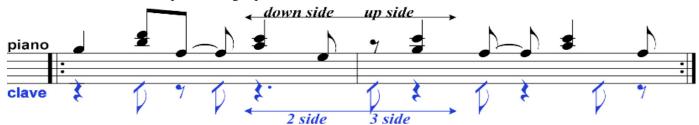
**Diaspora**: Cultural legacy. Where the peoples have traveled and influenced with their culture.

Floriano (flowery) instead of sparse parts, more notes are played, flowing.

**Latin Music**: from "Latin America," or Spanish-America, Cuba, Puerto Rico, the Dominican Republic, Peru, Chile, Mexico, etc.. Also called Salsa, Son or Mambo.

Mambo: 1) the style we usually call Latin Music. 2) a section of a song near the end, repeated.

**Montuno**: Latin piano part, often on guitars, violins or horns. Has 2 distinct functions: 1) Usually has a "down-side" and "up-side," not always the same down side as other instruments. 2) Defines the chord progression, usually with the leading tone as the montuno's octave note (sometimes with both hands making 4 leading tones!) or the root, 3<sup>rd</sup> or 5<sup>th</sup>. It has to be rhythmically exact, and create the perfect rhythmic tension. It is a musical / tonal instrument performing a percussionist's function.



Rumba: Drumming and dance form of the poorer people from the Caribbean, particularly Cuba and Puerto Rico, mostly of African descent. Usually with no melodic instruments. Conga drums with 3 specific roles: Primo=basic downbeat, Segundo=basic pattern beats, and Quinto=improvised solo, a higher tone. The 3 forms of Rumba are: Guaguanco, Columbia and Yambu. Usually includes the following percussion instruments: Claves, Palito, Shekere, sometimes Agogo (or Cowbell). Each instrument has the role called by its name, for example, the palito pattern could be played on something else, like the quinto, or cowbell. Since it was developed in the Caribbean, the language is Spanish, as are the melodies.

Salsa Romantica: A more slow-dancing Latin Music, flowing. Often love songs.

**Son**: the style we usually call Latin Music.

**Yemaya** (Yemonja): The Ocean Goddess. "The Mother of the Children of Fishes." One of the Orishás, the Nigerian Yorùbá tribe's sacred deities. She is the ultimate symbol, the personification of motherhood.

Yoruba (Yorùbá): The largest tribe in Africa, from the Lagos area of Nigeria. Most American slaves came from there. The language is a tonal language with low, mid and high tones: Yo=mid, rù=low, bá=high. In some ways, the Yoruba culture is said to be most alive in pockets of ex-slaves such as Brazil, Cuba and certain regions of the U.S. These regions are called "the Yoruba Diaspora."

The following cleverly includes advanced translating of percussion parts into melodic phrases in pages 2 and 3.

# Yorùbá Diasporas



(1) It is a harmonic delight when some or all melodic parts imply Am7-D7 while the Bass plays FM7-Dm7



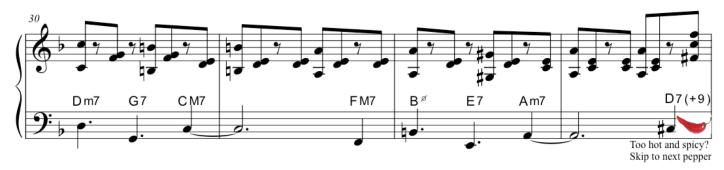


#### "Rumba"

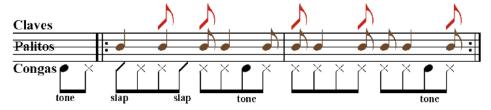
"Palito" (the word means little sticks) wood block patterns turned into piano "montuno" phrase



"Segundo" drum part. The foundation of Rumba is the "Tres Golpes" of the segundo opposite the "3 side" of the rumba clave pattern



Afro-Caribbean Rumba is: 3 conga drums, claves, palitos (or wood block) and singing. Usually no tonal instruments. This section is a creative adaption of the percussionist roles and rules into melodic music parts and phrases.



