EXPANDING MUSICAL INSTRUMENTS' CAPABILITIES TOWARDS THE DEVELOPMENT OF MUSIC EDUCATION IN NIGERIA

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Introduction

Nigeria and indeed Africa as a continent, has an array of musical instruments that can fully serve the musical demands of her citizens, but still the continent is considered as lacking enough musical instruments that would fully punctuate and expose her rich but changing musical tradition. The reason for this is due to the fact that most of her musical instruments are of indefinite pitches with limited instruments capable of producing few notes. This paucity of melody instruments is not only a handicap to the modern style of singing but also negates the global principle of moving at reasonable pace with development and changing needs of the society.

Musical instruments play vital roles in the music tradition of every culture. In fact, there is hardly any music without some musical instruments punctuating the basic pulses and providing the general rhythmic background. Even in the musical creativity of musicians like Malcolm McLaren where the pulses were marked by rhythmic nuances such as audible mouthing and striking of the body, the feeling of the use of musical instruments was inherent. Handclapping, feet-stamping and body striking are all aspects of instrumentation. With regard to the importance of instruments in music production, unreserved attention should be paid to it (musical instruments). There are lots of musical instruments in Nigeria with every ethnic community capable of being identified with at least one of such instruments. Already, Nigeria proudly houses over four hundred ethnic nationalities. According to Onwuejeogwu, "Nigeria is the only extant nation with up to 445 ethnic nationalities. One major characteristic of Nigerian ethnic nationalities is that each has a traditional core territory or culture area and a core language." (p. 8). The way they have core culture and languages is equally responsible for the way they have major musical instruments punctuating their musical practices. Also, it is important Festus Olisaeke: Expanding Musical Instruments' Capabilities...

to note that the use of musical instrument in songs enhances the beauty of that song because it gives meaning to the song through regular beats of the accompanying instruments. In line with the above, Forchu (2011) observes:

The dense timbre loved by Africans is often provided in the instrumental accompaniment of songs by a variety of rhythmic instruments, such as drums of various sizes and shapes, idiophones and melo-rhythmic instruments. The musical instruments, costumes adorned by the performers and other paraphernalia provide visual representation and symbols of various concepts that are prevalent in the society, thus enriching and meeting the needs of the occasion of performance. (p. 188).

In the Western world much emphasis is placed on instrumental compositions than voice especially as from the classical era, thereby making their instrumental compositions surpassing vocal compositions as against the practice in Africa. Because they have large variety of melody instruments, it therefore became possible to have varieties of instrumental compositions. This is why one can listen to chamber music, concertos and symphonies from morning to night without getting fed-up. Variety creates interest, and when you have variety of materials at your disposal, you apply different approaches to fully utilize the materials, and with this, problem of monotony is taken care of.

Coming home to Africa and Nigeria in particular, can we boast of matching our melody instruments against non-melody instruments in such a manner as to create comparable harmonic output? Though a popular Igbo axiom has it that *nku di na mba n'eghere mba nri* (the firewood in a community is capable of cooking the food of that community), but let us realize that something has happened to disrupt the musical environment of Africa and Nigeria in particular. Many writers have been calling on Africans to continue to uphold her traditional practices, but how realistic is it, and is it really possible in all aspects of her culture with the level of bastardization that has taken place so far? Let us for once tell ourselves the truth. Our fore-fathers sang their native songs making use of their native scales which was predominantly pentatonic. Since the western incursion of our musical environment, how many of us can sing any song without unconsciously applying the diatonic and chromatic scales of the white? How many of us can even

remember and sing those songs of our fore-fathers when we have been shrouded in the born again syndrome of the Christian churches that enslaved us and our cultures. Now we sit in the comfort of our homes and offices, pick our pens and with beautifully constructed grammar write extensively about upholding our musical culture, and the next Sunday morning enter the church and start singing the hymns of Ira Sankey and the songs of Handel. Is that not hypocritical? Many of us that are even living today had not the opportunity of being born in time to experience this pure African style of singing informed by the scale system we are talking about. And those who experienced it in their youth had already lost it by imbibing the western scale system through constant drilling the western education offered. So who can instill the bidding? Nobody is blaming anybody, but the fact remains that our predecessors (those who earlier imbibed Western musical knowledge) did not start in time to think home. The simple thing they would have done would have been to use our folk tunes unadulterated in singing the sacred texts.

