

Mexican indigenous music as a communicative system

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Tiivistelmä – Abstract <p>The music of Mexican Indians is here presented as a communicative system. Music is analysed in terms of structures found in myth. Numerology, notably numbers four and five, and the notion of symmetry are found to be the underlying structures of many Indigenous pieces. The music of the Mestizo population is presented as in contiguity to Indigenous music. Its underlying structures are found to abide by similar principles as Indigenous musical expressions. At first sight, the Mestizo examples seem to be less motivated and more semantized, than their Indigenous counterparts. However, Mestizo music can be understood as a continuing process of production of meanings that takes place through innovations and syncretic reinterpretations of older texts. This represents indeed a continuation of the same process of semiosis, already existing in the context of Indigenous cultures.</p> <p>This paper also reviews the ways in which Mexican Indigenous music has been represented in scholarly discourse. In this sense, the prevailing trend is to present it in terms of dependence to Hispanic traditions. This interpretation is basically opposite to the premises of this work. South American research tends to focus on the problem of pentaphony, which is contiguous to the folkloristic categorization, by which primitive societies tend to construct musical systems based on this system.</p> <p>The paper resorts to the concept of cultural areas and places it into the framework of the Mesoamerican programme. Cultural areas are construed as communicative systems, whereby an evolutive process can be identified, and the contiguity of Mestizo in respect to Indigenous expressions can be thereby explained. In this sense it has been useful to construe a distinction between a Hispanic and a Prehispanic Mexico.</p> <p>Finally, musical examples, and narratives associated to music are analysed, in terms of the structures found in mythological thought, whereby music is given a place in the Indigenous world-view.</p>	
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Acknowledgements.

This work was inspired many years ago by two events. The first was a series of conferences at the National Museum of Anthropology by Antonio Zepeda on prehispanic music. The other one was an introductory lecture by Julio Estrada at a homage concert to Julián Carrillo at the Ollin Yolitzli school of music.

My interest in the indigenous cultures of Mexico awakened during my teenage years when I first had the opportunity to travel throughout the country. I discovered that Mexico was more complex and culturally diverse than I would have ever known if I had never left the city.

I hereby thank to Julio Estrada for commenting on my ideas, and to Henry Stobart for taking the effort of making comments and suggesting reference material. I am specially grateful to John Richardson, who read and criticized several versions of this work, and also made many useful suggestions regarding literature and theoretical material.

1.Introduction

1.1. Motivation of this paper.

The motivation for this work lies partly on the general lack of published research on the music of the Indigenous people of Mexico. Interest on the study on the field of the music of Indigenous people in the Americas seems to be monopolised firstly, by those groups existing inside the limits of the United States, and secondly by those of the Andean area in South America. This seems to be partly a result of an attitude of neglect towards Mexican Indigenous music, on the part of researchers, both inside and outside Mexico.

I was surprised upon reading for the first time Bruno Nettl's "The Study of Ethnomusicology", how Helen Roberts, elaborating on areas of instrument distribution of North America, chose to leave Mexico uncharted for "lack of data" (Nettl Bruno. 1983.p.222). This was, to my bewilderment, in a text in which Nettl referred constantly to cultural areas and diffusionism, concepts which reminded me of the general discourse of *Mesoamericanists*. Furthermore, the concept of *Mesoamerica* seems to be almost unknown in musicological circles.

I believe there are many common places between the study of Mexican music in the context of anthropological studies, and North American ethnomusicology, in terms of the musical idioms of Native Americans, as well as in the way these are related to the theoretical frameworks of each school. One striking difference might be that Mexican ethnomusicology has not functioned as a self-sufficient discipline, but rather as a by-product of archaeology, history and anthropology, which have concentrated their efforts mostly on other aspects of indigenous cultures. Large collections of field research recordings have been published in Mexico, but the main focus of the observations has been put into anthropological, historical and archaeological aspects of the material.

Indigenous music and Indigenous cultural traits, have been diligently folklorized, and put to the service of politics, and the tourist industry. This has

contributed to the elaboration of a taxonomy, a system of classification that, despite its merits, has represented indigenous music in terms of dependence to mainstream Mexican and Hispanic and European culture. Mexican musicologists have many times simply ignored the problems posed by Indigenous music altogether.

Moreover, much of the literature produced during our century, revolves around the idea that Indigenous music is predominantly pentatonic. While a statistically significant amount of melodies would certainly prove to be based on a pentatonic scale, this observation in itself would tell us little about other structural aspects of the music, and how these can be interpreted.

Constantin Brailou demonstrated how different systems can be derived from the pentatonic, such as tritonic, duotonic and heptatonic systems. The relevance of this aspect is corroborated by observations by Henry Stobart who adds, like Aharonián, the existence of tritonic and duotonic systems.

Furthermore, they add timbrical variation as a structural element, thus diverging from a view which classifies musical systems on the basis of discrete frequencies on a scalar system, to one in which different parameters exist as structural and motivic elements.

Barbara Bradley demonstrated how pentatonic musical structures can be related to other concepts such as symmetry around a centre, which can be observed in social practice, ritual practice and distribution of space.

Helza Caméu maintains that instrumental music is independent from vocal music, and that structure is dependent on individual creativity. Concerning Mexican Indigenous music, Julio Estrada, supported by field research by Henrietta Yurchenco, maintains what he calls the *continuum* as one of its unique stylistical characteristics.

Anthropological and archaeological research reveals that Mexican Indians apply numerical concepts to narratives, ritual practices and spatial distribution. This

observation is corroborated by anthropological and archaeological studies, suggesting that Indigenous people have created an all-embracing coherent worldview.

However, musical structures have escaped detailed analysis. How are the aforementioned structures articulated onto musical practice? Are they applied at all? If so, how are these articulated with timbral variation, textural variation and agogic variation? This paper contends that these questions can be addressed through musical analysis in a coherent manner.

This methodological premise raises more questions. What structures would it be pertinent to search for? Different indigenous groups (or cultures) seem to apply numerical concepts with varying degrees of rigour. While the Mayas of Zinacantán apply an enormously complex numerological system in their everyday life, based on a mixture of the classical Maya calendar, and Roman Catholic concepts, the Tepehuán of Sinaloa seem to content themselves with a much simpler system based on the number four.

Most investigators on American indigenous cultures maintain that number four is consistently present in Indigenous narratives. Other numbers are probably present in Mexican Indigenous musical structures. Corroboration of this fact through data recollection and analysis would add little new to musicological thought. Besides, the scale of such an investigation would be enormous. The sole process of data recollection and analysis required to unravel the maze of symbols and numbers of many distinct indigenous cultures is completely outside the scope of this paper. Moreover, statistical figures can aid in revealing the meaning of structures, only if aided by an adequate interpretative approach. Preliminary analysis of existing material on hypothetical grounds is necessary before any large-scale project can be undertaken. This is the area this work is intended to tackle.

Therefore I have decided to limit the scope of this paper to an identification of the ways in which number five, as an extension of number four, through the concept of symmetry, is present as an underlying structure in Indigenous music.

Furthermore, the idea that Indigenous musical systems have stylistical elements of their own, and that they are thus interwoven into a complex symbolic world, seems relevant.

How are these structures interwoven into the larger structures of social practice and spatial distribution? This problem is tackled by means of the entities I call cultural areas. This concept is already present in structural anthropology as well as in Mesoamericanist discourse, and it can be implied by existing folkloristic categorisations. It is not hereby intended to add new knowledge to this aspect, but to articulate folkloristic categories, in accordance with the concept of cultural areas, as presented by the Mesoamerican paradigm, and the problems it poses in relation to Indigenous music. This approach is clearly opposed to a concept by which Indigenous styles are classified as derivatives of mainstream Mexican styles and dependant on European influences.

The cultural areas covered by this work will also be very limited. I shall concentrate on a hypothetical evolutive pattern of diffusion for the Son; originating in the Huastecas and identified with the Huapango, and the generative Jarocho ensemble. Afterwards, the Huastecan area communicates with the Otomí area, followed by the Jal-Mich area, adding new constituents and giving birth to the Mariachi ensemble, which is thus explicated as a derivative of the original Jarocho ensemble. Other areas such as Oaxaca are explicated in terms of the Indigenous problematic and the different connotations of the Son, thus linking them to the aforementioned evolutive process. The Yucatan area is covered in as much as it contributes to expand the problematic of stylistic terminology, classificatory criteria and its connotations in relation to Indigenous practices. The concept of cultural area is expanded, only tangentially, to other regions of the continent. This is done by means of comparative analysis of bibliography and musical samples, as well as the possibility of links between linguistic classifications and other cultural traits such as music.

One of the results that are expected from this approach is the relative homogeneity and unity of musical resources in Indigenous musical expressions, as opposed to mainstream Hispanic culture. Yet, the Mestizo (Hispanic) pieces

analysed in terms of Indigenous musical resources, share this stylistical unity with their Indigenous counterparts. Therefore, it is possible to place the Mestizo repertoire within the Indigenous problematic. That is; to conceptualise Mestizo music into the context of an evolutionary process of Indigenous forms. In this manner, Mestizo can be placed within the evolutionary process implied by the concept of cultural areas, into historical strata, in which it is conceivable to infer cultural dependence from Indigenous forms.

Finally, the ideas of Bruno Nettl express my own motivations regarding my own approach to the study of Indigenous music:

[...] they (ethnomusicologists) realise that discussing the uses that a culture makes of music, and the way in which music reflects the values of society is likely to be meaningless without an understanding of the music itself. Thus it is true that ethnomusicology has two sides, or two approaches, the musicological and the anthropological, but they are both essential [...]"(Nettl Bruno 1973. p. 29)

1.2. Main premises and scope of this work.

The main preoccupation of this work will be to portray Mexican Indigenous music as a communicative system. It is my belief that Mexican Indigenous peoples possess unique aesthetic resources which can be identified in their musical structures.

I believe that these aesthetic resources have had an important influence on the development of many styles in Mexican popular music. If this is true, indigenous music should be acknowledged as an essential reference for the understanding of the evolution Mexican musical forms.

One of the premises of this work is that there are specific aesthetic traits, which distinguish Mexican indigenous music from the rest of the music in Mexico, and renders it certain autonomy from mainstream Hispanic culture. These traits are present in Indigenous music, as well as in other musical traditions which are usually categorised as being non- indigenous.

These assertions can be supported, through musical analysis, by the identification of musical structural elements, such as that expressed by the concept of continuum, as introduced by Julio Estrada, and the concept of symmetry around a centre, as indicated by Barbara Bradley, as well as certain shapes of typical melodic lines. The concept of symmetry around a centre is supported by considerable amounts of evidence from the fields of anthropology, and archaeology. I shall make a comparative assessment of some well-known examples, and explicate how the aforementioned structures can be identified. I shall establish links between rituals, myths, narratives, numerology and symmetrical structures in Indigenous musical forms. Furthermore, this link between structures and music can be justified by the role of music in the overall process of communication of the Indian with the universe.

The premise of a unique Mexican indigenous music, will be aided by a more general view of the music of other native peoples of the continent, grounded on the hypothetical concept that there is reiterative use of formal, structural musical elements, which are common to many cultural groups around the continent. Furthermore, this can imply similar systems of communication among different peoples, by which similar functions are assigned to music.

Given this hypothetical unity of Indigenous styles throughout the continent, it seems pertinent to make an assessment of some of the theoretical proposals dealing with research of music from other parts of the continent, such as the Andes, and the Amazon. This assessment will be done largely in the form of critique of the theoretical material. Given the limitations of scope in this work, reference material from North and South America is tangential.

The different musical areas will be defined according to the concept of cultural areas, a concept that has been used in connection with North American Indians. The concept is placed within the conceptual framework of Mesoamerica. This will help in placing my hypothesis into a theoretical framework that is well known in Mexican studies. Furthermore, this framework links this paper to structural anthropology, which tackles the problem of historical evolution.

Due to limitations of space, time and scope, many aspects related directly or indirectly to Mexican Indigenous music, have been left out of this work:

- 1) Areas that lie between the areas discussed in this work, such as the "tierra caliente" in Guerrero.
- 2) Dance styles and forms such as the different Conchero variants, and rituals associated with them, as well as the music performed in these contexts, and syncretism in relation to Indigenous theatrical dances in general. The dance of the Tlacoleros, related to the jaguar as an earth deity, would be a fine subject for a future field research.
- 3) The Afro-Caribbean and Afro-American influence, an aspect so vast that it would require a research programme of its own. The cultural area of Chacahua, as a stronghold of African culture in Mexico. Syncretism of African and Indigenous forms, as in Cuajinicuilapan, or in the development of the Marimba in Central America. Literature on this field is practically non-existent.
- 4) Spanish and European forms and their influence on the development of many styles. This aspect would lie righteously on the field of folkloristics, where the variations and evolution of original Iberic narratives can be traced. Vicente T. Mendoza has done fruitful work on this field, doing comparative work and tracing the relation between the "Corrido" and the Spanish Romance, as well as recording lullabies, and children's songs (Mendoza Vicente 1939, and 1951).
- 5) Arabic influence in Mexican music. Some research has been done by Arturo Chamorro, regarding the use of Chirimías.
- 6) Many musical areas such as the north of Mexico and the Norteño styles, and their European influences.
- 7) The influence of cultural industries, electronic and mass media on the evolution of Mestizo forms is touched only superficially. Problems of cultural politics are touched only in as much as these can be related to the way representations of Indigenous music have evolved, and how these have been affected by them.

1.3. Disposition

The main premises and the scope of this work have already been reviewed. The following section, entitled "Previous research", is devoted to reviewing some of the ways in which Indigenous music has been problematized. The authors here criticised, represent the most publicised trends in Mexican musicological thought during the XX: th century. Indigenous music has been explicated in various ways. On the one hand musicologists have strived to reconstruct prehispanic music on the basis of archaeology, complemented by what is hereby called the "folkloristic programme".

The work of Robert Stevenson, is in itself a survey of some of the problems that have been debated during the first half of the century, over the character and usage of music in prehispanic Mexico. These representations are the ideological basis for what we here call the "indianist" programme. Indianists have sought to identify modern indigenous music with ancient Aztec music, thus justifying it as a legitimate source for modern national identity, as well as a motive for high artistic production. This programme has thus been biased by political agendas, and thus offers only partial solutions to the problems posed by it. Yet, archaeological research undertaken during this period has yielded knowledge that corroborates some of the assumptions put forth by this paper.

Folklorism is reviewed from other perspectives, taking into account comments by Bártok, Kurkela, Brailou, and Nettl. This programme is epitomised in this paper by the work of Vicente T. Mendoza, as a musicologist devoted to the study of folklore, and by Carlos Chávez, a prominent nationalist composer and an influential cultural promoter. On the other hand indigenous music is generally characterised as primitive, and hence, problematized in relation to pentaphony. After this short digression, indianism is again addressed in relation to the comments of Carlos Chávez. The work of Vicente T Mendoza is now reviewed, explicating how indigenous music is analysed in terms of European cultural values.

Following, we review more contemporary views on Mexican music, one characterising Indigenous music as subsidiary part of Mexican folklore, yet presenting style distribution in terms of cultural areas, which for the purpose of this paper is very useful. The problem of the “continuum” as posed by Julio Estrada is novel, and presents Indigenous music as a system with unique forms of expression.

The next section concentrates on the work of South American Helza Cameu, as well as Barbara Bradley, Henry Stobart, D’Harcourts, and Constantin Brailou. They concentrate on the music of the Andes and the Amazon basin. Cameu sees Indigenous music as a system obeying unique aesthetic codes. The problem of pentaphony as a primordial musical system in primitive and folkloric music, has been elaborated by Constantin Brailou, while analytical and historical considerations are explained by Barbara Bradley and Henry Stobart. Comparison of these sources with musicological thought in Mexico, reveals that the theories developed in relation to the study of music in these areas, have been based on similar initial premises as those related to the music of the Mesoamerican area (the primitive character of the music, predominance of pentaphonism). Their results have relevance to the observations put forth on this paper.

The emphasis of this work will now shift to a structural approach by which music is portrayed as a means of communication. The following chapter attempts to place the problem of Indigenous music and the problems associated with folkloric classification, as construed within the Mesoamerican programme. This programme as it is conceptualised, is linked to the concept of cultural areas, diffusionism, and thus to structural anthropology. For this purpose, a short digression is necessary, to delve into the cultural map of Mexico, how it was shaped by Spanish colony and its prehistorical background.

The next section of this work is a general review of cultural values, which serves as background knowledge to comprehend the relationship between myth, aesthetics and musical idiosyncrasy in Indigenous music. Certain structures are overwhelmingly present in narratives, myths, as well as social organisation, ritual performance and distribution of space. Some explanations are presented

regarding the mechanics governing the way in which these structures present themselves, as means for communication with the universe. This can be extrapolated to musical structures, to explain the relevance of such structures as the number five, symmetry around a centre, binarism, as criteria for the analysis of musical examples.

The chapter entitled "Cultural areas and Mexican ethnomusicology" strives to establish a theoretical background, by which a taxonomy, a classification of some of the styles in Mexican folklore, can be established, according to a familiar folkloristic view, by which Hispanic folklore can be represented in contiguity with Indigenous music. This folkloristic paradigm can be supported by the concept of cultural areas espoused by the Mesoamerican programme. This approach is elaborated in "Son: cultural areas and stylistical taxonomy". The term Son referring to Mexican music poses problems, since it relates Mexico cultural to Spanish and African traditions. This problem is briefly analysed.

The section entitled "Analysis" is concerned with the analysis of specific musical examples which exhibit formal, melodic, and modal characteristics that exhibit structures, by which the concepts of symmetry, binarism, and the number five, are actualised. Melodic line, and specific musical structures, as well as narratives are analysed. The case of "Voladores" will illustrate with an objective example how musical form, performance, and other extramusical elements such as mythologies and aesthetics are interwoven into a meaningful symbolic complex.

The last section deals with the conclusions as well as proposals for further study. In this chapter I shall briefly review the most relevant aspects of this paper in the form of conclusions, and ponder upon the aspects left unanswered by this research, as well as the future of this field. Musicological study of indigenous music has also social significance that will be briefly pondered.

2. Previous research

The following section deals with a selection of previous work by researchers in the field of Mexican Indigenous music as well as music from other parts of the continent. It is intended to give an overview as of how Mexican Indigenous music has been represented by scholars and scholarly discourse.

Mendoza, Stevenson and Stanford represent the most accepted views in the study of Mexican music. They have different methods, and different vocabulary, but they do support each other implicitly. Robert Stevenson gives us an overall view of the problems involving the various representations devised throughout the XX:th century to explain the nature of prehispanic music, notably the interpretations of Mendoza and Chávez. For this reason I will deviate to criticise the use of Indigenous motifs by the revolutionary intellectual elites of the first half of the century.

Vicente T. Mendoza is perhaps the most orthodox, and influential of Mexican ethnomusicologists, during the first part of the XX:th century, having had a close relationship with many of the foremost musical figures in Mexico such as Carlos Chávez, and Julián Carrillo. Having left a deep mark in the well-established representations of Mexican music, he has to be taken into account and criticised.

Thomas Stanford gives us a taxonomy of Mexican Mestizo styles, which supports the concept of cultural area, but does not explain the place of indigenous music within this paradigm. I will later elaborate on this concept of taxonomy in as much as it concerns indigenous musical practice and the relationship between Mestizo and indigenous.

On the other hand, I use the some of the literature concerning the music of the Amazon and the Andes, with a comparative approach, in the sense that they raise many problems which are similarly raised within the study of Mesoamerica. Helza Cameu, in his study of the music of the Amazon basin, brings forth different concepts and questions pertaining the use of certain methodology and terminology concerning the music of native peoples.

Furthermore, the study of the music of the Andes has long raised the question of pentaphony as an archaic and primordial system, to which different solutions have been proposed. The problem of pentaphony in relation to the Andes, concerns the study of Mesoamerican music in the sense that different representations have been construed regarding both fields, based on similar arguments. The chapter devoted to Barbara Bradley and Henry Stobart naturally leads to Constantin Brailou and his interpretation of the pentatonic system.

2.1. An archaeology of Mexican music.

2.1.1. General overview.

In his book "Music in Aztec and Inca Territory", R. Stevenson makes a wide survey of ethnomusicological practice in Mexico during the first half of the century. His efforts are directed towards an interpretation of Aztec music and 16th century colonial music. The part referring to strictly Aztec is based firstly on the early Spanish sources (reports), which for the most part were not written in musical technical language at all. Perhaps the only technical document to have survived is the "Cantares en idioma Mexicano" written by an Aztec professional drummer from Azcapozalco (neighbouring the Aztec capital Tenochtitlán), Don Francisco Plácido in 1551. This document exhibits a mnemonic notational system based on syllables, such as: to, co, ti qui, ton, tin, con, h, that could be called the alphabet of this system. (Stevenson Robert 1968. p. 47-54)

This system reveals an inherent relation to the concept of duality and symmetry; for example: in that the basic significant structures are organised in groups of one vowel and one consonant opposed to each other as in k-i, and k-o, t-i, t-o.

Mendoza and Novotny analysed and deciphered 758 beat patterns. Unfortunately, this process provides mostly hypothetical data and very few clues as far as to how this system should be interpreted. For example; there are pieces arranged for different ensembles of Teponaztlis, which as we know, can provide at least two notes at a time. We cannot know what the intended frequencies are

in the notated score. Furthermore, we may add dynamic verbal indications to the aforementioned signs. This supports the idea of timbrical variation as a structural element.

Secondly, archaeological evidence allows some inferences as to the nature of the music of ancient Mexico. In as far as the accounts from XX:th century musicologists can tell us, we can build certain representations as to what seem to have been the basic elements of prehispanic Aztec music.

- 1: The Huehuetl-Teponaztli twosome was all-prevalent throughout Mesoamerica.
- 2: The Huehuetl could typically produce two notes a fourth apart.
- 3: There were Huehuetl ensembles of different sizes usually tuned in fifths.
- 4: Typically the Teponaztli produced two notes tuned anywhere between a second and a seventh apart. Each of the blades could be hit at two points producing a total of four notes.
- 5: There were ensembles of different sizes comprising Huehuetls, Teponaztlis tuned to different notes.
- 6: Archaeological evidence (analysed and interpreted by Mendoza) shows that the concept of circle of fifths was known and known, and utilised, as well as the overtone series.
- 7: The major third and the minor second were not very popular, at least among the Aztec.
- 8: Pentatonic scales were very common. Many, however were derived from minor modes, and diminished modes.
- 9: Stringed instruments (the monochord) were not widely used.
- 10: There was a wide variety of aerophones. The most admired are the polyphonic-multiple flutes, some of which produce 6th chord triadic inversions, and seventh chords, while others produce microtonal clusters. These instruments were common in classic Teotihuacán (0-700 A.C.).¹

¹ It is known that Teotihuacán was a multiethnic metropolis, that housed immigrants, tradesmen and dignataries from all of Mesoamerica. This supports the idea that other groups knew and shared the acoustic and aesthetic developments of Teotihuacán.

11. There were flutes that used bodies of water to alter the size of the air column, and a variety of water drums.

12 There was a great variety of flutes and ocarinas which produced registers ranging from bass to soprano.

13: The Aztecs had a mnemonic "notational" system based on combinations of the syllables: mo, to, ti, ki, ko, ton, h.

Archaeological evidence from other areas of Mesoamerica, however, reveal a much wider array of musical resources as pertains to scales, as can be inferred from the physical structure of the instruments. The imposition of the pentaphonic system upon Mesoamerica has to be challenged upon having found five holed ocarinas in Central America, particularly near lake Nicaragua, which can produce up to seven notes within an octave.

Archaeological evidence suggests that the greatest developments in ancient mesoamerican music must have happened during the so-called classic period (0-650 A.C.). Instruments found in Teotihuacán, Tajín, Jaina and Nicaragua exhibit the widest use of polyphony, microtonal scales and diatonic scales. These developments seem to have disappeared without a trace along with the general collapse of theocratic states throughout Mesoamerica around 650 AC.

All of this can be led to an elaboration of representations of the indigenous based on the supposition of parallels between the aesthetics of ancient Mesoamerican peoples and the aesthetics of contemporaneous indigenous peoples. However, this programme has been unsatisfactory in explaining this relationship in a conclusive manner, simply accepting archaeological findings as a given fact, as well as data gathered during the early colonial period.