#### Yorùbá Diasporas (page 3)

"Rumba Clave" especially complex syncopation pattern played expressively on chromatic dissonant chords





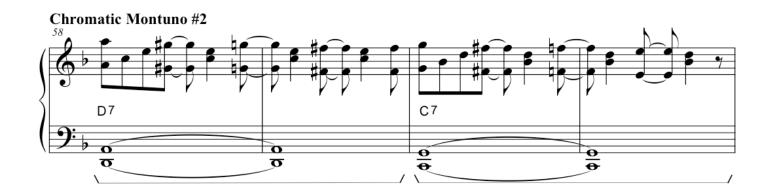
"Rumba Palito" a more syncopated little sticks (wood block) pattern re-envisioned into a tasty piano montuno

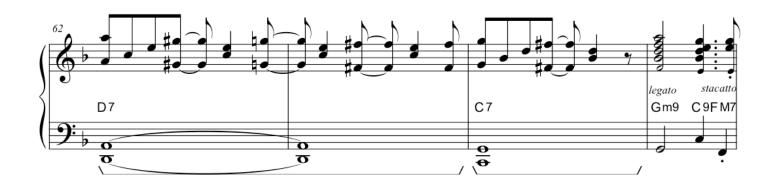




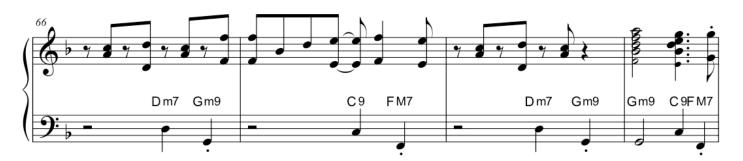


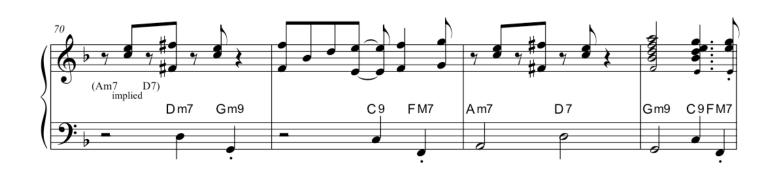


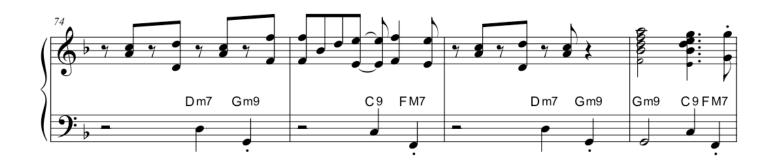


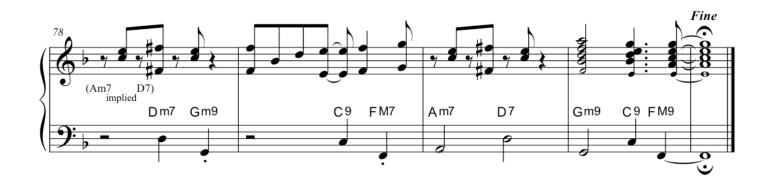


### Yorùbá Diasporas (page 5)









### **Complimenting Ensembles**

One of the most advanced business techniques is to groom your successor. Rather than just keep your competition down, you help the person that will replace you, so that you move up the ladder.

The pianist's role is often to accompany the singer. By extension, the keyboardist is often giving everybody in the ensemble their part, harmonic structure, tempo and even feel or mood. In the old operas the harpsichord might be so quiet that it is drowned out by the louder instruments, but it's role is key to keeping the orchestra "in the groove."

In Jazz, the term is: The Piano *Comps*. Comping in another way of looking at it is playing the accompaniment. Comp chords are giving the harmonic structure to the basic melody and parts.

There are many reasons why an artist compliments his friends a lot: for one, if one is judged by the company that they keep, then showing their company in the best view is best for them as well! It is also just simply good to encourage the best in people, help them see their accomplishments and good points rather than focus on their weaknesses. I remember being absolutely wowed by Pat Metheny's keyboardist Lyle Wagner, but he was more the backbone, in the shadows, allowing the star to shine ever so brightly. Lyle is great at complimenting, in the best sense of the word, and the best sense of the work.