The writer feels that chasing a black goat when it is already dark is an effort in futility. This is why Olisaeke (2012) opines that:

there is a general saying that if you cannot beat them, join them. Since it may be difficult to completely wrestle our tradition from Western encroachment, it may still be possible to re-modify it in order to adapt some of our cultural heritages to be in tandem with the music of the day." (p. 266)

Enhancing Music Education through Musical Instruments

There are two aspects or approaches to learning, no matter the given discipline – theoretical and practical. The two complement each other but it is extremely difficult to ascertain which has supremacy over the other. It is as difficult as solving the puzzle of the egg and the chicken which came first. Anyone with the logical ability and argumentative power to prove one against the other may as well be able to do same between theory and practical. However difficult this may be in other fields of study, in music, the arguer in favour of practical will have an easy ride given the pragmatic nature of music in a general sense.

The word 'music' cannot be felt with a sense of touch. It does not really exist if it is not practiced and it is equally aesthetically predicated. Theories of music are designed for didactic purposes in the academic circle whereas practical knowledge may fully be acquired even out of classroom environment. This makes practical music knowledge easily accessible to anyone that has the talent and interest.

Ways of expressing music include singing and dancing, and none of these can thrive effectively without musical instruments of some sort providing the necessary rhythmic and melodic accompaniment. Olisaeke (2009: 45) observes that "no serious music production happens without musical instruments taking a major role. The charm, beauty and aesthetics in music are realized mainly through the role of musical instruments". In another situation the same author opines:

In Africa, music and dance are inseparable. In every dance there is a structured form of accompaniment to which the dance takes its rhythm. Musical instruments of different types most often provide the required accompaniment while in some aesthetic variations, rhythmic body sounds like clapping, stamping of feet and slapping of hands against the chest, stomach or the sides provide the musical accompaniment". (Olisaeke, 2014: 54)

If musical instruments are of this great importance to general music making and appreciation, then there is an urgent need to lay enough emphasis on it in acquiring music education. Children's first interests in learning music usually centre on musical instruments. The simple experiment the reader might use in determining the veracity of this claim is to gather a number of children, divide them into two groups, teach one group theory of music or even singing and teach the other group to play piano, violin or guitar, and watch the reaction of the other group. Within two practices the theory class would have decamped to the other group. "Whenever you see a group of musicians having a session, you would notice that children usually gather around the instrumentalists with curious interests and with less interest on the singers". (Olisaeke 2009: 45)

With this interest on the practical playing of musical instruments, there is the need to approach teaching music with much emphasis on musical instruments.

This belief must have led Onviuke (2008: 151) to assert that "the use of melody instrument in the classroom is an effective aid in teaching children to enjoy and understand music". However, in Nigeria, when we talk about learning musical instruments, our minds usually go to western instruments like piano, quitar, etc. The thinking of this writer is to try as much as possible to localize the content of our music curriculum however possible, be it theoretical or practical. And where that content is not rich enough as in the case of melody instruments, something should be done to remedy whatever shortcoming there is. Moreover, education experts are of the view that learning should progress from the known to the unknown and from the seen to the unseen. But then, we have a problem - paucity of traditional melodic instruments. The reason for this emphasis on melody instruments is anchored on the generation of interest on the part of the learner because interest enhances learning, and melodic instrument is apt to providing that than instruments of indefinite pitches. It will equally help teachers in imparting better music knowledge to their students since it will afford them the opportunity of improving their practical skills. Ekwueme (2009) holds the same view when she observes: "It is generally acknowledged that for teachers to be productive in music teaching, teacher education programme must emphasize acquisition of the skill in performance – vocal and instrumental". (p. 39)

Instruments of Definite and Indefinite Pitches

African musical instruments are categorized into two: instruments of definite pitches and instruments of indefinite pitches. Sachs and Hornbostel (1933) had classified African musical instruments into four classes, namely: aerophone, chordophone, idiophone and membranophone. Two, out of these classes, aerophone and chordophone belong to the instrument of definite pitches while the other two, idiophone and membranophone belong to the indefinite pitches. By indefinite pitch is meant that their bodies produce only a single sound when they are beaten, and that the sounds may not easily be tempered or calibrated. In these instruments, sometimes a second sound which may serve as a variation may be realized by depressing the resonating surface as in the case of membranophones or beating at the tip end or other side of the body as in the case of idiophones. On the other hand, definite pitched instruments are those capable of producing variety of pitches making it possible to create melodies out of them.

