

Making possible the impossible: performative ideas and solutions in some Xenakis' percussion works

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Abstract

This paper presents two brief reflections on performative and musical ideas from the percussionist's point of view in relation to the work of Iannis Xenakis. Two emblematic works of the percussive repertoire, *Rebonds* (1987-1989) and *Okho* (1989), are used as a way to exemplify the issues to be addressed here. Through the discussions raised on this paper we hope to contribute to further considerations about the performance relationships established between the percussionist and the work of Xenakis for percussion, often permeated by the myth of the impossible as a poetic feature of the composer. The perpetuation of this myth is the main justification for the practices of simplification and self-indulgence by the percussive community on Xenakis' repertoire. The first work (*Rebonds*) brought about a more direct reflection on technical solutions for an expressive form determinant in the musical text: the double appoggiatura (in the percussive universe called drag). The second work (*Okho*) is inserted in a different discussion context, for it was written for the west african drum djembé, played with bare hands. Thus, we sought to demonstrate the dynamic process of searching for timbres on the djembé, observing the tension of what was called 'transplantation' of compositional material from a piece with mallets (*Rebonds*) to a bare hand drum piece (*Okho*). Having Irlandini (2020), Solomos (1996), Soteriou (2011) and Stasi (2011) as bibliographical references, the main goal of this article it is to make an approach about how the notion of 'impossible' can drive original solutions on percussive performance in Xenakis' percussion works.

1. Introduction

One of the most common ideas associated with Xenakis' music is "the impossible", going so far as to consider it as one of his poetic traits. In this context, Xenakis' percussion music explores a complex universe in relation to musical performance. If we can say, in a way, that this idea can be considered completely contradictory and utopian in itself (bringing an integral performance trying to traditionally obey the signs of the written music - beyond a subversive performance - in opposition to a sensitive musical result) perhaps what instigates the musical work of Xenakis lies exactly in the point in which the path chosen by each performer as a way to "transform or achieve" the "impossible" could bring to the artistic sensorial field an original contribution built, architecturally, on musical gestures expressed by sound, the performer's body, configuration and other elements that permeate the musical performance.

The very notion of impossibility, in a sense, is based on a transcendental approach to thought that is, in a sense, utopian. In examining Lyotard's definition of postmodernity and the consequences of

giving up modern meta-narratives (such as identity and meaning), Aylesworth (2015) says that discussing Art with a postmodern bias deal with "(...) a sensibility that there is something non-representational that demands to be put into sensible form and yet bypasses all attempts to do so."

That said, we will seek through a look at the works *Rebonds* and *Okho* to observe and point out original performative means by which we can identify different paths taken for the solution of musical passages considered, at first, as 'impossible'. The idea that there are distinct performative constructions that can indicate musical solutions to 'unattainable passages' may help us understand the technical difficulties and musical ideas suggested through Xenakis' discourse from another artistic and human perspective - rather than unattainable - plural, tolerant and variable in its nature.

2. Drags on *Rebonds B*

For Xenakis (*apud* Yoken, 1990), percussionists are always on the path of developing and building new instruments and performing means, allied to technological innovation, in order to seek to improve their performance with originality. The percussionist works in constant partnership with composers, luthiers, and manufactures and his role as an innovative agent, not only in the act of performance but also in the production of instrumental engineering, becomes more and more evident in the contemporary musical scenario. Reed (2003) states that "In the pursuit of the new and unusual, percussionists are frequently asked to collaborate within the compositional process in terms of learning to play a new instrument or being asked to design and build that instrument" (Reed, 2003, 48).

The passage about "learning a new instrument" draws our attention, something that induces us to think about the possibility of new or unknown sounds approached in the percussionist's performance. Sometimes the idea of a "new instrument" also goes through the possibility of exploring or proposing unusual approaches to instruments already legitimized, in ways - until that moment - not yet considered. The development of new performative means to reach the desired musical result in works by Xenakis written for percussion are, in this way, a constant for the percussionist. The idea of the 'impossible' becomes not only a performative issue (eventually), but a matter of not being able to predict the results that will be achieved in the construction and presentation of this performance: "I also take risks when proposing new solutions, whose result is impossible to predict" (Xenakis *apud* Solomos, 1996, 90).

