



ISSN 2278 – 0211 (Online)

Indigenous Music Technology: The Construction of Slit Wooden Drum in Igbo Culture, Nigeria

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Abstract:

Music is present in all cultures of the world, and it serves essentially the same functions in most cultures. Among the Igbo, all aspects of life, ranging from birth to death, are integrated with music making, and yet, some of the traditional music practices have started disappearing, and if care is not taken, they might be lost forever. The art of indigenous instrument construction is not exempted, especially the construction of slit wooden drums. The interest in constructing indigenous slit wooden drums has drastically reduced, resulting in many challenges facing the drum makers. As a result of the scarcity of strong trees that are required for the construction due to deforestation, indiscriminate bush burning, and bush fallowing in Igbo land, coupled with the stress that the constructors undergo before achieving the end product, has led to interest reduction of many in the business. This paper aims to investigate how a slit wooden drum is constructed in Igbo culture. It focused on the construction technique, the procedure, materials, socio-cultural determinants as a musical instrument in Igbo culture, and the effects of western technology in its construction. This descriptive survey employs musicological tools, including participant observation, field recordings, and interviews of informants. Information was elicited through oral interviews with eight slit wooden drum makers and players from Anambra state. Articles and books related to the topic were selected and studied. It was revealed that the slit wooden drum is one of the oldest and most significant musical instruments produced and played in Igbo land and is still constructive in this contemporary Igbo society. Because of its socio-cultural implications in Igbo culture, the makers always consider materials, construction techniques, and decoration creating a balanced instrument that is both functional and aesthetically pleasing. To ensure the continuity of this cultural heritage, it must be in a state of constant change, both through indigenous innovation and technological influences. It recommends, among others, for slit wooden drums to be one of the mass-produced factory-made instruments to fit into this technological era. This paper would help the perplexed instrument constructors to have metanoia in this art and will motivate rich people, who need business to invest in, to find this as a lucrative and worthy business.

Keywords: Music technology, indigenous music, construction, slit wooden drum

1. Introduction

The Igbos are one of the three main ethnic groups in Nigeria who took their name from their language. The way of life of the Igbo is similar in terms of language, religious and social practices. Despite the similarities, slight differences or variations exist among them. They have a monarchy. The occupations of the people of Igbo include farming, fishing, blacksmithing, hunting, weaving, pottery, wine tapping, wood carving, and instrument construction. The Igbo are deeply religious, and a religion forms an important aspect of their everyday lives. They believe that their gods provide them with their needs. Therefore, they worship them frequently with songs and musical instruments like metal gongs, rattles, drums of different types, and many others.

They have great respect and regard for their culture. Their cultural life is full of other activities which last from birth to death. Music in Igbo culture covers the physical, mental, emotional, and social experiences. Under physical experiences are motor skills, which include the demonstration of their songs. Within mental experiences are the intellectual levels: learning common ideas, meaningful tunes, and application of the knowledge gained to a new situation and analyzing situations. Within emotional experiences, the music portrays methods of shaping personality and/or patterning moral concepts. In the social sphere, folk music attempt to socialize the listeners by transmitting worthwhile roles, in particular, emphasizing interpersonal relationship for the good of mankind.

Music performance in Igbo culture involves the use of musical instruments. Instruments are part of music-making in life. They are sonorous objects artistically used for producing musical sounds and interpreting creative music works in Igbo Culture. The slit wooden drum is one of the indigenous musical instruments that are prominently in use among the people of Igbo. In addition to the musical performance, the Igbo people make some indigenous musical instruments such as *ogene* of all types, thumb piano, slit wooden drums of all sizes, membrane drums, rattles, xylophones, and other traditional musical instruments.

In Igbo culture, a slit wooden drum is a traditional instrument with a rectangular cavity slit in the hollowed-out wooden interior, made out of wood and most commonly a tree trunk. It is an idiophone instrument made from a hollowed piece of wood in which a narrow groove serves as a sound resonator. It is struck with a stick along both sides of the narrow groove, which produces two different pitches. As a result of the characteristic tonal inflection of the Igbo language, the tones exacted from the drums are made to imitate sentences and phrases. Thus, the drums are also means of communication.

Technology, as it relates to music, implies all the technical or mechanical applications in the production and performance of musical arts. Nwankwo (2008) posits that technology is 'the process by which human beings modify nature to satisfy their needs and wants' (p. 14). It is the body of knowledge used to create tools, develop skills, and extract or collect materials. It involves using electronic devices, machines, tools, and computer software to make or perform music, compose, notate, play back, record songs or pieces, or analyze or edit music. Ibekwe (2011) argues that:

Music technology should not be restricted to the use of computers and electronics only. Attention should also be drawn to our traditional music instrument technology, which is highly sophisticated and requires high-level technical abilities in both production and performance (p. 80).

Technology is the changing and manipulation of the human environment or the application of knowledge to the practical aims of human life. It involves using devices, mechanisms, machines, materials, tools, techniques, and sources of power to make life easier or more pleasant and work more productive, and so is the technology of traditional musical instruments. Igbo musical instrument, as a cultural indicator, presents the most diversified source of information on the artistic values, religions, family life, and the general social structure of Igbo society. It is cultural, making it liable to change because no culture can even be inert as the only thing invariable in life is change. This discussion is hinged on the theory of continuity and change as propounded by Femi Adedeji. 'This theory presumes that change is inevitable on the one hand and that continuity and change form a kind of dynamics that shape a particular musical practice from time to time on the other' (Adedeji, 2014, p. 113). Slit wooden drum was one of the oldest and most prominent indigenous musical instruments in Igbo culture; it is still and will continue to be useful, and to meet up with the standard of this technological era, change in the construction process is necessitated.