As a matter of fact, Africa, or specifically Nigeria has a lot of musical instruments of the above classes but the writer is of the view that instruments of indefinite pitches are far greater in number than those of definite pitches. This is really a handicap especially in today's music education if the above call to use melody instruments in classroom as an effective aid in teaching music would be realized in the African sense of it. Again, another challenge is that most of Africa's melody instruments have limited scales and some do not have the capability to produce sounds beyond five notes. This is equally a handicap in the style of singing of a modern African. Africa, in this modern epoch has gone beyond the melorhythmic and surrogative accompaniment styles that are characteristic of her traditional music. This is an after-effect of modernization and globalization.

Many traditional ensembles of Nigeria are deluged with indefinite pitched instruments with melody instruments hardly featuring. Most times when they are featured, may not go beyond a notched flute or a xylophone with limited tonal slabs, or at most the single pitched horns that are used in hocket form as found in the northern part of the country. These more or less serve the purpose of providing melo-rhythm, and surrogating on the vocal parts.

We are aware that there are some traditional efforts made by making most of these instruments of indefinite pitches produce variety of pitches by making different sizes of them and arranging them according to their tonal levels. Of particular mention here are the Ukom and Ese music ensembles. According to Uzoigwe (1998: 11) "Ukom ensemble consists of three musical instruments ... (1) a set of ten small membrane drums that are graduated in size and collectively referred to as *aria nkwa* (drumrow)". But these efforts are not really enough as they have not fully addressed the problem this research is highlighting. Again, Nzewi (2007: 84-87) had typified the various roles of African musical instrument ensemble to include: mother instrument, solo instrument, rhythm of dance instrument, pulse marker instrument, the phrasing-referent instrument, action motivation instruments and the obbligato instruments. However, it is important to note that of all the roles of the various instruments, melody instruments could only be applied in the roles of obbligato and mother instruments.

Theoretical Thoughts on Musical Instruments Expansion

Almost all musical instruments we have today have undergone one transformation or the other before they are at their current forms. Transformation in musical instrument arises out of the need to meet with the demands of the changing society. Some of these needs include (a) discovery of different sonorities, (b) absorption of foreign musical cultures, (c) adoption of alien scale structures other than the one peculiar to a particular ethnic culture, and (d) infiltration of a culture by foreign musical elements through agents of civilization like colonization, missionary incursions, globalization, etc. When the musical tradition of a community undergoes such mutations, musical instruments must be imported, transformed or upgraded to satisfy the need of the new tradition. History of some major musical instruments may here be necessary to lend credence to this discussion.

Piano as a musical instrument evolved into a complex mechanical framework from the simpler mechanism of the harpsichord and clavichord. The earliest known model was manufactured in 1709 by Bartolomeo Cristofori, a harpsichord maker of Florence, Italy (Encarta 2009). Formerly, the strings of harpsichord which is a precursor to piano were plucked, but the new innovation employed a different mechanism. "The new device used a harpsichord frame with a new action mechanism: hammers hitting the strings instead of plucking them, allowing for the first time a gradation of soft to loud sounds." (Encarta 2009) Other instrument makers who adopted Cristofori's action include German organ maker Gottfried Sibermann of Freiberg, Johann Andreas Stein of Ausburg, John Broadwood and co, Sebastein Erard of France, etc.

Germany and the United States have long been distinguished for fine pianos, notably those of the German firm founded by Karl Bechtein and the American firms of Baldwin, Mason & Hamlin, Steinway, and Chickering. The pianos of the Austrian Bösendorfer firm are also highly respected. In the area of compass, the early piano had, like that of the harpsichord, only four, or at most, five octaves, but with structural changes, has increased to a compass of more than seven octaves. Development in piano led composers like Mozart, Beethoven, Chopin, Liszt, etc., to write exciting compositions that explored all the potentialities of the piano and discovered new sonorities that were not hitherto there, especially the effect derived with the use of pedals. Piano could then be made to sound like a full orchestra on its own. Glennon (1980) states:

Beethoven, Schumann, Liszt, Chopin, Debussy, and Ravel were some of the more adventurous composers who strove for greater range of tone-colour, more powerful sound and more subtlety of expression in their composition for piano, and instrument-makers were encouraged to meet these demands (p. 91).