This risk can also be assumed by the percussionist, trying not to fall into the trap of establishing as a goal setups/performances traditionally legitimated by the musical/percussive community. It is not a matter here of forcing the percussionist to limit itself with a specific approach to Xenakis. But to dodge 'common places' and always keep searching something that can contribute in an original way to the musical making.

Written for solo percussion, we can say that *Rebonds* (1987-1989) is one of the most emblematic works of the repertoire for multi-percussion, being widely performed by percussionists around the world. Divided into two parts (A and B) this work exposes points where the climax and the exposition of relatively less powerful themes instigate the percussionist to seek innovative solutions for its representation. At first, certain passages may seem 'impossible' to be performed. If the percussionist is treating the work in a traditionalist perspective, he/she will hardly make the work feasible (at least within Xenakis' poetics). The development of new techniques and the search for instruments that can 'respond' to these demands need to be considered for the representation of the musical idea to become tangible for the performer and the audience.

Rebonds has been subject of several dissertations, theses and articles since its composition. It is a widely discussed work in the percussive milieu. Thus, we bring here a very particular aspect of *Rebonds B*, which unmistakably characterises the construction of motifs and phrases: the double appoggiatura (drag). *Rebonds B* is initiated with a rhythmic *ostinato* in the high bongo where, every

two beats, a sixteenth group is coloured by a drag (Figure 01).



Figure 01: *Rebonds B* (Xenakis, 1987-1989). Bars 1-2.

During the course of the piece, the drag will undergo through displacements, as well as changes of voices and instrument groups. Due to the instrumentation of *Rebonds* (which requires two bongos, conga, tom-tom, bass drum and 5 wooden blocks) and the physicality required in the performance, the ways to achieve a satisfactory result on these appoggiature are not an easy task for the percussionist.

2.1. Bars 01 to 64

In some performances we observe percussionists abdicating the natural character existing between the drag and the main note (where the first two notes should sound with less intensity in relation to the third one). In these cases, the percussionist chooses to play with one mallet in each hand and tries to play three notes (drag and main note) as a triple stroke with a single movement with the same mallet (Figure 02).



Figure 02: Example of drag sticking either with the right or left hand using one mallet.

The result is a *decrescendo* between the first and third note. The relation between the bongo and tom-tom voices is lost in the very first gesture because, although the tom-tom has double accentuation, the main note of the bongo should sound strong. This problem is perpetuated in the voice relationship between bongo and the other drums, and it is difficult to identify the voice relationship between them. As much as the bongo voice is stable and hardly changes for long periods, it does not necessarily have an accompanying function. The voices are parallel, articulated in a heterophonic texture, aided by variation in accents. One of the difficulties in playing the drags stems from this irreconcilable parallelism.

Some percussionists argue that this way they can play the piece in a faster tempo (as if this were some kind of advantage). Others ponder that playing with two mallets brings more energy and physicality to the gestures required by the piece. In this specific point we agree. However, neither tempo nor physicality should overlap with the motoric and gestural construction of the drag and main note.

Other performances of *Rebonds B* make use of the option of playing the piece from the beginning with 4 mallets. In these cases - if the *ostinato* is being played with the right hand - the drag is performed with the outter mallet (n.4) and the main note with the inner mallet (n.3) or vice-versa (Figure 03). Here we notice that the sonorous relationship between appoggiatura and main note is more faithful. However, the work loses considerably energy, sonic depth and physicality, extremely relevant points in Xenakis' works for percussion. We also notice that performances that opt for this technical solution tend to play in a faster tempo than the one suggested by Xenakis.



Figure 03: Example of drag played with the right hand using two mallets (also can be played with left hand).

As the piece progresses, the passages that require drags become more complex, making a homogeneous execution even more difficult. At the moment this articulation leaves the bongos and starts to transit through the other instruments (tom-tom and bass drum mainly), the rebound of the mallets becomes more difficult due to the physical characteristics of the instruments. In other words, the idea of a main-note flourish fades away. This occurs mainly between bars 61 to 64 (Figure 04).



