# UNIVERSITY OF PARIS SORBONNE (PARIS IV) DOCTORAL SCHOOL V, « CONCEPTS & LANGUAGES »

Recording number:					

# Thesis to obtain the grade of Doctor of the Paris-Sorbonne University

Disciplin: Musicology

Presented and defended in public the 10th of May, 2011 by

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From implicit musical objects to their exogenous formal didactising: internal didactic transposition of suingue brasileiro in France

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## - Thesis position -

NB: Because the topic induced a high number of references, the latter have been voluntarily omitted in this text to make it more legible. The reader interested in them should consult the integral text of the thesis and its reference table.

## Introduction

This thesis deals with the teaching of The Other's music, and more particularly with the didactic transposition of Afro-Brazilian music in France. It tries to understand why the *suingue brasileiro* (Brazilian *swing*), a microtemporal morphophoric phenomenon, dissolves itself when it goes through the French musical teaching system. Based on an anthropo-cognitive perspective, our problematic is, by essence, multidisciplinary: it borrows from musicology, cognitive science, anthropology, and of course, from Education Science.

## The suingue brasileiro

Analyzing the course of the *suingue brasileiro* in the French educative institution requires that we define it as a research object.

#### Afro-Brazilian musical fundamentals

The Afro-Brazilian culture derives from the triangular trade: it has roots in a cultural African patrimony (in particular sub-saharian, especially Yoruba and Bantu) partially enslaved, and in a resistance mechanism to the hegemonic culture of the Occidental oppressor, one aspect of which is called *batuque*, or *batucada*. As a collective interplay of percussion, singing and dancing mixing sacred and profanes postures, it has been the basis of most of the Afro-Brazilian manifestations and it has spread all over Brazil; The African origins are palatable through fundamentals that are part of a vast majority of afro-diasporic musical expressions. These fundamentals reveal themselves as a non isochroneous grid of minimum operational values on which a complex polymetric structure is built.

### **Swing** and micro-temporality

Although the presence of such an anisochronous microstructure is observed in the majority of cultural areas linked with African diaspora, the most famous appears in jazz music where it is called *swing* (this term will be used in this thesis in a generic sense). It is in this large musical aesthetics that the phenomenon has been the object of the biggest number of scientific works. As a consequence, the phenomenon has been mostly studied in this large musical area.

Though its origin led to contradictory hypothesis, it is certainly a morphophoric and microrythmic organization: being the lowest level of musical discourse segmentation, it underlies every musical performance and crosses all other parameters like sound production mode, timbre, dynamic accentuation or instrumental fingering. Nevertheless, it cannot be considered as a *rubato* form, because it is based on an isochroneous and stable pulse.

#### The suingue brasileiro, a specific kind of swing

As a Brazilian declination of the Afro-diasporic temporal phenomenon, the *suingue brasileiro* has inherited characteristics which make it a musical object similar to the jazz *swing*. As a situated activity, it is strongly linked to the corporeity with which it has a relationship that is not very clear yet: it seems to be dependent on the musical gesture, but independent of the kind of gesture. Although not writable with Occidental transcription means it can be graphically represented, and even modelized, as a mid-position between binary and ternary etic models, a dynamic intermediary which has an average value and a variation ratio. In Brazil, its transversal presence for many years is verified by the means of synchronic and diachronic analyzes which show the permanency and the diversity of the phenomenon.

Nevertheless, we show that, during its diffusion in metropolitan France, the *suingue brasileiro* disappears from most of the musical performances (professional French artists or non professional groups of *batucada*). This disappearing also concerns the educative world, from self-learning methods to the didactic activity of the teachers, a category of actors on which this thesis focuses.

## Afro-Brazilian music and conditions of their transmission

#### Afro-Brazilian music transmission in Brazil

An overview of the endogenous conditions of the Afro-Brazilian music transmission allows a better understanding of the transmission of *suingue brasileiro*. Afro-Brazilian traditions imply an oral learning, by the means of an immersion that can last all life. The musical knowledge they convey are often implicit and revealed in the musical performance itself, by the way of two transmission formalisms: informal and not formal. On the other hand, Afro-Brazilian music does not integrate the official institution of Brazilian music education because the latter, even though it is obviously evolving, is mainly based on the erudite Occidental repertoire of the 18th and 19th centuries. Attracted by the opportunity of practicing music collectively without any institutional frame, the young Brazilian middle-class shows a growing interest in the *batucada*, which it performs generally decoupled from Afro-Brazilian traditions.