When all the parts of the ensemble are clear on the overall structure and process throughout a song, having the conductor inside each musician keeping each in their proper role and compliment to the whole, this is when everything flows gracefully and beautifully.

### Highlife has: 1-Rhythm, 2-Line and 3-Lead Guitar Parts

Highlife is a beautiful and fun the West African style of dance music.

Highlife style was made popular by King Sunny Ade the great guitarist among others.

One guitar plays chords. Another plays "the line," an important part of the arrangement rhythmically *and* harmonically. The third guitar is the lead guitarist, and the lead part may be a 8 bar phrase or even longer!

**Afrobeat** was an important synthesis of the two: Nigerian and American Soul musics by the famous Nigerian artist **Fela Kuti**. Fela was very inspired by the American James Brown's Soul Music and guitar grooves so Afrobeat was a way of merging old and new styles.

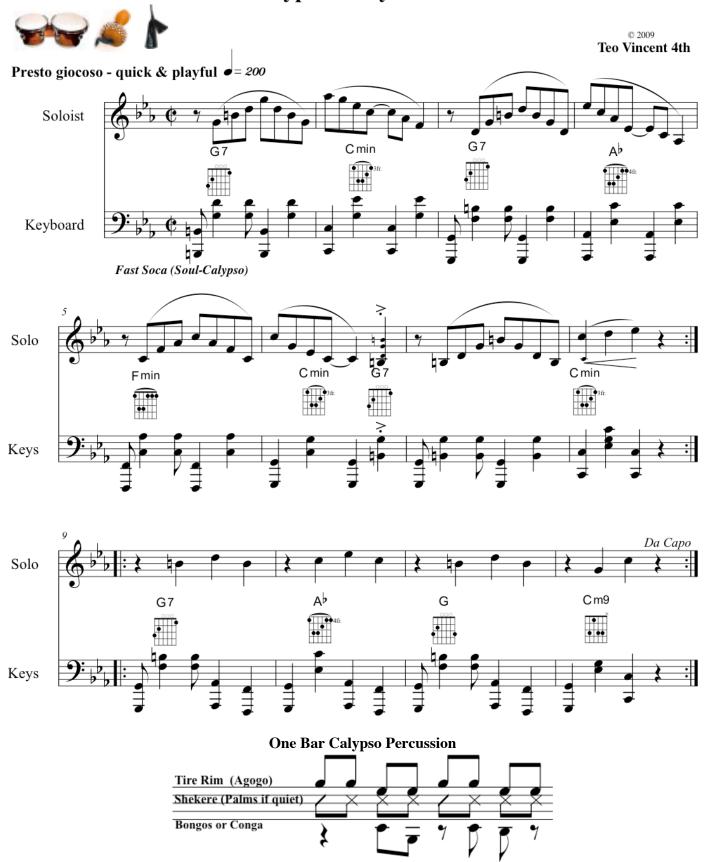
The great Camaroonian composer Hugh Masakela did similarly with "Soul Makosa," a song popular in the 1970s. Makosa is a traditional African musical form.

Many African musicians came to California originally on tour with Hugh Masakela's band in the 1970s.

Some musicians came to California from playing with Fela. His son still leads his band.

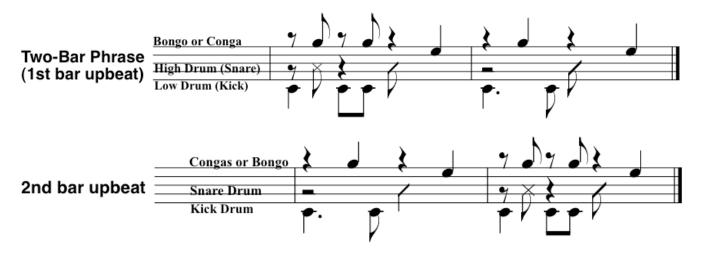
There is a Cameroonian band that plays awesome salsa, and sings in Spanish, and doesn't even know what they are saying! Their tempos are amazingly tight though! What goes around, comes around!