Fig.04: *Rebonds B* (Xenakis, 1987-1989). Bar 64 showing drags on the conga, bass drum and tom-tom.

From the beginning of the work until bar 65, the percussionist has the challenge of maintaining the energy and physicality of the performance without giving up the relationship between the drag and the main note, that allows the transmission of something essential to the work: the relationships of voices that are established between low drums and the high bongo through the relationship of pitches and accents. Thus, we suggest a third hypothesis of performance that seeks to preserve this characteristic of the work. The idea is to perform the whole section (bars 1 to 65) with two mallets, but modifying the sticking. We seek to use the premise of the technical study of the double stroke (where, by convention, the second stroke is accentuated as a way to exercise the musculature so that later the sound can, in a natural way, be balanced to the sound of the first stroke - which spontaneously, by habit, sounds stronger). Having said that, if we think that the *ostinato* is conducted by the right hand, we suggest the drag as a single stroke (l-r) followed by the main note (R) having then the following sticking in the high bongo: l - r - R (Figure 05).



Figure 05: Example of a drag and main note sticking with the right hand using two mallets (this can also be played with left hand).

The 'accentuated' strike of the second note played by the right hand will highlight the main note on the bongo, ensuring a two-voice relationship with the other drums. The energy and physicality of the performance in this section is also guaranteed by the use of only one mallet in each hand.

The percussionist's gesture needs to be fast enough for the left hand (or right, depending on the set-

up) to play accurately on the other drums. At first glance the sticking solution presented here would also allow to play the work in a faster tempo than indicated by Xenakis. But, as the passages with drags become more complex (mainly between bars 61 and 65), the unfeasibility of the body movement above 60 bpm becomes a factor working against the performance. Therefore, if we seek a performance that ensures this relationship of voices between the drums added to the relationship of the drag with the main note, and a physicality that gives energy and musicality to the performance, we seek to maintain the tempo suggested by the composer.

2.2. Bars 65 to 72

The wood instruments section, from bars 65 to 72, is one of the most challenging moments in the piece for the percussionist. Three technical aspects are worked on in this short section: single stroke, drags and rolls on a surface with little to no rebound (Figure 06).



Figure 06: *Rebonds B* (Xenakis, 1987-1989). Bars 68-69. Single stroke, rolls and drags on pieces of wood (or wood-blocks).

An important factor that often goes unnoticed is the set-up and choice of instruments for this section. Unlike *Psappha* (1979), *Rebonds* has a well-defined list of instruments, where there is little margin for great 'adventures'. However, the percussionist, in the path of an original thought, should seek to distance himself from the common place of certain instrumental groupings legitimized mainly by musical instruments industry. Instruments such as "temple-blocks" or "wood-blocks" are commonly associated with specific groups marketed by recognized manufacturers in the musical instruments market. Several percussionists offer quite original solutions for their setups, as a way to ensure that their decisions about mallets, sound and physicality are preserved. In some cases, percussionists build their own set of wood planks, duplicating or triplicating the pieces and arranging them one on top of the other. This arrangement takes place basically in two ways (Fig.07):

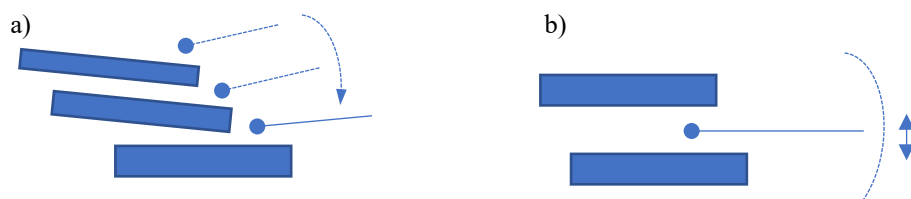


Figure 07: Suggestions of set of pieces of wood, where: a) drag (pieces above) and main note (piece below). b): roll.

Opting to use only one mallet in each hand, the setup 'a' suggests two strokes on the plank above (inclined), playing the main note on the plank below, both tuned to the same pitch. The downward direction of the gesture has gravity as a strong ally for the main note to differ from the drag. The 'b' arrangement allows the percussionist to make rolls between the two pieces of wood with only one mallet.