Finally, Stevenson proposes a partial ideological solution to the problem of interpretation. Following the thoughts of Miguel León Portilla in his book "La Filosofía Náhuatl en sus fuentes" (Náhuatl philosophy as seen from its sources), he searches for a philosophical basis for the musical aesthetics of indigenous peoples based on the philosophical problems as expressed in ancient Mesoamerican literature. This would lead to the eventual instrumentalization of

this ancient knowledge, as well as interpretations of archaeological evidence based on the former, combined with anthropological knowledge of modern Indigenous cultures, to construct an image, a representation of Indigenous musical aesthetics capable of supporting universal statements referring to them.

2.1.2. Spanish colony and conversion.

After the conquest, friars saw music as a means to convert Indians to Christianity. They were very surprised at the quantity and the quality of the students, as they constantly reported the King, asking for more money to fund the orchestras, the building of instruments and teaching. What they failed to mention is that these were mostly noble musicians during late Aztec rule, as in the case of Don Francisco Plácido. These skilled musicians soon learned Latin, and all the skills necessary to write and orchestrate in the strictest European styles. As far as the peasants, the macehualli, were concerned, it would be naive to think that their interests and those of the ruling classes were the same. Peasants were skilled as farmers and hunters, and surely had aesthetic sensibility. But they lacked, and were denied, the knowledge of mathematics, writing and surely enough, the technical- aesthetic developments in music. This implies that their appraisal of European music must have happened on different grounds than that of the nobility.

2.2 Folklorization, reinterpretation of indigenous music and Indianism.

2.2.1. Folklorization as an appropriation.

The study of Folklore is occupied mainly with the narrative aspects the arts of non-literate peoples. Folklorists engage in gathering samples of a certain type of narrative and statistically derive archetypes from them.

One of the most common associations regarding Folk categorisation is that of the illiterate as opposed to the literate. This is consistent with an aspect of its methodology according to which, material (the lore) is to be gathered from amongst the most illiterate subjects, preferably older people who have never left

their village. The idea behind this approach lies in the assumption that this material survives exclusively through oral communication.

Bruno Nettl has reached some general conclusions regarding the nature of Folk music throughout the world, such as not having clear ends nor clear beginnings. (Nettl Bruno.1973 p.20-22)

A common approach to the study of ethnic music is to see it as Folklore, as opposed to classical music or industrially produced music. The problem of what is categorised as folk in a given society, is related to the way social divisions are arranged according to class and social status and how they interact. Both Brailou and Kurkela have pointed out that the concept Folk music has been all but systematic. The concept of "the people" has been applied to the most varied human groups according to different ideologies. The people with that Folklorism is concerned with though, are the peasantry. This entity has been defined by August C. Mahr as a population which has developed a fixed code of customs, as a result of a long-established civilisation, stability in social conditions and a very slowly changing order down the years. (Mahr August C. 1965. p. 378-379) Folklore can also be construed as a mythical projection of the bourgeoisie.

This "folk entity" can also be understood as a specific civilisation, which either creates its own cultural forms, or it learns them from the upper "advanced" classes (Brailou 1984 p.2). The latter pattern of projection in the XIX century can be transposed to modern industrial society, wherein the Folk can represent the idyllic, unspoiled noble savages This dictates a division between rural and urban, the first of which is depersonalised and becomes a receptor of urban culture, absorbing the urban codes.

The concept of Folklore as employed by Bartók assumes that musical materials are of an instinctive (empiric) nature. He distinguishes popular music in the cities, describing it as "popularesque", from peasant music which is:

"[...] all of those melodies that exist within the peasant class, and which are instinctive expressions of the musical sensibilities of peasants."(Bartok Bela. 1985. p. 2)

Bártok explicitly assumes the rural/urban distinctions. He sees rural melodies as a richer source of information. A key feature of his methodology is fieldwork. To him, it is important to look for melodies precisely in places where there has been little contact with the outside world, as opposed to say, a mining village which:

[...]”will yield scarce possibilities of finding good material, since intense traffic of people from all countries will corrupt its original qualities.”(Bartok Bela 1985 p. 49)

One of Bartók’s preoccupations is the possibility to find musical links between far away places. One such case is how he allegedly found the same musical structure in melodies gathered in Romania, Algiers, and he could perhaps even link it to China. He centres his research upon isolated and "unspoiled" villages and compares the gathered material with that found in other villages, far away, looking for analogous structures, homogeneous styles and universal elements.

Folklorism has thus a wide variety of methodologies and purposes. Bártok has a very systematic approach to folklore, which has a definite subject of study: the illiterate and his instinctive expression. While his folkloristic work centered mostly on gathering material, this was done with a clear hypothesis in mind. Bártok recollection of material had to be followed by comparative study.

The view that represents Indigenous music as something emanating purely from the instincts in strict relation to the level of literacy of the individual does not seem sufficiently solid for the purpose of this paper. It is not clear how this approach can allow to explain a complex behavioural system that furthermore, seems intentional, and thus rational. Moreover, Mexican Indigenous music originated in cultural environments which had elaborate arithmetics as well as written languages. The fact that this system is passed on in an oral fashion does not seem more a consequence of historical process rather than a set of criteria for structural analysis. As Nettl has pointed out, there is a great deal of oral tradition in the musical education of high cultures. Classical musical traditions of India, for example, are almost totally based on oral tradition.

This paper parts from the standpoint that Folklorism in Mexico has functioned as an appropriation of indigenous cultural traits on the basis of ideological values. According to Vesa Kurkela music- folklorism could be defined as the processing and utilisation of Folk music for ideological, social economic and political purposes. In this sense it functions as an imposed system from above.

Folklorism can also be viewed as a conversion of popular tradition into the spiritual life of modern industrial society either as part of academically oriented cultural production, or as part of the entertainment industry. This implies a distinction between non-Folk and Folk. In either of the aforementioned cases (cultural vs. entertainment) there is priority on the development of aesthetic and ethnic functions at the loss of other qualities of tradition. In culturally oriented production, communication happens not from Folklore into art, but from art into Folklore. Folk is left thus, at a lower, secondary hierarchical level (Kurkela Vesa 1989.p. 27-35).

2.2.2. Folklorization as an etic approach.

Folk categories see the musical phenomenon from the outside, imposing representations onto it. This approach can be identified as etic, as opposed to emic. This dichotomy can be described in terms of the method being employed. Notation, for example was described by Seeger as either descriptive, which would be the outsider's version of the music, or prescriptive, meaning that it is related to the function of music within the cultural context. Etic views the piece of music from an objective standpoint and stresses its verifiability. (Nettl Bruno. 1983. p. 141) Emic stresses the subjective experience of the actors themselves. The etic/emic dichotomy is not necessarily clearly limited to the opposition of these two terms. Indeed, the more one tries to solve its problems, the more one has to compromise. The insider might be perfectly able to give analytical descriptions while the field researcher will inevitably be influenced by his own cultural background.

Folklorization is inherently etic, that is; Folk musical practice is expected to fill a behavioural niche, a role in a social group. Yet, with all its disadvantages, folk categorisation does help us to associate styles to distinct cultural environments that relate to a specific human group, which can be placed in time and space, thus allowing sociological interpretations.

2.2.3. The problems of Indianism: reconstructing Prehispanic music from a folklorist perspective.

Stevenson mentions the implicit relation between state dogmas and the activity of the musical "intelligentsia"; Chávez, Revueltas and Moncayo. Stevenson demonstrates that the allegedly Huichol melody on which Chavez's Indian Symphony is based, exists also in the Cora repertoire, thus "proving" its non-Indian origin. This assumption is supported by the allegation that the Coras are all but a completely acculturated people, an assumption that Mendoza agreed with. Citing Lumholz: "there is no such thing as a true Indian melody in Mexico". With this statement it can be inferred that the true motive behind the Indian Symphony lies in the newly found national pride of post-revolutionary Mexico. Chávez clarifies:

"[...] convincing Indianism emanates from a subjective evocation of ancient and contemporary Indian culture, rather than from specific references to its musical style [...]"(Chávez Carlos. Op.Cit. Behague Guerard. 1979 p. 141)

Having spent his childhood in the state of Zacatecas, Chávez knew the music played by Indians. Surely he understood the contradictions in his descriptions of Indian music, characterising it as pentatonic, and lacking minor seconds or sevenths and major thirds:

"The Aztecs showed a predilection for those intervals which we call the minor third and the perfect fifth; their use of other intervals was rare"[...] "this type of intervallic preference, which must undoubtedly be taken to indicate a deep-seated and intuitive yearning for the minor, found appropriate expression in modal melodies which entirely lacked the semitone [...]. Since the fourth and seventh degrees of the major diatonic scale (as we know it) were completely absent from this music [...]"(Chávez Carlos. Op.cit. Stevenson 1968. p. 16-17)

This contradicts his own Huichol sample, gathered by Carl Lumholtz, which is based on a major triad. Moreover, an analysis of many a contemporary Indian melody will turn out to be based on the major triad. Lumholtz explored Mexico travelling from the north, meeting first with Pima, Yuma who do not belong to the Mesoamerican proper, and then Tarahumaras, Tepehuas (also called the Mexicans of Sinaloa), then Coras, getting ever deeper into the Mesoamerican area. In his travels he gathered many such melodies. Chavez's commentaries also contradict archaeological evidence that he was familiar with, through Vicente T. Mendoza Furthermore; Chávez characterized Indian music as simple:

"[...] these aborigines avoided modulation [...] primarily because (it) was alien to the simple and straight-forward spirit of the Indian [...]" (Chávez Carlos. Op.cit Stevenson 1968. p. 16)

Could it be that Mesoamerican Indians possess a different musical sensibility than those Indians Lumholtz met firstly? Could it be that Mesoamerican nobilities had developed different, highly coded musical systems, which made emphasis on the difference between the more "refined" musical values of the royalty and those of the rough peasants?

Surely the major triad could have been introduced by missionaries or by common Spaniards into the most remote regions of Mexico. This does not seem to be very important issue, given the wide array of musical melodies and scales, which we have managed to rescue from ancient Mesoamerica, given the wide array of musical vocabularies throughout the American continent.

Though Chávez might have agreed on this, as far as to what is the relation between Aztec and modern Indigenous music, the point of conflict of his discourse lies in that it prescribes cultural values and a-priorises a criteria based on cultural hierarchy, according to an evolutionistic ideology:

"The Indian music best preserving its purity is not what remains of Aztec culture, but that of more or less primitive or nomad tribes which never, properly speaking, achieved a culture. Such as the Yaquis, the Seris and the Huicholes". (Chavez Carlos. Op.cit. Behague 1979. p. 132)

Though Chávez did not intend to represent an "authentic" indigenous aesthetic through his work, he does acknowledge that Indigenous music represents different aesthetic values than those expressed in European music:

"For those whose ears have become conditioned by familiarity with the European diatonic system, the polimodality of indigenous music inevitably sounds as if it were "polytonality" [...] It seems evident that either the aborigines possessed an aural predisposition, or that an ingrained habit of listening was developed among them, which we today do not possess. They were thus enabled to integrate into meaningful wholes the disparate planes of sound that clashed in their music". (Chávez Carlos. Op.cit Behague 1979. p. 129)

Such numerous contradictions in Chavez's and the whole Indianist movement's discourse reveal that indigenous music was instrumentalized as a means for the ideological legitimisation of their own aesthetic movements, in accordance with the agendas of revolutionary governments. Indigenous music was romanticised by Manuel M. Ponce, folklorized by Moncayo in his "Huapango", Candelario Huizar in "Pueblerinas", primitivized by Revueltas as in "Sensemaya". It was always instrumentalized to epitomise nationalism.

Julián Carrillo, who could have been much closer to a true Indigenous aesthetic, was left out of the Indianist discourse, possibly for political reasons, since he had earned the Sympathy of former dictator Porfirio Diaz. (Malmström Dan 1977.p. 50) His explorations on microtonalism passed almost unnoticed, even though he did achieve the sympathy of such influential people as Vicente T. Mendoza.

2.2.4 Otomi music and dependence upon Hispanic culture.

Vicente Mendoza's work holds a special place in the study of Mexican music in general, having published books such as *Lírica Infantil de México*, *Corridos Mexicanos*, and *El Romance Español y el Corrido Mexicano*. These can be classified as concentrating on the Mestizo repertoire. His research of Indigenous music is equally important while somewhat less profuse.

Vicente T. Mendoza's "Música indígena otomí" concentrates on the material gathered at the valley of El Mezquital, in the state of Hidalgo in 1936. He also uses the material gathered and analysed by Jacques Soustelle as reference material. He resorts to historic material as well. He draws conclusions by comparing his own fieldwork and archaeological, historical findings.

In his study of Otomí music he exploits many Folklorist techniques, such as fieldwork, biographical case studies, gathering of folk tales, as well transcription and musical analysis. The latter he bases on European musical theoretical assumptions, such as those derived from ancient Greek rhythmic theory.

The aspects on which Mendoza's methods concentrate are formal, qualitative analysis, of the musical structures. In this sense he does implicitly compare the indigenous melodies to western art music by applying a western terminology to the description of Indian structures.

One criterion under which he classifies melodies is as to which melodies are "feminine" or "masculine", as used in the western classical tradition. This methodological approach is somehow contradictory with the premise of a distinction between "purely" Indian, and acculturated musical resources.

"We did not exclude other aspects of the music; those which have been influenced by European culture or those which seem to be an imported mixture from other regions, which have influenced the primitive aspects (*of the music*)" (Mendoza 1936. p. 7).

Moreover, he makes a distinction between different repertoires associating the profane ones, such as lullabies, love songs and animal songs to the "older" repertoire, and religious material, such as dance melodies, instrumental melodies, praise songs, and psalmodies to the more recent material (Mendoza 1936. p. 10).

Mendoza also analyses the "ideological" content in the literary aspect of the songs. For this purpose, he profusely examines Prehispanic, as well as Hispanic

historical sources. He takes time to mention the geographic, the economic environment of the Otomí, as well as their technical achievements of the past.

He raises an interesting issue regarding the influence of Spain in the contemporary repertoire. At first, missionaries and clergy such as Fray Bernardino de Sahagún had some sympathy for the music and dances of the Indians thinking these were simply intended to entertain. As he learnt the meaning of the dances and songs he sought to impose changes in the content and meaning of the songs, first changing the names of the deities mentioned in them, and then composing his own versions based on indigenous melodies in the native language, or using the European repertoire as model, and writing in Náhuatl. Some of the altered songs in Náhuatl are originally Otomí (Canto triste Otomí) which could mean that Otomí culture was appreciated enough in prehispanic times to be imitated. This can be opposed to the common belief that the Otomí were generally characterised by the Aztec as primitive and that therefore they were despised.²

In analysing the rhythmic structure of poetic usage in Otomí, he names the different structures he identifies, in accordance to their correspondence to classic Latin and Greek rhythmic structures. This functions positively in tackling the relationship between the Spanish influences, and the cultural bonds between Otomí and Totonacs.

Mendoza uses the dance of Los Matlachines, a dance found in the repertoires of the many indigenous groups, to illustrate this. As cited from Rafael M. Saavedra; Matlachines is the first theatrical representation staged in New Spain as a result of the conquest. This dance depicts Santiago de Compostela leading the Christian army against the Moors, hence its clearly Spanish origin. However, having reached the Mezquital valley through the Totonac and the Huastec areas, it acquired a distinctive erotic connotation, which he infers, is a Totonac influence. The melody was preserved by the Otomí, but the narration was

² The Otomí were addressed as "Chichimecatl", which stands for savage.

replaced by an erotic one, fitting the lyrics to a rhythmic pattern usually associated to sexuality (Mendoza 1936 p.124-125)

2.3. Two contemporary views on Mexican folklore.

In the following chapters, two different views are presented regarding indigenous music. One presents it as Folklore with a particular classification system, which shows dependence on Hispanic culture. The other one portrays stylistical features that are dependant on indigenous culture. Furthermore, these features are present in other musical cultures of the continent.

2.3.1 The Mexican Son

Thomas Stanford has arranged his work in his study of the Mexican Son, according to stylistic idioms corresponding to cultural areas. These cultural areas, again correspond to the areas prescribed by the concept of Mesoamerica. His subject of study focuses upon the Mestizo repertoire.

Stanford distinguishes between Son Veracruzano, Son Istmeño, Son Jarocho, Son de Tierra Caliente (meaning “hot land”, also referred to as Son del Bajío). In the same manner he examines such miscellaneous styles as the Jarabe, and the Chilena, utilizing different historical and historiographical approaches, so as to trace out their origins and their place in the context of the Mexican Son, tracing their origins to South America. In this way, again we can build a connection between the greater cultural areas of Mexico and South America.

Stanford also analyses the controversial case of the Mariachi ensemble and its variations throughout Mexico, in its repertoire, and instrumentation. He assumes, as is widely accepted that the term Mariachi is derived from the French word "marriage". With this he implies that the Mariachi orchestra is the result of French influence, during the three-year period in which Emperor Maximilian ruled (Stanford 1984. p.33). This view can be challenged by Alvarado Ochoa's assertion that the term Mariachi derives from Pinutl, a now extinct language from the north of Jalisco and Colima, related to Cora (Alvarado Ochoa 1985 p.

39). The opposition of these views exemplifies the ambivalence in meanings in Mexican folklore, and also how popular representations can be biased and influence academic discourse.

2.3.2. Specific aesthetic resources of indigenous music.

Musical "continuum" is a term used by Julio Estrada to describe the use of microtonal scales in the music of Julián Carrillo. According to Estrada, it was Carrillo who introduced this musical resource (Estrada *Retrospectiva SigloXX* leaflet 1984, and personal communication 1999). Carrillo's use and development of the continuum was formalised in a notational-compositional system which he called "sonido 13". The use of these intervals in his music often has a characteristic mannerism to it; using descending and ascending glissandos as in "Preludio a Colón". This characteristic usage seems to be influenced by his indigenous sensibility.³

Estrada describes two recordings made by Henrietta Yurchenko, where in one excerpt the singer performs clearly distinguishable musical scales, whereas in the next:

"[...] we hear a song which lacks that gradation [...] a voice which gives us a continuous gliding from one point to the other, as a new point of reference, [...]". (Estrada LAMR 1982 p.192)

Charles Seeger investigated a singing style among the Suyá of the Amazon. This style consists of shouting as high a note as possible, and descending gradually, forming a long continuous note that can be pictured figuratively as a parabole. According to his transcription the descending passages are divided into short descending fragments of the long line (Tarasti Eero 1979. p. 47-52). This same mannerism can be identified in the music of the Cuna, who after the long note engage in a sort of responsory passage, interchanging short descending shouts. The same melodic shape appears in Alcarabán and in Son de la Culebra.

³ There is confusion as to which Indigenous group did Carrillo belong to. Some biographers state that he was Mixtec, while others state he was born in Aqualulco (Malmström 1977), in the state of Hidalgo, in which case he could be Tepehua, Otomí, Mexican (Nahuatl). In any case, Carrillo did influence Vicente T. Mendoza and converted him into his system; "Sonido 13".

This concept of continuum in indigenous music should not be confused with the term as used by Charles Boilés in describing the "thought song" of the Tepehuas, even though there is a link between both concepts. Boilés uses it as part of Transformational Linguistics terminology, whereby the continuum is the transitional area upon which we impose discrete grammatical structures (Boilés Charles 1990.p. 71-96).

According to Roger Scruton the continuum in music can be understood as a "phenomenal truth", whereas there is an infinite amount of pitches lying between those we can actually perceive. Still we are predisposed to construe discrete gradations to which the less definable intervals will be related as if "out of tune" (Scruton Roger 1997. p. 15).

According to Scruton, melodies, chords, rhythmic motives are *Gestalt* phenomena. He sees these structures as unities which function as a reidentifiable whole (Scruton Roger 1997. p. 40). To him, musical perception happens outside the real world. Experience and intuition play a part in that process. The principle of numerical identity is important to him, since we build discrete distinctions, according to which we organise the perceived material. We do not, and we cannot perceive a tone as moving towards another tone because it would lose its identity. We are predisposed to perceive tones as discrete intervals (Scruton 1997 p. 51). This can also be expressed in terms of cognitive theories. According to Ulric Neisser, Schemata are internal portions of the perceptual cycle, that direct exploratory activities and make information available. We could think of of interaction between Schemata and what what Goffman calls "frames"; external information that is presented in a certain context thus raising expectations, and interacting with internal schemata (Neisser Ulric 1976 p. 51-59).

I will use the term continuum to express the use of the sound spectrum not as a system of audible frequencies organised into discrete steps to form scales, but as a continuous line, that could graphically be described as a parabola.

The continuum is here defined as a musical stylistic mannerism whereby the transition between two discrete scalistic frequencies is broken into infinitely small intervals, rendering the subjective impression of one continuous tone, gliding from one pitch into another. Thus there is not a clear opposition between distinct notes but an identification between these two poles. The stylistic manner in which the continuum is expressed is a series of individual consecutive notes, or clusters of notes, descending without a clear beginning or end to each. The overall frequency of each of these notes is not necessarily lower than the one before, but the overall effect of the passage is that of a continuously descending passage. There is a constant dialogue between the continuum and the use of clearly distinguishable frequencies in indigenous music. The same piece might feature the main theme constructed upon a clearly pentatonic, duotonic or tritonic system, while another passage displays the continuum. The continuum is also a rhythmic structure, which provides timbral variation, as well as structural cohesiveness. The tempo of the piece slows and increases periodically at strategic points in the symmetrical disposition of the piece. There is thus a dialogue through opposition between the timbral-structural aspects of the music, based on the formal aspect of the music, and the melodic aspect functioning as a structural factor, and also linked to those aspects related to content, such as the construction of figurative meanings, thus linked to the narrative aspect of performance. Narrative exists at a synchronic level, while structure lives on the diachronic.

The continuum as a melodic and rhythmic resource can be used as a means for figurative expression, as an association of the mythic consciousness of the Indian. The continuum a structural resource serves as pure musical expression, referring to abstract concepts such as symmetry.

2.3.3. A South American approach to indigenous music: Amazonia

Caméu's research of Amazonian indigenous music resorts primarily to fieldwork research. To a lesser extent he resorts to the work of researchers during the early stages of the Colonial period. In his book "Introducao ao Estudio da Música

Indígena Brasileira", he states points of view by which he supports a autonomy of Indigenous music:

"The totality of documents gathered up to this date demonstrates that the primary characteristics of indigenous music are in a continuous process of transformation, which confers it a life of its own [.....] the music keeps on accumulating elements and conquering new stages. The process is slow without it necessarily involving any sort of external influence" (Cameu Helza. 1977p. 11).

Another point in which his ideas agree with mine is the general lack of genuine interest, and objectivity in the study of Indigenous music among researchers. Yet, much of his research is based upon reinterpretation and comparison of early records undertaken by early Catholic missionaries and adventurers, and findings dating from the 40's into the 70's. One such early compilation is Jean Lery's, published in 1585 (Cameu Helza 1977p. 86).

Cameu continuously questions the validity of these sources wondering whether the notated versions are tainted with prejudice and /or fantasy. He questions the validity of forcing the indigenous chants into the tempered mould as if it were a universal and natural value. Instead, many chants which were originally discarded as "out of tune" could well have been declamatory passages, according to Darcy Ribeiro's hypothesis (Cameu Helza 1977 p. 111). According to Cameu, intonation in Indigenous chant is determined in varying degrees by physical limitations, personal fantasies (Cameu Helza 1977 p. 112), musical aspirations, and choral singing, which he describes as a chiefly social phenomenon. Choral singing responds to patterns which are determined by tribal particularities (Cameu Helza 1977 p. 111-112).

Cameu systematically analyses the form of gathered material and draws conclusions from the general shapes of melodies (Cameu Helza. 1977. 121-133). He also ascribes great importance to rhythm as an element of unity and coherence (Cameu Helza 1977. p.134-152). According to Cameu there are two ways in which motives are prolonged in indigenous music: simple repetition and development (Cameu Helza 1977 p. 134). Cameu suggests that development is based upon logical musical principles of motivic ordination which are obeyed in

instrumental music as well as in vocal music. This suggests that musical discourse is more important than verbal structures in the generative process (Cameu Helza 1977 p.134). He thus, reinterprets this information and combines it with his own, not without questioning their initial interpretations based on his own observations. I see three important conclusions deriving from his research:

- 1) Indigenous music has values of its own and an aesthetic evolution determined by these values.
- 2) He makes a distinction between instrumental music, and vocal music as aesthetic entities in their own right.
- 3) The aesthetic particularities of each style are related to the cultural autonomy of each community.
- 4) Variation is done through simplerepetition and development.
- 5) Development is based upon logical principles.

