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The role of musical instruments in the globalization of music

El papel de los instrumentos musicales en la globalización de la música

ABSTRACT

In recent years, the term «globalization» has become a catchword in many languages. It is an open-ended process that implies different levels of unification. In music, attempts have been made by individual and collectively by artists from different cultures in the world. In each case, the process has been focused on the unification of musical sounds that can be identified within the global community. Technology is successful with the duplication of sounds of musical instruments for computer games, but the creation of zones of cultural interaction as defined by actual musical instruments is presenting challenges with the unification of cultural values into one global community. In music, globalization implies «world music» that is articulated as a hybrid product. The process of globalization is readily realized electronically, with sounds of musical instruments, but the creation of zones of cultural interaction, with the same musical instruments, will require a mixture of configuration of factors ranging from ecology to language and cultural manifestation. The objective of zones of cultural interaction is not to unify style of music, but through globalization is the sharing of actual musical instruments. To accomplish this objective, geographic spaces will have to surmount the globalization of the world ecology, language, and culture.

RESUMEN

En los últimos años, el término «globalización» se ha convertido en una palabra clave para muchas lenguas. Con él se hace referencia a un proceso abierto que implica diferentes niveles de unificación. En el campo de la música, han participado en él, tanto de forma individual como colectiva, artistas de diferentes culturas del mundo. En todos los casos, el proceso se ha centrado en la unificación de sonidos musicales que puedan identificarse por una comunidad global. En este sentido, la tecnología ha conseguido con éxito duplicar los sonidos de los instrumentos musicales para los videojuegos, pero la creación de zonas de interacción cultural, como las definidas por los instrumentos musicales actuales, se enfrenta a una serie de retos derivados de la unificación de los valores culturales en una comunidad global. El proceso de globalización se puede desarrollar fácilmente de manera electrónica con sonidos de instrumentos musicales, la creación de las zonas de interacción cultural con los mismos instrumentos musicales necesitará que se den además una serie de factores, que van desde lo ecológico hasta lo lingüístico y cultural. El principal objetivo de las zonas de interacción cultural no es el de unificar el estilo de música, sino el de compartir los instrumentos musicales actuales a través de la globalización. Para cumplir este objetivo, los territorios en los que se produzca esa interacción tendrán que completar este proceso globalizador atendiendo a criterios ecológicos, lingüísticos y culturales.

KEY WORDS / PALABRAS CLAVE

Ethnomusicology, globalization, technology, cultural interaction, musical instruments, hybridation.

Etnomusicología, globalización, tecnología, interacción cultural, instrumentos culturales, hibridación.

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1. Introduction

Attempts to globalize styles of music of the world have been made by individual artists and, collectively in various cultures in the world. In each case, the process has been focused on the development of the musical alphabet that will become the foundation of the new expression—«world music». This assertion is best understood when taking into consideration that, as a sign, music is empty and derives its meaning from the multiplicity of interpretations, which arise from the network of relations that compose the societies of the world. For that, it becomes necessary to accept *à priori* that, as both a process and a product of processes, and regardless of its genre or the concept held by its makers, music has a limited culturally defined semantic field, in which it operates as means of communication.

As such, «world music» engenders the concept of hybridization, which reflects levels of attainment in various aspects of human life in a global reality. In the field of technology, one observes creative efforts being endorsed by manufacturers of computer-generated music leading, to such products as the chiptunes, referring to music composed for the microchip based audio hardware of early home computers and gaming consoles. These manufacturers visualize the world is divided into zones a, b, c, etc., and the music being played in zone d, can be heard also in zone z, without traveling. In spite of this rather high tech attempt, which is globalizing sounds of musical instruments of the world, there are still aspects of certain musical elements that will resist being globalized in this process, and absorbed into this form of high tech. This is due to the fact that the identity of instruments is culturally defined, i.e., every instrument is identified with of its musical zone, in which it fulfills a specific cultural function and it is an integral part of the essence of musical style pertaining to a given geographic space and people. In this paper, I am arguing that although the globalization of sounds of musical instruments can be accomplished electronically, the process of incorporating these instruments into zones of cultural interaction will require complex factors such as ecology, language and cultural practice. The effort is not so much on unifying the styles as it is on reinterpreting the actual instruments, to become integral parts of cultural calendar of the world communities.