For setups that use standard wood-blocks - or that have resource/logistics limitations to build their own materials - we suggest another possibility, using four mallets. Considering that we begin *Rebonds* with two mallets (section from bars 01 to 65), we perform a short breath (caesura) in the middle of bar 65 as a way to start the wood instruments section. This caesura is then used for the mallets

changes, as a continuous flow of the performance. Being the first part of bar 65 the climax of the drags in *ff* dynamics, we understand that the woods instruments entrance in *pp* dynamics - in the second half of bar 65 - is enriched by the *drama* of this *poetic license* to which we allow ourselves (a brief silence between the climax of drags and the beginning of *pp* section in woods) (Fig.08).



Figure 08: *Rebonds B Part* (Xenakis, 1987-1989). Bar 65. Change of mallets, during a brief caesura, starting a new section on woods.

For this excerpt on we then suggest the use of four mallets (two mallets on bongos - Figure 09) as illustrated in Figure 03. In this case there is no loss of physicality and energy by opting for four mallets, due to the characteristics of the wooden instruments themselves and also due to the musical text of this section.



Figure 09: *Rebonds B* (Xenakis, 1987-1989). Bar 69, sticking using four mallets, two mallets on bongos.

Here the drag and main note of the highest wood, if we consider the right hand, could be made in the following order: 4-4-3. The rolls will be made with the other hand (mallets 1 and 2) The following picture (Figure 10) illustrates our suggestion:

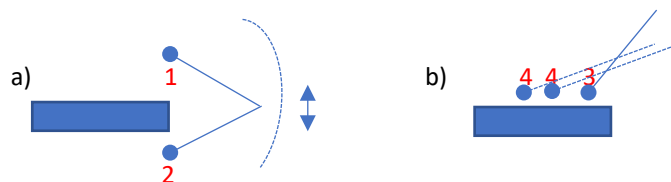


Figure 10: Suggestion of sticking using four mallets on pieces of wood: 'a' roll (using mallets 1-2). 'b': drags (double stroke 4-4) and main note (3).

There are also setups that 'mix' the two ideas of Figure 07. and Figure 10, adding only one piece of wood to the higher pitch (example 'a' of Figure 07) and using only one piece for the other voices (example 'b' of Figure 07). In this case, the hand that conducts rolls must use two mallets¹ (in case he started the work with only two mallets).

In the same way that the beginning of this section allows for a *poetic license* that gives space for change mallets, we notice that - at the end of the same section - the same occurs. As a way to 'deliver' the music to the new section - that will seek to merge skin and wood instruments - through a

¹ Doing a *poetic license* as Figure 08.

instrument, is quite unusual. The composer works with an abstract timbral model of the instrument, converting the physical object djembé into an *hors-temp* structure of sonic events³ capable of being worked with automated *stochastic music* procedures. As Makis Solomos states, '(...) *Okho* (1989), uses only African djembes. The only concern here, too, is the most abstract, most universalizing rationalization: the classification of instruments according to register⁴'. (Solomos, 1996, 56) Xenakis splits the instrument in two halves/types of sound: *bord* (high pitched) and *basse* (low pitched). Each half is then further subdivided into three types of timbre, each associated with a specific dynamic. The score, however, does not specify how the timbres should be produced, leaving this choice for the percussionist, having as a guide six generic descriptions: *basse étouffé* (mf), *basse normale* (f), *basse claquée* (ff), *bord clair* (mf), *bord claqué sec* (f) and *bord claqué résonnant* (ff).

The score demands further timbral choices from the percussionists in four places. On the *Éditions Salabert* digital edition of the score, bars 25-28, 31-32, 52-54 and 56-57, Xenakis requests 'three differentiated pitches in "*bord clair*"; on bars 61-73, 'undulations (*glissandi*) with the fist'; on bars 74-79 'dense tremolo with sticks'; bars 80-110 'use sticks' for the three *bord* sounds. There is, however, a second version of the same score, an *Éditions Salabert* manuscript edition, with two discrepancies from the digital edition: on bars 74-79 the indication is 'dense tremolo with the nails' and on bars 80-110 the indication for the three *bord* sounds is to 'play with the nails' as well. The second step to learning *Okho* is then deciding not only how one will produce each sound, so that later on one can deal with the consequences of these choices, but also which instructions to take into consideration.