2.3.4. The Andes and different approaches to the problem of pentaphonism.

In her study relating the music of the Andes, Barbara Bradley has mentioned the use of symmetry in musical practice, and how it appears to be implied in abstract musical thought. This symmetry is based on different representations of the number five. In the realm of musical practice, she demonstrates how festivities and the repertoires are organised around symmetries which relate in one way or another to this number. This concept is applied in many other practices such as the organisation of the agricultural cycle.

The analysis of musical structures is based on a division of musical motives into intervallic groups of high, middle and low registers. In this way she points out how the symmetries of tetratonic motives imply the number five. Where scales are tritonic or duotonic, symmetry prevales. Symmetry is also present in musical form.

This idea does not imply the use of tonal centres as in European tonality where the tonic can be seen as placed between the subdominant and the dominant, placed a fifth apart from both, or as in certain modern serialist proposals where a

central tone works as a centre of symmetry, around which "mirror" or mutually retrogradable groups are built.

Instead, intervallic motives appear in groups which revolve symmetrically forming structures that imply number five, or imply it through the number four, using the "space" between two and three to symbolise the "centre", or the fifth element; the centre of symmetry. This same structure is expressed according to Laurette Sejourne's notion of cincunce.

With her idea of symmetry Barbara Bradley challenges the idea of pentatonic scales as the music of primitive peoples, or its creation by Neolithic matriarchal societies. It even challenges the concept of imposition and complementarity of European tonality imposed by Spanish conquerors, whereby the primitive duotonic and tritonic forms were augmented by the wider European system to evolve into a pentatonic system (Bradley Barbara 1987. p. 197-199).

The concept of pentatonism in relation with the Andes does have to be criticised more thoroughly, since the rationale espoused by such people as Carlos Chávez in the case of Mexico, is so reminiscent to it, in its evolutionism. As Constantin Brailou points out:

"The desire to localise the pentatonic at all costs in certain areas or within certain civilisations has engendered a theory that has been developed with all conviction that such concepts generate, namely that it was invented by matriarchal societies" (Brailou Constantin. 1984. p. 241).

Brailou, in "Concerning a Russian melody" (Brailou Constantin 1984 p.239) proposes a paradigm by which pentatonism is given status as an autonomous system. He searches for the immanent rules of an archaic (primordial) (Brailou Constantin. p.241) pentatonic system which exists in the music of the whole world. With this he points the universal and natural character of this system. He uses Greek theory and the concept of a final tone as an indicator of tonal centre to give an outline of these rules. From the Greek concept of "pycnon" he derives the "anhemitonic", the scale without semitones. Using Chinese musical theory as a model, he builds five modes by way of permutation of the basic pentatonic

group, in which each of the tones serves as the tonic for its particular centre. He indicates how heptatonic scales can be built by way of adding accidental, or passing tones (pyen).

The analysis of numerous examples is also concerned with the hypothetical existence of a secondary tonic, much as in the case of the relative minor, in the minor-major system, that is; a minor third beneath the tonic or a major sixth above. In a similar manner as the pentatonic has been characterised as a defective heptatonic, Brailou assigns the category of "incipit" to the defective pentatonic permutations, thus explaining tetratonic and duotonic scales in the context of the primordial pentatonic system. This, he does admit, does not suffice to give solid explanation as to the primordial tetratonic tritonic or duotonic as autonomous systems.

As far as explaining pentaphonism in Inca music Brailou's system does give insight into the possible archaic pentaphony discovered and developed in their music, while it does not exclude the possibility of it being an abstract numerical concept related to symmetry. On the other hand, the insistence on the concept of the anhemitonic scale as part of this primordial musical universe fails to explain the widespread usage of tritones (augmented fourths) in the simplest musical expressions of the Amazon basin, such as greeting calls, children's songs, as well as in more complex forms.

The relevance Bradley's article in this paper lies in that it supports the assertion of common usage of similar abstract concepts by different indigenous groups in the Americas, such as the number five and symmetry, to create musical forms and to organise musical practice. In this way, clear differences can be appreciated in the way similar musical resources are applied and interpreted in the Andes, as opposed to Mesoamerica..

Harry Stobart sees the issue of numerology as relevant in certain cases, as in the celebrations of "todos los santos" where six holed flutes are used, as opposed to carnival celebrations, where five holed flutes are used. This though, would be a seasonal distinction and not strictly a musical one. He points out that it is

difficult to indicate the exact significance of numerology in melody since people are not usually very able to:

"[...] articulate ideas about pitch linguistically, and compared to vocabulary and discourse concerning, for example, timbre, that for pitch is very limited [...]" (Stobart Henry. personal communication 1999).

According to him Andean music is more developed in the realm of timbre, which is treated in a similar way in the Amazon basin.

He sees the development of scale systems, partly as a result of technological appropriation on the part of indigenous peoples, one which is strongly influenced by the activity of Jesuit missionaries (Stobart Henry. *Garland Encyclopaedia of World Music*. p. 283-284). If we draw a parallelism to the context of Mexico, it seems possible that technological influence by Europeans would have had an effect on the development of the indigenous music of Mexico. This is clearly the case with the introduction of stringed instruments such as the guitar or the vihuela, the violin, the harp, or aerophones such as the chirimía, which has been recognized as an arabic instrument (Chamorro Arturo *LAMR* 1982. p.165-167).

One apparent difference between the music of Mesoamerica and the Andes would be the absence of microtonal scales in the Andes, which Mesoamerica does share with the Amazon basin. Another reason for this difference might have originated in the days of Inca rule. The people of the highlands are known to despise the people of Amazonia regarding them as primitive. Up to this day they ridicule them in a dance called "chunchos". (Stobart Henry. Personal communication. 1999).

Pentaphony in the Andes poses problems which divide researches in different camps. Some see it as a clear sign of acculturation. This camp sees the solution to the search for the "original" Incaic music, in the timbral similarities between the Amazon and the highlands. According to Coriún Aharonián, prehispanic Andean pentaphonism that was practiced only among the Quechua (Inca) and

the Aymara, was not of the kind practised today, but one based on sounds which did not seem musical to the European colonisers (Aharonián Coriún LAMR 1994. p. 189-225). With this, he seems to imply that scales which we have identified as tetratonic or tritonic, are based on intervals which only approximate western tempered gradations such as a "minor third" or "perfect fifth". This leads us to the possibility of regarding the concept of timbre as a unifying element. The concept of continuum as practised in Mexico seems to lead in that direction.

Furthermore, Aharonián assumes that similar (reiterative) elements were the basis of a more general musical idiom practised outside the limited context of the Andes.

"Horizontal macrostructure; equivalent to the European idea of musical form [...] was associated to concepts [...] of reiterative behaviour, but [...] differing from each other."(Aharonián 1994 p. 139)

The strong emphasis of pentatonic systems in the Andes is a very clear distinctive element between the music of the Andes and the rest of the Americas. Their use of scales seems to be a strong indicator of an intentional effort to construct Andean identity, as opposed to the rest of the American peoples. Thus, they developed a strict musical system reflecting their ideological systems, which make implicit assumptions of class, and ethnic identity. This can be further supported by the fact that the Quechua as well as the Aymara had formal musical instruction before the conquest (Stevenson 1968. p. 275-277).

It is possible to infer from this short review on the work by Brailou, Bradby, and Stobart, that the use of such musical resources as discrete musical intervals, as opposed to the continuum, and internal organisation and motivic development based on the concept of symmetry, cannot be explained solely on the basis of musical analysis and cultural evolutionism. Instead, analysis has to be undertaken taking in account the aforementioned abstract concepts, as normative criteria. Whereas there are clear stylistic distinctions between Mesoamerica and

Amazonia in that there is a dialectic relationship between the continuum and the discrete in the world of Indigenous music.

3. Mesoamerica as a paradigm.

Up to this day, the study of Mexican culture has been dominated by the concept of Mesoamerica. I believe this paradigm still works well at explaining the particularities of Mexican culture and its history. It has been successful in explaining the ethnic composition and the cultural evolution of Mexico. However, this paradigm in my view, has pictured Indigenous music as part of the folkloristic paradigm.

My subject of study attempts to analyse Indigenous music in terms of indigenous cultural knowledge in the context of the Mesoamerican paradigm, as opposed to the Folklorist categorisation.

The aim of this next chapter is to explain generally the concept of Mesoamerica and how it can be related to the study of Indigenous music. Furthermore, and in accordance with deterministic aims exposed at the introduction, I will attempt to indicate certain theoretical, and methodological approaches with which the problem can be undertaken, namely; I shall point out the need to acknowledge the problem of diachrony and synchrony in relation to the significance of cultural areas within the Mesoamerican paradigm.

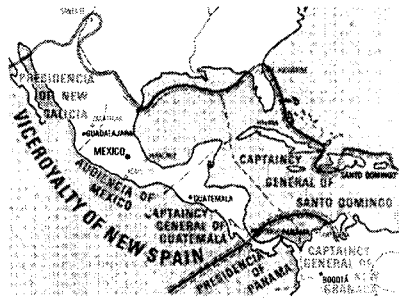
3.1. Mesoamerica as a complex of musical-cultural areas

Fig.1



In the context of studies related to Mexican culture it is generally accepted to speak in terms of a cultural area known as "Mesoamerica"(Kirchoff Paul 1943.p. 92-107) (Fig. 1) which defines the cultural borders of civilisations that flourished in the area we now know as Mexico, Guatemala, Belize, Salvador, Honduras and Nicaragua. Mexico as such did not exist before independence from Spain. During the initial period following the Spanish conquest, Mesoamerica and the territory that is now Mexico, were named the Viceroyalty of New Spain. As Spanish hegemony was consolidated and its conquered territory expanded, it divided into three other political entities: Audience of Mexico, the Capitancy of Guatemala and the Presidency of New Galicia (fig.2.). (McAllister Lyle 1984. p. 262-263) It was only after the fall of the Spanish Empire that the name Mexico was first used as the name of a nation-state, with its capital in Mexico City. Hence, the area now identified as Mexico does not quite correspond to the cultural area of Mesoamerica. The cultural-musical map of Mexico however, corresponds almost exactly with the concept of Mesoamerica, as well as with the ethnic map.

Fig.2



The limits of this cultural area are not clear-cut. The area north of the states of Colima, Jalisco, Guanajuato, San.Luis Potosí and Tamaulipas is usually referred to as Aridamerica. Culturally it is closer to the North American indigenous cultures. Musically North American cultures can be distinguished by elements such as the "rise", as well as the typically descending scales, in the music of the Mexican Yaqui in Sonora. These are features which have more in common with the cultural groups of North America such as the Yuma. Still, there are many groups within the Aridamerican area which clearly belong culturally to Mesoamerica, such as the Tarahumara (or Rarámuri) north of Chihuahua, the Tepehuán in Sinaloa and Zacatecas, or the Huajirillo in Sonora. Groups such as the Cora and the Huichol exist culturally and geographically at the limits between Mesoamerica and Aridamerica.

3.2. The common origin of the Native Americans

There are cultural and aesthetic elements, which are common to all Native American peoples. First it is important to state that these peoples have a similar origin. As far as it is supported by archaeology, they migrated at different times to the American continent through the straight of Bering during the last ice age, which ended some 10.000 years ago. Before that date there were four periods in which the straight was dry (Tampereen Taidemuseo 1997.p.54). The most ancient remains found in the continent are arguably from the south of Chile, and are between 30 and 40 thousand years old (Tampereen Taidemuseo p.50). It has been speculated that people could have travelled by sea from the Pacific Ocean. Possible contacts with China have been proposed by Paul Arnold comparing the

similarities between Chinese and Maya languages, both from the point of view of the written language as well as from the point of view of phonetics (Arnold Paul 1983). Furthermore, contact between the Americas, the Pacific and Asia has been pondered by Levi-Strauss, based on comparisons between the artistic features of primitive cultures (Levi-Strauss 1963. p.245-268).

3.3 Shamanism: its possible influence on musical thought.

On the next two sections, I shall attempt to portray some of the traits that characterise shamanistic thought and practice in Mexico. This is helpful in understanding the origin of certain forms and concepts that are identifiable in musical practice, as well as how music serves as a means for communication with the physical and the supernatural worlds. The first section exemplifies by comparison of the Olmec totemic system with the Huichol system, how deities are interrelated with people by family bonds. This relation extends to totemic animals. Furthermore, ritual is a means by which communication is sought with the universe and in particular with ancestors, linking causally space and time, past and present.

Next, I shall explicate the concept of duality and how it determines underlying structures by which the universe is conceived, having a direct influence on ritualistic organisation, aesthetics and everyday life. This is exemplified by the ancient Maya myth of Ixcuic, as told in the Popol Vuh and compared with various ritualistic practices. Animals and objects have qualities by which the function of imitation is actualised into different actions, linking causally the subjectively interpreted qualities of the objects, and subjective experience.

The physical and the supernatural world conform the universe, which is endowed cohesion by means of a strict numerology. Semantic dualism is expressed by how an event, an object, whether a deity or a person, are positioned within this system. Therefore we have oppositions of constituent elements belonging to two systems, one encompassing the notions of how space is distributed, the dualistic character of the universe and the kinship bonds of humans with the earth; the notion of the earth as mother, with its four corners

(directions) plus a fifth, the place of birth, the underworld and the heavens. The other one is a numerology, by which these qualities are associated to discreet values. Numbers are values by which we can make oppositions, depending on the placement of the numbers in relation to the concept of the Earthmother.

The concept of underworld is exemplified by the Nahua (Aztec) myth of Quetzalcóatl. This myth is compared to the Virgin of Guadalupe, in whose narrative are interwoven, the concept of Earthmother (Coatlicue), the myth of Quetzalcoatl rising from the underworld, and modern Catholic faith. Thus, this process of semiosis entails organisation of space and time, overlapping past and present beliefs, expressing a coherent worldview.

The next chapter elaborates through comparison of different myths, rites and architecture, on the concepts mentioned above. It delimits the problem raised by this paper in relation to numerology and music, to number five. Numerical structures in general and five in particular, as an extension of four and their multiples, are characterised as values that underlie musical performance as part of the communicative process. Myths and structures are commented on, from a pragmatic point of view. The process of semiosis is thus explicated as a constant dialogue with the universe, regulated by strict social norms.

3.4. Shamanism and cult to the ancestors.

Many American peoples have religious systems based on shamanism. Shamanistic peoples believe their tribe or clan is linked to an animal by family bonds. This animal is known as a Totem. Román Piña Chan has characterised shamanism among the Olmecs as follows:

" As far as totemism is concerned, it must be remembered that it appeared within clanic groups, and that the clan is a form of social organisation; the magician, witch, or shaman, served as a mediator between men and the Totem". (Piña Chan Román 1983. p.12 (a))⁴

⁴ "En cuanto al totemismo, hay que recordar que éste aparece en los grupos clánicos y que el clán es una forma de organizacion social; que el mago, brujo, o chamán servía de intermediario entre los hombres y el Totem" .

In shamanistic systems, animals and humans have a relationship of kinship. The animal might be considered a twin, a brother, as well as an ancestor and a companion who shares the same fate of the individual. In the Americas, such animals as the eagle, the jaguar and the snake have been the totemic animals of greater cultural groups:

"These Olmecs adopted the Jaguar as their totemic animal, who was associated with the earth and was the protector of the new men, the children who would ensure the survival of the community" Piña Chan Román 1983. p.12 (d))⁵.

In Mexico, the totemic animal is often referred to as "Nahual". The Nahual can be defined as an *alter ego*, a twin brother who shares the fate of a person (Thompson J. Eric S. 1984. p. 211).

Evon Z. Vogt has explained shamanism among the Maya of Zinacantán as a system by which a person communicates with the soul through the elements that the soul inhabits. Human souls are composed of many parts, or many souls, of which the most important resides in the blood. This same soul is shared with the Nahual, and binds their destinies.

This relation of kinship with gods and animals is apparent in other cultural groups such as the modern Huichol. The main deity of the Huichol, Tatéwari, who is called "our father Fire", is also called simply "Shaman" (Maráakáme), while Káuyúmarie, Sacred Person Deer, who is next in importance, serves as his animal companion and cultural hero. Káuyúmarie is also called "our big brother deer" (Furst.Peter T. Nahmad Simón. 1972.p. 8).

Contact with different deities is sought through sacrifice. These deities are often indistinguishable from the ancestors. Contact with the ancestors implies a re-enactment of creation myths. Martha Iliá Nájera has investigated the nature of magic and religion and sacrifice among the Maya. According to her:

⁵ "Estos Olmecas tuvieron al Jaguar como animal totémico, el cual estaba vinculado a la tierra y era el protector de los nuevos hombres, de los niños que aseguraban la supervivencia del grupo[...]".

"Ritual is a traditional symbolic action whose function is to introduce man into the realm of the sacred. It is expressed through a formal conduct; collective or individual"[..]" With the help of ceremony man is enabled to mingle into the sacred cycle of time and space and exert [...] some influence upon supernatural beings [...]" (Nájera Martha Ilia 1984 p. 19).

As part of the religious experience, the shaman or the whole community may travel physically, or psychologically in search of their ancestors. The Huichol Indians, for example, migrate once a year from their lands in the Mexican states of Jalisco, Colima and Sinaloa, across the country to the state of San Luis Potosí to a place known as Wiricutá. Along their path they shoot arrows randomly, with which they metaphorically hunt the Peyote cactus, which is believed to be a reincarnation of the very first deer, which are the ancestors of the Huichol. The cactus is eaten, and produces hallucinations through which the people "travel" to the very first days after the creation of the world (Furst Peter T. Nahmad Salomón. p. 80-81 1972).

3.5. Imitation and interplay of symbols used in communication.

Mesoamericans have been described by Eric Thompson as being profoundly animist (Thompson J. Eric S. 1984 p. 206). All the elements of nature are alive and in continuous communication with humans. Furthermore, religion is permeated by magic. Magical acts are those in which a certain formula implemented in an appropriate way, yields the desired results. According to Thompson, communication with nature is the aim of "Imitative Magic", in which the form of the object is apprehended and applied into the process of the magical ritual, to communicate with it. In this manner, the smoke of burnt tobacco leaves takes the shape and colour of the clouds, rises onto the skies to attract the clouds filled with water. Likewise, Chamula children are handed the tools of their trade at an early age, in the belief that this will have an enhancing effect on their professional skills at a later age (Thompson J. Eric S. 1984. p.209-211).

This idea of imitation has been explained by Evon Z. Vogt in terms of "replication". According to Vogt, the people of Zinacantan (a Maya people inhabiting the western borders of the Mayan area), have developed a coherent

lifestyle in which different social and ritual practices are arranged according to structures that are imitated and applied at different levels, such as in social practice and ritual practice (Vogt Evon Z.1973. p. 155-168).

Imitation is also apparent in different narratives. Nájera explicates how Ixcuic, as narrated in the Popol Vuh, resorts to imitation in order to avoid human sacrifice. We are told how Ixcuic, the mother goddess, the lady of blood, is sent to be sacrificed by her father, the master of Xibalbá (underworld). She takes a drop from the fruit of a tree (Xompantle), and with it, she makes a simulation of her heart which is taken back to Xibalbá by the owl, as proof of her death. The fake heart is burned so as to be smelled by the gods. This sacrifice is necessary for the birth of the hero twins Hunahpú and Ixbalanqué, to take place (Nájera Martha Iliá 1987 p. 50-51).

Animals have properties which are imitated and articulated into everyday behaviour. In this manner, the hummingbird is a symbol of life. Those who establish a relationship with the hummingbird, by offering it water and flowers to feed on, are said to have a harmonious and long life (Personal account. Mexico City 1994). In the Aztec pantheon the hummingbird is the totemic animal of Huitzilopochtli, the young man from the left⁶, tribal god of the Aztecs. This pattern of thought is explained by Laurette Sejourné:

"The bird-insect also possesses the ability to hibernate, which sustains the metaphor of existential continuity that lies at the centre of Náhuatl thought." (Sejourné Laurette 1983. p. 288)

7

Figure three shows the hummingbird (symbolising Huitzilopochtli) as a protégé of Quetzalcoatl in an image belonging to Aztec mythology (Codex Borgia). This iconic image symbolises the adoption of the cult to Quetzalcoatl by the Aztecs, thus legitimising them as heirs of the Toltec heritage.

⁶ Huitzilopochtli, is composed of two roots: huitzilampa= east, and pochtlí= young man. The east is towards the left if you look from the north. He is also identified with the Sun. The east is the holiest side of the sky from which the sun rises. Thus: Young Man from the Left.

⁷ "El pájaro-mosca posee también la propiedad de hibernar, cuya objetividad sostiene la metáfora de la continuidad existencial que está en el centro del pensamiento nahuatl."

Animals also have different qualities, which relate in different ways to phenomena of the natural world. A frog, for example, is related to water, and so it has a magical relationship with those deities which have power over water. Ducks fly through the air, and so they are related to the winds and the weather they carry, thus the beak of a duck in the face of Quetzalcoatl in his identity as Ehécatl, the deity of wind. (Fig.3) The Jaguar and the Ocelot are related to the nightly deities, because of the dots on their skins, resembling the night sky, and because they are night predators. Figure four taken from a fresco at Teotihuacan, shows Quetzalcoatl in his identity as lord of the night; a jaguar dressed with his seashell medallion, shaped as a five pointed star (Fig.4).



Fig.3

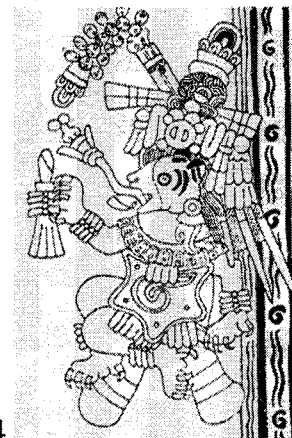


Fig.4

3.6. The four corners and the “rule of the centre”.

On this chapter I shall concentrate on the way numerology is interwoven into the structures underlying the general world view, as expressed in religious symbols, religious and secularised narratives, and the organisation of space. The way symmetry around a centre is expressed in all of these views, plays an important part in this paper.

Shamanistic peoples are linked to the place of birth. Seeing the earth as mother, it is common to picture the birthplace as a belly button. A recurring element in

these religious systems is the belief in the underworld, the place of residence for the dead. The underworld is the place where many a mythical hero must travel. In Mesoamerican legends Quetzalcoatl, the snake-jaguar-quetzal deity is believed to have travelled into the underworld to recover the bones of humanity. After inflicting self sacrifice through ritual bloodletting, humans were born again from the bone powder fertilised with the blood of the deity.

The Maya cosmology sees the earth as a flat surface with four corners, on which the four Bacabs stand, sustaining the heavens. The sky is divided into thirteen levels, and the underworld into nine. A closer scrutiny reveals that the thirteen levels of the sky are actually seven "stairs" upwards and seven downwards, with the seventh on the middle, making it the highest level, as a centre of symmetry. The same concept applies for the underworld, which is instead made of five levels, making the fifth level the lowest (Fig. 5) (Thompson J Eric S. 1984 p. 243). The sun rises from the east side of the sky, and climbs up along the stairs up until reaching the seventh level, after which it gradually falls into the west side, and into the underworld. There, after reaching the lowest level (number 5) it rises again. Nahua mythology, narrates how Quetzalcoatl rises from the underworld. This is represented metaphorically with rise of the morning star (Venus), rising from the east, as a herald of the triumph of Quetzalcoatl over the forces of the underworld. Figure five is a Zapotec representation of the rise of the morning star as a tongue coming out from the mouth of a jaguar, symbolising the underworld. (Fig.6.)

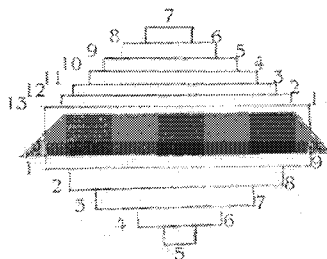


Fig.5

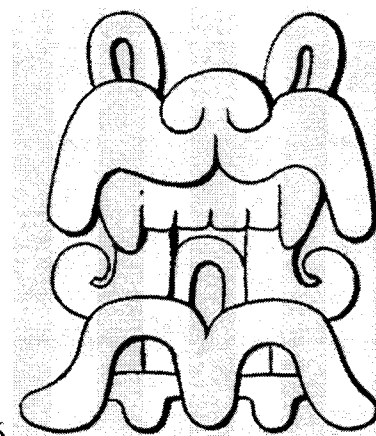


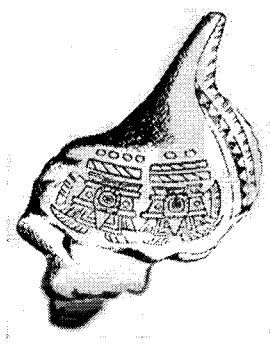
Fig 6.