The Amati family of Cremona pioneered the making of violin in the sixteenth century. Started by Andrea Amati who is the founder of the Cremona School of Violin Makers, the art was transferred to his children and grandchildren. The violin evolved from two medieval bowed instruments – the fiddle and the rebec. Also related to it but not a direct ancestor is the viol, a fretted six-stringed instrument. Girolamo Amati continued to develop violin in the style of his father although he also developed a larger violin with an altered sound hole. It was in the hands of his son Nicolo Amati that major changes that refined violin took place. The backs and bellies were arched and made of beautiful grained wood; the sound-holes were graceful and bold, the scroll exquisitely cut and the varnish was transparent and of a deep, rich hue.

Violin making however reached its peak in the hands of Antonio Stradivari and Andrea Guarneri who were the pupils of Nicolo Amati. According to Encarta (2009), "During his career, Stradivari made certain changes in the proportion of his instruments, particularly the violins. The secret of his unmatched mastery remains elusive. Some believe it to be in the varnish he used; this is a subject of controversy."

There is hardly any musical instrument seen today that still retains its original form and capability as it was from its conception. Every instrument has undergone certain modernization to meet up with the demands of various changing generations. Writing about the development that has taken place in harp, Vaughn in Encarta (2009) observes:

As music in the 16th to 18th centuries gradually demanded more notes lying outside the seven notes of the European harp's scale, attempts were made to enable the harp to produce the additional Festus Olisaeke: Expanding Musical Instruments' Capabilities...

notes. These included adding a second row of strings tuned to the sharps and flats (chromatic harp), setting small hooks on the neck that could be tuned to catch a string and raised its pitch a half step and providing pedals to which the hooks (or later, rotating disks) were connected by levers and wires set inside the fore pillar.

The Way Forward

We all know that it is not easy to revert the situation now. Moreover, development in every facet of life is moving at a rocket speed and affecting everything in the line of its motion. It is like a chain thing with every connection weaved on its stead. To upset or discomfit the flow calls for caution as global education may not be favourably disposed to such thinking. This is why the recent call by many African schools of thought in various disciplines to localize most of the contents of African practices may be a herculean task to achieve. Our people have gone far in imbibing alien cultures and the youths of our time are crazy about imitating American and European youths.

What need be done is to expand some of our traditional musical ideologies to accommodate these changes. In the area of musical instruments, we need to expand our musical instruments to rid them of these deficiencies that make them almost irrelevant to the present age. Olisaeke (2012) had done this by improving the local xylophone of Berom people of Plateau State to play diatonic and chromatic scales alongside its original pentatonic scale instead of only pentatonic scale it originally played. According to him, "Musical instruments need to be updated and transformed to meet the changing needs of every society from time to time, since culture is not all that static. It is a known fact that development has affected every aspect of the world's cultural practices and music is not left out. This development has equally affected the scale structures of different societies necessitating constant updating. (Olisaeke, 2012: 74)

Lending credence to this, Nzewi (2007a) had earlier posited that:

As the music technology of a culture area is advanced, and its musicians explore greater and more diversified ranges of sounds on a cultural instrument, the scale system may acquire new scale structures, i.e. variations in the intervallic scheme. We bear in mind that the music systems of various world cultures have always been accommodating changes from within as well as outside as a result of culture contact. Thus cultural advancement has been an ever-occuring process in Africa and elsewhere. (pp. 33-34)