Considering the purposefully imprecise description of the timbres used in *Okho*, it is interesting to appreciate the fact that there are as many solutions to this as there are performances registered. By going through an array of versions, it was possible to determine that the diverseness in sound production of the six main timbres were more evident in the *basse claquée* and *bord claquée résonnant* sounds. The *basse claquée* sound is not a common sound in the traditional djembé playing and usually is done by performing the conga open slap tone in the center of the skin of the drum. This, however, can bring imbalance to the mixture of the six sounds, since the sound produced by this technique indeed activates the bass sound but has a lot more energy on the high partials of the slap: in short, it sounds more like a slap than a bass sound. Considering the sonic events typology of the piece, having a slap-like sound replacing a bass sound makes half of the total sounds slaps, which **drastically** alters the final rendering of the music. The version⁵ of *Okho* we propose chooses to modify two of the bass sounds. The *basse normale* sound was done with the hands closed in a fist, hitting the carpal bones between the center and the rim, which in fact gives the roundest bass sound the instrument can produce, with the most drastic attenuation of high partials. The *bord claquée résonnant* sound was then differentiated by trying to enhance as much as possible the high partials of the bass sound without crossing the threshold of the slap sound; this was achieved by having the palm opened, the stretched fingers completely touching each other and hitting the metacarpophalangeal joint almost in the middle of the drum.

The *bord claquée résonnant* sound is usually done in two different ways, by using either the conga open slap tone or the djembé slap tone. Using the same principles as above, it seems preferable to use the djembé slap tone, for this is the most pure and loud slap sound that can be produced by the instrument. In doing so, one can easily distinguish the three *bord* sounds types and dynamics. On the one hand, one could argue that if Xenakis really wanted specific techniques for the timbres, he should have made this very clear in the instructions of the piece; this could indicate a freedom of choice desired by the composer. On the other hand, one could conjecture if the percussionists indeed are making the choice of using the conga slap tone or just could not bother themselves to learn the djembé

³ "Sonic events are the independent musical sounds which are found in an abstract musical space. Their attributes include: pitch, duration, and intensity, which are called dimensions. The positions of these musical sounds can be measured relatively to each other, for example: low, high, soft, loud, etc." (Soteriou, 2011,14)

⁴ '(...) *Okho* (1989), emploie uniquement des djembés africains. Seul souci, ici aussi, qui tient de la rationalisation la plus abstraite, la plus universalisante : la classification des instruments en fonction du registre.'

⁵ https://www.youtube.com/watch?v=JJyf5YrQE_Y

slap tone, which is harder to master and very different from any muscular memory built to play congas.

Xenakis wrote *Okho* for djembé and is expecting that the percussionist knows how to play the instrument. A composer is not required to describe every common technique for playing the instruments he/she composes to because that's on the performer's realm of action in the musical performance phenomenon. That being said, the percussionist is not necessarily nailed to the traditional technique of the djembé for playing *Okho*, but needs at least to acknowledge the secular tradition of the instrument, dating at least back to the XIII century. If the musical community is not careful, colonialist delegitimizing self-centered discourses may pass as libertarian propositions, a typical ideological mechanism of decadent bourgeois societies. Of all the family of instruments, the percussion is the one that suffers the most with the maintenance of it, by means of demeaning the technical aspect of its instruments either regarded as primitive or simple/incidental.

I was talking about the formative elements that make percussion something always primitive. What would then be the concepts that sustain this whole structure of prejudice? There are two: the first is precisely the concept of generalization in relation to "primitive," which has always been related to the idea of origin, purity, and naturalness. This is where [Marianna] Torgovnick [in her 1990 book *Gone Primitive: Savage Intellectuals, Modern Lives*] demonstrates how so-called primitive societies are conceived as being outside of linear time. That is, the "primitives" are the same in any place and time. The second is the concept of Naturalization, that is, percussion already exists in nature itself, as well as in everyday actions. For example, because of its sound qualities, people establish an analogy between percussion and certain natural forces: thunder, the beating of the heart, breathing, the big bang⁶. (Stasi, 2011, 95)