### Diffusion and teaching/learning of Afro-Brazilian music in France

In France, three institutions are concerned by the teaching and learning of the Afro-Brazilian music. Despite the strong will of the Ministry of Culture, which has tried to implement a kind of institutional shaking up since the 1980s, the specialized teaching system finds it difficult to integrate in its conservatories the so-called "extra-European" music. Afro-Brazilian music is no exception and is not represented in it. On the other hand, this kind of music is widely appreciated by the associative world (as well as the already mentioned young Brazilian middle-class), where a high number of *batucada* groups have emerged since the 1970s. These groups seem to form a kind of new orpheonic movement based on percussions. More or less close to Brazilian esthetic rules, they are organized around a leader, a kind of mediator who assumes a real pedagogic function. As to the last institution considered, the French school, it shows a huge interest in these musical activities, particularly regarding collective musical practices. Some music education teachers anticipate official directives and introduce a kind of Afro-Brazilian instrument in their classrooms. But the cultural reference is ambiguous and the teaching contents appear to be quite different from the endogenous canons because most of the fundamentals which rule this music disappear in the pedagogic act.

## Didactic transposition of exogenous musical objects

One of these fundamentals is thus the *suingue brasileiro*. Its dissolution in the teaching system can be studied by the way of the didactic transposition concept which describes the different steps of knowledge transformation in an educative institution. Here, this knowledge is tantamount to the endogenous socio-musical practices of reference, in which the *suingue brasileiro* is an implicit know-how which can be considered in a praxeology, also called praxeological organization. This last tool, coming directly from the Anthropologic Theory of Didactic, considers that every task can be represented as a function linking a type of task, a technique, a technology and a theory. Following such a modelization, the *suingue brasileiro* reveals its presence as a sub-task that cannot be separated from other parameters like dynamic or timbral interpretation. Integrable in an unlimited number of musical task types, it is linked to techniques mastered by the musicians who incorporate it to their performances. As these performances are generally practiced with no meta-cognitive dimension, only a few technologies exist (*i.e.* thoughts about techniques). On the other hand, the ethnomusicology produces some theories which allow a priori the *suingue brasileiro* to be the object of a transpositive mechanism.

What is more, the concept of didactic transposition is directly linked with the question of reference: although the music education teachers take explicitly the endogenous socio-musical practices as a reference, their repertoires and their "performance models" are more widely based on the example of French *batucadas*.

In the domain of *batucada* teaching, the French teachers are in charge of almost the totality of the noospherian power: they take sole responsibility for the major part of both the didactic transposition steps (*i.e.* external and internal). This responsibility questions their expertise, that is to say their didactic expertise and disciplinary expertise. The latter cannot only be constituted by declarative knowledge acquired by the reading of specialized books or rare existing manuals. It requires a real know-how which integrates listening and practicing, two potentially problematic aspects when it comes to the Afro-Brazilian music.

## Didactic transposition of didactic situations: from endogenous mediator to French professional teacher

In Brazil, the *batucada* is more than a musical practice; it is as well a didactic situation that I define as endogenous. The use of *batucada* in secondary classrooms is also a didactic situation, but exogenous. So, this last use induces a series of paradigmatic slides between both situations. The most interesting for now can be analyzed by articulating the notions of didactic transposition and praxeologic organization (based on the Anthropologic Theory of Didactic) with those of situation, milieu, mesogenesis and contract (based on the Theory of Didactic Situations). The passing from an endogenous semi-formal situation to an exogenous formal situation transfers the totality of the initial function of endogenous mediation to the teacher, who is then in charge of organizing the didactic milieu and particularly the "sonic milieu", which gives him a status of referent which can be a big responsibility. Indeed, he must manage a musical praxeology for which he has not been trained for, and in which the *suingue brasileiro* is a problematic sub-task that cannot be desyncretized from the other musical parameters. The French teacher who chooses the *batucada* as a pedagogic tool then becomes the central ring of a tricky chain of a didactic transposition, where his practical competencies are primordial, in particular those related to the perception of musical objects potentially never heard before, like the *suingue brasileiro*. Unfortunately, we speculate that he does not have an "adequate" perception to realize this transposition in the best conditions.