This way of arranging the universe, entails the concept of duality, and hence binarism. Number seven and number five are related and opposed to each other because of their privileged position as centres of symmetry in their respective worlds. Imitation, or replication implies a change of position in the universe and hence a change in identity and character.

Eric Thompson explains syncretism as an expression of duplicity in the worldview of the Maya. During the day, the sun functions as a deity of the heavens, whilst during the night it travels through the underworld, where it functions as a one of the lords of the underworld, only to rise again the next day. In the same manner most gods can interchange identities, behave benevolently or in an evil manner, depending on the context. This explains how many of the Catholic saints introduced by the Spaniards have acquired indigenous features (Thompson J Eric S. 1984 p. 284). It also explains how European cultural forms have been adopted by indigenous peoples without implying a loss of the most essential aspects of their culture.

Likewise, an instrument could be assigned a function according to its timbral characteristics and the musical possibilities it offers, as well as other possible referents. The musical use of a sea shell found at Teotihuacan, carved with the glyphs of time cycles, and the numbers nine and twelve (Fig.7) (Sejourné Laurette 1987. p. 152), could be reserved for rituals relating the evening star and the morning star, representing respectively Xolotl and Quetzacoatl. In our representation of the universe (Fig.5) twelve and nine are placed at opposite sides of the universe. Moreover the seashell is one of the elements of the dress of Quetzalcoatl, represented as a five-pointed star (Fig.3). This corroborates the musical use of the shell in relation to the rise from the underworld.

Fig.7



The Catholic virgin known as Guadalupe Tonanzin, whose chapel was built north of Mexico City on the former seat of the cult to Coatlicue; at Tepeyac. She is revered as a Catholic deity in modern day Mesoamerica, both by non- Indians as by Indians. From the point of view of Catholicism she is seen as a symbol of the newly converted Christian Mexico. However, information is coded into the design of the image, which expresses the rise of planet Venus from the east, in the morning sky. This symbolises the rise of Quetzalcoatl from the underworld (Fig.8)(Centro de Estudios Guadalupanos 1989). The shrine was erected in the place that had been devoted to the mother goddess Tonanzin, also called Coatlicue (Skirt of Snakes) (Kehoe Alice B. North 1992 p.86-87). Many other symbols have been adapted to suit both the old and the new cults in Mexico. The use of crosses which is usually taken as self evidently Christian, refers to the four corners and the centre in the Indian universe, as has been mentioned above.

In semiotic terms, it could be said that there has been a translation of one semantic field into another. There are shared meanings between the Prehispanic cults and the Hispanic-Mexican cult. There is thus, intertextuality. The Prehispanic text tells us about the Earthmother, and the triumph of Quetzalcoatl. The Catholic text tells us about Virgin Mary and the birth of Christ. The image as a whole tells us about the transformation of Tonanzin-Coatlicue into the mother of Jesus, who is identified with Quetzalcoatl.

This implies opposition between both texts, and tells us about a change in time, the conversion of Prehispanic Mexico into Hispanic-Catholic Mexico. It also tells us about superposition of both texts in space and time. Furthermore, the

Prehispanic text can be said to be a closed one, in that its explicit meaning is closed to outsiders, that is; it is not available to non-Indians. While the Catholic codes are open to both, the Christian and the Indigenous worlds.

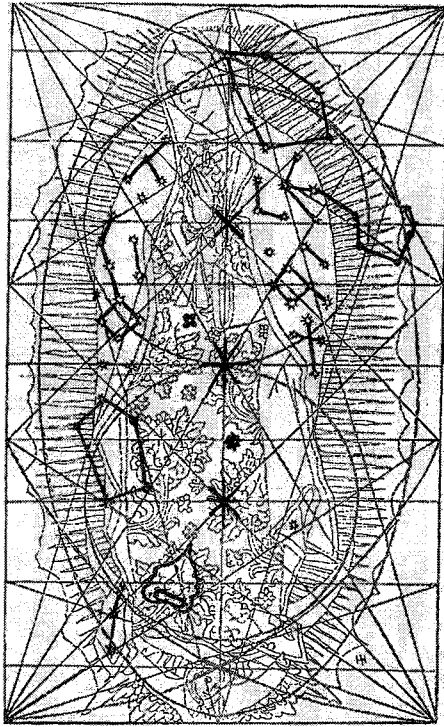


Fig.8

3.7. Communication with the universe.

A common role of the Shaman is that of a healer. The Shaman has the power to contact the primordial soul, residing in the blood, for healing, or causing disease. Disease is caused usually as an effect of disobedient behaviour towards the deities. There is thus a link between a normative system of behaviour, and the supernatural world, with which humans are in constant communication. Shamans have primacy thus in all celebrations dealing with the soul, such as birth, healing and interceding with the spirits that govern nature.

The killing of an animal, the chopping of a tree, clearing a piece of land for farming are all acts which require communication with, and permission from the spirits who inhabit them (Vogt Evon Z. 1973 15-16).

Accordingly, the Mesoamerican artist looks for signs in everything that surrounds him. The artist, through his experience, apprehends the language of nature which he utilises, in order to communicate with it. The falling of a leaf, the passing of a cloud, the coming of the rain season, are all signs to be learnt. (Zepeda Antonio. Templo Mayor) ⁸.

Furhermore, this experience has to be translated into the musical language practised and accepted by the community.

"Prehispanic music was a fusion of strict norms prescribed by tradition, with the musical influence, that was produced as a consequence of deliberate listening of the sounds of nature. This practice was important to [...] understand the rhythm of nature." (Zepeda Antonio) ⁹

Imitation, or replication thus, has an important place in ritualistic practice. Music serves as a means for communication between humans and the supernatural world. As with indigenous verbal arts, the music of Indians relies on different semantic functions, as in the acts of replication and imitation. Forms that are perceived in nature are imitated in religious and secular practice at all conceivable levels. Musical metaphor and musical onomatopoeics, conceived thus as forms of imitation and replication, acquire different qualities, depending on the context on which these appear.

The usage of a numerical system based on 20 is justified by correspondence with fact that humans have five fingers in every hand, and five toes in every foot. Numbers are an aesthetic and a metaphoric means of expression. Five is thought of as a perfect number, it represents the centre of symmetry implied by the concept of the four corners. But multiples of five are associated with different levels of beauty. Months in the Mesoamerican calendar are made up of twenty days, which is referred to in Nahuatl as Cempohualli, which means one count, is referred to as "flower of twenty leaves".

⁸ "La naturaleza tenia un lenguaje cuyos signos eran interpretados para comunicarse con ella" .

⁹ "En la música prehispánica se fusionaban las marcadas normas de la tradición con la influencia musical que se produjo a partir de la audición deliberada de los sonidos naturales. Esta práctica era importante para [...] comprender el ritmo de la naturaleza. "

Mesoamerican peoples have a strong affinity for figurative expressions. Everyday expressions, as well as sophisticated narratives such as those embedded into Maya stelae, are full of metaphoric language. The name "Mexico" is composed of two roots: Meztli and Xico. Meztli is the moon, which is represented graphically by a rabbit. The rabbit is used thus as a synecdoche for the moon. It is the figurative image of the spots on the surface of the moon. Xico stands for belly, that refers to the concept of belly of the Earthmother. The ideogram representing the identity of the rabbit and the moon as a symbol of tribal unity can be found in groups as far away from the Aztecs, such as the Maya of Yucatan.

The association of numerical terms to things and places renders special qualities to them, by which these are further associated to other meanings in a chain of unlimited semiosis. Hence names for places such as Cempoala (one count). Furthermore, increasing the numerical value has a hyperbolic function augmenting the suggestive strength of the signified. Numbers such as forty (ome-pouhuali, or two counts), four hundred, (cen-tzontli,¹⁰), are increasingly diverse in their suggestive possibilities.

Number five as expression of centre is identified with "belly of the earth". Number five is also associated with Xiuhtecutli (Sejourné Laurette 1957. p.103), the god of fire, who is also represented in the sky by the North Star, also called "Heart of the sky". Number five is related to the calendar and as such it is the number of Venus, symbolising the rebirth of Quetzalcóatl (Sejourné Laurette p. 1957 p.103).

The following are examples of how numerical structures, particularly number five, are interwoven into narratives, as well as how these can be observed as architectural motives.

According to one Huichol myth of creation, a group of deities guarded the fire, refusing to share it with the animal-people, who were cold and hungry. They

¹⁰ Centzontle is the name of a bird with a very characteristic song resembling a downward glissando with strong overtones: "The bird of the four thousand songs".

tried to steal the fire four times without success. The zarigüeya, a small and hideous animal, as well as a sacred one, had to try it for the fifth time and be sacrificed in the process (Furst, Nahmad 1972. p. 9).

It is possible to draw parallelisms between this and other Mesoamerican myths. According to the Popol Vuh, the gods succeeded in creating whole human beings at their fifth try. At a later stage the resulting tribes became separated and Tohil granted fire to only one of these. The rest were hungry and cold, and were granted fire only after accepting to perform sacrifice for Tohil as a precondition (Popol Vuh. Los Abuelos p.19-41).

According to the Nahua mythology, the creation of the sun required the sacrifice of Nanahuatzin, the leper. Nanahuatzin and Teccistecatl had been appointed for sacrifice, and thus they fasted for four days while the fire burned awaiting them. When the moment came, on the fifth day, Teccistecatl tried to throw himself into the fire four times without daring to do so. At the fifth try, Nanahuatzin dared to throw himself, thus giving birth to the sun (León-Portilla Miguel 1984 p. 61-63).

Mythical historical periods such as the creation of the world are very suitable to be used along with these concepts. According to most Mesoamerican legends the world has been repeatedly created four times, plus a fifth one; our own (León-Portilla Miguel 1984.p. 59-61). Numbers are also fateful. The fact that America has been colonised for 500 years is a symbol of great significance for the native peoples of Mexico.

Moreover, ancient Mesoamerican cities such as Teotihuacan were planned in accordance with the movement of the sun, the planets and the stars, thus symbolically reflecting the order of the universe in space and time. Ancient American cities are simultaneously ritual spaces, and aesthetic spaces. They are thus symbols in which the cyclic passage of time is given meaning, and thus, ritual space is actualised into social, political and economic structures.

Teotihuacan is divided by a great street, the street of the dead, which is placed in a north south position (Garret Kenneth 1995. p. 11-12). At the north end,

towards the North Star is the pyramid of the moon (Mateos Mónica 1998). At the middle of the street on the left side (looking from the north), is the pyramid of the sun, facing west. The east is always reserved for the holiest and larger buildings, since it is the side from which the sun, the moon and the planets arise.

As conclusion to this chapter it can be said that in Prehispanic Mexico, as well as in modern Indigenous cultures, symbolism surrounding the number five is articulated into complex and coherent semiotic fields and behavioural codes, whose purpose is communication between humans and the world. This system relies heavily on figurative language, in which associations are guided by the principles of replication or imitation, that renders these expressions a place in the symmetrical world of the Indians. It could be said that there are transitions between different semiotic borders. There also is continuous reliance on the same motives and structures. In semiotic terms it can be said that there is semiotic saturation and intertextuality.

The underlying cohesive idea behind the use of numerical concepts, is symmetry. The concept is expressed graphically into an ideogram which Laurette Sejourné calls the "Cincunce" (Fig. 9), a figure which is always formed by four points, either in an explicit or in an implied manner, united by its centre (Sejourné Laurette p. 101). According to Antonio Caso:

"This basic idea of the four cardinal points and the central region (up and down) which constitutes the fifth region [.....] is present in all religious expressions of the Aztec people" (Caso Alfonso 1983 p. 21-22)¹¹.

Fig.9



¹¹ "esta idea fundamental de los cuatro puntos cardinales y de la región central (abajo y arriba) que da la quinta región..... se encuentra en todas las manifestaciones religiosas del pueblo Azteca" Caso Alfonso El pueblo del sol. CFE Mexico. 1983. p. 21-22.

3.8. Political aspects of syncretism.

Many of the forms which indigenous expression have taken, are the result complex historical and political processes. Many of the dances which are now well known as part of the indigenous repertoire, such as Matlachines, originated as part of the indoctrination process undertaken by Catholic missionaries in the early colonial period (Mendoza Vicente. T. 1936 p.132). Many indigenous groups were thus forcibly acculturated. They were gathered villages where they had to re- invent their cultural identity in order to preserve it.

Nevertheless, it can be said that during the colonial period, indigenous communities enjoyed a high degree of autonomy. Leadership and economic administration of the community was largely left to local chiefs. This type of organisation could be described as corporative, based on privilege, tradition and obedience:

“The ‘Indian republics’ as they were juridically called, were in no way republican in the modern sense of the word. They were stratified societies, in which all the work was shared among the community, but under the rule of a native aristocracy that monopolised power in their own hands.” (De Vos Jan. 1998)

During the late 17th century the Bourbonic laws, with new emphasis on mass production of raw materials, brought about social changes which again shattered the world of the Indian and produced new cultural structures. The expulsion of the Jesuits has been interpreted as a grievance against Indians throughout the continent, whom they often protected. Furthermore, the introduction of “intendencias” in 1786, which were supposed to protect the Indians (Rippy Fred 1958. p. 100-103), actually took control of the economy away from the native authorities, which in turn resulted in weakening the cultural life of the communities. Lands were also transferred to the Haciendas that produced cotton, henequén¹² and maguey¹³.

¹² A type of cactus used in textile industries.

¹³ Another cactus from which the alcoholic beverage “pulque” is made.

During the XIX:th century, independence and the liberal governments continued this process, by abolishing many of the remnants of the social structures upon which Indigenous peoples had managed to construct defensive cultural norms, on which they had become dependant. Again, their creativity had to be put to test. This last process originated what we now know as Mayordomías, or Cargos, a system by which a member of the community is rendered responsibility over all the festivities during a period of time.

3.9 Terminology and ethnic categories.

Another important concept in Mexican studies is the Indian/Mestizo dichotomy. The term "indigenous" as is generally accepted nowadays, refers to the original inhabitants of any country.

The Mestizo/Indigenous dichotomy comes into play also as a distinction is made between aesthetic resources belonging or having been originated strictly in the indigenous world and those belonging to the wider Mexican world. The distinction can also be functional. Indigenous music is more often associated to religious festivities or events that are related with an indigenous worldview. Some groups such as the Totonacs of Veracruz seem to have clear-cut distinctions of repertoire and its use, whether it be ritual, or secular. Where a Mariachi band might be hired for Christian celebrations, whereas it is never placed in a context where it would conflict with an indigenous ensemble, such as in the case of the Voladores.

Evon Z. Vogt has explained how the Maya of Zinacantan make a distinction between the secular character of Mestizo music and strictly religious music. In their larger celebrations, up to four types of music are overlapped. On one side plays the Mexican (Mestizo) music from the loudspeakers, on another a paid Mariachi orchestra, while the men dance and drink. The ritual music is played by one flute and a drum, and another group composed of one violin, a guitar and a harp (Vogt Evon Z.1973.p. 32-33).

A categorisation based on the Indian / Mestizo dichotomy, is often criticised in as much as Indian is a colonialist category, that refers to Indians not as subjects but as objects. I shall use them though, because they are widely accepted, and they are useful as a straightforward means of classification. Mestizo designates a person of mixed Indigenous, Spanish, and African background. In this sense we can talk of Mestizo culture and hence Mestizo music. Since most Mexicans belong to this mixed category we can say that Mexico is mainly composed of a Mestizo population. In the same way we can state that mainstream Mexican music is Mestizo music. In this same sense we can assume that Indigenous music, having varying degrees of acculturation, is Mestizo to varying extents, and in that sense it is also Mexican.

This opposition between Indian and Mestizo can also be expressed in terms of the Prehispanic Mexico/Hispanic Mexico dichotomy. In this sense Prehispanic refers to the Indigenous worldview; a coherent semiotic field not completely assimilated and not entirely translatable to the Hispanic sensibility. Hispanic Mexico as a semiotic field, is the result of the Spanish conquest, and acculturation. The meanings produced by the Hispanic worldview have been assimilated and translated into the Indigenous world. Indigenous-Prehispanic-Mexico/Hispanic-Mestizo-Mexico speaks to us about a meaningful transformation through time.

In referring to specific ethnic groups, it is appropriate to use the names of their languages or tribes. This is not completely unproblematic. Terms that are regularly used as accepted conventions might seem correct from the point of view of mainstream culture. Yet, there are also relationships of power between the indigenous groups, that have an effect on how the use of terminology has evolved. It is not the subject of this paper to discuss on this aspect. It will suffice, for the sake of simplicity, to use the familiar conventions and to clarify where needed.

4. Cultural areas and Mexican ethnomusicology

4.1. The problem of cultural areas

Mexican ethnomusicological studies have resorted to methodologies, that consisted in a combination of archaeology historiographical research, and anthropological fieldwork. The concept of Mesoamerica as a cultural area has influenced the development of Mexican ethnomusicology. There are different approaches with which Mesoamerica can be explained as a complex of cultural areas.

According to Nettl, the Diffusionistic School was concerned with what they called the "Kulturkreis" a cultural circle (Nettl Bruno.1983. p. 231). This concept was concerned with historical processes, associated thus, to the diachronic axis of Saussurean theory. These circles can be defined by shared cultural traits, such as a certain food production technique, a tool or a style of music.

But even more, diffusionists are concerned with the way traditions are structured, that is, concrete elements such as a certain material in the construction of an instrument might be absent, while the structural concept of the instrument is shared. Sachs and Hornbostel on the other hand, were devoted to an elaboration of a cartography of instruments throughout the world. Cultural circles need not to be contiguous, and may be superimposed through space and time. Diffusion of a particular trait happens at a moment in time from a location that functions as a centre or "climax". In this manner circles represent different strata in time. Lower historical strata are more widely spread than the higher ones (Nettl Bruno 1983 216-226).

According to Levi-Strauss the study of cultural areas entails problems because of the traditional contradictions between two approaches: a historicist, and a diffusionistic approach. The historicist approach is also evolutionistic, in that it assumes that one structure represents a stage which evolved into a later and more complex one, as if social structures were species, making an analogy with

biological terminology. It focuses on the search for individual cases that can be corroborated and documented. The diffusionistic approach, borrows constituent elements and reconstructs "pseudo-individuals" that can be placed in space and time according to the way in which the constituents have been assembled.

The semantic interpretation of these structures, depends on a dialectic between the subjective representations of the observer, and empirically acquired information. The observing subject construes the object of study. In any case culture can, and is, studied as a complex of social and behavioural structures. These interpretations are limited by the lack of empirical evidence:

"[...] the `cycles´ or cultural complexes of the diffusionist, like the `stages´ of the evolutionist, are the product of an abstraction that will always lack the corroboration of empirical evidence."(Levi-Strauss Claude 1963 Vol I p.5)

Interpretation of structures as they present themselves in our day is conditioned by our interpretations of historical facts.

"We never loose sight of the fact that existing societies are the result of great transformations of mankind which occur at given moments of prehistory [...]. and that an uninterrupted chain of real events links these facts to facts which we can observe." (Levi-Strauss Claude 1963 Vol II p. 14)

The concept of cultural circles, as well as diffusionism, have been criticised from the standpoint that culture is analysed on the basis of a limited amount of criteria, such as a specific mode of production. It has also been criticised from the standpoint that it makes a- priori assumptions on the basis of a small amount of data, often a single musical sample (Nettl Bruno edit. Kaufman Kay 1990 p.175). According to Levi-Strauss this is a problem that traditionally generates dilemmas in anthropology. How to construct historical events on the basis of historical phenomena? From one perspective, Levi-Strauss refers to history as a diachronic dimension; a process through space and time. In the other case the anthropologist resorts to the methods of the historian:

"The problem of reconstructing a past whose history we are incapable of grasping confronts the ethnologist [...] the problem of the history of a present without a past confronts ethnography."
(Levi-Strauss Claude 1963. Vol I p. 3)

One example of how these contradictions appear in academic discourse could be the case of the cultural area known as Yuma in the Southwest of the USA, and Northwest tip of Mexico. Linguistically they belong to the Hokan family, of which some languages exist inside Mexico, such as the Cochimi, Cocopa, Kumiai, Kiliwi, and the PaiPai. The cultural area, however, is shared also by peoples belonging to the Uto-Aztecan language group, such as the Apache, Hopi, Mayo, Opata, Yaqui and the Comanche. Musically, the Yuman area is defined by the appearance of the "rise"; a motive pattern repeated a number of times and suddenly introducing another melodic element which raises upwards the melodic range, accompanied by a raising of hands by the dancers. This mannerism is shared by indigenous groups inhabiting most of the United States (Nettl Bruno. 1983. p. 220). This trait, however is not shared by all the groups, neither is it applied very often among the Yuma. Can it be valid then, to generalise and define a musical area based on such a limited amount of evidence?

Another point of critique is the fact that it a-priorises the concept of authenticity, and gives preference to the supposedly "older" material, supposedly less adulterated. According to Nettl, musical cultures tend to change and to evolve, and nothing can tell us whether an orally transmitted musical piece can be older than the other, hence more authentic. Furthermore, the concept of cultural area assumes that different pieces have something in common, rather than their differences from each other. According to Levi-Strauss, a further limitation the cultural area complex is that it fails to:

"[...] explain the conscious and unconscious processes in concrete individual or collective experiences, by means of which men who did not possess a certain institution went about acquiring it, modifying previous institutions or borrowing from the outside."(Levi-Strauss 1963 Vol I p. 6)

Another interesting point for the purposes of this paper, relating this structural approach is the idea of dualistic organisation. According to Levi-Strauss, many societies, notably the Amazonian Ge and North American Winnebago, abide to dualistic codes, many times being unaware of them or not being able to verbalise the concept appropriately (Levi-Strauss. 1963. Vol I p. 132-135). This paper sees the Mestizo/Indigenous, or Prehispanic/Hispanic dichotomies as dualistic systems, much in the same logic. Concepts of geographic distribution, hierarchy and prestige, and myths can be shared among neighbouring populations complimenting each other, without necessarily implying their mutual consent. In this manner this concept can be extended to the diachronic. Levi-Strauss goes as far as to look for structural similarities in the symmetrical designs of the cultures of North America and the South Pacific. In this sense Levi-Strauss acknowledges the limitations of cultures so far apart from each other in every sense. It is important then to assume that when and if cultural contact has taken place, it is not simple unassociated motifs that have been communicated, but whole structures. For all its limitations, the concept allows us to make associations and even borrow theoretical tools from other disciplines:

“If history [...] cannot yield an answer, then let us appeal to psychology, or the structural analysis of its forms; let us ask ourselves if internal connections, whether of a psychological or logical nature, will allow us to understand parallel recurrences whose frequency and cohesion cannot be the result of chance.” (Levi-Strauss. 1963 Vol I p. 248).

Nettl sees some merits in the concept of cultural area. It is a very specialised tool which functions best in studying the people for whose study it was devised (Nettl Bruno 1983. p. 211), It has provided a tool with which we can classify the different styles of Mexican folk music according to their cultural area, and trace the patterns of diffusion of melodies rhythms and instruments

Methodologically, it is possible to follow Bence Szabolcsy's five premises:

- 1) Musical life is closely tied to the divisions of the earth

- 2) Geographically closed areas preserve musical styles while open ones favour change and exchange providing venue for the development of cultivated or classical systems.
- 3) The centre standardises and unifies materials developed throughout the area while margins develop and preserve diversity.
- 4) Diffusion of musical styles from the centre is the typical process in musical history; the longer a musical style exists, the further it becomes diffused.
- 5) The unity of archaic folk music styles is evidence of the most ancient intercultural contacts (Sczabolsky Bern. Op.cit Nettl 1983 p. 225).

4.2.1 Son; cultural areas and stylistical taxonomy.

The elaboration of a taxonomy of the different Mestizo musical genres, serves the function of making an inclusive system of interrelated constituents. Later on, the Mexican Son shall be first defined in terms of its articulations with the larger and better known forms of Latin America, such as the Cuban Son, as well as the possible implications of such a representation. Afterwards, the Son will be defined in terms of its articulations within Mestizo and Indigenous music. The following taxonomy will elaborate on the different styles, classifying in accordance to its constituents and its articulations, in the contexts of the cultural areas in question.

4.2.2 Son in Mexico and Latin America.

The term Son is popularly known throughout Latin America, associated to Afro-Caribbean musical forms. In fact, Mexican Son and Cuban Son have a common ancestor: the Spanish “romance”. How then is it possible to define and distinguish Mexican Son in terms of its Cuban counterpart? This chapter presents the Mexican Son as opposed to the Cuban Son, and Spanish Flamenco, forming a triad. Cuba and Mexico have selectively borrowed constituents from Spain, such as classificatory structures, rhythms and instrumental techniques. The particularities of the Mexican Son and its meanings are elaborated at the end of this chapter.

