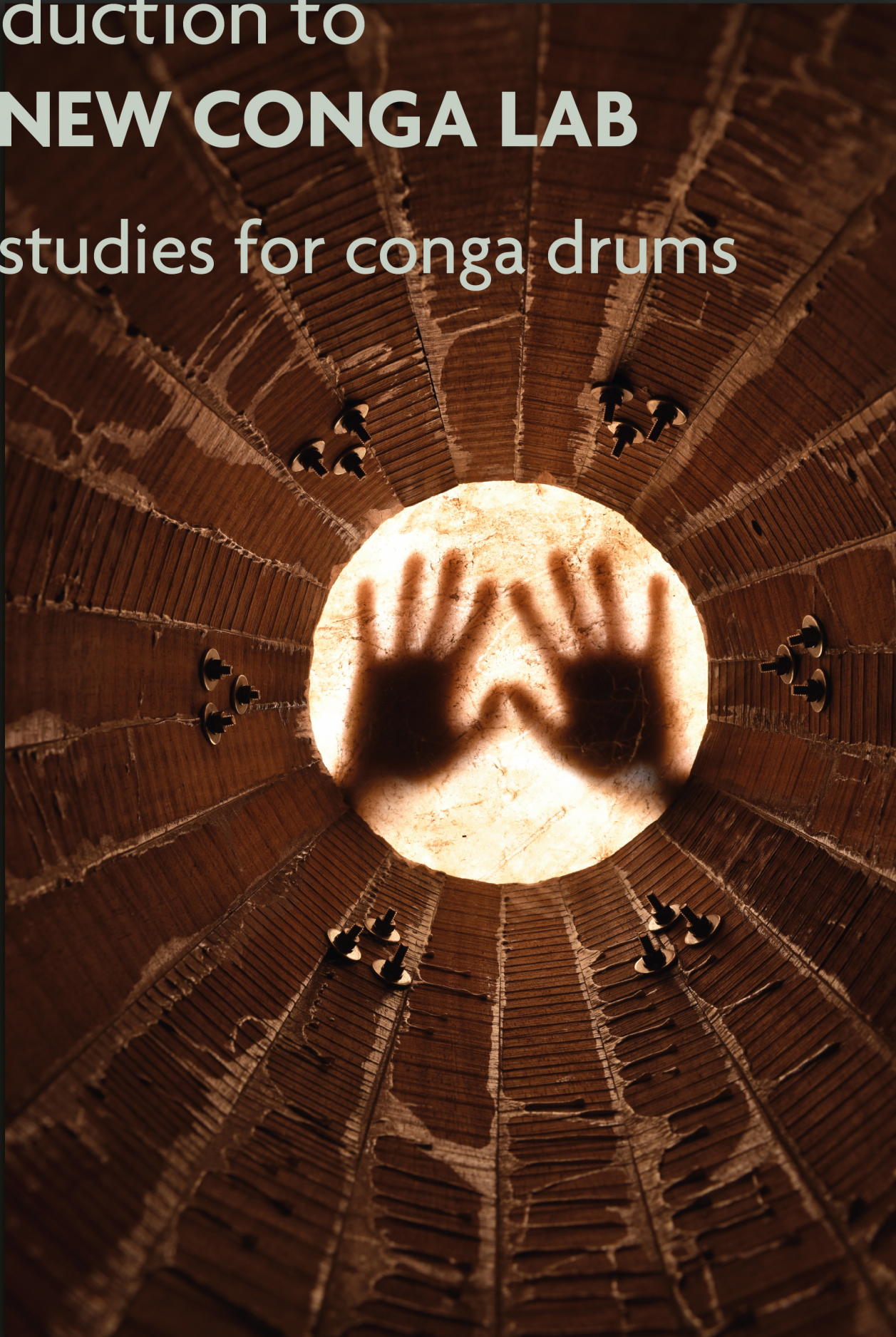


Introduction to
THE NEW CONGA LAB
New studies for conga drums



Maurizio Ravalico

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P R E F A C E

The disciplined study of a musical instrument is one of the most effective methods for expanding mental suppleness, promoting a healthy unity of body and mind, and training both to be constantly alert and flexible, ready to make quick choices not limited by habits, and to instantly translate novel thoughts into physical action.

All of our daily activities, with rare exceptions, tend to slide into a groove of memorised muscular sequences, which are repeated every time we perform a given action with little or no variation. We can observe this in the way we brush our teeth, soap up our body under the shower, the way we drink from a glass, cross our arms; the list is positively endless.

This is a natural human process, as the living system that we embody tends to always choose the path of least resistance. It has the advantage of helping us save mental and physical energies during our waking hours, and the downside of offering us the possibility of going through our days, and whole lives, without fully engaging our brain.

Playing a musical instrument is not immune from this risk. As soon as a decent level of proficiency is gained the temptation of falling into known patterns, of using well oiled “winning” licks or phrases, will always be there, providing either the tension necessary for growth, or the misery of stagnation. However great your repertoire of patterns and technical solutions may be, it will always remain a vocabulary, a lexicon. Disciplined study provides us with the means for expanding that vocabulary and, because music is unique among languages in its peculiarity of not making use of symbols, the possibility of enriching and articulating its syntax are practically limitless. One method for breaking loose of self-fulfilling vicious circles consists, for example, in analysing other players’ styles, trying to “enter” into their mind, and expanding ours in the process. Another common approach is that of practicing exercises that challenge our musical habits, dealing with combinations of elements which we have never thought of, and which can initially feel awkward and uncomfortable. Both systems have the function of forcing us out of the comfort realm of things which come “natural” to us, and the inevitable consequence of expanding (to some degree) our sense of self.

Going systematically through all the possible permutations of, say, a paradiddle, or a particular scale, might not, at a first glance, appear to have much musical value. Yet it is precisely by playing each and every permutation that one conditions the body to memorise all possibilities of a given set of elements. This trains the mind to be constantly alert and capable of instantly translate into action any idea that your musical imagination might suggest - even a completely new one.