# **Calypso Study for Duet**



The one bar pattern has no down side and up side. The following two bar patterns do have up and down sides:

#### Two Bar Soca (Soul-Calypso) Percussions



Have one person play both the low and high drum parts, repeated, and then another person come in with the bongo drum part. These things can also be sung instead of played on drums.

The kick and snare could sound like: "Boo – pootat, Bootaboopootat." The next part could be sounded like "bing, bong, bingbing, bong."

Then reverse the patterns: The kick and snare are: "Bootaboopootat, Boo – pootat" and the bongo is: "bingbing, bong, bing, bong."

After trying the above examples, you can see clearly that one side is up and another is down. This helps immensely as you coordinate the group to play and sound good together.

Can you see that just like a clave pattern, both of the two bar patterns are identical except for where they start?

### **Rhythm Section Accompaniment "Chucks"**

Notice how the piano part and guitar chords have accent on the first beat – by following it immediately, not at all like the 2<sup>nd</sup> half extremely on-the-beat. We can assume therefore, that their "down" side is the 2<sup>nd</sup> half, in other words, the accompaniment to Calypso Study #1 is in "3-2 clave."

Also notice that the melody highlights the clave pattern on the second side, as Jazz chords often do. Unlike the accompaniment, the melody is clearly in a phrase that is in "2-3 clave." This combination means that the musicians don't step on each other's foot, they leave the all important spaces!

The guitar to be right after the 1 is a special Soca (Soul-Calypso) technique that makes the rhythm very bouncy, well, how else could Trinidadians, "Trinys," win so many carnival competitions? To dance for hours with heavy costumes and such, special bouncy Soca "Guitsy Riddim" keeps you up (and up beat)!!

# Yemaya Orisha Ocean Goddess





## Yemaya Orisha Ocean Goddess (2)



## Yemaya Orisha Ocean Goddess (3)



### The Yoruba People from Nigeria, West Africa

To be totally correct it is actually Yorùbá: The largest tribe in Africa, from the Lagos area of Nigeria. The Yoruba are the most traveled around the world historically. The majority of American slaves came from there. The language Yorùbá is a tonal language, low mid and high tones: Yo=mid, rù=low, bá=high.

In some ways, the Yoruba culture is said to be most alive in pockets of ex-slaves such as Brazil, Cuba and certain regions of the U.S. These are called "the Yoruba Diaspora."

## Some Afro-Latin Music definitions:

**Latin America** basically means Spanish America: Cuba, Puerto Rico, the Dominican Republic, Panama, Argentina, Columbian, Nicaragua, El Salvador, Peru, Chile, Guatemala, Mexico, etc.. mostly Catholic cultures.

**Latin Music** is from Latin America. It is also called Salsa, Cha-cha, Son or Mambo. Although it is a long distance, both physically and culturally, the rhythm in Latin Music is or has African roots. Latinos all know this, and they are quite proud of the African drums and culture mixed into their music.

Sadly, people in the United States often don't know how rich Latin music is with deeply loved African roots. This is partly because under slavery in the US drums were illegal, as was speaking any African language or doing things resembling African culture – though in some rare cases some survived.

A *Bembe* is a religious event of the Nigerian Yoruba people. Drummers play 3 Batá drums. Batá are sacred drums that have 2 drum heads. Each of the three drums has very specific roles. Other percussion instruments are often agogo (or cowbell) patterns, shekere (or shaker) patterns, and clave patterns.

Songs are to honor their deities called "Orishas." Sometimes they (and the religion itself) are called "The Seven Powers," though there are many orishas and they have wonderfully interesting stories and interactions with each other! Chango is the warrior and lover. Yemaya the ocean goddess. Osain the owner of herbs. Ochossi is the hunter. Ogun rules metals. Elegbara (or Elegua or Eshu) is the trickster. Oya the wild woman of the cemeteries. Ochun the Love Goddess. Others are: Orunmila the owner of the divination system or "Table of Ifa," Obatala the ruler of the head, Orunmila Goddess of the Heavens, Ibeji The Twins.