The topic of threshold observation as a tool for timbre choosing will prove to be critical in the last section of *Okho*, bars 117 to 138. This is the hardest section of the piece to play, due to the two-voice polyrhythmic nature of the writing and the frequent division of the djembé into the two initial groups of timbre: *basse* and *bord*. This type of writing is very unusual to hand played drums and in fact comes from another piece by Xenakis that was being created simultaneously to *Okho: Rebonds A* (1987/89) for two bongos, three tom-toms and two bass drums⁷. The similarities between *Okho* and other percussion pieces by Xenakis (such as *Rebonds A*, *Rebonds B* and *Idmen B*) and a sort of common percussion set-up for most of his other pieces with percussion (usually a pair of bongos, one or two congas, two or more tom-toms, bass drums and a group of wooden instruments) have lead percussionists (mostly from the USA) to play *Okho* on this drums set-up.

This is a comfortable option for musicians who are not willing to deal with the difficulties of hand percussion. However, Xenakis original intention for the work was that they be played with traditional technique, and this was only possible thanks to the collaboration with percussionists of the Trio Le Cercle (Willy Coquillat, Jean Pierre Drouet and Gaston Sylvestre), who had an interest and knowledge of the music of non-Western traditions. (Irlandini, 2020, 23)

It's hard to think of a more obvious example of the hazardous process of acculturation perpetuated by

⁶ *Eu falava dos elementos formativos que fazem da percussão algo sempre primitivo. Quais seriam então os conceitos que sustentam toda essa estrutura de preconceito? São dois: o primeiro é justamente o conceito da generalização em relação ao "primitivo", que esteve sempre relacionado à ideia de origem, pureza e naturalidade. É aqui que [Marianna] Torgovnick [em seu livro *Gone Primitive: Savage Intellectuals, Modern Lives de 1990*] demonstra como as chamadas sociedades primitivas são concebidas como se estivessem fora do tempo linear. Ou seja, os "primitivos" são os mesmos em qualquer lugar e época. O segundo é o conceito de Naturalização, quer dizer, a percussão já existe na própria natureza, bem como em ações cotidianas. Por exemplo, devido às suas qualidades sonoras, as pessoas estabelecem uma analogia entre percussão e determinadas forças naturais: os trovões, a batida do coração, a respiração, o big bang.*

⁷ The similarities of *Okho* and other percussion pieces by Xenakis (such as *Rebonds A*, *Rebonds B* and *Idmen B*) and a sort of common percussion set-up for most of his other pieces with percussion (usually a pair of bongos, one or two congas, two or more tom-toms, bass drums and a group of wooden instruments) have lead percussionists to play *Okho* on this drums set-up.

former colonial owner nations on the traditional knowledge of the African and Latin American continent in the name of artistic poetic license and an unrestricted and inconsequential freedom of choice. *Okho* and *Psappha* are the only percussive pieces written by Xenakis that greatly diverges from the usual drum set presented in his other compositions (with occasional additions of timpani, flower pots and small instruments used in his pieces with voice), so coming to the decision of adapting the trio is an audacious move, to say the least.

Diving in the realm of technical mechanics of the djembé, let's consider player A on bar 117, the polyrhythmic group of the second half of the first beat (Figure 12). This transplant, coincidentally, happens to fit quite well to the playing technique required to execute this sample. The first note, a *basse étouffée*, is played in the center of the drum head and requires that the percussionist keeps the hand on the skin in order for it to sound muffled. The next sound, *bord claqué sec*, is generally played with a conga dry slap technique, which also requires for the percussionist to keep the hand on the drum. Following this, the percussionist plays a *basse normale* and a *bord claqué*, both played with the hands allowing the head to vibrate. Another *basse étouffée* at the end of the sample coincides with a *bord claqué sec*, making this an example of careful timbre craftsmanship for the djembe. One has to consider also that playing drums with sticks is much more agile than playing the 6 timbres with bare hands. That being said the tempo of 56 BPM for the eighth note is in fact the maximum limit of feasibility for this section, with a few passages requiring either a laid-back tempo or playing the whole section lower than this (mostly when the notes are grouped and distributed along the *bord* sounds).