In Cuba, the term Son refers to a wide array of musical styles, whose most audible constituents are derived from African traditions and Hispanic traditions. The main structural elements are determined by:

- 1) The verbal narrative in verse form, derived from the Spanish “romance”, and augmented by African antiphonal chant (Carpentier Alejo 1979.36-39).
- 2) The rhythmic element, which is the main musical vehicle for variation and innovation. This is attributed to African traditions, Ibo, Yoruba Mandinga and Lucumí among others, indigenous to the cultural areas of western Africa, from where most of the slaves were exported to this part of the Americas.

Son as a Cuban genre encompasses urban styles such as the Rumba, with its sub-genres such as the Guaguancó. These original rhythmic forms are thus, derived from ritual performances called “Santerías” in which the narratives are a syncretic derivation of African religious systems and Catholic religion (Carpentier Alejo 1979 p. 33). The original rhythms are named in accordance to the African deity (Oricha) to which they refer. In this way, Elegua has his own rhythm, Ogún has a rhythm of his own, and so forth.

Most modern versions of the Son are editions of the primitive sacred forms of the Santería, stripped of its overt mythic codes. Yet, they follow the same organisative hierarchical criteria as the Batá ensemble. Modern percussive ensembles featuring the Bongós, Tumbadoras, cowbells and the Caja (box) are guided by the rhythmic line of the Clave. Cuban rhythmic ensembles are guided by a classificatory principle in which instruments range from big/feminine to small/masculine, that can be exemplified by the Batá ensemble. The biggest instruments with the lowest pitch tend to improvise solos (Iyá), while the smaller and highest pitched instruments (Ocóncolo) tend to play ostinatos. Furthermore, musicians are related with the family of instruments: whereby the Iyá is the mother, occupying the highest hierarchical position, and the drummers are children of the gods of the drums, occupying the lowest position (Amira John, Cornelius Steven.192.p. 15-18).

The modern Cuban ensemble can be thought of as an edition of this generative structure that has gone through a process of addition by Hispanic constituents. Rhythm sections of modern ensembles have inherited the functions of the original ensembles. The Tres (a guitar with three pairs of strings), has an intense rhythmic technique, that could be compared to the functions of the Itótele drum, while the bass in any of its forms, plays longer but more variable notes, as would the Iyá in the Batá ensemble.

In contrast to this, the generative Son ensemble in Veracruz features the Bajo Sexto or Guitarra Huapanguera, or Harp as a combination of bass instrument and soprano, the Jarana as a soprano rhythmic instrument, and the violin as melodic instrument. The melodic lines (in punteado technique) of the Jarana and the Bajo sexto are very reminiscent of the Cuban Tres, alternating to a rasgueado technique, which is rare in Cuba. The Son ensemble in Veracruz does not seem to apply the clave function to high-pitched instruments, such as the violin, whereas the harp's high register could be abiding to this principle.

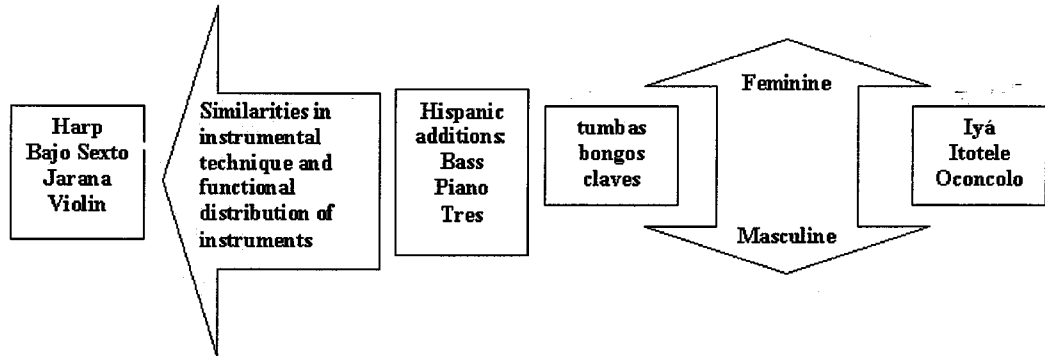
Thus, it can be said that the ensemble as a whole has African characteristics in the hierarchic arrangement and the distribution of rhythmic functions. Moreover, the Jarana and the Bajo Sexto do apply intermittently instrumental techniques that are reminiscent of the Tres. Yet, the actual rhythmic patterns of the Jarana are clearly based on different principles to the African patterns present in Cuban music.

A very similar arrangement to the one in Veracruz, exists in the Venezuelan and Colombian traditions. In the musical tradition of the Llanos in Venezuela and Colombia, featuring such forms as the Joropo, and Merengue, the use of the Cuatro is very similar in its intermittent use of rasgueado and punteado techniques.

Figure 10 illustrates a model by which the Mexican Son ensemble and the Batá ensemble are represented at opposite ends of the continuum. In the Batá (right end of the spectrum), the size/gender categories are explicit. These categories tend to be less explicit as we move towards the Hispanic side (left) of the

spectrum. Yet, the categories seem to be actualised by the functions assigned to the instrumental voices in the Jarocho ensemble.

Fig.10



In terms of instrumental technique it could be said that Hispanic tradition has had a stronger influence in countries like Mexico or Venezuela, while the Caribbean has inherited classificatory categories from Spain, retaining the African character of its rhythms and instrumental techniques. In the same manner Mexico has chosen to borrow classificatory categories from Spain, and rhythmical organisatory structures from Africa, but not specific instrumental techniques associated with the drum. Figure 12 illustrates this by opposing African and Hispanic constituents as influences determining the development of differentiated musical idioms in Mexico and in Cuba.

There is a structural parallelism between the classificatory structures of Spanish, Cuban and Mexican systems. These can be exemplified by Cuban Rumba and Flamenco Rumba, and the place these occupy in their respective stylistical hierarchies. In Flamenco Rumba is a characteristically simple 4/4, not requiring great technical skill. It is thus one of the most commercially exploited styles. Players with more knowledge and skill might perform Farrucas, or Tarantos, which are far more complex rhythms, that call for metric variation. In the same manner the Rumba in Cuba stands for a specific rhythm, basically similar to the Spanish counterpart. Generically, it stands for a stylistical complex of urban rhythms encompassing more complex styles such as the Guaguancó, a style requiring more developed variation skills. This parallelism in the underlying

values simple/complex underlying stylistic organisation is illustrated in figure 9. Mexican music does not seem to present this simple/complex dichotomy.

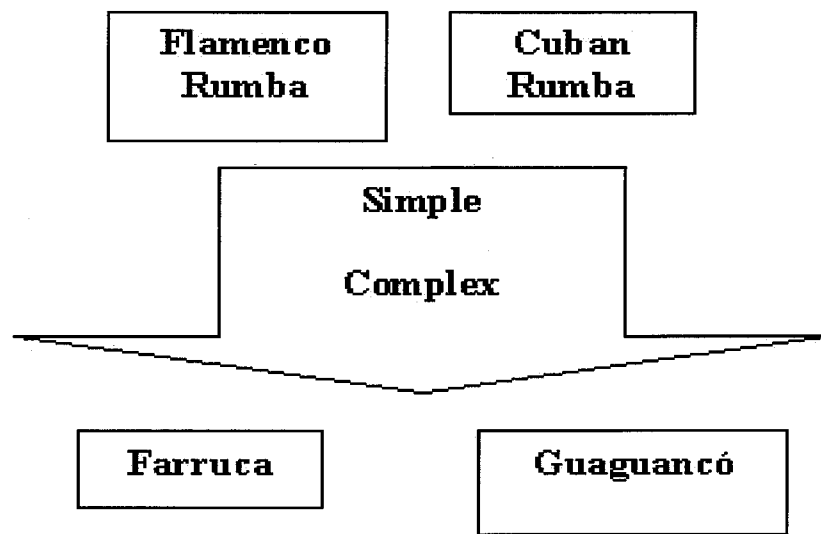
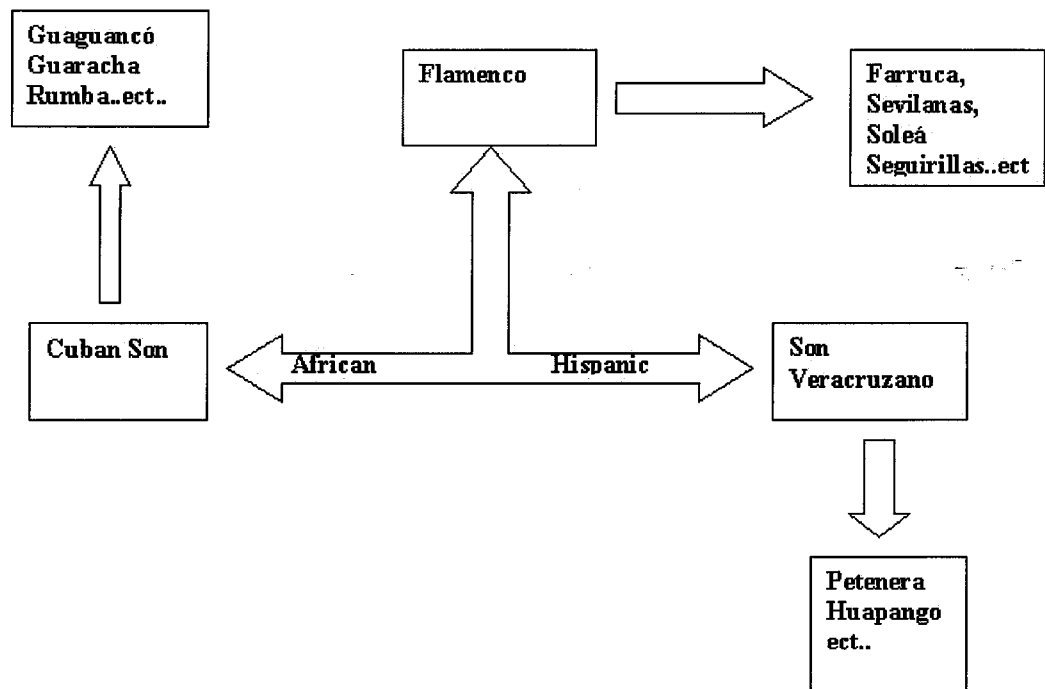


Fig.11

It can be said that Mexican music has accepted African and Spanish influences selectively. Figure 12 illustrates the triadic relation between these systems; Hispanic, Afro-Caribbean (Cuban) and Mexican. From the standpoint of Mexican music it is possible to identify an opposition between the Hispanic and the African constituents, leaning however towards the Hispanic side of the spectre, and retaining its own characteristics in the form of the actual rhythmic patterns.

Fig.12



The term Son, as understood throughout the Americas, has common structural features of the rhyme structure. Whereas in some countries this entity is referred to as “Décimas” instead of Son, because of the way syllables are arranged (in groups of ten. In practice Mexicans arrange verses in many different groupings and refer to them accordingly. Rhyme is arranged in an **aa, bb, aa, cc, ddc** fashion. In this case the arrangement is called a “quintillo”, since it is actually composed of repetitions plus a final repetition of “c”. “Mexican Son” designates a multiplicity of styles throughout Mexico. A specific style is usually identified by its place of origin. Hence a piece which originated in Veracruz will be called “Son Veracruzano”.

In Mexico, as opposed to other areas of Latin America, the word Son can be used in the same manner as “tune”. Son is used in this way to designate “Son de la Negra”, referring to that particular tune. For Indians Son has an ambivalent function: it is used both as in the above case, and also to designate specific musical forms, as in “Son del Pez Espada”.

4.3 The Son in the context of musical-cultural areas

The general idea of this section is to present an evolutionary process, by which the Son, as a musical style and as a concept, communicates. The Son carries diverse connotations, associated with a specific instrumental ensemble composed of the jarana, the violin and the harp. Other ensembles belonging to different musical areas in Mexico can be described as derivations and variations of this same concept. Each area has thus appropriated the idea and made variations according to a similar underlying meaningful structure.

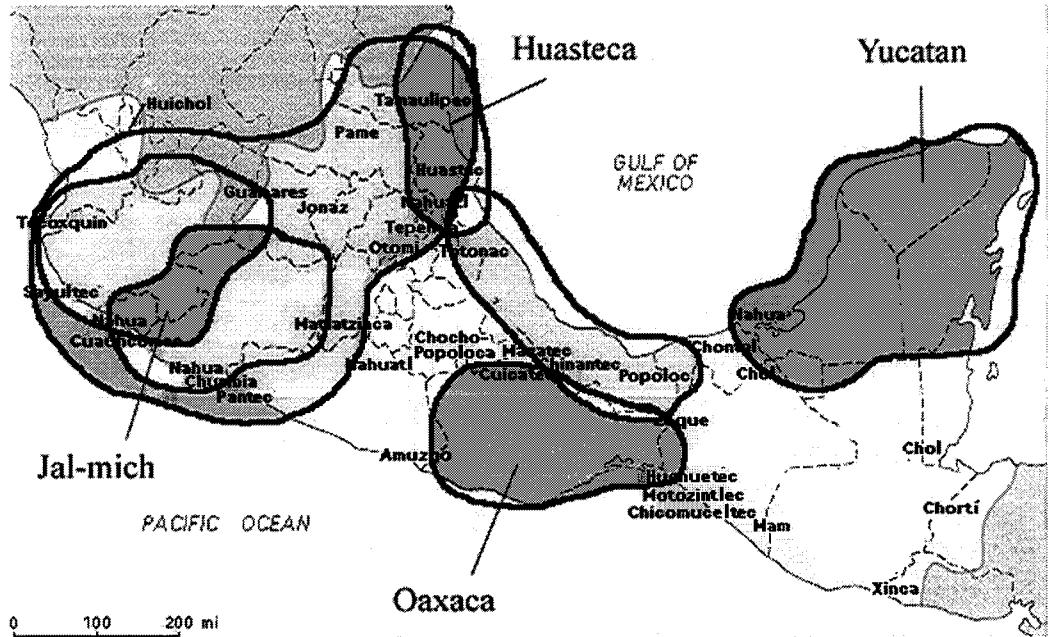
These areas are not construed as mere geographical entities, but as communicative systems. Figure 13 presents the cultural-musical area complex, (marked with a thick line) and the main “climaxes” (darkened), or centres that radiate their influences. This process is contextualized within the Mesoamerican area. The Huasteca as a generative area radiates towards the Bajío, and into Michoacán and Jalisco. Here, two musically heterogeneous areas combine elements inside the Jal-Mich area, creating the modern Mariachi ensemble. The Huasteca likewise, radiates southwards into Veracruz and Tabasco. This influence is felt in the form of Jarocho music.

This diachronic aspect of communication, that links the Huasteca with the Oaxacan area is less clear. This area is covered only as illustration of how the connotations of the Son, its forms and instrumentation are freely varied without rendering the system as incoherent. The Oaxacan area is also linked to Chiapas and Guatemala by the Marimba. Yucatán, is likewise not clearly explicated as a coherent continuation to this radiative model. Instead, it is a survey of another cultural element that links it to the rest of Mesoamerica; the Xtoles in comparison to the familiar Mitote.

The evolution of the Son is a process of flux, in which change is determined by sign saturation, substitution, translation and intertextuality. Each area and each community adapts the particular notions of Son to its needs. In this manner, while the Son is played with Jarana, Bajo Sexto and Violin in Veracruz, the Son Itsmeño of Tehuantepec is played with a brass orchestra in a sad mood.

Figure 13 illustrates the overall hypothetical diffusive pattern proposed herein. It sees cultural areas as systems that communicate, borrowing notions and structures.

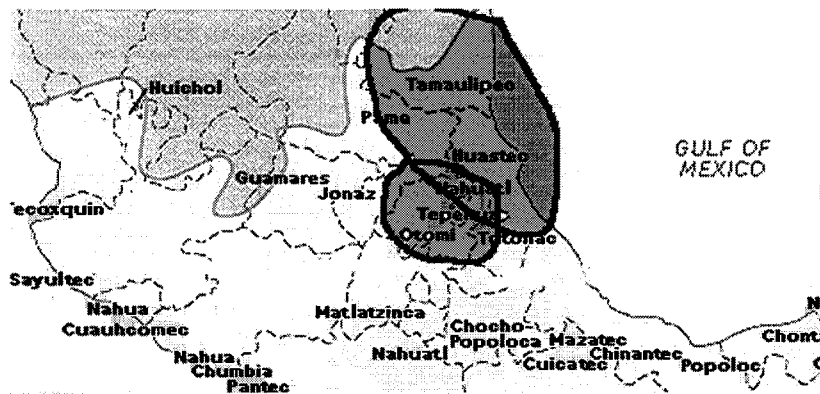
Fig.13



4.3.1 Huasteca and Veracruz

One culturally important area is the Huasteca, shared by the states of San Luís Potosí, north of Veracruz, south of Tamaulipas, and east of Hidalgo. We refer to these as Huasteca Hidalguense, Huasteca Veracruzana and so forth (Fig.14). The Son can be named Son Veracruzano or Son Jarocho or Son Huasteco, meaning respectively a particular Son from the specific region referred to by the name. Their forms are difficult to distinguish from each other. This indicates that the name of a specific Son functions as referent of local identity.

Fig.14



More than any Mexican style, the Son of the Huasteca and Veracruz exhibits striking similarities to the styles of the Venezuelan Llanos in terms of rhythm, the instrumental technique of the Mexican Jarana, and the Venezuelan Cuatro, as well as the functions assigned to each instrument. The use of drums in conjunction with rhythm instruments in Venezuela is a clear distinction. Musically the most obvious difference between Venezuelan folk music and the music of Veracruz lies in the use of the minor harmonic minor scale and profuse use of modulations, pointed out by Carlos Vega as being related to the cultural complex that he has called "mesomusic" and what which he calls the "escala antigua", or "pseudo mixolydian", a scale whose usage is the result of medieval influence in the Americas. The use of this scale covers a cultural area that spans the east of the South American continent from a thin coastal area in western Colombia, Ecuador and Peru, to the Pampas of Argentina. This indicates a clear difference in the development of Popular music between Mexico, Central America, and South America (Vega Carlos edit. Kaufman Kay 1990. p. 232-237).

The typical instruments of the Son Veracruzano are the violin (Fig 15), which accompanies the voice along with the other instruments, and alternates with the voice playing solo improvised passages. The jarana (Fig.15) is both a rhythmical and melodic instrument. According to the New Grove Diccionario of Instruments, its name is derived from an association with the Son type Jarana of Yucatán (New Grove Dictionary of Instruments 1984 p. 322-323). Bajo Sexto (Fig.15), mainly a rhythmic instrument. It is a larger guitar on a lower register

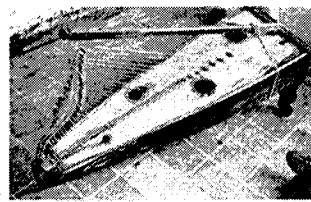
used to play counter rhythms with the jarana. It is often replaced with variations that are named according to the number of strings arranged in groups (órdenes), and the dimensions of the instrument. Other names to be encountered are bajo quinto. The harp is a rhythmic, melodic and bass instrument. Its introduction to Mexican instrument repertoire is said to be a consequence of the expulsion of the Jesuits. With this, the harp replaced the organ as a continuo instrument in church music. There is however, evidence of a much earlier use of the Harp in Veracruz, as part of the Jarocho ensemble (Schecter John M. 1984 p.152). The Harp shown in figure 16 is actually a 32-string harp from Michoacán. Figure 15 shows a typical trio from an Otomí community in San Miguel Tzinacapán. The ensemble is composed of Jarana, Bajo Sexto and violin. The group performed in Mexico City and explained that the Son they were about to perform was intended to ask the owner of the mountain (a spirit) permission clear some land for farming.

The Indigenous groups that inhabit the Huasteca are the Totonacs (linguistically Mayan) the Otomí, and the Nahuatl (Mexican).

Fig.15



Fig.16



4.3.2. Jalisco and Michoacán

The Purepecha, though existing well inside the convened boundaries of Mesoamerica, do represent a distinct cultural area. As was mentioned above, the Prehispanic cultures of the west of Mexico (Occidente) developed before the

Olmec expansion, featuring the same or very similar elements as the so-called archaic cultures of Tlatilco and Cuicuilco. The Olmec expansion can be considered as the breakthrough from the "formative" or archaic period, and the beginning of a strictly Mesoamerican cultural development. This Olmec expansion does not seem to have reached the states of Guanajuato, Jalisco and Michoacán.

The Purepecha represent a distinct cultural group for other reasons as well. Their architectural techniques, besides featuring round structures, are typical of the archaic-formative period. The Purepecha have been linguistically classified as belonging to the Chibchan family, of the Chibchan-paezan phylum, of which many groups inhabit the Amazon basin (Chamorro Arturo 1998. p.575).

The area of Purepecha cultural influence is also known as the Bajío, or lowlands, which includes Guanajuato, Jalisco, Colima, northwest of Guerrero and Michoacán. Musically, there is a striking contrast in the use of musical terminology, as well as in sound and melodic structures. The term Son is used ambiguously, as in the rest of Mexico, vaguely meaning tune. "Son abajeño" is used to describe a Son from the area known as the Bajío. There are also uniquely Purepechan styles such as Pirecua (or Pirekua), and Jarabe. The most obvious difference between music in Michoacán and Veracruz, would be its instrumentation, using vihuela (or guitarra de golpe) instead of the jarana, and the use of the "cuatrillo", four grouped notes in the place of 3/8 (Chamorro Arturo 1998 p.579). Jarabe could be traced as being related with the South American Yaráwi. The typical instruments of Purepechan music are: the vihuela, harp, violin and guitar.

The state of Jalisco as well as Colima, Sinaloa, south west of Zacatecas, and Nayarit are ethnically populated by people who speak Nahuatl, or other languages related to Nahuatl, known as the Uto-Aztecs (Britannica Encyclopaedia p. 599), such as the Huichol, Tepehuan, the Cora and the Mexicaneros.

In the realm of popular music this area is better known for the Mariachi Ensemble. According to Ochoa there is a close relation in the development of this ensemble centering in the area which he calls Jal-Mich (Ochoa Alvarado 1985 p.39), an area which according to Stanford was used during the colonial period as passing point for royal carriages (Fig.17).

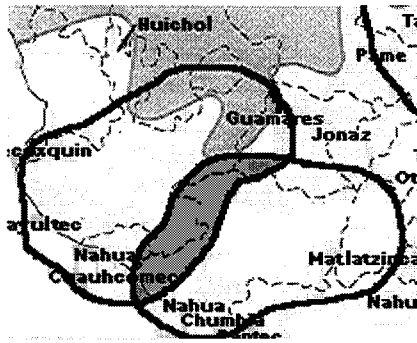


Fig.17



Fig.18

The instrumentation, however, seems to be an elaboration of the generative ensemble from Veracruz, to which they have added, with the advent of radio and television, the guitarrón, a four string bass guitar replacing the harp (Fig.18) (Stanford Thomas. 1984. p. 35). They have also added more violins to it, as well as trumpets. I contend trumpets in the Mariachi play the same structural melodic role, as does the violin in the Huasteca ensemble. Michoacán has continued to be a very unique musical area, with strikingly different melodic lines to those in other parts of the Mesoamerican area (Chamorro Arturo 1998 p. 580), despite the shared elements with Jalisco, such as a distinctive final cadence (Fig.19) (Stanford Thomas 1984. p. 36). Moreover, they do prefer to use their own instruments in Michoacán such as the 32-stringed harp (Fig.16) (Stanford. 1984 p. 36). The musical and stylistical repertoire of the Mariachi, on the other hand, is clearly appropriated from the aesthetic developments of the Huastecas, as the usage of the term "Huapango" illustrates. Figure 20 illustrates the overall pattern of diffusion from the Huastecas into Jalisco and Michoacán.