## Transcultural perception of the *suingue brasileiro*: quasi-experimental contribution

## Transcultural musical perception and Afro-Brazilian microtemporality

The chosen method to verify this hypothesis includes a quasi-experimental study which induces a necessary theoretical preamble. In the cognitive theory, the fundamental contribution of the constructivist paradigm allows us to think about musical perception, not as passive reception of a stimulus, but as the construction of sense by the way of enaction. It also allows us to manipulate the decentration concept, which is presented here in a large meaning coming from both the perception domain (cognitive psychology) and the culture domain (cultural anthropology). This articulation between two different facets of a topic constitutes one of the basics of cognitive anthropology, a still recent thinking frame, that is little know in France, and which allows us in particular to abandon the "shared code" to the benefit of an inferential model which induces a sense/meaning construction by the way of inferences.

This model is the heart of the affordance theory that, by its ability to explain choices based on a cognitive economy principle, induces directly the idea of an underlying perceptive expectation. Although this expectation is influenced by the subject's life story, it is certainly dynamic, focusable up to a certain level and linked to the phenomenon called entrainment, a multimodal rhythmic synchronization both intrapersonal and interpersonal. The hypothesis leading to this experimental study is that the enculturation of the teachers influences their perceptive performances. While in intracultural situation this influence often stimulates a recognized form of expertise, it can become a burden in transcultural situations. To verify this hypothesis, a psychophysical experimentation on the discrimination of *suingue brasileiro* as an "ambiguous" musical stimulus could have provided a first answer. But the anthropo-cognitive theoretical substrate formerly presented calls for its insertion in a larger protocol, integrating especially the discourse of the subject on its practice.

### **Experimental setup**

The experimental setup is based on a laptop computer, a touch-input graphic interface for acquiring responses, headphones and a synchronous audio recording system. All these parts constitute a mobile mini-lab which meets the subjects on their own living or working area. The protocol is divided in 3 parts (questionnaire, automated protocol, interview) which provide a crossed beam of information about the teachers, their declarations and their performances. The 2<sup>nd</sup> part of the protocol is organized as a funnel: it starts with ecological musical extracts and ends with a psychophysical test of microtemporality discrimination with an identification threshold. The results are analyzed by following two complementary axis: on one hand, a brief clinic analysis of each teacher allows to put a link between the different questions and tests, still looking for an articulation between the evidences extracted from the totality of information in a coherent beam. On the other hand, a systematic analysis tries to highlight some recurrences in the teachers panel.

#### Results

The experimental study concerns 25 teachers with a long pedagogic experience. Despite the high diversity of the results, the study highlights some consistent recurrences. The main one is at the same time the most astonishing: there is a clear divergence between the teachers' declarations and their performances observed during the psychoacoustic test. Indeed, almost all the teachers do not say a word about the microtemporality topic, including during the interview. Those who perceive an irregularity give an explanation based on a dynamic accentuation and/or an hemiola; this kind of explanation proves that they get confused at a metric level in which an ambiguous rhythm is perceived as ambivalent. On the other side, the results of the threshold detection test show, among other things, a latent ability in discriminating between different values of *swing*, an ability which partially invalidates the hypothesis to be verified. Most of the teachers concerned by this study perceive the *suingue brasileiro* but do not use this ability: a filtering process takes place indeed but in an unexpected way.

## **Conclusion**

For many years, Afro-Brazilian music has shaped part of the French musical culture. It contributes to a change in the way music is taught in French schools, being used as a tool with a high educational potential (especially in terms of collective play, and orality) by a growing number of secondary school music teachers. However, it has peculiar characteristics (both musical and didactic) which makes it a priori incompatible with the educational system. In the paradigm change induced by the switching from an informal transmission to a formal teaching, we postulate that the concept of didactic transposition can be used as a tool for understanding the educational act, through an articulation between the Anthropologic Theory of Didactic and the Theory of Didactic Situations. Several pieces of implicit fundamental knowledge, called "transcultural" are filtered out by Western cognitive perception. Such is the case of the object of our research, a pan-African microrhythmic organization that structures the Afro-Brazilian repertoire. We thus believe that, in the benevolent hope of opening up the student to the music of The Other, the teacher is first confronted with his own (ethno)centrations in the form of "inadequate" cognitive and cultural inferences on such truly exotic musical objects. These perceptions distort his own learning and induce persistent transformations of knowledge in the reception context. It means: at school and thus in society.

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