THE CONGA DRUMS

Congas belong to the range of instruments that have transcended the aesthetic bounds of the geo-historic context which originated it, and has become a drum that can adapt to genres and ensembles different from, and at times even alien to, those that had initially defined it.

As a drum, its African origins can be traced with a good degree of accuracy, and for this purpose I'd like to refer the reader to the invaluable encyclopaedia *Los Instrumentos de la Música Afrocubana* by Fernando Ortiz; at any rate, what we today know and recognise as conga drum, its barrel-shaped body and the hooked bolts tuning system, is an urban product which made its first appearance in Cuba towards the end of the first half of the XX century, and it consolidated into its final shape in the 1960s.

Ortiz lived in Cuba and was writing on the subject in the 1940s as a middle-aged man; he is therefore a priceless source of first-hand informations about processes of cultural transformation that were taking place during his lifetime.

Ortiz divides the typologies of African drums transplanted to Cuba into four main groups, differentiated by their ethnical provenance, but, more importantly for our purpose, by the system of body construction and tension of the skin. These groups are: the Bantú, the Carabalí (or Semibantú), the Arará and the Yoruba (or Lucumí).

Out of these four groups, the drums built by the Bantú are arguably the most simple, with a straight hollowed tree trunk body, and they are the only ones where the skin is simply nailed to the wood, without the auxiliary use of ropes or wedges. This skin mounting system is also the one employed in the first drums which appeared to be built using barrels, an item much easier to come by in the urban environment of a port town like La Havana than tree trunks, which in addition need a great deal of labour to be hollowed. This legacy of barrel-shaped drums with the Bantú culture is also reflected in the genres of music that these drums were employed on during the early stages of their existence, and which were crucial in defining the elemental components of its lexicon, palpable in styles like the *guaguancó*, *rumba columbia*, and eventually *chachacha*, *son monuno* and the *tumbao*.

The fact that the Bantú drums were used in predominantly recreational music situations, as opposed to religious ones, likely facilitated its early introduction into popular ensembles and orchestras. Also the fact that congas were not obviously "African" drums contributed to their diffusion and relatively undisturbed use even in periods and circumstances where the whims of the colonisers were forbidding the use of such instruments. This factors were also conducive to their utilisation in new

styles, indigenous to the colonial territories, and all this conjured to their universal, non-specific nature from their very inception.

As mentioned in the previous paragraph, the first congas made out of barrels (often used for the transportation of olives, wine, oil and what have you) had their skin nailed to the wooden body, similarly to the Bantú prototype, and often one of the barrel's metal hoops was employed to cover the row of nails, thus preventing them from snapping off as a result of the skin's tension and the players' action.

The introduction of hooked bolts as a system of tension, a technology imported from the European drums, was implemented gradually during the first half of the XX century, and the conga settled into its final contemporary shape between the 1950s and '60s, crucially consolidating into a standardised model in the '70s, thanks greatly to the dedication of Martin Cohen, founder of the LP (Latin Percussion) brand.

ABOUT THIS METHOD

The following method is not intended to be a compendium of traditional and modern congas rhythms. For this purpose, a great deal of literature is already widely available, as are teachers capable of conveying that knowledge to students; a perennially unfinished process, because the very object of its learning is in perpetual evolution.

Also, this is not an introduction to the instrument for somebody who is approaching it tabula rasa for the first time, and it doesn't provide instructions on how to sit, hit and draw the various sounds from the drum. It contains several basic exercises useful mostly to beginners, but these shouldn't be taken as a substitute for the personal and direct contact with a teacher, which is the only way to acquire a correct technique, posture and sound.

My purpose here is rather that of providing the student with a body of purely technical studies; "abstract", or "neutral" so to speak, inasmuch as they are unrelated to a specific musical application, or style. There will be several studies which are inspired by patterns found in the congas' traditional repertoire - namely rhythms from the salsa and rumba fields - but this is only because these rhythms are so intrinsic to the very identity and function of the instrument that avoiding their use would be like omitting the idea that the core function of an electric bass is that of defining the root of a chord in a book dedicated to such instrument.

Most of the studies presented here can be practiced by players of any level, from intermediate to proficient, and there is not a specific way in which they should be approached, nor a particular order to follow. They can be employed as additional program material by a teacher, as a reference for basic technique's exercises by a student, or as a companion for life for an advanced player who wants to investigate certain specific aspects of the instrument - or more simply have a collection of exercises and studies at hand to pick up at leisure during his or her daily practice routine.

In whichever case, all the written material lays on the assumption that a comprehensive knowledge of musical notation is already acquired; there's nothing too complicated in the transcriptions of these studies, but nothing has been simplified for the person who cannot read either.

Another topic that this method doesn't deal with is the widely used double stroke on congas, as a double open tone or slap. This is a very exciting feature of modern conga playing, and it can be achieved with a bit of dedication; but for a systematic study of its applications the best reference is probably still the classic literature for snare drum: the Table of Rolls of the Gene Krupa, the various paradiddles and the many permutations that can proliferate from either.

Rather than focusing on flashy playing and solo phrasing, most of the studies in this method are conceived with the aim of helping both students and advanced

players to improve precision and coordination over any set of one, two or more congas. Even the studies more focused on endurance and physicality maintains the same function of developing the muscular tone necessary for that sort of control and accuracy.

On the topic of permutations, many studies in this method are precisely that: investigations on all possible variations of a single idea. As it often happens with tables of permutations, the first hindrance is the challenge of boredom. However, one effect of this systematic approach is that sometimes you might find that on some of the exercises the accents fall in strange places, on subdivisions where you may not have thought of placing one. This may give you new ideas to add to your playing. There are also studies focusing narrowly on certain isolated aspects of conga playing - which may not suggest an immediate application in the existing styles and in what is generally expected from the instrument. You'll find for example exercises using only open tones, or only combinations of palm-tip strokes.