Fig. 19

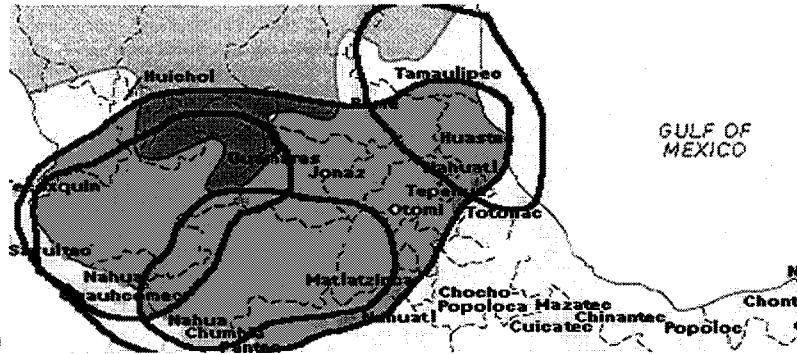
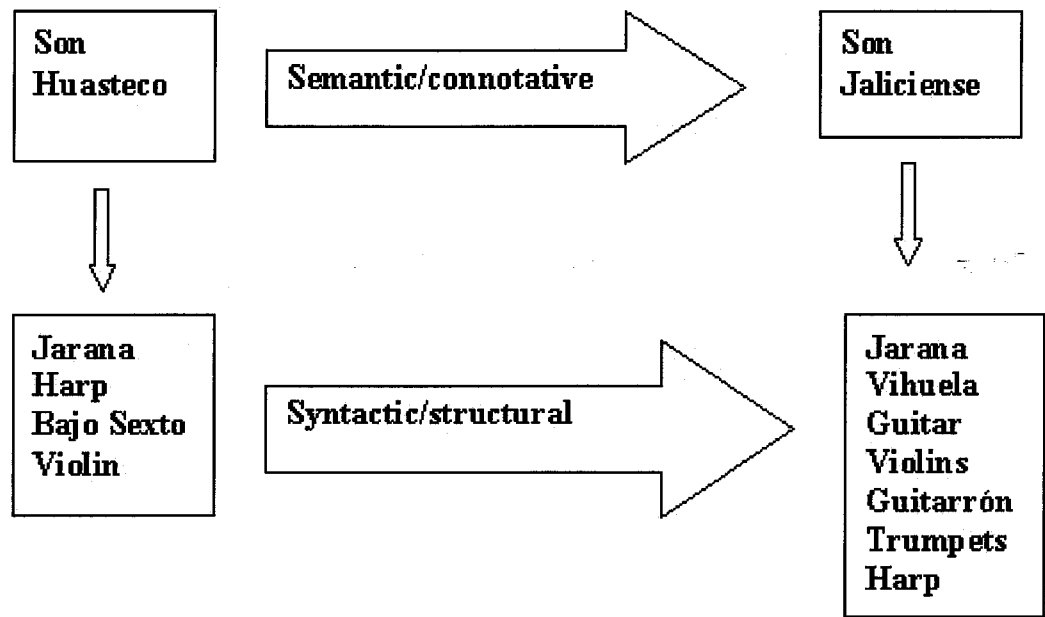


Fig.20

Change in the notions of Son can be described also in terms of intertextuality. The Son Huasteco has prestige among the Mariachi of the Jal-Mich area, and thus there are large quantities of Huapangos in the Mariachi repertoire. The Mariachi thus borrow terminology, geographic allusions, and musical rhythms, which undergo variation in a particular way to fit into the stylistic repertoire of the Mariachi. This integrates the Huapango into the repertoire of the Mariachi in a cohesive manner, making it one of its variants of the Son, on the basis of formal characteristics and stylistical qualities. The Huapango is coherently integrated on the basis of the connotations and associations it carries. While the Huapango in the Huasteca is identical with the Son (as a Mestizo expression), giving it the whole syntagmatic variability and functionality the term implies, the Huapango of the Mariachi is a particular rhythm with particular connotations: happiness, danceability, zapateado style. This is a process of semiotic saturation by which the need for new signs is satisfied.

Figure 21 illustrates the way in which the Mariachi ensemble has edited the original text of the Huastec ensemble at the semantic level, borrowing terms and adding associations, and at the syntactic level, borrowing instrumental categories, expanding them and adding more instruments.

Fig.21



4.3.3. Guerrero, Oaxaca, and the Isthmus of Tehuantepec

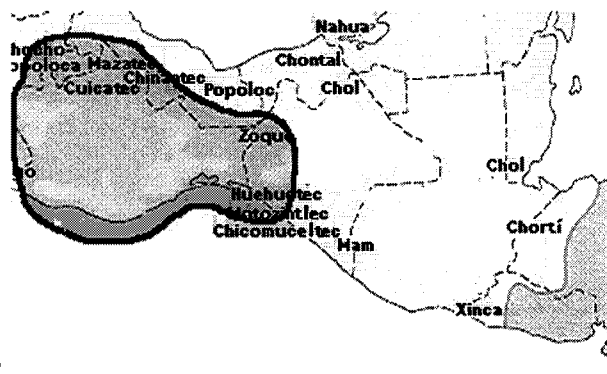


Fig.22

The area that shall be described next starts at the east side of the state of Guerrero and traverses the state of Oaxaca (Fig 22). The Isthmus area is culturally inscribed in Oaxaca. The different forms are named in the same manner as elsewhere: Son Mixteco, Son Istmeño, referring to specific ethnic and regional backgrounds. In the state of Oaxaca Indigenous peoples have appropriated a wide array of musical and technological resources from Europe.

Brass bands are typical of almost every region of the state of Oaxaca, and in some places such as the Mixteca, they have been included as part of the

compulsory community work known as "tequio", having thus become an inextricable part of indigenous life

The repertoire of the brass orchestras of the Mixteca is constantly renewed and it is clearly influenced by XIX:th century romantic European composers. Oaxacan music is greatly influenced by European tonalism and by South American styles, such as the Chilena and the Yarawi (Jarabe) (Nava Ricardo 1988 p. 60-61).

The Marimba, both an instrument and a performance style in its own right is built and tuned according to the well tempered system. Its origin, it has been argued, could be African, or an extension of the Mayan version of the Teponaztli, or a mixture of both. (Garcia Blanco Daniel 1992.p. 27) ¹⁴ The area of influence of the marimba extends at least from central Oaxaca, the Isthmus, Chiapas, Guatemala and El Salvador. Figure 23 describes the cultural area of diffusion for the Marimba, overlapping the Oaxacan area, and stretching into Guatemala and El Salvador.

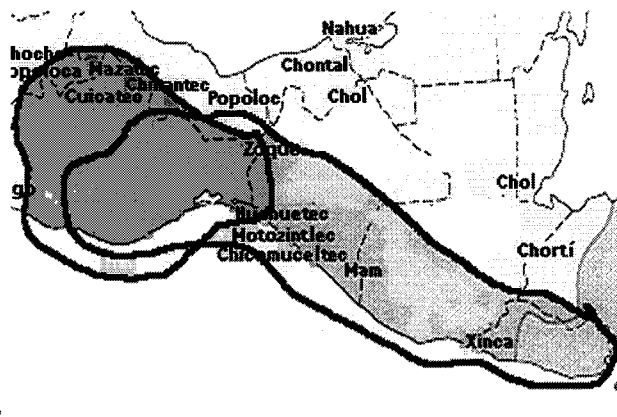
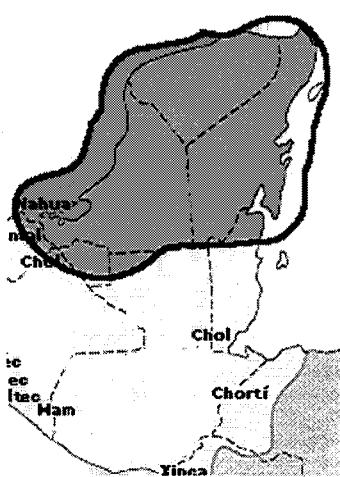


Fig.23

¹⁴ According to Daniel García Blanco, the "Vase of Ratinlinxul"; a Maya ancestor of the Marimba exists at the University Museum of Pennsylvania. Cuadernos de la Casa de la Música Mexicana. Casa de la Música Mexicana 1992 . p. 27

4.3.4. Yucatan: the case of the Xtoles, Mitote and Areito as carnivalistic expressions.

Fig.24



Mayan identity is arguably more present in Yucatan than indigenous identity is in other parts of Mexico. Musically the area is characterised by an eclectic combination of Afro-American rhythms such as the Bambuco, originated in Colombia, appropriated into the repertoire of the "Jarana Yucateca", also called "Trova Yucateca" (Esquivel Diaz Raul. 1992 p.26). In this case Jarana is not the instrument as elsewhere in Mexico but the ensemble, including bongos, congas, guitars and vihuelas (Bock Phillip K. LAMR Spring/Summer1992 p. 36). According to Behague, the name Jarana designating the ensemble, was appropriated from the instrument originated in Veracruz (Behague Gerard. edit. Nettle Bruno 1973. p. 200). The field of Yucatecan Mestizo forms seem to be somehow isolated from the rest of Mexico. It is difficult to elaborate a coherent discourse in which to articulate the Yucatecan concept of the Jarana, associated with a Colombian dance. According to Raúl Esquivel, the Jarana designates a musical style.

Yucatán has many particularities, its geography is atypically flat, its population is very homogenous, as well as the use of the Yucatecan Maya dialect. Furthermore, Yucatecan Maya is one of the most populous in Mexico. Historically, the Maya of Yucatan resisted longer the Spanish conquest. According to some scholars the "Guerras de Castas" (Wars of Castes), at the end

of the XIX century with the rebellions associated with the Mexican revolution, were the last attempts by the Mayas to rid themselves of Spanish imposition. If compared with the almost immediate conquest at the centre of Mexico, we see a difference of several hundred years for the final crush on Indigenous resistance to have happened. Cultural resistance though, as with other surviving groups continues among the Mayas. This could explain the reserved nature of Maya folklorizations, as a means to present their traditions without actually opening their meanings to outsiders.

One of the most popular indigenous dances is the Xtoles, meaning "clowns". This dance was "discovered" during the 50's and folklorized by the dance company of Amalia Rodriguez, receiving world acclaim. The dance is now performed in folkloristic shows for tourists in Merida (Bock Phillip K. LAMR Spring/Summer 1992. 35-55).

While there is a clear discontinuity between Yucatan and the rest of Mesoamerica, there is one connection associated to the name of the dance, "Clowns", the Caribbean "Areito" and the Mexican "Mitote". This connection again binds together cultural areas which are geographically and linguistically very far apart.

The Hispanic term "mitote" is derived from the Nahuatl "mihtotia" which means dance. In strict language usage it has no specific connotation. The phrase in modern Nahuatl: "Nimihtotia ce Huapanco", means "I dance a Huapango". Dance is not, however limited to orderly ritualistic practice, or shall we say; not all ritualistic practice is meant to represent an orderly world.

The use of the word "dance" (mihtotia) was first encountered by Spaniards in associated to disordered parties which ended in uncontrolled orgies. Spaniards first encountered them in the Antilles by the name of "Areito". Gómara describes them as:

"Multitudes of people dance at these areitos, sometimes for a day and a night They end up drunk on a certain native wine". (Thompson Donald LAMR Fall/Winter 1993 p. 186)

The Taínos, the first Indians Europeans encountered, were represented in Europe as the ideal noble savages as opposed to the Caribs, from whom the term “cannibal” was derived. The image of the noble savage was supported by many other versions according to which Areíto was a dance-musical celebration in which ancient history was reviewed. It can be inferred that the term was simply generalised to refer generically to all dance festivities of the Indians. This can be explained in terms of semioclasms, the destruction of meanings, presumably the as a result of lack of familiarity with an unfamiliar code, as well as lack of empathy with people who were seen as an enemy.

Notwithstanding the meanings given by the Spaniards, there is a place in the world of the Indian for "carnavalistic" celebrations, which Europeans readily utilised to represent Indians as immoral, mischievous and in need of indoctrination and guidance. The Mayan word "Xtoles" as meaning "clowns", has a very similar function in the Mayan context. The carnivalesque is present in many other celebrations throughout Mesoamerica.

The word Nahuatl word "Mihtotia" (dance) has likewise acquired a distinctive connotation. In Michoacán it is identified with the Purépecha term "Guaracua", which has later been adulterated in Spanish into "Guaracha" (Ochoa Alvarado 1985 p.41), which is terminologically reminiscent to the Afro-Cuban Guaracha.

5. Analysis

5.1. Scope of the analysis

The taxonomy presented above was intended to classify and to identify different constituents of Mexican Hispanic folklore, and relate them to cultural areas, determined by the evolution of Indigenous forms.

The following section is intended to identify and explicate, how the musical structures present themselves, in both the Indigenous as well as in the Mestizo repertoire, as part of the communicative system of the Indigenous universe. This

analysis thus, compliments the taxonomy, illustrating the dualistic character Mestizo music, seen as an extension of the Indigenous worldview.

The purpose is to determine some of the various links between the structures of the Indian worldview, their mythical consciousness, and musical practice. Therefore, the analysis alternates between content analysis of narratives and musical formal analysis.

The selected material, seen as a whole displays a remarkable unity in structure, while thematically, the choice of samples is very diverse. The narratives of Indigenous examples exhibit different representations of mythical consciousness. This consciousness can be traced also in Mestizo examples. Mestizo examples feature similar musical structures, if analysed on the same terms.

Furthermore, while these indigenous pieces exhibit the structures that were presented in previous sections dealing with myth and cosmology, as rhythmic-melodic structures, "Son de la Negra" and "Jarabe tapatío", which belong to a very different cultural context, Mestizo and essentially secular, exhibit them as well.

Far apart as they are culturally and geographically, the Cuna melody and the Huichol melody, can be analyzed in terms of their melodic structure and producing similar results as the rest of the selections. Of all the selections, only the Huichol example, which is part of a peyote ritual, is vocal. There has been thus, an emphasis on the instrumental features in this music in my choices.

I have strived to make a selection that encompasses the widest possible array of musical behaviours. Accordingly, these examples have a widely varying degree of social uses. Alcarabán exhibits the use of microtonal scales for which it has a special place in this work. It also exhibits the use metaphor in music, as it imitates the song of a bird of the same name.

Danza de la culebra is a theatrical piece which represents the killing of a snake. The sounds of the dying snake are "sung" by an actor disguised as a snake, who touches the audience with a toy snake. The members of the audience are drawn in this way as participants. While this piece also exhibits the use of microtonalism in music, what attracts me most to it is its use of rhythm. The way in which the rhythmic pattern is inverted to form its retrograde to introduce tension into the music. Son del Pez Espada falls into this category as well. Both of these pieces illustrate the use of "continuum" applied to rhythm. Son del Pez Espada however, applies it as a structural element forming the beginning and conclusion of the piece.

Danza de las Varitas feature a special melodic hierarchy which can be observed in many Mariachi, and therefore Mestizo pieces, such as Son de la Negra. Namely: the use of a leading tone towards the dominant. In this way we can draw the superimposed cultural circles between indigenous musical aesthetics and Mestizo music.

Finally, I shall analyse the dance "Los Voladores", from the standpoint of performance and form. This piece exhibits all the elements related to symmetry and the concept of five.

5.2 Methodology of musical analysis

I have made transcriptions of the chosen material. Western musical notation seems more useful in the description of western music. Its greatest limitations in describing indigenous music lie in the great difficulty to notate continuous glissandos as well as the rhythmic continuum, with any accuracy at all. Therefore I have resorted to simply describe these phenomena by means of verbal and graphic allusions, supported by the structural facts observable through notation. Western notation is very useful though, in the description of passages with regular rhythmic pulsations as well as with discrete pitches.

First I have indicated the smallest meaningful fragments in every section of the music. Having analysed these elements as they appear in the indigenous

examples, I have further analysed them according to the melodic line, symmetrical placement of motives revolving around the concept of five. I have also identified microtonal passages, as well as the use of rhythmic variation, as evidence of the use of the continuum.

I will compare the indigenous examples to their Mestizo counterparts in terms of the musical structures already mentioned. I will undertake modal analysis, that is; I will indicate what types of hierarchies are at work in the construction of scales. This is where the concept of duality, numerology and symmetry, reviewed earlier in this paper, come into play as normative elements.

5.3 Xopan Cuicatl

Nezahualcoyotl is relevant as an exponent of Prehispanic Mexican culture at its highest point. This poem makes explicit allusions of codes by which musical values were appreciated in Prehispanic culture. It is therefore a reference to understand how mythical thinking and music are related. Furthermore, his use of figurative meanings exemplifies the tendency of Mexicans towards use of metaphor.

There was profuse use of tropes in prehispanic poetry. In this poem, Nezahualcoyotl praises the court musicians:

Amoxcalco
pehua cuica,
yeyecohua,
quimoyahua xochitl,
on ahuia cuicatl.

In the house of poets
He starts to sing
He sings and sings
He pours flowers
Gladdens the song

Nezahualcoyotl mentions how the musician imitates the sounds of birds and water. According to Nezahualcoyotl the musician brings the birds and water to life in his music:

Xochitlacuila,
in yectli cocochtli,
ye con ya totoma
aitec.

Zan connanquilia,
in nepapan quechol,
in yectli quechol,
in huel ya cuica.

Above the flowers sings
A wonderful peacock
His song opens
Inside the waters
And to his song reply
Numerous red birds
Wonderful red bird
How beautifully it sings

The activity of the musician is praised because of his function as a preserver of memory. The musician transmits collective memory, recorded on books, whose knowledge only available to the Tlamatinime, expressing his truest feelings, symbolised by his heart:

Amochtlacuila in moyolo,....
....
Zan icmoyahua...

Your heart is a book of paintings..
....
Only you shall remain....

The passage of time is again invoked, as well as the temporal permanence of music. Music is rendered a special place in the movement of the universe. This

allusion of birds as referents of time reminds us of the Lord of Time as pictured in a fresco at Teotihuacan, surrounded by four owls. (Fig 25).

We can also imagine the sound of water and the continuously descending scales in contrast with the strict pitch and timing of the Teponaztli and Huehuetl.

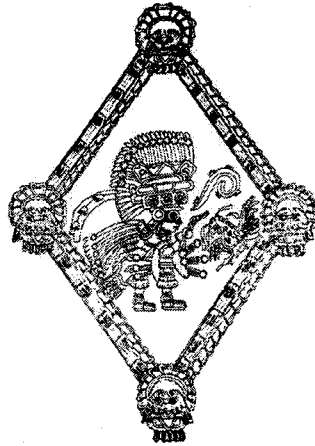


Fig.25

5.4.1. Alcarabán

It has been said that when a myth is evoked in a strong cultural context, music loses significance acquiring its communicative power from the mythical narrative itself. It has also been stated that music can be the media which gives life to myth, through performance (Tarasti Eero1979 p. 30).

Alcarabán (see below) displays a stylised imitation the sound of a bird. It is possible to make a clear separation of musical expression and mythic expression. The sound of the flute has more similarities with many other passages in Indigenous music, such as the Suya's "akia" (shouts) (Tarasti Eero1979 p.47-51), or the mannerisms of Julián Carrillo. The similarity with the actual sound of the bird seems slightly far-fetched. It can be said thus, that the use of a stylistic resource is thus associated to the particular bird because of the context in which it appears.

The sound can also be interpreted as a figuration of the animal to be imitated. A variation of its many constituents. In the dualistic world of the Indian it is perfectly acceptable for beings to interchange identities as they appear in different contexts. Thus the sound of the Alcarabán, figured and stylised in musical practice can retain its identity while producing a very distinct impression. Indeed the actual sound of the Alcarabán and its musical representations are oppositions in the continuum of Indigenous mythical consciousness seen as a communicative system.

It has been said that the actual presence of an instrument and its sound in musical context can actualise myth even without the explicit acknowledgement of the author (Tarasti Eero. 1979. p. 32). In this sense it is conceivable to perform an archaeology of the mythical sign. The musical resource refers directly to the idea of the bird. The idea of the bird as signified, is further articulated as part of mythology. Birds have been associated with time, fate and destiny, whether presented as Quetzalcoatl, rising from east side of the sky, the lord of time surrounded by four owls, the hummingbird heralding the rise of the Aztecs, or the eagle as the Sun rising into the zenith and falling into the underworld. Time plays a crucial part in the notion of continuum, as it is here articulated into the concept of the Indian universe. The continuum represented as a stylistic musical resource appears in performance evoking the sound of a bird. In this sense the meaning of the musical resource is determined by the cultural codes that connect it to the notion of time.

Figure 26 represents the Alcarabán motive according to a Barthean model (Barthes Roland 1983 p. 124), whereby the melody is rendered significance at different levels. It is possible to speak thus of a first articulation, to use Tarasti's terminology (Tarasti Eero.1979. p.31), at which the musical resource, that I shall call melody, is associated to the bird, thus creating the sign-melody, and a second level by which the sign-melody signifies the notion of time in the context of Indigenous mythology. This second association can be here called the continuum.

melody	bird	
melody as a sign		bird as a symbol of time
melody as a symbol of the continuum		

Fig.26

5.4.2. Musical analysis of Alcarabán.

This indigenous Son was published by the ENAH and played by an Ikoods (Huave) performer of the Isthmus of Tehuantepec. The name of the song, Alcarabán refers to a bird. Thus it represents the "naturalistic" repertoire, which imitates different elements of the environment. According to Arturo Warman the present form of this piece might have developed during the XIX:th century (Warman Arturo 1968).

It exhibits the same sequential movement as Son de las Varitas and Son de la Negra. It is also based on binary melodic motives which express symmetry. My rhythmic notation is only an approximation of what happens in the actual recording, since in reality the tempo fluctuates speeding up and slowing down at every bar, which is a clear example of the use of the rhythmic continuum. The overall structure of the recorded sample is ABA, in which A is the basic theme, and B is the "solo" section, followed again by A before ending.

The A section can be divided into a; a pair of consecutive thirds moving sequentially which is played twice every time, starting at measure one and lasting until measure four. This is followed by part b; another pair of thirds moving sequentially, but instead of accomplishing the sequence at measures eight and twelve, it resolves to note d. Together they form the whole motive which is thus constructed as a large sequence of four pairs of notes.

The "solo" section consists of a microtonal passage; a scale which starts at a and descends first to f, then to eb, to db and finally to b, forming a whole tone scale. It dwells around db and b for a while and goes back to a, where it starts a

movement downwards in intervals that vary in size: major seconds, minor seconds and quarter tones, until reaching a slightly lowered d from where it jumps to its highest point: b. The performer uses technical effects such as fluttering and overblowing, particularly at measure 16.

To me, this is one of the most revealing passages. It is reminiscent of the typical mannerisms in Julian Carrillo's music, as well as the "shouts" of the Suya. The disposition A, B, A, in which B displays the microtonal descending passage is symmetrical in the same sense as the examples shown before:

[A, [B], A]

The fact that B is placed at this privileged position displaying precisely this resource brings to mind the concepts of movement (ollin), and time in the mythological thought of Indians.

7.5.1. Danza de la Culebra

In the same manner, Danza de la Culebra (Dance of the Snake), is a theatrical performance of the killing of a snake. The killing of the snake is a necessary activity in clearing the fields for a new harvest. Snakes though, are seen as beneficial in getting rid of pests. The pain of the snake is thus evoked through the cries of the performer. The snake is also a phallic symbol. A masked male performer portraying the snake, cries as he passes the snake in front of the breasts of the women among the audience. Women and femininity are articulated as symbols the earth, while the snake represents the water pouring from the hillsides. This brings to mind the myth of Coatlicue, the Earthmother, a mountain from whose slopes pour rivers resembling snakes. The drum represents the beating of the sticks as farmers slaughter the snake. The crying of the snake appears as a low, trembling and descending note every now and then, in sharp contrast with strict arrangement of the melody and the interplay with the drums, producing symmetrical structures.

5.5.2. Musical analysis of Danza de la Culebra

The place of retrieval of this piece is the Isthmus of Tehuantepec. It is played by Ikkoods indians, also known as Huave to the Zapotec or Mareño to the Mestizo. This music is used to accompany a dance which, as I already explained is theatrical.

The basic motive (A) is divided into two parts: a in bar 1, and b in bar 2. A single note, functioning as an anacrusis leads into the repetition of the motive which varies on bar 4. Motive B starts at measure 5 and is also built of two parts; c and d. Part c can be further divided into c' and c''. c' starts at note e and lasts for two beats. c'' exhibits a group of notes at beat 3 (d,e,f.) which is reminiscent of beat 1 of motive b (e,f,g) which spans the whole measure, if we see note b as an anacrusis. In this sense it can be said that part c'' is a rhythmically diminished version of b, where accentuation has been shifted from beat 1 and 2, to beat 3.

Part d exhibits two quarter notes at beat 1 and 2 of measure 6. Together, part c and d exhibit a rhythmically retrograde version of motive A, in that the heavy rhythmic element of two quarter notes is shifted to the second part of the motive, accentuated at measures 5, and on 6 on beats 1 and 2 with leading tone c# moving into d. It is important to note that there is an emphasis on note d as the dominant of the first note of the melody (g). So for the melody we have the following elements:

Motive 1: (A,B), motive 2: c composed of (c', c''), and d.