2. Reproduction of sounds of nature in music

Prior to the development of harmony in Europe, composers were occasionally incorporating human emotions and sounds of nature as a process of musical embellishment in their works. The evolution of this

practice intensified from the Baroque period forward until the Romantic era, when composers utilized their orchestral scores to account a story or describe a scene as detailed by the program. Samples abound throughout the Romantic and the 20th century periods in the symphonic compositions, the operatic realm as well as in tone poems program music. Nevertheless, it would be the French experiment, with *musique concrète* that will finally give rise to the electronic music. Composers wrote works with electronically generated sounds from laboratories emulating nature disaster sounds, independently recorded or those of orchestral musical instruments electronically generated.

The concern of reproducing sounds of musical instruments electronically, as accurately as possible, is related to that of the evolution of the process of transcription of music, which occupied the 19th century evolutionary phase of the field ethnomusicology, when it became a means for the ethnomusicology to «advocate [its] worth in cognate disciplines» (Wade, 2006: 191). The process of transcription became an obsession, for some in the field, to perfect this process mechanically. This experiment with musical sounds was being developed contemporaneously with the ability to transcribe music mechanically. One encounters the development of music transcription apparatus from the tonometer to the digital melograph being perfected for ethnomusicological laboratories. This noble effort evolved to the point of rendering the entire process obsolete in the evolution of the field of ethnomusicology. One of these inventions is a series of Charles Seeger's melograph, from Model-T to SYMPOD, ranging in degree of sophistication of elements and musical partials to be included in the transcription. The higher the model, the more the entire exercise became useless and abandoned all together for providing graphs of superfluous sounds of music that were not needed nor audible to the human naked ear. The concern of transcription has been reduced to the sound heard by human ear, and this has simplified the transcription process, even that being produced for analysis by using computer software.

In the realm of instrumental sound, the effort was placed on the electronic production of the actual sound of each music instrument, with all its characteristics. All of these experiments took place prior to the mention of World Music and the concept of globalization in this human artistic expression. This process continued to be developed more in both areas by engineering sounds than by music composers. It can be asserted that in these domains, the concept of globalization was taken to a higher level, especially when one

considers different sounds emitted by sources, other than the virtual musical instruments. From this perspective, these sounds can be identified in any corner of the world, specifically where technology has been developed, in that they are electronically generated. In this sense, the accomplishment of, or the realization of so-called globalization is complete and at that level, technology has succeeded in unifying the world musically, at least is the sounds of video games.

3. Globalization and «zones of cultural interaction»

Elsewhere I assert that although it has recently become a catchword, «globalization is an open-ended process that implies different levels of unification» (Kazadi, 1999-2001: 191). As a new concept in music, «globalization» continues to present challenges to scholars and layman alike, as to the scope of its definition, and in reference to the intended outcome of this process, I asserted that «regardless of its accepted definition and concept, «world music» is becoming a reality as a product of the globalization process» (Kazadi, 1999-2001: 191). In the field of music, globalization is feeding on music cultures of the world, not so much for the purpose of unifying musical styles of the world, but rather, to create a musical language alphabet, capable of being utilized to produce a hybrid expression – «world music», that can be claimed by the diverse cultural areas in the world.

In another source, I share Kwabena Nketia's expression, «zone of Cultural interaction», which he defines as a geographic space in which a cultural element is shared by its inhabitant¹. For the interest of this paper, the cultural element can be a musical instrument or a musical practice that is not temporarily borrowed by a culture, but it is an integral part of the cultural calendar of a given area for that geographic space to be considered part of the zone of cultural interaction defined by the instrument in question. In addition to the criterion described above, the process of assimilation has to take place before the instrument can be integrated into a new culture. First, members of the new society have to determine its compatibility with the existing practices in the new society; second, there has to be a source of raw material in the area with which the instrument can be fabricated; and last

but not least, the instrument has to be re-interpreted by its new users, i.e., as a final phase of the process. And, before the instrument is assimilated by the new society, it has to be judged valuable and attributed new cultural functions or assigned to a new cultural manifestation, to insure its perpetuity in the new culture (Kazadi, 1990).

4. Zones of cultural interaction defined by musical instruments

Relevant to this paper, three African musical instruments have been selected to illustrate this argument. The first of these is the mbira – a widely spread idiophone encountered today practically on the four continents of the world; but the zone of cultural interaction defined by the mbira is limited to the Bantu world and its bordering territories of the Central African Republic and the Igbo region of Nigeria on the continent of

In music, globalization implies «world music» that is articulated as a hybrid product. I have also argued that whereas the process of globalization is readily realized electronically, with sounds of musical instruments, the creation of zones of cultural interaction, with the same musical instruments, will require a mixture of configuration of factors ranging from ecology to language and cultural manifestation.