All these studies are there for a reason, and that is that they might open up your mind to different patterns, and suggest different ways to play the instrument. A great deal of the creative process consists in training the mind to look at a familiar object from a different angle, and asking yourself what is it that hasn't yet been done with that object, what other functions can that object have. Congas playing is a tool for creativity, and whereas you may rightfully smile at a classical composer asking you to play them with sticks and treat them basically as any odd drum, you can certainly hit them with your fist, your knuckles, fingertips, and still remain coherent with the established aesthetic functions of the instrument. These are "extended techniques", which I have explored to a considerable length in my playing - and whereas they are not directly dealt with in the present publication, some of the studies contained in it point towards that direction.

ON NOTATION

Despite congas being nothing like a marginal instrument, a widespread and universally acknowledged system of transcription specific for this drum hasn't settled yet. Some systems are more commonly used than others, some less, but in general when it comes to transcribing for congas everyone is left to their own initiative, having to pick from the available techniques the one which is more suitable to one's particular purpose, and try to make a score as readable as possible.

There are several reasons for this gap in the world of music writing. One is that in a majority of cases transcriptions for congas are employed to communicate musical informations between players of the same instrument, often between teacher and student; which means that both interlocutors already share a lot of pre-established informations: both are dealing with a material which is familiar and limited in scope, and one only needs to give a generic indication of what he wants to convey in order to be understood.

Another cause is probably found in the fact that conga drums, unlike most other percussion instruments, have to this day failed to be taken seriously by composers, classical and Broadway alike. In regards to the former the absence of congas in "serious" music is practically total, apart from few cases where they are to be played with sticks, and are treated therefore just like some random drum, with disregard to their idiomatic legacy. When it comes to theatre composers instead, the situation is one in which the player is more or less expected to understand what the score is referring to, even with minimal and approximate instructions.

In addition, the scarcity of exemplary uses of congas which go beyond their traditional linear rhythm-keeping role, feeds back on this lack of interest among composers, who fail to see a challenge and will be content to confine their instructions to "play such rhythm here" and "stop playing here", or "play this stab here".

One of the main challenges of transcribing for congas is that one single drum can produce an array of different tones; this is often resolved by assigning different tones to different lines in the staff, but it becomes a problem when you need to write for more than two drums. Keeping each drum confined to one line is therefore crucial, and the solution is either to add symbols and specifications at the bottom of the staff, or to employ a prescribed set of different noteheads, one for each tone. The former solution is limited, in that it takes up a space that cannot then be used for other instructions, like sticking or dynamics, and we are left therefore with the differently shaped noteheads option.

Imagination has run unleashed for decades as to which notehead shape each tone may be associated, but most seem to agree that the open tone is a standard round black notehead, and the slap is an X-shaped one. Another small group of sounds are the ones produced by the palm-tip movement common to most Cuban-centred genres, and a solution seen more often than others consists of triangle-

shaped noteheads: vertex up for the palm, vertex down for the tip. These make for very clear and intuitive reading, but are rather awkward and time-consuming when it comes to handwritten music. Speed of handwriting in music is a priority, and this is therefore a problem that I feel needs to be addressed. Black squares and rectangles have also been seen in adventurous congas transcriptions, but they present the same limitations.

One thing to be acknowledged with congas notation is that there are different levels of precision needed for different requirements. Specific as their vision might be, a pop producer, a jazz composer or a Broadway arranger know that they can rock up with a part containing the main defining accents of a rhythm, and rely on the player for filling up the rest and make the part idiomatic for the instrument; which is fair enough, and works fine most of the times.

Educational literature on the other hand, that which deals with notating studies and exercises, requires the instructions to be exact and unambiguous down to every single note; but in most cases the musical material is very schematic and, more often than not, built on a constant simple rhythmic grid. The notation systems available nowadays fulfil these functions satisfactorily enough.

But what if a composer decides to delve into the full extent of idiomatic possibilities of our dear instrument, liaises with a proficient player (as composers do) and creates a piece which challenges and transcends the customary use of the instrument? What if, say, Luciano Berio would have wanted to write a 'Sequenza' for congas?


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
With this method I would like to propose a system of notation which I have been using for decades, and that will be employed throughout the many pages of studies that follow. It was devised with the purpose of increasing both in simplicity and versatility, and of fulfilling the following requirements:


- Must be concise and unclogged in its graphic appearance, to facilitate reading;
- Must be extremely fast to write by hand;
- Must make use of the smallest possible number of notehead symbols, aided by conventional articulations, like the staccato dot or the common accent;
- Each drum must be confined to one line (or space) in the staff.


My aim is also that of providing a system which remains the same in its fundamental mode of operation, whether you need to sketch a simple rhythm or create an extremely complicated part, where articulated and precise instructions are needed. It should not limit the number of drums that can be used in a part, allow for both unspecified and defined tuning, and for all existing and possible tones to be employed on ANY of the drums in a set, and not just on the central one. Such system of notation should not stop short of resources when new adventurous and as yet unpredictable situations are created for the instrument.

The system I am proposing here makes use of only four simple conventional noteheads: the black dot, the cross, the round hollow note and the slash; thus we have:

- The open tone: 

- The slap: 

- Palm: 

- Tip: 

These four symbols are sufficient for most situations.

The so-called “muff” - the short tone obtained by pressing the skin instead of letting it ring after an open tone - is represented using a very conventional musical articulation: the staccato dot on top of (or below) the black round notehead. This, in fact, is precisely what the “muff” is: a shortened open tone.