The whole form:

A, A, B, B

or

[a, b, a, b,] [c', c''] [d,][c', c''] [d]

Ten parts in all, with no apparent centre of symmetry. However, as I already mentioned, c'' is an imitation of b where the accent shifts to the second half of the bar which makes c'' an important motive. If we see motive c' as relatively unimportant, serving only as a bridge leading into the rhythmically diminished

c" (lasting only two beats), which leads to the long motive d, containing the leading tone c# and dominant d, c" does appear as being at the centre of the melody, functioning as the end of A, and the beginning of B, changing the disposition into:

[a, b, a, b, ,[c"], d, c', c", d]

Where c" is the centre of symmetry.

The melody is accompanied by a small drum and a bass drum. The small one plays steadily in measure 1 accompanying the rhythmic pattern of the melody. In the second bar the bass drum comes into play striking the first and the third beat while the small drum continues with an unaccented constant beat. Bar 5 exhibits a shift of the rhythmic functions of each. The bass drum now accentuates beats 1 and 2 while the small drum continues its unaccented pattern passing almost unnoticed. In this manner the bass plays a counterpoint against the motive 2 which is a variation of motive 1 and does not accentuate beats 1, and 2. It can also be seen as an imitation of motive 1 in the flute and the small drum. Bar 6 is a return to the basic beat corresponding to part B or D.

5.6.1. Danza de la Varitas

“Danza de las Varitas” (Dance of the Sticks) represents a battle sometime in the distant past. The sticks are figurations of weapons, and the dance represents groups of warring soldiers. Like myth in Indianist music, in this case myth represents a distant golden age. The high note on g can represent the sound of a military call, while the rhythmic variation on the drum represents “movement”. Conceivably it represents the movement of troops, while movement as “ollin” is a basic concept in indigenous cosmology, representing the movement of the universe, the passage of time.

5.6.2. Musical analysis of Danza de las Varitas .

The piece on which this transcription is based was originally recorded during a festivity at Aquimsón in the state of San Luis Potosí. The name of the performer, as well as the date of performance are unknown. It was published by the INAH as a vinyl record in 1968.

As far as can be inferred from the published version, the whole performance is based on constant repetition of this same motive. Variation happens internally as part of motivic development.

Rhythmically, the piece is based on a 6/8 motive. The drum accompanies on an eighth note pattern ostinato. At bars 8-9 the drum plays a sort of counterpoint against the expectant g of the flute. The drum pattern performs a crescendo during bar 8 and changes the accentuation pattern to 3/4 at bar 9.

The motive can be divided into four parts:

- A) The submotive at the first bar based on g and e.
- B) A submotive based on a sequential movement of thirds, which starts at bar 2 and lasts until bar 6.
- C) f# as leading note to g as the highest point of the motive.

A lasts for one measure, and is not repeated. It is composed of two parts: part 1, a note g with a duration of an 8th, and a note e with a duration of a 4th., and part 2, three 8ths: g, e, and g. This is a binary opposition of long/short constituents. Submotive B is a sequence that can be characterized as a repetition of the same rhythmic values; an 8th, a 4th and an 8th, five times. It can also be described as a descending sequence of thirds. We can divide B into a,b,c,d,e.

C features the high point of the tune (note g, with leading note #f), and a long note g, followed by rhythmic variation lasting two measures.

We thus have:

A, [a,b,c,d,e] C

Where part B, being a long motive composed of short submotives opposes A, being a short motive composed of a complex arrangement of long and short. C presents the longest note and rhythmic variation. This Son can thus be seen as a symmetric triadic arrangement, with its centre on B.

5.7.1. Son de la Negra

“Son de la Negra” resorts to abundant metaphors, allusions and metonyms:

Negrita de mis pesares,
Ojos de papel volando

Black girl who makes me grief,
Paper eyes that fly.

The black skinned girl probably represents the mixture of African and Indigenous heritage at the coastal areas of Jalisco, Colima and Michoacán. Her eyes are compared to a very thin coloured type of China paper, used as decoration.

It has been said that texts are edited as part of a process of infinite semiosis, and semiotic saturation. It is conceivable that myths are present, even if not overtly, in the structures of music. The happy humorous and sexual allusions of “Son de la Negra” are in accordance to the rhythm, often associated with the Huapango. It was said before that Huapango is associated to the Huasteca. Here the values associated to the Huastecans since Prehispanic times, as shown by the how the Otomí associated overt sexuality, is actualised by the Mariachi repertoire. The Huasteca is, likewise a far away land, geographically as well as semantically.

5.7.2. Musical analysis of Son de la Negra

This sample was recorded at a "charreada", by Gerard Kremer. The instruments are:

Jarana, Vihuela, Guitarrón, two trumpets, two violins.

The recording starts with a rhythmic motive of one eighth and two consecutive sixteenths played by the Jarana. The chord is dominant g 7th with a suspended 4th. At bar 2 it resolves to a dominant function with a 6/4 chord with a rhythmic motive based on eighths and quarters on a 5/8 bar, on bar two. It returns to the 3/4 meter and rhythmic units of eighths. Tension is released by “resolving “on the 6/4 chord in measure four. Bars 5 to 9 exhibit an inversion of the first rhythmic motive. This leads to the beginning of the melody played by the trumpets with an anacrusis at bar 12.

Bar 13 marks the beginning of the melody as part A, composed of a, and b. Part a, lasts four measures, with a scale that rises steadily up to its highest point e, through its leading note d# creating a chromatic voice leading from d to d# to e. Part b is itself divided into b' and b". Part b starts as note d natural is restored as the scale returns downwards reaching note g at measure 16. Part b' variates at b" in measure 16. Part b" can be seen as a retrograde of part a, beginning at the second beat of measure 16 and creating a wave like motion.

So far we have:

a, b', b"

The melody starts again at measure 17. The conclusion of the repetition of motive A is interrupted by the appearance of motive B. Motive B, which features a succession of 5/8 and 3/4 bars, can be divided into Ba and Bb. Since each of these is composed of two parts, we shall call them respectively: Ba, Ba', Bb, Bb', Bc, Bc', Bd and the non-existent Bd'. Motive Ba starts at beat 2 of measure 20. It is a sequence whose motive spans measures 21-22, and again 23-24. The first 5/8 bar can be opposed to the following, by the rhythmic emphasis on beat 2 of bar 20, as opposed on rhythmic emphasis on beats 1 and 2 of bars 22 and 24.

B is repeated as Bc, and then as Bd, with a small rhythmic variation at measure 26 which is 4/4 and replaces the expected Bd' motive, with a cadential

movement resolving into the tonic C through the dominant with an augmented 5th (the leading tone to the third of the tonic). This too can be interpreted as an interruption of the expected repetition of motive B. There is thus, a symmetrical relationship between bars 20, 22-24 and 26, in the following arrangement:

[20, [22-24], 26]

The next section (C) is a variation of the first part with a sequence of thirds, by the violins without the melody of the trumpets, that reminiscent of other examples; Jarabe Tapatío, Son de las Varitas and Alcarabán. The sequence lasts six measures, where measures 29-32 (Cd) feature alternating tonal functions IV, I, V7, I. This pattern is not continued another time in Cd', from measure 33 to measure 36. Instead it is interrupted at measure 35 by a syncopated rhythmic movement, and a resolving cadential melody on the trumpet. This, again is an example of the unfinished pattern.

The whole form can be expressed as:

A, B, C

Where the disglossed version would look like this:

a, b', b'', Bb, Bb', Bc, Bc', Cd, Cd'

or in a symmetrical fashion:

[a, b', b'', [Ba, Ba', [Bb, Bb', Bc, Bc'], Bd, (cadence)], Cd, Cd']

Where section B functions as centre of symmetry.

5.7. El Durazno

In El durazno, the narrator makes associates woman and the earth. Man is a giver to the earth through his ability to work, and he is also a receiver, enjoying the fruits of his work.

Me he de comer un durazno
Desde la raíz hasta el hueso
Los ojitos que te quieren
Desde lejos te saludan

I shall eat a peach
From its root to the bone
These eyes that love you
Greet you from afar

The narrator announces his departure to another place to work and asks for his family and friends to pour dirt upon him, as a reminder of his kinship with the land.

Mañana me voy, mañana
A la tierra de Colima
Adiós hermanos y amigos
Échenme la tierra encima

Tomorrow I shall leave
To the land of Colima
Goodbye brothers and friends
Pour some dirt upon me

Again the feminine qualities of women are associated to the earth. There is an association between the concept of Man communicating implicitly with the mythic Earthmother, who is actualised in this narrative.

5.8.1. Jarabe tapatío

“Jarabe Tapatío” is a mixture of South American influences with Mesoamerican structures. Jarabe is reminiscent of Yarawi, the Andean grief song. Yarawi arrived during the XIX century in Mexico as part of operettas and musical productions mixing South American dances and Mexican styles, in the form of pot-pourris. The Yarawi was brought as an evocation of a far away place, yet evoking the common heritage of Spanish-speaking America, a nationalism akin to the liberal movements of Bolivar in South America. Again, there is continuity melody and structure, but not in the way these are associated to mythical thought. Furthermore, there are linguistic and archaeological precedents of contacts between Michoacán and South America. of pieces, displaying many of the same features with indigenous examples, even with a piece as far away as the Amazon. Likewise, Indigenous pieces are In contrast to this, Indigenous styles display of styles that reflect the particular character of a cultural area, while also displaying the unity that characterises the Indigenous worldview. Through Son de la Negra and Jarabe Tapatío we exemplify the diversity of meanings in the Jal-Mich area. Music serves, as in previous examples as a means for communication.

5.8.2. Musical analysis of Jarabe Tapatío

This is another example of the way melodic lines are treated in the Mestizo repertoire. Again, this is a standard in the Mariachi repertoire. The melody starts as an upbeat at the third beat in bar 1. It rises a semitone to f where it initiates a downward sequential movement of thirds; notes f and a, e and g, d.and f. As the sequence reaches e, in bar 3, the melodic range of the piece increases as much as to an ninth, from note g, to note a. On measure three it reaches an octave on the second and third beats, and a seventh at measure four, from note b to note a.

The melody reaches stability through a leading tone which leads to g, on the weak beat of measure five. Downwards sequential movement resumes at the next measure leading to another widening of intervals, in measure seven. Measure eight starts at the highest point of the melody with leading note b, leading through a descending passage to the tonic note c on measure nine.

The overall structure of the passage can be constructed as follows:

c, a, b, b', c', a, d, d', c''

Nine parts in all, where c is the upbeat note in measure one, c' is note g in measure five, and c'' is the final c, on measure nine. They can be arranged with note g as the centre of symmetry:

[c, a, b, b', [c'], a, d, d', c'']

As in the Son de las Varitas there is a leading tone to the dominant. There is sequential movement and binary motives.

5.9. Cuna melody.

The melodic contour of this melody is reminiscent of the Jarabe Tapatío. The melodic range is an 12th from g at the first measure to c# at measure 9. Part A begins at measure 1 and lasts until measure 6. Part A is composed of motive a, and motive b. Motive a starts at the last upbeat of measure 1 descending throughout measure 2, stopping at d#, lasting one measure. Note d is repeated before returning back to g. Motive a, is repeated, only this time continuing to what could be motive b; a whole tone passage, oscillating from c# to note a and stopping at note b, lasting two measures.

Thus we have part A composed of:

a, a, b

Part B is a thematic development of A. Thematic development continues with the same motion of the first motive, only now it is transposed a minor third downwards, with the upbeat on note e (beginning at the second half of beat 4 , measure 5), which we will call a'. Part b' of B now assumes a pentatonic mode. The descending movement starts once again, a minor third downwards from c#. The oscillating motive now revolves around a diminished triad.

Thus we have

a, a, b, a', b', a', b',

This piece exhibits a symmetrical disposition in which two short phrases (a and a) are opposed to one long phrase, composing part A. This first part is opposed to part B, in which motives of the same length are presented in succession. Part A can be thought of as being composed of three parts (a, a, and b), displaying binarism and opposition between long/short categories. The crucial point of this passage lies at measure six, which is part a' and the beginning of part B. The disposition of the passage can be presented as:

[a, a, b, [a'], b', a', b']

Where a' functions as a centre of symmetry.

5.10. Huichol Peyote Song.

This example is a song performed as part of the Peyote ritual. It is not the scope of this work to go into more detail in the description of this particular ritualistic context. With this example I intend to present the idea that Indigenous music does include melodies based on major triads. Following Henry Stobart's ideas it is possible to assume that major thirds were first learned in America after listening to the overtone series in aerophones. This particular sample can be characterised as a tetratonic scale.

The total range of the melody is a major sixth, from its lowest point c to its highest, a. The axis of symmetry would be the minor third between g and e, expressing number five, the centre. The form of the melody can also be analysed as implying the number four.

The beginning motive, based on notes c and a (measure 1), works as a sort of introduction to the g-e motive (last beat of measure 1 and first and second beats of measure 2), which is repeated three times fading away. This, in itself contains all the material necessary to generate the rest of the tune: a major sixth, a second (a and g, measure 1), a minor third (g and e), and a fifth, actualised only at the second part of the tune, where the motivic cells are varied by subtractions of note a. This second section starts at the second half of beat 3 of measure 2, with three successive c's. This is an imitation of the original motivic cell at measure 1, displaced rhythmically half a beat backward. This group of three notes is answered by a repetition of the g-e motivic cell, now repeated only two times, lasting the first two beats of measure 3, instead of three, as in measure 1 beat 4, lasting until measure 2, beat 2. This pattern, lasting from beat 3 of measure 2 into beat 2 of measure 4, is thus achieved by diminutions of the original motive which lasts a total one and a half measure, and repetitions of the motivic cells. The whole second motive thus lasts longer than the original one (almost two measures). This creates a symmetrical opposition between parts 1 and 2, where part one has a total of four notes (c,a,g,e) and part two has only three (c,g,e). There is no central motive as such. Instead, number four is expressed by the successive appearance of the motivic cells. Part one has a symmetric disposition expressed by what we shall call section a (note c repeated three times), b (high note a, repeated three times) and c (notes g and e, repeated three times). The structure of this motive is:

a,b,c,

Where a and b are considerably simpler than c, and thus are opposed by a simple/complex relation. Furthermore, this is a triadic relation, that can also be represented as a dual structure where a and b are one motivic cell opposed to c.

This is however inconvenient since variation at section 2 is undertaken by means of subtraction of note a, making it thus a significant motivic element.

Part two is essentially dual, presenting two identical repetitions of motivic cell a, and a diminished version of c; c'. The structure of part 2 is thus:

a,c',a,c'

The whole structure is:

[a,b,c,][a,c'a,c']

There is a binary, and thus symmetric relationship between parts 1 and 2. After having been sung in this manner it then starts again, imitated by the rest of the participants in an antiphonal manner.

5.11.1 Voladores.

Los Voladores, or "Flyers" are a dance-music-performance, popularly associated with the Totonac town Papantla, within the Huastec area, in the northern part of the state of Veracruz. The meaning of this dance is unknown to the Mestizo population.

The musical performance consists of five different Sones (as in tune), that are dedicated to the four corners of the universe-earth; north, south, east west and the centre. The musician stands at the top of the pole facing each of the four corners playing a different Son every time. The fifth son is played to accompany the flight of the dancers downwards as the ropes unwind, allowing them to descend until they reach the ground.

According to Phil Weigand and Cristopher Beekman, the musician-dancer is a shaman who, at the moment of the dance, is magically transformed into an eagle. The eagle has the ability to traverse the different levels of the universe and can communicate with the gods. For the Huichol the eagle is related to the

Grandfather-Fire (Weigand Phil, Beekman Cristopher 1999), Xiuhtecuhtli, for the Aztecs or Huehuetēotl, the old god identified with the North Star, the centre of the universe, door of the universe, heart of the sky. For the purpose of this paper, the eagle is better associated to the passage of time.

The pole on which the musician stands organises ritual space. It traverses the different levels of the sky and connects with the centre of the earth, the underworld, functioning as an *axis mundi*.

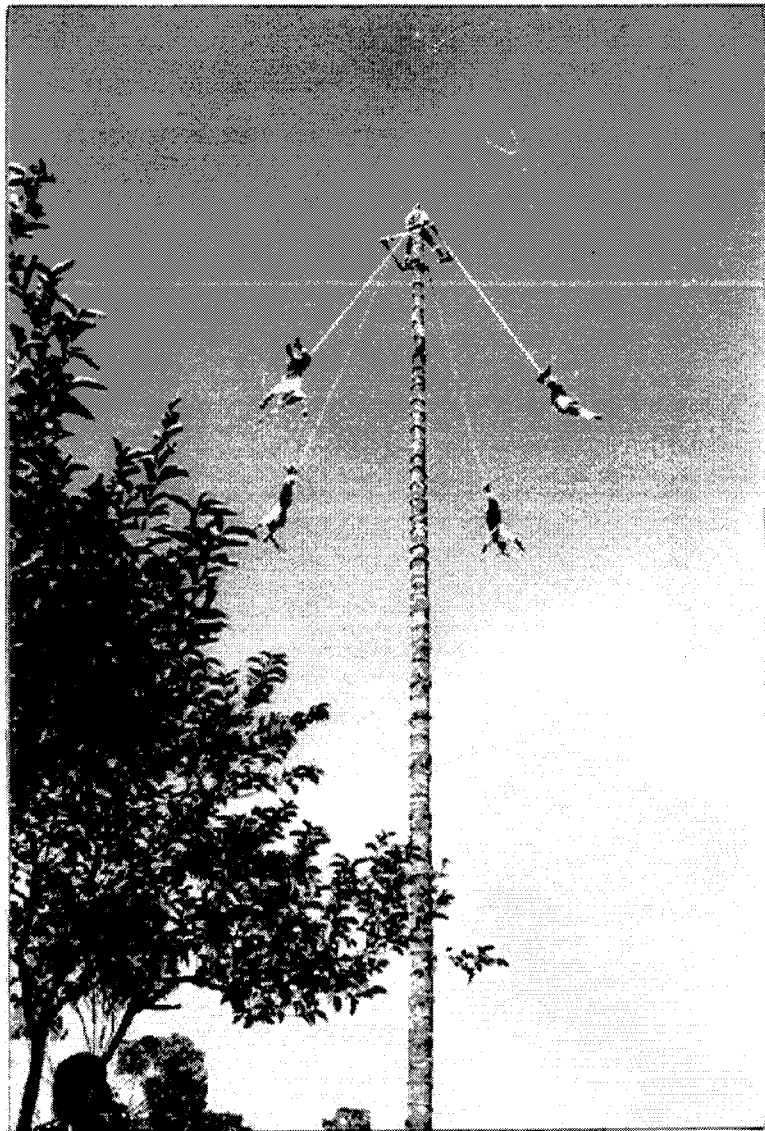


Fig.27

This concept can be compared and conceptualised in accordance to the worldview of the Indian, and his effort to communicate with the universe. The continuum is expressed by the shifting identities of deities as they pass through the different levels of the heavens and the underworld. In the case of Voladores,

the flight of the four dancers through the skies is a continuous transition from one position into another, reflecting the passage of time, symbolised by the number of times they turn around the pole (13 or 20), while the main cohesive structure of the dance is determined by the numbers represented by the dancers themselves, as the four corners of the earth and the pole as a representation of the universe. Further figurative meaning is added by the association of the Voladores with the eagle on top of a primordial tree, as a symbol of tribal unity.

The structure of the dance can be represented as follows:

1 Son played facing east

2 Facing south

3 Facing west

4 Facing north

5 Movement. The four dancers, representing the four corners, revolve around the pole accompanied by the Son played by the musician-shaman.

This performance can be divided binarily into two symmetrically related parts: A, which is composed of 1, 2, 3, 4 and B, which is composed of 5.

5 is representation of movement, the concept of centre and thus symmetry.

5.11.2. Analysis of one Son for the Voladores.

The Son here presented belongs to a series of Sones preceding the climbing of the pole. This transcription has been limited to only one motive, since the beginning of the performance was not included on the recording (Vincensini Cyril.1996), nor was any information about the amount of Sones included in the disc jacket, or any analysis of their distribution in relation to each other.

This tune has a dual structure and its parts can be called 1 and 2. Part 1 starts with a submotive that we shall call A, composed of four notes and lasting two measures, at the vicinity of the dominant (note a), with a leading tone (g#). Starting and the second half of beat two of measure two, the leading g# leads to note a, which is sustained note for two measures. This, we can call submotive B.

The melody returns to tonic d (second beat, measure 6) by means of a submotive which we can call C, lasting two measures. This pattern (A, B,C) is repeated once.

So far we have: A,B,C,A,B,C

This pattern exhibits a dual structure, where symmetry is expressed by C:

[A,[B],C],[A,[B],C]

Variation begins at the final motive (C) starting from measure 12 to the end of the Son. Here, C functions as the last submotive of part 1 and the generating submotive for part 2. C produces a series of variations that lasts for five measures. This first motive, the final cadence of the original motive, could be called A' in the sense that it is the generating submotive of part 2. However, we shall continue to call it C to avoid confusion. It features a descending scale from note g passing to note d, goes through a rhythmic embellishment (a triplet) including note a. This makes the range of this motive a fifth. Measures 13 and 14 feature a repeated variation of C, excluding notes g and a, now embellishing downwards to note e. We shall call them motive B'. Measures 15 and 16, which we shall call C', emphasise note f# and leading tone c#, separated by a fourth, reaching note d through note e, as the fifth of the dominant.

Measures 17-19 feature a strong polyrhythmical motive (we shall call it D) that is repeated two times, starting at the first beat of measure 17 with note e, and repeating at measure 18 at the second half of the measure (the second dotted fourth). This motive spans the three measures.

The overall structure of this variation is explicated as follows: C (one measure), B' (two identical motives spanning one measure each = 2), C' (two identical motives spanning one measure each = 2), and D, a polyrhythmic variation spanning three measures. A is thus the shortest, yet, very important as the generative motive of the sequence. B' and C' are symmetrical in their internal distribution as well as in terms of tension towards each other. D outweighs all

the others in strength as well as in length. There is thus a symmetrical opposition between C, B', C', and D:

C, B', C', [D]

There is also a symmetrical opposition between C and D, whereby B' and C' function as centres of symmetry:

[C, [B', C'], D]

The overall structure of the Son is:

{ [A, [B], C], [A, [B], {C}], [B', C'], D }

Where C functions as an expression of symmetry and links parts 1 and 2.

6. Results and conclusions

6.1. The problems

This paper has been devoted to an assessment of several different approaches by which to comprehend the music of Indigenous Mexico. A young field of inquiry in many senses, one of the merits of this work is, more than giving conclusive answers, the posing of questions. If, as it was presented in this paper, there is an existing body of work regarding Indigenous music, it is scarce and loosely articulated. Indianism offers an interpretation that is useful for an understanding of the way in which Indigenous culture was instrumentalized at a particular historical and political stage in Mexico. Yet, Indigenous music seen as folkore, and as raw material for high artistic expressions tells us little about its primal motivations. This is in notorious contrast with the wealth of information produced related to other areas of research in Mexican culture, such as archaeology. On the other hand, due perhaps to Mexican isolationism, ethnomusicological achievements from other parts of the continent failed to enrich Mexican musicology. It follows that these disciplines have to be

articulated into a situation of dialogue. This is a problem of such a great scale that it cannot possibly be resolved conclusively in a work of this sort.

In this same spirit, the aforementioned folklorization of Indigenous music produced a taxonomy that was put into dialogue with diffusionistic thought, by means of the notion of cultural areas, with a structural approach. This problem again, was only tangentially touched. Yet, it leaves sufficient untouched space for future inquiry, which can also be very positive.

Finally, musical analysis was undertaken as a means to support empirically the notion of structures identified in myth as part of musical structures. This can be understood assuming that the identification of these structures can lead to an analogy. It can also be understood as an extension of behaviour that is overtly expressed in almost every other aspect of Indigenous cultures, throughout many different areas inside and outside Mexico.

6.2.The methodology

This work has sought to contextualize the initial assumptions into other theoretical programmes. These assumptions had to be put into an existing theoretical framework. We have therefore instrumentalized the concept of Mesoamerica and the programme it represents, as well as the concept of cultural areas, as communicative systems. This approach has yielded a representation of Indigenous music that is pragmatic, in that it is preoccupied with the ways in which Indigenous music is given meaning from both, the standpoint of Hispanic culture and that of Indigenous culture.