Africa. The presence of this instrument in the various parts of the world is not permanent and for the most part it is not an integral part of the cultural calendar of the world cultural areas where it is found. Examples abound in Africa and elsewhere with different cultural elements, but the zone of cultural interaction defined by each of them takes into consideration a variety of factors and phenomena, which is more than the mere presence. Although the world has been rendered narrow by the evolution of the technology, the explanation of the dissemination of any cultural element falls more into the realm of diffusionists than into that of the evolutionists. African cultural materials are readily encountered in Asia, America and Europe, where they have been diffused by tourists or by casual amateurs.

The second musical instrument under consideration is the instrument par excellence of the Mandingo Jali (griots) — the Kora. This 21-stringed instrument



Fig. 1. Shona Mbira dza Vadzimu

has a fascinating morphological structure. The sound box is made of a large gourd covered with an animal skin. Its 21 strings are arranged in two rows of 10 and 11, attached individually to a rawhide ring around the long neck. The evolution of this instrument over the years, has been noticeable by the increase in the number of strings, which is being threatened by the younger generation to raise it to 24. The zone of cultural interaction defined by this instrument is limited to the Sudanic Belt territory and specifically in the area where the large gourds are readily available. In addition to the ecological requirement, which explains the absence of the kora throughout the continent of Africa, there is also the cultural function for which it was developed to entertain the emperor Sundjata Keita (c. 1217-c.1255).

These traditional cultural functions were fulfilled by four families Kuyate, Suso, Diabate, and Konte, who have maintained the tradition of kora playing and its repertoire, and passed it down within the family from one generation to another. While the physical structure of the kora has suffered minor adaptations over the evolution of the instrument, the replacement of rawhide and gut strings with fishing line, the implantation of tuning pegs to resemble those of the Western chordophones, the insertion of an electric device for acoustic reasons, are among the most visible. The tuning system adopted by each family has remained the same, as corroborated by the number of epics that compose each family's repertoire. The zone cultural interaction defined by the kora incorporates the countries of Mali, Guinea Bissau, and Sine-Gambia area, where members of the Mandingo ethnic group migrated after the death of the «Mansa»² Sundjata Keita.

The third instrument under consideration is the xylophone encountered throughout the sub-Saharan Africa, where it is known by a different names and structurally different, according to the function it fulfills in the ethnic group. In spite of its distribution on the continent of Africa, the cradle of the xylophone on this continent is in Mozambique, where it is known among the Chopi as *timbila*, is of varying sizes and group them into an orchestra also called *timbila*. For a significant period of time, scholars were inquisitive about the source/cradle of the xylophone. Where the majority in the field of anthropology and ethnomusicology stressed that xylophone was a native of Africa, others argued that this instrument came from Indonesia, together with the disease «*elephantiasis*» with which it is associated and it entered the continent of Africa via Mozambique (Jones, 1964). It is only appropriate that the Chopi of Mozambique, who excel in the art of the xylophone, would believe that it was given to their founding fathers by the spirits. Would these spirits be the Indonesians who came and returned on water? This will certainly remain unanswered for being out of the scope of this paper.

All three musical instruments from Africa are products of a network of ecological distribution, linguistic stock, and cultural values, which collectively underline their cultural identity. Although their sound can be electronically generated, their cultural identity, for which the definition is partially initiated by the zone of cultural interaction, will have to be reinterpreted in the new society. This is the case, for example, of the Brazilian friction drum – *cuica*, which morphologically resembles the Congolese *Kinfwiti*. Whereas among Bakongo this instrument was used for entertainment and for ritual

invocations, symbolizing the leopard, the lion, or the mysterious voices from the dead, in Brazil it has been attributed only carnivalistic functions. This process completed the cycle of assimilation and the instrument had to be vulgarized for it to attain new



Fig. 2. «Kora»

role in the new society. What I am stressing here is the fact that when completed, the process of assimilation is an integral phase of the globalization. It allows musical instruments an integral part of the cultural calendar of the area, and with that brings the area into the zone of cultural interaction, which is the result of the globalization process.

Unlike with the *kinfwiiti*, which has been assimilated in Brazil, other musical instruments from Africa, although they were at one time utilized in Brazil, have been dropped by the way side, because they had lost their context in which they evolved. This is the case of the xylophone, the *mbira*, and the *tchiumba*. On the other hand, Tiago de Oliveira Pinto (1990) affirms that if the musical bow *berimbau* survived to the present day, it is because it found its way into a new cultural context/manifestation – *capoeira*. Similar obser-



Fig. 3. Xylophone

vations can be made in reference to other musical instruments of African origin, which have been adopted or rejected in Brazil, primarily because they were incompatible and were not assigned new roles in the new society. While stages of the assimilation process may be applied consciously, or otherwise by members of an emerging society, the incorporation of the new area into the zone of cultural interaction is complete only after the re-interpretation phase.