In conga playing the palm stroke can be used either within the context of the palm-tip motion or on its own; in the majority of cases this differentiation is made obvious by the context, and doesn't need to be specified. Should however a differentiation become necessary, as in a palm hit played during the phrasing of a solo, or as an emphasis when the drum is raised by the knees for extra depth and sustain (like on the “push” of a *guaguancó*), it will be sufficient to add an accent mark:



A tip stroke can often appear as a “ghost” note, played with the hand either in the same position as an open, or on the centre of the drum, as in the palm-tip sequences. Whereas the exact position is usually made obvious by the context, we may, at times, want to specify a ghost note by closing it in between brackets.



Again, but only if and when this is necessary, the different types of slap can be specified too:



- A slap closed by the action of the other hand (as in the context of a *Tumbao*) written as a staccato slap:



- A normal closed slap, where the hand stays on the skin:







- An open slap, which is let to ring:

either  or 

- A slap played in the same position as a tip stroke (on the drum's centre):



To reiterate, the last few specifications would only be needed in extremely detailed transcriptions, and in most cases all we are ever going to need to use are four noteheads:

- open:  - slap:  - palm:  - tip: 

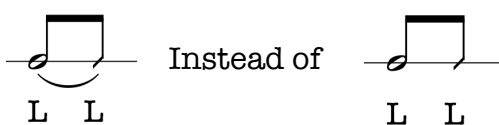
with the option of staccato and accent articulations when required. Again for non-specific “composer” transcriptions, the slashed notehead can stand for generic ghosting, when additional details are superfluous for the purpose and can be left to the performer.

For more extreme articulations, and use of extended techniques, additional annotations can be employed as easily as in any other instrument: in the same way that we can write “sul ponticello”, or “col legno” on a violin part, we can instruct our conga player to play on the edge of the drum with the fingertips, on the centre with his knuckles and so on. A simple example is the familiar “glissando” you can get on the conga by sliding a wet middle finger on the skin after hitting it with the other hand: this can be written as an open tone, followed by a symbol for glissando, which already exists in conventional musical notation.

A composer who knows the instrument well enough to write an informed part, but doesn't extend his knowledge to the most minute technical details of the instrument, can use the simple open and slap symbols, adding slash notehead as “ghost” notes for filling a part where it is obvious that all the subdivisions need to be played, and leave the technical details to the player. But if another composer wants to give extremely detailed instructions, and tell a performer exactly what to play note by note, beyond any possible misinterpretation, the same set of symbols can be used with satisfactory results.

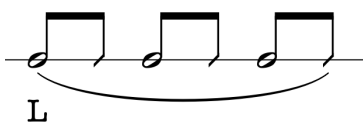
In many instances a simple two stroke palm-tip sequence is played with one hand as a one-off filler, either at the prevailing subdivisions of a piece or in its sub-units. This, in the conga lexicon, has a similar function to the “diddle” in stick playing, and it is employed to readjust or switch the sticking during phrasing on the drum. In a fully written part this is often made obvious only by the sticking instructions, when they are employed at all; and even in those cases it may not be visually immediate for the reader. For this sort of instances, my suggestion is to mark the two consecutive hits with a legato slur. This would make it visually obvious and helpful in both cases of parts with or without sticking notation, and if extended to longer one-hand palm-tip sequences it could in fact often eliminate the need of sticking notation altogether.

So, as an option, when required for ease of readability:



when sticking is intuitively obvious or irrelevant for the purpose of the part.












One can see this solution coming handy also when a continuous longer sequence of palm-tip hits is to be performed with the same hand, either specified



or unspecified.

Within this platform, the first example will be used consistently on all studies concerned with Core Motion E.

RECAPITULATION

Open Tone:	
Generic Slap:	
Palm:	
Tip: (and unspecified ghosting)	
Muff (or Press):	
Accented Palm:	
Closed Slap (by the opposite hand):	
Closed Slap:	
Open Slap:	
Slap on skin's centre: (tip accent)	
Specified ghosting:	

For the love of thoroughness, here is a (non-exhaustive) list of further tones that can be played on congas, several of which are widely used:

- The aforementioned Glissando, apparently also known as “Moose Call”.
- A raise of pitch (up to three semitones) obtained by pressing the centre of the drum with the elbow, while playing an open tone with the other hand.
- The drum is hit by the tip of the index finger in proximity of the skin's edge (tonally equivalent to “sul ponticello” for bowed strings).
- As above, while the opposite forearm alters the pitch by leaning on the skin and moving towards or away from the hitting hand.
- All five fingertips are tightened together, and hit the centre of the skin vertically.

- A finger is placed at the centre of the skin, while the other hand slaps, producing a harmonic overtone.
- As above, with the index fingertip instead of a full-hand slap.
- Drum head is slammed in the centre by a clenched fist.
- Drum is hit by the knuckles, at any point along the skin's radius (centre to edge)

- - -

This system of notation allows for simple unpitched one-line transcriptions, and can be expanded to two, three or five-lines, depending on the number of drums, without altering its basic functionality. Normal five-line staff can be employed for either unspecified tuning (headed by the neutral clef), or for precisely tuned drums; in this last case, the “treble clef 8va bassa” usually covers the full available range of all sizes without the need of more than one ledger line at either end of the staff.

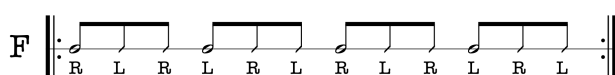
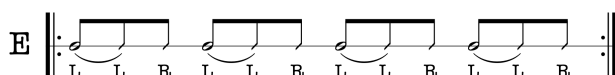
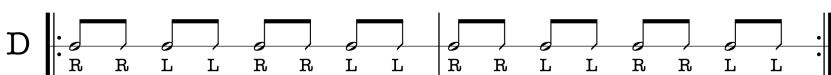
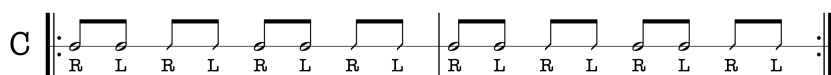
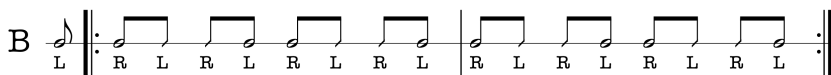
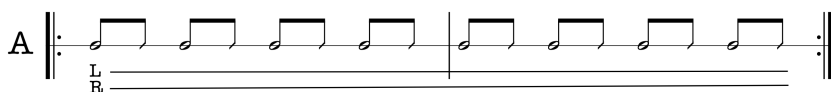


However, in virtue of the fact that once a set has been tuned the notes stay the same for the duration of the performance, you may find that it is more practical (and easy on the eye) to specify the tuning at the beginning of a score, and then place the drums' relative pitches on lines or spaces that are visually more convenient for the reader, on a neutral clef staff.