Throughout this work it was explicated how existing representations of Indigenous music in Mexico failed to problematise it from the standpoint of cultural knowledge. Instead, the existing literature presented Indigenous music in a situation of dependence from mainstream Hispanic culture, as an extension of European cultural values. North American and European ethnomusicology concentrated mostly on Indigenous music from South America and North America This has produced interesting theoretical proposals, but excluded

Mexican indigenous music out of the overall ethnomusicological programme, and at the same time excluded itself from the wealth of information that Mexican Indigenous cultures can yield.

There was thus, a latency to present Mexican Indigenous music as an extension of these cultural groups, both North and South American, leaving the particularities of Mexico unattended. Furthermore, a scrutiny of Mexican cultural values enriches the overall discourse surrounding the study of Indigenous cultures throughout the continent.

This work sought to analyse Indigenous music from the standpoint of native cultural values. These values have been inferred from a scrutiny and reinterpretation of meanings conveyed by narratives, as these present themselves in archaeological findings, historical records, graphic arts, myths and folkloristic records. As a result, it was found that values such as numerology, symmetry, imitation or replication, present themselves in graphic arts, performative arts, narratives and myths. Indigenous music was therefore problematised as a means of communication with the universe. Seen as part of a semiotic field, it was necessary to make a distinction between Prehispanic Mexico, and Hispanic Mexico, construed as fields overlapping and complementing each other. In this manner, Prehispanic Mexico, was also presented as the oldest, more codified, less semantized layer, while Hispanic Mexico was presented as a series of editions of previous texts.

This approach proved to be very suitable to explicate this particular field of inquiry, since Mexican mythologies are structured as complexes of overlapping semiotic systems. Distribution of Indigenous ethnic groups seems to be also explicable in these terms. Cultural characteristics that can be observed in the form of artefact distribution (as in musical instruments), and cultural traits (as in musical styles) abide by this logic. Thus Indigenous cultures seem to actualise mythical structures into every conceivable aspect of expression, thus constructing them socially and geographically. This leads us naturally to seek a continuity of this trend into musical practice.

For these reasons, our theoretical and methodological approach also proved suitable in establishing a dialogue with earlier theoretical frameworks dealing with Indigenous Mexico, such as the concepts of Mesoamerica, and cultural areas. This dialogue was also established with the existing folkloristic categories of Mexican music, presenting Mestizo (Hispanic) styles as communicative systems in constant dialogue with each other, and in a constant process of evolution, editing and complementing the mythical legacy of Indigenous cultures.

6.3. A structural framework for indigenous music: a dialogue between material artefacts and concepts.

This work can be described as a dialogue between two approaches, whereby Indigenous music can be described as:

- 1) The technical aspects of musical creation, musical structures and instrumental technique.

- 2) Music as part of mythic expression.

The first point of view, the technical aspects of musical production, implied a review of instrumental organisation, and how these are placed in the continuum of functional distribution. This can give insights into the diachronic aspects that link different cultural areas, and how the presence of concrete items can be interpreted in terms of an evolutive process. This approach was actualised by means of the concept of cultural areas, whereby instruments and structural musical items were communicated as texts from one area into the other, and edited by means of additions, innovations and reinterpretations. Sometimes only the connotations of a certain terminology were preserved, preserving the underlying structure of the system by which instruments and styles are categorised. In this sense, the problem of Indigenous music was contextualised in a structuralist framework. This notion of a process of constant edition of texts and production of meanings, proved particularly fruitful in analysing Mestizo styles and their evolution.

From the second standpoint, which in fact complements the first one, Indigenous music can be analysed as an expression of mythic consciousness. In this case it was necessary to have background knowledge of the patterns of thought, and how they could be interpreted, on the basis of inferences from the underlying structures of narratives, whether these were derived from folkloristic, or archaeological findings.

We assumed that structures in older semiotic fields survive and overlap with newer ones, and that contact between different borders has happened at a given time and a given place. Levi-Strauss goes as far as to imply that a given person can be the vehicle of this contact. This contact takes place through intentional innovations. This idea can serve as a guideline for what we may call an archaeological strategy, a process by which we strive to identify the etymological stage of the sign, that is the original motivated stage.

On the other hand, it has been said that humans are essentially non inventive. According to this interpretation, less emphasis is given on individual invention and more emphasis on motivic variation. The initial motivation for the innovation is lost and a subsequent semantization takes place, which is mainly an unconscious process.

This work has concentrated on construing Indigenous music as a communicative system, whereby regardless of subjective interpretations on human nature, variation happens as a result of semiotic saturation, intertextuality and semiosis. Semiotic saturation implies that there is a continuous use of the same signs throughout the communicative process. Intertextuality implies that there is lending of signs and structures between different systems. Semiosis is the social construction of meanings as a result of the aforementioned processes.

These premises aided us in performing an archaeological strategy, by which we attempted to separate the distinct constituents of each system, Indigenous and Mestizo. This helped us in analysing the way in which different constituents are present in various systems and how their use varies in relation to the changing

contexts. Assuming that intentional innovations have taken place at a given place and time, and that constituents have spread over different systems, it is possible to establish a pattern of change through time and space.

6.4. Symmetry in indigenous myth: a dialogue between semiotic fields.

It was further contested throughout this work that Indigenous music can be construed as part of a larger system of communication, whereby humans communicate with the universe. The very concept of the universe in Mesoamerican thought, as explicated by anthropological and archaeological findings, lends itself very well for this sort of analysis. Numerology, symmetry and a cyclical concept of time, together with overlapping of different mythical concepts, are all recognisable characteristics in Indigenous expressions. Moreover, Indigenous narratives exploit explicitly their binary characteristics, actualising changes of character according to the context in which constituents are presented. These changes abide to oppositional values that are actualised in stylistics, as in the case of the use of melodic and rhythmic continuum, well as in syntax, in the internal organisation of musical structures, spatial distribution, and social practice. For the sake of brevity, we examined only the symbolic and emotive qualities of number five. We identified the associated meanings of number five, both in Prehispanic mythology, in modern indigenous myths, as well as in narratives and in the organisation of ritual space. Finally, we examined number five as a structural element in musical structures.

6.5. Musical areas: reinterpretation of established frameworks and dialogue between Hispanic and non-Hispanic traditions.

Cultural areas are not solely geographical entities. Referring to musical styles, being systems of signs, it can be said that these can communicate between each other through space and time. This brings the concept of musical areas a step further. They represent a processes of communication through space and time. In this manner this theoretical concept of the view of the Indigenous universe as a coherent system, was articulated into geographical entities.

In this manner an evolutive pattern was suggested by the contiguity of different cultural areas within the Mesoamerican area. The Huasteca area was presented as an initial generative area, from where much of the forms in Mexican folklore are inspired, as well as many of the classificatory criteria used in various parts of Mexico.

This part of the research was complimented by an overview of the relationship between Mexican, Afro-Cuban, and Hispanic influences, illustrating how, in a wider cultural context, covering Colombia, Venezuela and the Caribbean, Mexican music can be represented as a predominantly Hispanic expression as opposed to African influences.

Thus, rather than simply adjusting the problem of Mexican styles to an *ad-hoc* theoretical framework cultural areas (Mesoamerica), there is a dialogue between the theoretical framework and cultural knowledge. Cultural knowledge thus, also gave concrete items that supported the theory.

6.6. Mexican music as a Mestizo expression: a dialogue between Prehispanic and Hispanic Mexico

In the concrete case of Mexican music, this paper has also concentrated on an analysis of how Indigenous music is represented by Mexican musicology, aided by archaeology and anthropology, and how it is articulated into the Indianist movement. This is a convenient step, prior to an analysis of Mexican musicological sources, as well as to a future programme that would concentrate on the influence of electronic media on Mexican music.

Indianism nurtured on idealisations of Prehispanic music, mainly Aztec, together with interpretations of modern Indigenous music, to create its own versions of Indigenous music, presented as high artistic expressions. This movement worked in constant dialogue with early archaeological findings, historiography and ethnography. One of the governing criteria of Indianism is a taxonomy, a classificatory concept of Mexican folklore, that implicitly expresses the patterns of evolution of Mexican styles. This classification, as presented in the

work of Thomas Stanford, does not problematize Indigenous music, rendering it implicitly to a state of cultural dependence from Hispanic cultural values, characterising Mestizo expressions as the original forms of Mexican folklore.

This work has sought to reinterpret this taxonomy, aided by anthropological thought, mainly structuralism, and archaeological information, to construe a mythical world, whereby the particularities of Indigenous music can be explicated on the basis of its own significations.

The result is an interpretation of Mexican music, that can be conceptualised from two complementary standpoints:

- a) There is an opposition between two semiotic fields, that can be called: Hispanic Mexico/ Prehispanic Mexico, just as we can speak of a Mestizo/ Indigenous dichotomy.
- b) These semiotic overlap each other, whereby Prehispanic Mexico precedes Hispanic Mexico, and determines many of its structures and its meanings.

The first model, whereby there is a bipolar opposition, implies a process of change, of transference of meanings and functions. It is thus; a process of semantization.

The second model, in which the two systems coexist, implies a constant dialogue; complementarity and shared mythic structures, whereby meanings are constantly lost within one context, and recovered within the other, where one narrative compliments another without the conscious agreement of the actors involved.

It can be said that even with the advent of electronic-cultural-mass-production, these forms and this world view tends to impose itself to the new cultural forms, in an infinite process of translation and production of new meanings on the basis of the same underlying structures.

With this in mind, a future research programme can establish interpretative approaches that can be applied in both recollection of empirical data, as well as of previously recorded material.

6.7. The problems of pentaphonism, timbric variation and analysis: a dialogue between South American and North American theorisation

It was said that musicologists tend to an attitude of neglect towards the problems posed by Indigenous music. One of these problems is the one referring to pentaphonism as the primordial system of primitive peoples. In Mexico this characterisation was accepted mostly as a given fact, after initial theorisation by D'Harcourts.

The problem of pentaphonism has been further developed in relation to South America. Bailou, Bradley and Stobart seem to agree in that there can be other systems based on more and less than five notes, and that the election of a given system can depend on different aesthetic and social factors. Bradley went as far as to suggest that numerology is embedded into musical structures and social practice, while Stobart gave more importance to considerations related to timbric variation.

This work concentrated on identifying and articulating the structures existing as part of narratives, and relating them to identifiable musical structures. The hypothesis was set on the presence of number five as a structural element, guided by the notion of symmetry around a centre, and the use of Estrada's "continuum" as a motive of timbrical variation, and as a stylistical feature.

6.8. Problems of musical analysis.

One of the problems in articulating these features, has been the lack of an existing terminology able to describe the musical language in question, in a manner which reveals truthfully its immanent formal, aesthetic, musical qualities. Music notation, transcription and analysis, revealed only partially these qualities. Some of these qualities had to be described figuratively. It can be

questioned whether this sort of musical analysis based on discrete pitches and time divisions has any validity at all in the description of the continuum.

I present these conclusions which have been drawn from the samples subject to musical analysis:

- 1) The use of rhythmic resources is very similar in both Son de la Negra and in Son de las Varitas in both cases they invert the rhythmic pattern in which the effect was to stretch the rhythmic continuum.
- 2) The contour of the melody is treated in a similar way. The high point of the melody is accompanied by a leading tone, as well as the other important modal tones, such as the mediant in the case of "Negra".
- 3) In both cases there is a sequence of parallel thirds which is structurally important.
- 4) In both pieces there is an important emphasis on instrumental performance. Negra is a Mestizo Son and as such it has a verse upon which there is usually improvisation. In this case however, the interpretation was purely instrumental. Varitas is chiefly instrumental. This reinforces Helza Cameu's statements regarding the prevalence of abstract musical thought over physiologically determined musical practice.

The analysis of other examples further demonstrates consistent use of rhythmic continuum and the use of leading tones as musical resources.

The analysis of the Amazonian example shows structural similarities between this music and Mesoamerican music.

The usage of rhythm and melodic contour is a clear signal that a relationship between Indigenous and Mestizo is at work. Whilst in a Mariachi Son, the function of music is mostly to entertain, and the function of Indigenous forms is related to experiences that have particular meanings to indigenous communities. It is apparent that the aesthetic resources have a similar origin.

In the case of Son the la Negra, and Son de las Varitas I found that they shared many elements which are unique to Mexican music. The contour of the melody is treated in a very similar way adding leading tones to the notes which are placed either in the highest and lowest positions of the melodies, or in modally important places, such as the mediants.

Melodic continuum, if understood as the usage of microtonal scales, as well as the whole sound spectrum is a resource used throughout the American continent. In Alcarabán this technique is used associated with a bird of the same name. The melody of the flute rises and falls in short continuous melodic glissandos. Sounds of nature such a wind and water are part of the wider sound palette of Indigenous music.

Rhythm is also treated in a unique form which cannot be attributed to Spanish or African origins. The concept of rhythmic-continuum which was hereby extended from the concept of melodic-continuum, appears consistently at the beginning and end of a piece, or in between Sones, as a sort of bridge. Rhythmic continuum is expressed as:

- 1) Gradual *accelerando*
- 2) Gradual *diminuendo*
- 3) Alteration of the size of time units, for example stretching quarters into quintuplets, or quarters into triplets.
- 4) Inversion of rhythmic patterns
- 5) Combination of all these.

The case of Voladores, presented many of the symmetrical structures of other pieces. As in other samples, symmetry was expressed by means of opposition between larger unities, versus shorter, as well as denser against simpler textures. The analogy can be drawn between the Cuna melody, based on a structure based on number four, and Voladores.

Stylistic analogies between Indigenous melodic structures, and Mestizo melodies can be drawn. Voladores has a strong emphasis on a high note straight

from the beginning of the Son, made more evident by the presence of a leading tone. This relation is also found in Son de la Negra, as well as in Son de las Varitas. Jarabe Tapatío makes less emphasis on a single note, but does embellish significant notes such as the tonic the mediant or the dominant with leading notes.

Another feature that was present in Voladores and other samples, was variation of a single submotive, the final motive of an earlier section making it the generating motive of the following section, functioning thus as the link between both. This analogy can be made between Voladores, Jarabe Tapatío, the Huichol melody and Danza de la Culebra. While the principle of diminution and elaboration of smaller motivic cells remained constant.

This technique of diminution was encountered in some cases in relation to number five as an overlapping structure, always implying symmetry. In this sense, the notable difference between the Huichol sample and Voladores is the lack of an explicitly symmetrical motivic cell in the Huichol sample that would imply number five. This can be opposed to an analogy between Voladores and the Jarabe Tapatío, where note g, characterised as motivic cell c' is the centre of symmetry. The Cuna melody can also be compared in this manner. While it does not exhibit number five as a centre of symmetry, it does exhibit an opposition of simple/complex constituents, as well as a long/short opposition, joined by a single motivic cell as centre of symmetry. This long/short dichotomy can also be found in Son de la Negra, where parts B and C are diminished by means of interruption. Symmetry is expressed by B, itself a composed of short motives, as opposed to parts A and C. Son de las Varitas too exhibits a triadic symmetrical structure as well as an opposition between long/short, complex/simple, while the notion of a single motivic cell functioning as a centre of symmetry is more difficult to sustain. Likewise, Danza de la Culebra, while having a symmetric structure, does not exhibit explicitly a single submotive as centre of symmetry. Only through a more indirect inference is this structural element identifiable. Son de la Culebra resorts instead to retrogradation, diminution and augmentation, which links it to far away examples such as Son de la Negra, in its introductory passage.

Other prevalent structures are the sequences of thirds, as in Jarabe Tapatío, Son de las Varitas and Alcarabán. This further supports the idea of links between Mestizo and Indigenous styles. We can place Alcarabán, son de las Varitas and Jarabe Tapatío into our evolutive model of cultural areas. Geographically, Alcarabán (from the isthmus of Tehuantepec) is the most distant in relation to Son de las Varitas (Huasteca). Whereas in our evolutive model we placed the Huasteca as the generative area, it is conceivable to present this behaviour of successive thirds as evidence of communication between the Huasteca and the Bajío. This fails to explain the parallelism between Alcarabán and Son de las Varitas, being both Indigenous examples. The idea that comes to mind is that of uniformity in Indigenous expressions. Being older, more codified texts, belonging to an older civilisation, it is also conceivable that a musical “conservatism” is at play. This conservatism is presumably functioning also in Mestizo expressions where the sequence is to be found (Son de la Negra, Jarabe Tapatío), with the difference that these represent a process of semantization.

6.9. Present and future of research paradigms.

This paper has strived to represent Indigenous music from the standpoint of Indigenous cultural values. However, it is undeniable that the rationale of this work is essentially constructed from an outsider’s context, with notions that are foreign to Indigenous thought. The theoretical tools employed seem to fit well into the Indigenous world, as it presents itself from the evidence that is available to us. This is valid from the standpoint that we can build our representations of Indigenous music, and the Indigenous by these means. Further research requires the input of Indigenous researchers acting as insiders. Furthermore, this work is, as of now, not supported by statistically significant data. Further research must actualise the theoretical problems posed herein, with fresh primary material.

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Appendix

Xopan cuicatl

Amoxcalco,
pehua cuica,
yeyecohua,
quimoyahua xochitl,
on ahuia cuicatl.

Icahuaca cuicatl,
oyohualli ehuatihuitz,
zan quinanquiliya,

toxocayachach,
Quimoyahua xochitl,
on ahuia cuicatl.

Xochiticpac cuica,
in yectli cocochtli,
ye con ya totoma aitec.

Zan connanquilia,
in nepapan quechol,
in yectli quechol,
in huel ya cuica.

Amochtlacuilotl in moyolo,
tocuicaticaco,
in tictzotzona in mohuehueuh,
in ticuicanitl.
Xopan cala itec,
in tonteyahuitiya.

Zan icmoyahua
in puyuma xochitli,
in cacahua xoxhitli.

In ticuicanitl.
Xopan cala itec,
in tontecahuiltiya.

Danza de la Culebra

The musical score is presented in three systems, each consisting of three staves: a treble staff, a bass staff, and a piano staff. The key signature is one sharp (F#) and the time signature is 4/4.

- System 1:** The treble staff begins with a first-measure rest and a dynamic marking of *mf*. The bass staff contains a first-measure rest followed by notes in measures 2 and 3, with a fermata over measure 4. The piano staff features a continuous eighth-note accompaniment with a first-measure rest and dynamic markings of *sempre piano* in measures 2 and 3.
- System 2:** The treble staff starts with a fourth-measure rest, followed by notes in measures 5 and 6, and a fermata over measure 7. The bass staff has a fourth-measure rest, notes in measures 5 and 6, and a fermata over measure 7. The piano staff continues with a steady eighth-note accompaniment.
- System 3:** The treble staff begins with a seventh-measure rest, followed by notes in measures 8 and 9, and a fermata over measure 10. A triplet of eighth notes is indicated in measure 8. The bass staff has a seventh-measure rest, notes in measures 8 and 9, and a fermata over measure 10. The piano staff continues with a steady eighth-note accompaniment.

The image shows a musical score for guitar, consisting of three staves. The top staff is in treble clef and contains a melodic line with a triplet of eighth notes marked with a bracket and the number '3'. The middle staff is in bass clef and shows four chords, each marked with a '7' and a 'V' symbol. The bottom staff is in bass clef and features a continuous eighth-note pattern starting from the 7th fret, indicated by a '7' at the beginning.

Danza de las Varitas

1

1

Measures 1-3 of the score. The top staff is in treble clef with a 6/8 time signature. The bottom staff is in bass clef. Measure 1 starts with a treble clef and a 6/8 time signature. The melody in the top staff consists of eighth and quarter notes. The bass line in the bottom staff consists of eighth notes.

4

4

Measures 4-6 of the score. The top staff continues the melody from measure 3. The bass line continues with eighth notes.

7

7

Measures 7-9 of the score. The top staff shows a change in the melody, including a sharp sign. The bass line continues with eighth notes and includes three measures marked with a 'V' above the notes.

Alcarabán

1

1 V V

First system of musical notation for measures 1-3. The top staff is in treble clef with a 6/8 time signature. The bottom staff is in bass clef. Measure numbers 1, 4, and 7 are indicated above the top staff. The word 'V' is written above the bottom staff in measures 1, 2, and 3.

4

4 V

Second system of musical notation for measures 4-6. Measure numbers 4, 5, and 6 are indicated above the top staff. The word 'V' is written above the bottom staff in measure 5.

7

7 V V

Third system of musical notation for measures 7-9. Measure numbers 7, 8, and 9 are indicated above the top staff. The word 'V' is written above the bottom staff in measures 7 and 9.

10

10 V

Fourth system of musical notation for measures 10-12. Measure numbers 10, 11, and 12 are indicated above the top staff. The word 'V' is written above the bottom staff in measure 11.

13 flutter

13 simil V

gliss.

Fifth system of musical notation for measures 13-15. Measure numbers 13, 14, and 15 are indicated above the top staff. The word 'flutter' is written above the top staff in measure 13. The word 'gliss.' is written below the top staff in measure 14. The word 'simil' is written above the bottom staff in measure 13. The word 'V' is written above the bottom staff in measure 14. Brackets with the number '4' are placed above the top staff in measures 13, 14, 15, and 16.

16

Sixth system of musical notation for measures 16-18. Measure numbers 16, 17, and 18 are indicated above the top staff. Brackets with the number '4' are placed above the top staff in measures 16, 17, 18, and 19.

19 *sempre gliss.*

22

25

28

Son de la negra.

The musical score is arranged in systems, each containing staves for Jarana, Tr. div., and Guitarrón. The Jarana parts are characterized by dense, rhythmic chordal patterns. The Tr. div. parts feature melodic lines with various rhythmic values and articulations. The Guitarrón parts provide a steady bass line with rhythmic accents.

System 1: Jarana (measures 1-4), Tr. div. (measures 1-4), Guitarrón (measures 1-4). Jarana starts with a 3/4 time signature, changes to 5/8, then 3/4, and ends with 5/8. Tr. div. and Guitarrón are in 3/4.

System 2: Jarana (measures 5-8), Tr. div. (measures 5-8), Guitarrón (measures 5-8). Jarana is in 5/8. Tr. div. and Guitarrón are in 3/4.

System 3: Jarana (measures 9-12), Tr. div. (measures 9-12), Guitarrón (measures 9-12). Jarana is in 5/8. Tr. div. and Guitarrón are in 3/4.

System 4: Jarana (measures 13-16), Tr. div. (measures 13-16), Guitarrón (measures 13-16). Jarana is in 5/8. Tr. div. and Guitarrón are in 3/4.

System 5: Jarana (measures 17-20), Tr. div. (measures 17-20), Guitarrón (measures 17-20). Jarana is in 5/8. Tr. div. and Guitarrón are in 3/4.

System 6: Jarana (measures 21-24), Tr. div. (measures 21-24), Guitarrón (measures 21-24). Jarana is in 5/8. Tr. div. and Guitarrón are in 3/4.

System 7: Jarana (measures 25-28), Tr. div. (measures 25-28), Guitarrón (measures 25-28). Jarana is in 5/8. Tr. div. and Guitarrón are in 3/4.

29

Jarana

v.div.

Guitarrón

33

Jarana

v.div.

Tr.div.

Guitarrón

Jarabe Tapatío

The image displays a musical score for the Mexican folk song "Jarabe Tapatío". The score is written in treble clef with a 3/4 time signature. It consists of three staves of music, each starting with a measure number: 1, 4, and 7. The melody is characterized by a series of eighth and sixteenth notes, often beamed together, creating a rhythmic and melodic pattern typical of the song. The first staff begins with a treble clef and a 3/4 time signature. The second staff starts at measure 4 and includes a sharp sign (#) above a note. The third staff starts at measure 7 and ends with a double bar line.

Cuna song



Son for the Voladores.

Musical notation for measures 1-4. The top staff is in treble clef with a 7/8 time signature. The bottom staff is in bass clef. Measure numbers 1, 2, 3, and 4 are indicated above the top staff. The bottom staff contains a series of chords, each marked with a 'V' above it.

Musical notation for measures 5-8. The top staff is in treble clef. Measure numbers 5, 6, 7, and 8 are indicated above the top staff. A triplet bracket labeled '3' is placed over the first three notes of measure 6. The bottom staff contains a series of chords, each marked with a 'V' above it.

Musical notation for measures 9-12. The top staff is in treble clef. Measure numbers 9, 10, 11, and 12 are indicated above the top staff. A triplet bracket labeled '3' is placed over the last three notes of measure 12. The bottom staff contains a series of chords, each marked with a 'V' above it.

13

13 V V V V V V V

17

17 V V V V V V