Figure 12: *Okho* (Xenakis, 1989) second half of bar 117, player A.

It is precisely the tension between the writing for drums played with sticks and the playing technique of the djembé that makes this last section of the piece such an interesting object of research. While playing *Rebonds A*, the percussionist has ready-made dimensions of the sonic events, mostly the timbre, just triggered by hitting the drums with the sticks: the playing situation is mainly a matter of aim, height and physical transition between the large sized set-up of drums. While playing *Okho*, the percussionist deals with small sized striking spots that are extremely sensitive to small changes in the hands: the playing situation is more constrained to precise hand shapes/movements and all the timbres are produced in the same hand of the single drum.

The next example is transplanted from bar 2 of *Rebonds A* to bar 19 from player B in *Okho*. This sample, completely feasible on *Rebonds A*'s set-up is, in itself, unfeasible to play due to the timbre composition chosen by Xenakis. As seen below (Figure 13), the composer writes simultaneously *bord claqué sec* and *basse normale*, the first requiring the hand to muffle the drum's head and the second a resonant sound. The whole passage presents this kind of 'wave destructive interference' relationship between the timbres and highly benefits from the alternative approach on impossible proposed by this article. One could choose to unsynchronize the strokes, giving space for the different skin configurations to vibrate/muffle (losing rhythmic sharpness) or assume that this destructive interference will give birth to new hybrid sonic events.

Figure 13 consists of two musical staves, labeled a) and b). Staff a) shows a musical passage with a 5:3 ratio indicated above the staff and a 3-measure group indicated below. Staff b) shows a similar passage with a 5:3 ratio indicated above and a 3-measure group indicated below. Both staves have multiple lines of music, suggesting a complex, multi-layered texture.

Figure 13: a) bar 21 of *Rebonds A* (Xenakis, 1987-1989) b) the transplant to bar 119 player B in *Okho* (Xenakis, 1989), with adaptations regarding timbre.

6 Afterthoughts

After all the considerations from this paper, it seems to us that trying to define or deal with the concept of ‘the impossible’ can be a contradiction in itself. How can the impossible be a poetic trait of a composer that has his pieces played massively nowadays? Such a transcendental value, echoing foundationists models of self and truth may actually deviate performers from a path of proposing new approaches to canonic repertoire.

Let us take for a moment the words of Xenakis himself on one of his hardest pieces for piano, *Synaphai*: ‘The pianist plays all the lines, *if he can.*’ (Xenakis *apud* HARLEY, 2004, 72) Xenakis undergoes through the hard work of writing a piece that handles the ten fingers of the pianist as individual performers having each finger its own stave, coordinates this with complex arborescence patterns and, in despite of all this multilayered complexity, counts with the performer’s discernment of his own physical/intellectual limitations. With each of his compositions, Xenakis was laying the grounds for a radically distinct way of doing music.

All have been faced with the necessity of finding individual solutions, of engaging their responsibilities as performers. Performing Xenakis has led them radically to change their approach to the realization of a work from a score: the aim is no longer to perform indications of a prescriptive score as meticulously as possible, but rather to evaluate the musical and physical means to be applied in order to attain an aural ideal that the composer has set down on paper. This approach implies a new kind of interaction between the listening process and the production of the sound during the work itself and the performance: it is the ear that continually guides and controls the instrumental gesture (Calvet, 2011, 04).

When faced with unfeasible passages in Xenakis’ music, the performer has to find new ways of dealing with the musical performance phenomenon and, in doing so the impossible is conquered. Rather than preserving a system of beliefs based on the utopian and stale of the absolute execution of a musical text, we chose to ally ourselves with the restless attitude of the first performers of Xenakis’ music: former pre-conceptions that forces the simplification of the musical text from the beginning of the learning process are left behind; the solutions should come from trying to play the text itself; there are a great amount of valid paths to take while learning his music, **so long those paths are taken with care, text observance and deep thinking.** The performers, then can use their own expertise to give life to the composition and, to use the words of the Brazilian friar Frei Betto go from the Utopia to the always renewing ‘Topias’ waiting to be made in existence.

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