Conclusion and Recommendations

Writing on African orchestration, Nwamara (2010: 225) asks a pertinent question about Africa having her own orchestra. "Does it mean that Africa has not aot enough musical instruments to form one (orchestra), or is it that all African musical instruments belong to one family or class of musical instruments and thereby lack variety in sound production"? He as much as had answered this question when he went further to develop a paradigm for accompanying songs with every accompaniment hovering around instruments of indefinite pitches. In the pattern he put forward, the following instruments were used: igba (membrane drum), ogene (metal bell), ichaka (seed rattle), okpokolo (small wooden gong), alo (big bell), ikoro (large slit drum), and udu (pot drum). He did a nice job by creating different rhythmic patterns at different entries to create rhythmic variations. But then, everything centered around play on rhythm, the voice probably providing the only melody without any melody instrument assisting it. Can we say that we are satisfied with this trend of orchestration without any instrument providing melodic assistance to the voices? We are not saying that our harmonic rhythmic instruments are not good enough to provide interesting orchestras but the fact is that we need melodic instruments to add interesting variety which will in turn prolong performance without getting bored easily and equally satisfy the changing demands of our traditional music. This, when done would be an obvious boost to studies in African music as the instruments would be readily available to students. and understanding to play them would be easier than foreign instruments because the materials and every construction methods involved would perhaps be more familiar to them.

To remedy this fewness of melody instruments, the following recommendations are proffered:

- Music instrument technology should be emphasized as a core course in the curriculum of the Departments of music in our tertiary institutions.
- The content of such a curriculum should be more tilted towards traditional African instruments in order to localize the content. Efforts should be made to apply knowledge realized from researches in technology in achieving improved African instruments.
- Musical instruments technologists should therefore go beyond the musical instrument creativity of our fore-fathers and apply new scientific knowledge in expanding our traditional musical instruments.
- This expansion should cut across all classes of musical instruments of Africa. It can be achieved by improving the tonal structures of the instruments to be able to play modern music conceived in diatonic and chromatic scales. This can be done by producing and arranging them in different tonal sizes in the case of instruments of indefinite pitches and also by inserting missing tuned materials in their various places in the case of definite pitched instruments.
- Construction of entirely new instruments to meet the demands of the changing nature of African music is also a challenge facing music instrument technologists.

References

- Ekwueme, L.U. (2009). Competency-based teacher education in music/cultural and creative arts: A suggested approach for the Universal Basic Education (UBE) programme. *Interlink: A Journal of Research in Music*, 4, 33-47.
- Forchu, I. I. (2011). The aesthetic concept of Nigerian traditional music: A tool for sustainable development. *The humanities and sustainable development*. 182-200.

Glennon, J. (1980). Understanding music. London: Macmillan.

- Nwamara, A. O. (2008). Towards developing and establishing basic indigenous accompaniment patterns for contemporary Igbo art songs. *Awka Journal of Research in Music and the Arts (ARJMA), 5,* 225-233.
- Nzewi, M. & Nzewi, O. (2007a). A contemporary study of musical arts: Informed by African indigenous knowledge system, 1. The Root: Foundation. CIIMDA. South Africa.
- Nzewi, M. & Nzewi, O. (2007b). A contemporary study of musical arts: informed by African indigenous knowledge system, 2. The Stem: Foundation. CIIMDA. South Africa.
- Olisaeke, F. I. (2009). A critical assessment of music education programme in Nigeria Practical perspective. *The academic forum*, 17 (3). 45-49.
- Olisaeke, F. I. (2012). Harnessing the potentials of the traditional horn xylophone (kundung) of the Berom of Plateau state for contemporary composition. An Unpublished Ph.D Dissertation in Theory and Composition, Department of Music, Nnamdi Azikiwe University, Awka.
- Olisaeke, F.I. (2014). African traditional dances and the current global educational challenges. *International Journal of African Studies and Education (INJASE)*, 2(2). 51-61.
- Onwuejeogwu, M.A. (n.d). Multi-ethnic nationalities of Nigeria and the problems of governance.
- Onyiuke, Y.S. (2008). Playing classroom instruments: Early experiences with simple musical instruments. *Awka Journal of Research in Music and the Arts (ARJMA), 5.* 150-166.
- Sachs, C. & Hornbostel, E. V. M. (1933). The ethnology of African sound Instrument. Africa, 6 (2), 129-157.
- Uzoigwe, J. (1998). *Ukom: A study of African musical craftsmanship*. Okigwe: FASMEN Communications.

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Vaughn, G. (2009). *The Harp.* Microsoft ® Encarta ® 2009 [DVD], Redmond WA; Microsoft Corporation, 2008.