In this paper, I have brought forth two theoretical observations that complement each other and stress the adaptability of a musical instrument to insure its survival in the new area as a process of globalization. The underlining condition for both of these theories is the assimilation process, which contains the following phases: 1) a cultural inventory; 2) the selection of common denominators; and 3) those common denominators that have been judged compatible are submitted to the «re-interpretation» phase, when the instrument is attributed new functions, as it gradually reach the point of assimilation. The relevance of this basic theoretical observation is applicable to the understanding of the forging of a zone of cultural interaction.

The same theoretical observation is relevant to the study of the assimilation of musical instruments, and it is also applicable to other cultural religious practices.

Elsewhere, I demonstrate how language plays a paramount role in the organization of vocal music in Africa, and conclude that: «Language is crucial to the understanding of the creative process of the vocal music. Its tonal inflections are not only vital in the process of melodic construction and heterophonic implication; they are also influential in the selection of certain musical instruments used by an ethnic group» (Kazadi, 1997).

In addition to assisting in the selection of the musical instrument, with which an ethnic group is identified in Africa, language is also the source of all the nature of music, ranging from the melodic contour to harmonic implication and the rhythmic organization. African language, for example, is predominantly tonal, i.e., the meaning of the word is determined by the pattern of its tonal inflections. Although two words may have the same spelling, they differ from each other when their respective tonal inflections are applied. Therefore, to maintain the meaning of each word, the basic melodic pattern has to adhere to the tonal inflection of each word. In short, the semantic level of the language is dictating the sonic level of the music. This reality is also true in the organization of the rhythmic dimension of African music, which derives its structure from the poetic rhythm of the language. Thus concluding that the temporal level of the music derives its structural principle from the syntax of the language. In other words, the impact of the language is also felt in the instrumental rhythmic structure.

Often, a phrase or a series of nonsense syllables – *kon nkolo kon kon nkolo* – is formulated to an instrumental rhythmic pattern, called by African scholars as *time-line pattern*, and in England as *standard pattern*, which serves as a memory and teaching aid (Kubik, 1972; 1979). Whereas traditionally master drummers rely on these patterns as memory and a teaching aid, in a composition, they function as a measuring stick for musical phrases. Although the structure of pattern may appear simple individually, the difficulty in understanding the final rhythmic tapestry of an African musical piece resides in the relationship derived from the combination of its constituent patterns. In his mind, the African believes that each pattern contains holes that are fitted by another pattern. Although an instrumental composition may be conceived rhythmically, the relationship between its constituent time-line patterns is by application perceived melodically. In other terms, the stratification of any number of time-line patterns in an

interlocking relationship is what Meki Nzewi (1997: 44) has coined an Ensemble Thematic Cycle (ETC).

The continuity of a cultural element in a new society is a validation of its persistence or its assimilation into that society. Although persistence and assimilation are not synonymous with continuity, they are conditions, *sine qua non*, for the realization of the latter. This order of events is best comprehended when «assimilation» is accepted as having occurred when the process of cultural exchange, acculturation or inculturation, has been completed. Thus, assimilation can be defined as the advanced stage of the acceptance of a cultural element; a stage at which «continuity» is initiated, while «persistence» insures the latter's evolution.

The discrepancy in this case is two fold: 1) difficulty of separating the object with its culture whence it derives its identity; 2) incorporating the object into a new cultural calendar and thus attributing it a new identity. For example, as a musical instrument from Africa, a kora defines a zone of cultural interaction which includes the entire northeastern corner of the continent of Africa. Unlike with zones of cultural interaction defined by the actual musical instruments, those defined by electronically generated sound, seem to be without boundaries in that they are void of cultural identity. Whereas on one hand, kora is identified with the Mandingo people, chiptunes, on the other hand, is identified with video games.

5. Conclusions

In the above discourse, I have argued that the globalization is a process with meanings differently determined by areas of interest. In music, globalization implies «world music» that is articulated as a hybrid pro-

duct. I have also argued that whereas the process of globalization is readily realized electronically, with sounds of musical instruments, the creation of zones of cultural interaction, with the same musical instruments, will require a mixture of configuration of factors ranging from ecology to language and cultural manifestation.

Endnotes

¹ Public lecture delivered at the Conference in Belagio, Italy, October 14, 1992.

² King of kings.

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