THE SIX CORE MOTIONS

I have stated that the exercises in this book are purely “abstract”, and unrelated to any specific style; nevertheless, it is precisely in the idiomatic legacy of the conga drums, and in the way it naturally evolved, that these studies are firmly rooted and built upon. The playing technique of the conga, and even its morphology, are inextricable from the musical styles which it has been employed on during the course of its evolution, and represent its core lexicon, its *raison d'être* in terms of aesthetics. To ignore that would be comparable to deciding to play tablas with a pair of mallets: yes, they are drums, and yes, you can get some sort of sound out of that; you might even like the result, and find a sensible musical application. But you'd not be playing tablas; what you're doing is making music with a found object. On the basis of this consideration, I have set out to break down the language of conga drums into its basic constructional elements, and build the main chunk of studies in this method around those - an operation vaguely comparable to that of rationalising the snare drum rudiments.

The single and most distinctive element of the conga drums lexicon, the one idiomatic factor that defines it and sets it apart from most other hand drums, is the extensive and pervading use of the palm-tip motion, often called “manoteo”. There's hardly a rhythm in the whole Afro-Cuban wealth of genres and styles which doesn't make use of it, in one combination or another. These combinations, in the way they present themselves in the living and past examples, are finite in number, and relatively easy to single out. I have called them CORE MOTIONS, and ordered them in a list of six.



These are, so to speak (and if I may be excused for borrowing the concept), the “archetypes” of conga drumming, and similarly to the Jungian collective unconscious’ archetypes they are devoid of content. They are implicit in all the manifest expressions of conga drumming, but are somehow antecedent to these, possess a life independent from them, and hold therefore the potentiality of branching out in any direction, however unexpected and removed from the orthodoxy, yet still remaining faithful to the nature of the instrument.

Despite them consisting of short non-melodic tones, the palm-tip sequences are not comparable to the “ghosting” you may find in other percussion instruments, like djembe or drum kit. Particularly in the rhythms of the “ballroom” family, like salsa, bolero, chachacha and so on, they form a mighty solid grid of subdivisions, indispensable and complementary to the various configurations of the “singing” tones of the drums - the open and the slaps. So what we have here is again a useful parallel with the basic rhythmic construction of the drum kit, where the palm is comparable to the bass drum, the open and slap to the snare, and the tip to the hi-hat. In conclusion, the palm-tip alternation, far from being an even grid-filler, is in many rhythms an out-and-out leading pulse, compensating the danceability and the upbeat thrust of the open tones and slaps with a heavy grounding on the downbeat.

In the most basic and representative of all congas rhythms - what is generally called tumbao - the manifest principle is that of the “strong” hand performing the main defining accents by replacing what is an otherwise regular and uninterrupted series of alternating palm-tip divisions, played by the other hand.

This principle can be easily clarified in the following diagram, where, for schematisation, the left hand (the “palm-tip” hand) is placed on an imaginary third drum on the upper line, while the right hand and the two main drums are on the lower two lines:

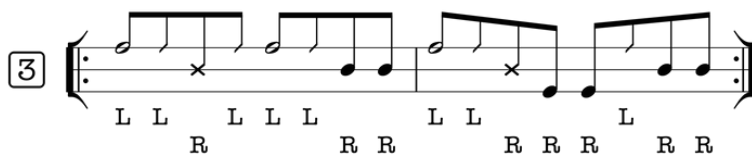
(fig. 1)



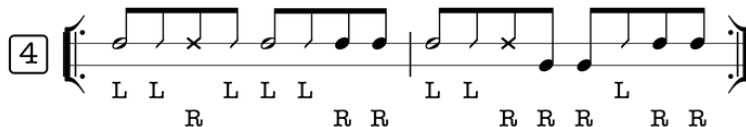
In fig. 2, the notes in brackets are replaced:



Resulting in fig. 3:



Which is obviously fig. 4:



The low-end pulse on the downbeat is maintained whenever it's possible; it is not an understated element of the rhythmic construction, and it is as fundamental and prominent as a bass drum in a drumkit groove.

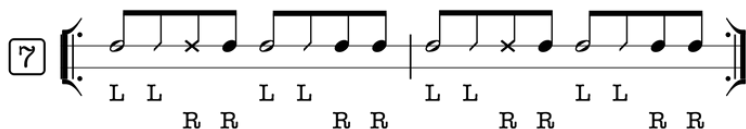
One creative way to keep the palm-pulse going throughout, on the first and third beat (and a first step into "organic" playing), is for example:



There are cases, in the traditional repertoire, where the bass of the palm stroke remains constant, as this doesn't interfere with the "singing" tones. An old style Son Montuno for example:



Or the classic Chachacha:



These last two are examples of relatively early styles, and as such they can help us understand where modern conga playing was originated.

The example on fig. 5 can give us a first hint of what it can mean playing congas in a non-linear way that doesn't necessarily resort on "independence", or on the idea of an ostinato running independently from the other parts. This idea is taken to further length in some of the studies on this method - although to do justice

to it would demand a dedicated work, which may or may not be published at some point in the future. The basic idea of linear versus non-linear, or “organic”, playing, on the other hand, is dealt with in depth in the chapter LINEAR VS ORGANIC PLAYING, and it is employed extensively throughout this method.