They have been "syncretized" with the Catholic Saints. Chango is Santa Barbara (both have the colors red and white), Niño de Atocha is Eshu, Virgin de Caridad del Cobre is Oshun, etc.. This way the followers could pray to Chango but tell master that they were praying to Santa Barbara.

This Nigerian language and culture in the new world is called "**Lukumi**" which is a word in the Yoruba language which means "friend." This is simply to distinguish it from it's Nigerian roots. This culture is quite alive and vibrant in many parts of the new world. See the movie "**Quilombo**" about Brazilian escaped slaves to see good examples of the Yoruba Orishas / Dieties.

The integration of the roots of salsa – Nigerian Yoruba tribe's music – into modern, new world music, is a thrilling blend of old and new, earthy and sophisticated, tribal and social, that is immensely entertaining and also greatly educational and uplifting for many people who have lost the connection with their roots.

The Yemaya song just above is adapted for singing and percussion at the end of the book. As a piano solo it is allowed more flexible time: bars 17 & 18 disappear – the agogo pattern shifts sides, but doesn't on the same part of page 3. The idea was crashing ocean waves in the first section, calm water softly flowing (even bar sets) at the end.

"Afro-Blue" the Jazz song is an Orisha song to Obatala (king of the head) that has been adapted & converted to African-American popular, non-religious, *secular music*.

# Motifs and Motivations

Pianist Anton Kwerti talking about Beethoven's 5th piano concerto: "Beethoven used the Salami style of composing. He chops the motif into little pieces like a salami, and you want to pick up the pieces off of the floor."

The "word" in music is the motif. Put them together and you get sentences, paragraphs etc.. You may read it as *motif* in one book, *motive* in another, they are the same thing! In LVB's 5th Symphony we have the classic motif of S-S-S-L-- (short short short long), perhaps the most well known motif of all (It was written just as he was losing his hearing and some think it is "I can not hear!" or "Why make me deaf?!"). If we expand the motif to s-s-s-l-s-l-s-l then we get a phrase that begs an answer. It motivates you to reply.

### Beethoven't 5th becomes a Perpetual Motivator



### Call and Response / Rhythmic Balance in Latin Music

The "Tumbau," the rhythm that dancers so love in Latin Music of Bass & Montuno is Rhythmic Counterbalance. The accented quarter note in the left hand with the eighth note accent in the right hand is extremely complex and difficult even for virtuoso classical pianists (bar 5 of "Montuno Etude" in a few pages).

An excellent exercise for the whole group is the beautiful fun song: Sandungera by the group Los Van Van.

Calypso and Zouk styles of music often have the bass guitar accent the 3 and 4 of the phrase. If you listen to West African Highlife, you will often hear this same accent.

What African and African rooted music gives you is the rhythmic tension that makes you want to hear the completion of the pattern, the answer, musically, rhythmically.

In addition to the magic of beats of rhythm propelling you up to dance and sing, the beauty and grace of masterful music played by energetic and vibrant performers motivates you to share your own beauty and grace with the world. Get inspired and get involved in motivating music!

### **Afro-American Contributions**

"Latin Music" is Black Man's heritage. Latinos know that it is African rhythms in their music. Even so African that it throws you off, you are lost unless you really know it, like traditional complex African music.

In the U.S. drums was illegal. They thought the slaves could communicate and plan revolts. African music and culture was thoroughly removed! What is suppressed, repressed and held back re-emerges. "What you resist persists!" Inevitably the African sense of rhythm and it's divinity naturally arose in Afro-American culture.

Louisiana was French - blacks could play drums in "Congo Square" on Sundays. This is one reason why so much of Afro-American music is from New Orleans, Louisiana.

1<sup>st</sup> Contribution-> Singing & soul wrenching excitement, even possession by (the holy) spirit inserted into the black Baptist church.

2<sup>nd</sup> Contribution-> Drum balance re-emerging generations later. The Rhythmic Tension of drum parts reinvented and evolved. Drums made into harmonic, melodic musical parts and phrases. Sections arranged as if they were percussion sections or following percussionist rules.