The principle intrinsic in the construction of the Tumbao, which we have analysed earlier in this chapter, is that of an underlying pulse - a constant grid of palm-tip subdivisions over which the “singing” tones are superimposed, by way of replacing the equivalent unit in the grid.

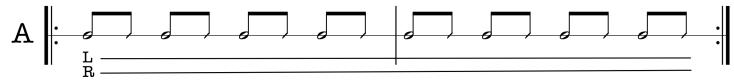
This principle is expanded in great length in most of the studies dealing with Core Motion B, C and F, and the more attention is paid to performing each exercise note by note exactly as written, the more this principle will become clear, and musically valid. For now, to clarify this idea, let me bring as an example two very elemental variations for three congas on an underlying Core Motion B pulse; these are the lines number 4 and number 33 from the study ‘core B - 5.1’:

L R L R L R L R L R L R L R L R L

L R L R L R L R L R L R L R L R L

THE SIX CORE MOTIONS - IN DEPTH

CORE MOTION A - [palm-tip]

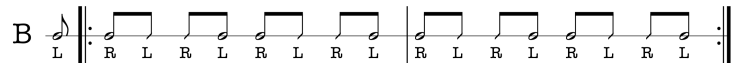


This is the basis of the simplest and, possibly, most central item in the whole congas lexicon: the tumbao. In it this movement functions as an underlying pulse, over which all the main open and slap accents are woven. On its own, played continuously, it is the most basic form of ostinato in the independence studies initiated by the great Changuito, and a lot of the exercises in this method will be expansions of, or digressions from, his seminal inspirations.

In progressing with your technique and proficiency - this is particularly directed to beginners and intermediate students - always keep in mind this golden rule: a good sounding, fat tumbao can only go as fast as the speed in which you can still execute the palm-tip movement WITH YOUR RIGHT HAND (for right-handed players) in a relaxed, comfortable and musical way. Anything faster than that will need some attention. It is therefore important to make the exercises of this group a daily routine.

CORE MOTION B - p- [p-t-t-p-p-t-t-p-]

(“base del guaguancó” or “baqueteo”)

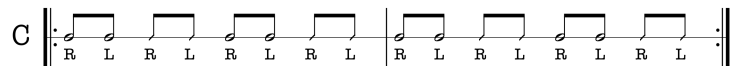


Again this is one of the most common and basic elements of the congas vocabulary. It is often mentioned as the “base de la rumba”, or also “baquetéo”, and a lot of times you will in fact hear players starting with this module before embarking on a full blown guaguancó. This is a way of settling into the pulse, locking into the claves and creating a solid bottom layer over which the final groove can flourish and be constructed. Exercises based on this movement will often consist of phrases and accents inspired by the rhythms of the rumba and comparsa family.

Similarly to the role of the palm-tip pulse of the left hand in the tumbao, or “salsa” rhythm, the basic principle behind this series of exercises is that the main sequence of p-t-t-p-p-t-t-p is constant, and whatever happens in the realm of the open tones and slaps will replace the respective sound on the p-t-t-p-p-t-t-p grid, and will always return to it.

CORE MOTION C - [p-p-t-t-p-p-t-t-]

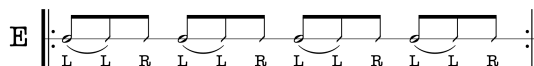
(base of the tres dos matancero)



This Core Motion is so strictly related to the one above that it may as well have been called B1. Also a “base” for the rumba, it is originated from what is the undercurrent of the tres-dos in the guaguancó of Matanzas. To my judgment however, it appears to be a sort of dead end in the instrument’s lexicon, and it only finds limited musical applications outside of its own traditional occurrence; this is also reflected in the amount of exercises dedicated to it in this method. That noted, and despite it being arguably an end to itself, it is nevertheless due its own rightful place in this list.

CORE MOTION D - [p-t-p-t-p-t-p-t-]

This is basically a double stroke, applied to the palm-tip motion; many of its possible utilisations are in fact straight transpositions of most snare drum rudiments into congas, and for these there is already plenty of literature available elsewhere. It differs however, from the double-open / double-slap so common in contemporary congas playing, and for which, again, the best reference is the Gene Krupa and all commonly available studies on the snare drum rudiments. For its very nature, a number of studies on this method will be speculations and digressions of the general idea of double-stroke rolls, contextualised however specifically for congas.

CORE MOTION E - [p-t_p-t_p-t_p-t_]

Without the last eight of the triplet, which in most cases can be treated as a ghost note, this is the ternary equivalent to Core Motion A. This is due to the way many Afro-American rhythms have naturally evolved, which manifests an interchangeability between certain binary and ternary constructions, and may be clarified in the following example::

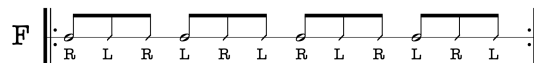


These two rhythmic cells (which, to be clear, have exactly the same sticking), and the many steps one can gradually go through while morphing between one and the other, are the key to understand the elusive “swing” that many African and especially Latin-American rhythms have, both binary and ternary.

Similarly to CORE A, many of my studies employ it as an ostinato for independence exercises. Taken singularly, and not as a repeating pattern, it is on par with CORE D the familiar double stroke useful for embellishments, ruffs, drags, and also a useful grid filler to readjust sticking while playing main parts with the other hand. Again, similarly to CORE D, all the studies that are basically transposition of

traditional snare drum rudiments are left out of this method, or at best only suggested as a starting point for individual exploration.

CORE MOTION F - [p-t-t-p-t-t-p-t-t-p-t-t]



Here is an interesting subject. This particular combination of the palm-tip movement doesn't appear in any pattern of the entire traditional repertoire of the congas; yet it feels almost like a natural consequence, almost like it's always been there, but never manifested itself. Something similar, at least the basic sticking, is quite frequent in the ghosting of West-African drums, and djembe playing more specifically. Here, it has been made idiomatic for congas, and will form the basis for many interesting exercises.