Play the rhythm 3-3-2 with the chords: C-E-G. In the other hand play in the spaces, that is a **One Bar Pattern**.

Syncometric Foundations =  $1^{st}$  and  $2^{nd}$  drums (primero y segundo), that's **Two Bar Patterns** like the bass below.



## All About The Bass



The Herbie Hancock song Chameleon demonstrates 2 bar patterns perfectly. The bass part = drum patterns – in this case the claves, as shown below. The solo = contrary rhythmic feel, contrast.



The solo in Caribbean drums is: **Quinto** = embellishments like in Jazz. Spanish words are often used because Latin Americans know this. They know their music has African rhythms.

Brazilian Rimshot-Clave is a great foundation under solos. Play chords in the circle of fifths with the rhythm and the solos are easy to come up with, and interrelate beautifully.

From Disco to R&B, Salsa to Merengue, it is the African counter-rhythms that make the layers of "Latin Music" that is so popular. It is playing on instruments the  $1^{st}$  drum parts,  $2^{nd}$  drum, (primero and segundo) and other percussion parts becoming the embellishments beautifully interwoven.

### **Perpetual Motivations**

A core component of the joy of making music together is having a repertoire of parts that can be played by one musician over and over, that give rhythmic and harmonic foundation so clearly defined that it is almost effortless for other musicians to hear opportune places to add phrases. These are germs – basics that germinate into full blown group motifs or collective motivations. The shortcut for these is: "Motorvations."

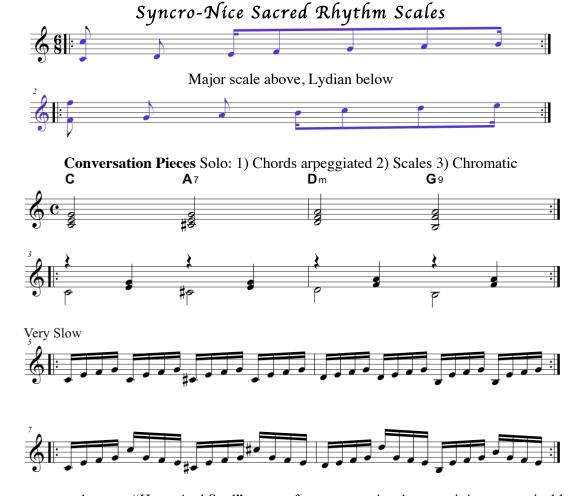
Cuba used to have a great musical influence over not only the United States but really the whole world. Their big bands and extravagant nightclubs are famous and well known. Much of their music allowed the African musical sensibilities to bring percussion parts into melodic music, creating repeated patterns that really add a fresh earthiness to music.

In the United States African ancestry people who were not allowed to keep their African instruments, language or culture, still brought rhythmic patterns and repeated longer motifs to the music that is now simply American music such as Jazz.

If you listen to good bass patterns in Afro-American music they act as motifs to build upon, very much like classical orchestrations in symphonies, fugues and concertos.

Many African Americans will tell you that the music moves them to a place where they feel more at home. It moves them inside and in their hearts. There are amazing intrinsic ways that the African relationship with music has secretly been released in American music!

The following two scales almost magically synchronize African agogo patterns with the most common major scales. The 2 most common agogo patterns, and the 2 most common major scales!



In general you can use the song "Heart And Soul" as a performance project because it is a recognizable well known foundation for repeatable parts that include Call and Response. It is also potent for solos – improvisation creation.

#### The Montuno is a Great Motorvator

The Latin Music Motorvation is the "Montuno." The Montuno defines firstly the rhythmic phrase in terms of which side it plays and it's floweriness or floriano quality (sparseness or fullness). Secondly the montuno defines the chord progression pretty fully. A complete and concise montuno will lean prominently on the leading tone from chord to chord making harmonic progression confusion impossible.

If you play a good montuno, especially with the "Tumbao" or bass pattern that is derived from African drum patterns, often it will motivate someone to start playing percussion, or even joining in with a song that they know that fits over the pattern you are playing.