LINEAR VS ORGANIC PLAYING

Generically, in non pitched percussion music you can make a basic distinction between linear and organic playing. Linear means literally playing one single line - however articulated a part may be, and however many different tones can a given instrument generate. All notes are played in sequence, one at the time. In organic playing two or more instruments (or surfaces) in a player's setup are engaged simultaneously.

The differentiation between linear and organic is not a neat cut, and the degree of predominance of one to the other is often determined by the number of playing surfaces a given instrument has. One extreme is that of playing, say, a single one-headed drum, where the playing will be inevitably linear. Even hypothetical combinations of different sounds within such drum will be by necessity flams, and therefore consecutive; linear.

At the other extreme is an instrument like the drum kit, where the same person plays an array of instruments. Linearity in this case is a specific choice, and not the norm. In between these extremes you can have anything from a couple of congas or a double-headed membranophone like the dhol, to a full set of timbales, with its drums, cowbells, cymbals etcetera. The moment you abandon the limitations of a single playing surface, the possibility of the unison appears, and consequently of organic playing.

Organic playing can be of different sorts:

- The ostinato. An ostinato means simply that you are keeping a fixed repetitive rhythmic cell with one limb, while the other(s) play more articulately, either improvising or executing a written part.

- Playing two or more parts simultaneously (limited only by the number of limbs your species is equipped with and, in addition, by how many sticks you can hold in each). When done mechanically, and in the presence of short repetitive parts, this doesn't differ much from the ostinato outlined above, but you can also train yourself to acquire more liberty on one or all parts, and play variations on each as if each was played by a single performer. Longer parts with no repetition are definitely an option here; in such cases the music is generally composed, and read, but in theory there's no limits to the extent to which you can "split" your brain, and apply this principle to instant composition.

- The fully organic. This means that the different playing surfaces are performing totally complementary parts, each incomplete on its own, resulting in a single musical discourse. A classical example is the Indian tablas, where two very different instruments, one on each hand, are played like a single indivisible unit. An instrument like the drum kit offers the possibility of employing every one of these

modes of playing: from the linear (using only one or all available surfaces) to various levels of ostinato, to the fully organic.

A classic ensemble of the Cuban Batá can be used as a clarifying (albeit simplistic) example: where the Okonkolo plays mostly in a linear mode, the Itotele is - in many cases - applying the principle of the ostinato, while the Iyá is playing fully organic most of the times.

The orthodox way of playing congas is mostly linear, with exceptions typically only represented by unisons. Linearity is sometimes broken in the case of one player replicating an ensemble part - this is the result of a two or three-players rhythm (like a batá toque for example, or the abakua rhythms, the makuta or the guaguancó). In such cases the one-man rendition can employ either one or more ostinato parts, or go fully organic, by not getting too hung up about replicating all the parts exactly. In many cases it's also possible to render such rhythms in a linear way, still preserving the general musical identity of the toque (at the expenses of pedantic accuracy).

When you play a set of three, four, five drums, but even just two, what you have at your disposal is an ensemble of instruments, and linear playing is just one of the options. The ostinato, and generally the idea of independence, are the first steps to break away from linearity. But drawing once again from the example of the drum kit, that is just one possibility, and a more full-blown organic way of playing a set of congas can be pursued. A few examples:

- The underlying pulse of the palm-tip in the tumbao can persist even when it falls simultaneously to other elements of the part
- It can be played on drums different than the central one, and move around them too.
- Any palm-tip sequence can also be played on more than one drum simultaneously (one hand per drum).

On this note, because the palm-tip motion is so predominant in this method, and because it often expands to all drums and not only on the traditionally allocated central one, I warmly suggest to practice all these studies with the congas raised from the floor.

All the studies centred on the palm-tip ostinato, and specifically the symmetric studies for three congas, can be also executed on the two lateral drums only, where each hand stays on one drum and the ostinato simply moves from one to the other, instead of alternating on the central drum.

Another way is that of keeping the "melodic" part, the variable counterpoint to the ostinato, on the central drum, and alternating instead the ostinato around the lateral drums.

Again, all this is especially effective if all the drums are raised from the floor - which is a setup I advise to use throughout these studies. The melody of the palm-induced bass tones becomes thus a new tonal layer and an additional idiomatic resource, and can stimulate new ideas on the instrument's musical possibilities.

ABOUT SYMMETRY

In studying congas there is a constant effort toward developing a total ambivalence of control and technical proficiency between the right and the left side of the body.

The conga setup, of any number of drums, is an instrument perennially aiming at left-right symmetry and perennially sliding back into asymmetry. That's because most of the literature and repertoire of the instrument consists of patterns fundamentally and heavily asymmetrical. One example is the "manoteo" in an ordinary salsa groove, which is played with the weak hand while the majority of leading accents - slaps and open tones - are given by the strong hand; another instance are all the hand-to-hand sequences, where you will unavoidably lead with the strong hand. To aggravate this situation, however successful one may be in achieving symmetry in his or her playing, all the rest of our lives is led in a heavily left-right specialised fashion, and our entire musculoskeletal system is built around the resulting patterns.

For such reason this is an issue which needs to be constantly readdressed. Studies aiming at developing symmetry are those where a given pattern is followed by its mirror image in a series, and they can be both linear and organic. I find that within this family of exercises, the organic ones for three congas, or those that make use only of the peripheral drums tend to be more effective in rebalancing the muscular system and, incidentally, your posture.

Given that symmetry in conga playing is the exception (however frequent), only the definition "symmetric" will appear on the heading of each applicable study, and all those non specified will be by default asymmetrical.