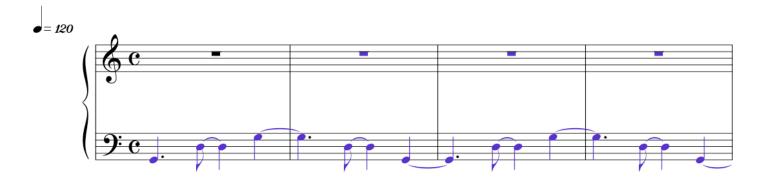
If you know 5 or 10 various montuno patterns, you can be the center of a musical experience where everyone wants to join in and sing, dance, improvise, and compose complimentary parts and phrases creating collaborative new music in real time!

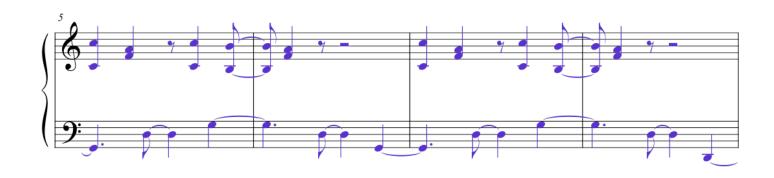
This type of real-time composing and improvising is one of the greatest ways that humans can act collectively to play their part and improve the whole. Again, the seeds of this type of group performance is repeated motifs of a specific design, which we are bringing to you in useful functions as Perpetual Motivators.

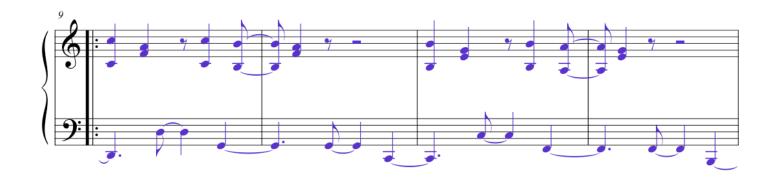
# Montuno Etude No. 1

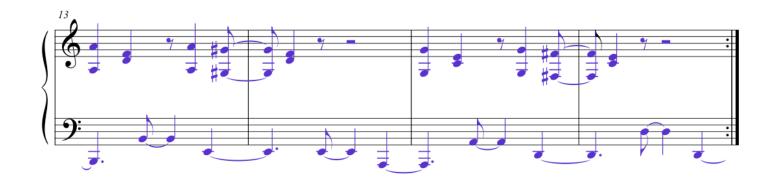
Dedicated to Oszkar Morzsa

Teo Vincent IV



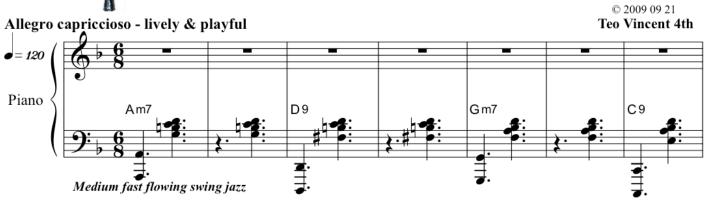




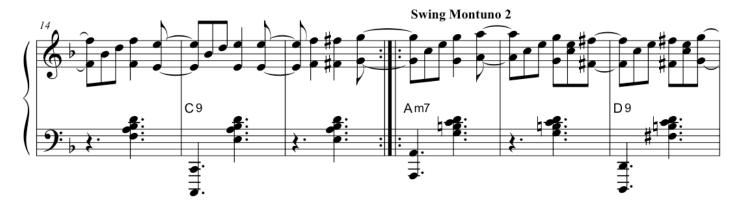




# **Swing Montuno Study**









#### Swing Montuno Study (2)



- A montuno's role is to define the rhythmic form AND the harmonic form. The play with the rhythmic tension in 4/4 is quite complex enough for most. In swing, 6/8, it is a Herculean challenge, but musically thrilling.
- The African 6/8 "Bembe Agogo" (Cowbell) pattern has the pulse (downbeat) plus Clave, use this first.
- Great percussionists imply and substitute 6/8 patterns into songs in 4/4. Try doing it with these montunos.