In addition, because the pursue of symmetry in congas playing is a Sisyphean task, and all the symmetry studies in the world will never fully compensate the ease of your "right" hand (whichever that might be), I have prepared a series unilaterally focused on training the weak arm, putting it through varying degrees of challenge, or more simply getting it to work a little more on its own, rather than evenly with the strong one. Another way to pursue this mission of compensation is that of simply practicing any two-drum sequence the other way round, as a left-hand player would (if you are right-handed that is).

NUMBERS, CIRCLES AND PARALLEL UNISONS

Playing congas is for a good part a muscular affair: it's about physical strength and the capacity of sustaining a prolonged effort without losing control, tone precision and rhythmic elegance; it is also about training your muscles to develop a high grade of flexibility, especially when it comes to play sets of three or more drums, where you have to extend your arms beyond the gravitational safety of one or two. In athletic terms conga playing is much closer to hitting a punching ball than to lifting dumbbells: control, rhythm, endurance and muscle tone must develop together; if one is left behind the others will not be of much use, and your playing will be poor.

A particular group of exercises on this method aim precisely at these issues, with particular attention given to toning the muscles of your torso and the back.

The "Parallel Unisons" series is designed to be played with two drums placed equidistantly from your centre; they can be the two lateral drums in a set of three, four or five drums, or they can simply be two congas placed laterally instead than in the usual diagonal shape. They are particularly helpful in toning the shoulders, pectoral and the back of your arms; your heart will be pretty grateful too.

Both the "Numbers" and "Circles" series are very helpful for extending the muscles of the torso and the back, and they will help you to develop the muscle memory necessary for hitting any of the drums in a setup in any sequence with perfect tone and accuracy.

STUDIES' ORGANISATION: CATEGORIES, SYMBOLS AND SEARCH FILTERS

All the pdfs of individual studies based on specific Core Motions are named following the same constant rule:

- Core A, B, C etc.
 - Unique identification number (i.e. 3.1, 3.2, 4.1 and so on)
 - Linear or organic (abbreviated as “lin” and “org”)
 - Number of drums (abbreviated as 1c for one drum, 2c for two and so on)
- (For example: core-F-1.1-lin-2c.pdf)

All the other studies, listed under “misc. studies” and consisting of more than one Core Motion combined or of none, are named arbitrarily.

PLEASE NOTE: The serial numbers on the heading of each of the studies based on specific Core Motions are in no way to be intended as progressive, and their only function is that of reference and identification of the individual studies.

In virtue of the non-linearity of this collection of studies, the navigation is facilitated by a series of search filters, each applying one of the categories described in chapters five to eight. The dropdown filters are organised as follows:

core motion	no. of drums	linear/organic	symmetric/asymmetric
all	all	all	all
core A	1 conga studies	linear	symmetric
core B	2 congas studies	organic	asymmetric
core C	3 congas studies		
core D	4 congas studies		
core E			
core F			
misc. studies			

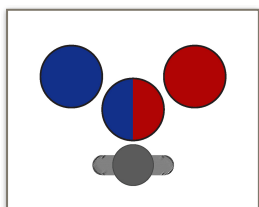
Plus an additional button to select a list of studies suitable as warm-ups.

In this way one can instantly search and display all the available studies for three congas for example, or all those based on Core Motion F; or all the linear studies on Core motion A for two congas, and so on.

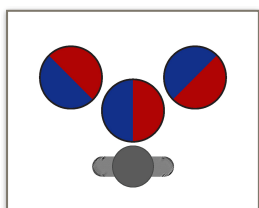
- Studies for two congas positioned in the classic diagonal configuration will be by necessity asymmetrical; however, there are other studies designed for the two peripheral congas of a set of three or four, and other which can be performed on any two congas in any configuration, and these are generally symmetric.
- Studies on Core B, C, D and F will all be linear.
- Studies on Core A and E can be both linear and organic.
- Both linear and organic studies can be either symmetric or asymmetric.
- For ease of readability, sticking is only specified on the first permutation of a series where it remains unvaried, and it reappears whenever there is an alteration, after which the same rule is applied. To reiterate, where sticking is not specified in any single line it means that it is the same as the last exercise in the series where it has been specified.

Congas can be arranged in a broad range of configurations, but for practical reasons the way the drums relative pitches are organised in these studies is based on a common set-up of high conga in the centre, tumbadora on the right (for right-hand players), mid conga on the left and a lower tumbadora in front. All studies, be them for two, three or four drums are based on this configuration, and any adaptation to different set-ups will have to take that into account. There are no studies for five congas in the present version of this method.

An additional information on the heading of each study is a top-view stylized picture of the drums, with a two-colour scheme. This is to give an immediate visual description of how many drums are employed in the study, but it also depicts which hand will engage on which drum. For example, in a study for three congas, this picture:

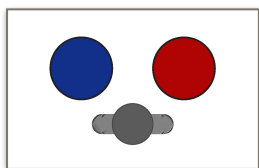


will tell you at a glance that in this series the left drum will be played only with the left hand, and the right with the right; meanwhile a study headed by this picture:

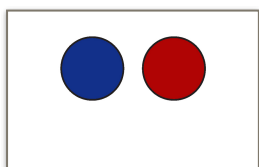


will engage both hands on both of the lateral drums.

Studies designed specifically to be played on the two side drums of a set of three, four or even five, are inherently symmetrical, and are thus depicted:



Meanwhile, this particular picture:



indicates a series that can be performed on any pair of drums of a set of two, three or more. In these cases each hand is confined to one drum, and the studies of this category consist generally of exercises in either independence and unison playing.

The six Core Motions have been created for practical purposes, as they allow us to divide the exercises in groups and to focus on specific aspects of the instrument's technique; however, they are not geometrical absolutes and, like anything musical, they must be approached with a flexible mind. Whenever more than one Core Motion is employed in a certain study or exercise, only the predominant one is listed at the beginning of the page, unless the study is deliberately making a mixed use of two or more Core Motions, or of none. All these studies are grouped under the search filter "misc. studies".