2. The Physical Descriptions of Slit Wooden Drums

Slit wooden drum is a musical instrument constructed traditionally from different trees. Nzewi (1991) described wooden slit drums as the 'ekwe class of instrument which is the cylindrical wooden slit instrument called drums because it functions musically as such' (p.59). Depending on the materials available, a slit drum, as a hollow percussion instrument, can usually be made from bamboo or wood. It has one or more slits cut into the surface, which increases the instrument's resonance. A slit-drum is a hollowed-out piece of wood used for musical or signaling purposes, which is made more resonant through one or more slits in it. They are found in Igbo culture, ranging from the giant slit drums to the smallest. It is a percussion instrument formed by hollowing a tree trunk through a lengthwise slip and sounded by beating with sticks; the edges of the slit are usually of different thicknesses to produce different pitches.

Slit wooden drum is prominently in use in all parts of Igboland and beyond. Akpabot (1986) made a comparative study of the distribution of the gong and wooden drum and came up with his findings by saying that 'whereas the gong is used throughout Nigeria, the wooden drum is prominent only in the Southeastern parts of the country among the Ibos, Ibibios and Ijaws' (p.14). Slit drum is important not only to the Igbos but to all people from different parts of the world.

Slit drum comes in various sizes and designs, and each size is determined by the purpose for which it is being used. In Igbo culture, depending on its size, place, and time, it could be used for other purposes besides music. Nketia (1975) observed that:

Their use is not confined to purely musical functions. Some are used where appropriate as signals for attracting attention, assembling people or creating an atmosphere (especially during religious rites and ceremonies). They may also be used for transmitting verbal messages or reinforcing verbal communication for marking the movement of special personalities such as priests and persons undergoing said initiation (p. 69).

According to Friedman (2005), the type of slit drum is determined by the purpose for which it will be used. The small slit drums can be constructed to be used for kola nut custom, music, dance or performance art, oral literature, ethics, and philosophizing. In contrast, the big-sized slit drums are used to perform ritual ceremonies and summoning of the indigenes to the monarchs' palace. In the Igbo culture of Nigeria, slit drums are of different types and sizes thus: giant (*ikolo, ikoro*), large (*abia, ufie*), medium (*ekwe*), and very small (*okpokolo*). The size of its body determines whether it will have a high, low, or medium voice.



Figure 1: The Giant Slit Wooden Drums (Ikolo, Ikoro)

The giant or the very large size is called *ikolo* or *ikoro*. It is usually very big in size, with a human head carved on top of it. The size varies between 13, 14, 15, and 16 inches in diameter and 17, 19, 21, and 24 inches in length, respectively. This is not as common as other sizes because it is a sacred instrument. The larger slit drum produces rich lower tones. Nzewi and Nzewi (2009) differentiated them thus:

Another type of drum found in some forest regions of Africa is the mostly cylindrical slit wooden drum that varies in size from 30cm to 3 meters long. The giant species could be up to 15 meters high. The slit drum is the original talking (speech surrogate) drum. The very large specie normally has metaphysical ascriptions and symbolize communal ethos as much as they could be used in special musical arts performance. (p. 13)



Figure 2: The Medium Slit Wooden Drums (Ekwe)

The medium is called *ekwe* which can be in the sizes of *nnukwu ekwe*, *ogbaso nnukwu ekwe* and *obeke ekwe*. These are common ones that could be found in different performances. They are of different sizes but have the same function.



Figure 3: The Small Slit Wooden Drums (Okpokolo)

We have the smallest size called *okpokolo*. It produces a high pitch and is used by hunters, watchmen, and even traditional medicine men. Okpokolo is also commonly used by women dancing groups and religious groups. It has a straight narrow opening without any demarcation. It is oval in shape.



Figure 4: The Large Slit Wooden Drums (Ufie, Abia)

The large one is known as *abia*, *ufie*. This is different from the ordinary *ekwe*. This instrument is mainly used for titled persons, especially during the *ozo* traditional title taking, at the death of a titled person, and also during traditional rulers' coronation or *ofala* festival. Echezona (1963) states that:

Some of the slits of smaller patterns are distinguished from the ekwe and are technically known as ufie. Ufie is generally found in the royal place and not in the hands of the commoners. It is the king's prerogative to own and have the sole right to use Ufie. Its sound is somewhat different from the ordinary ekwe, and its note is immediately recognized by the Ibo, even though the foreigner may be unaware of any difference (p. 58).

In Igbo culture, this type of drum symbolizes and protects royalty and is often housed in sacred dwellings. *Ufie* instrument is generally regarded as sacred. It has cultural attachments. It is strictly reserved for the *ozo* institution as their talking instrument. It is regarded as a spokesman to the *ozo* initiates, the *Igwe*, and titled men generally who can interpret the language of its music. Two drums that constitute the *Ufie* are classified under male and female. The male is known as *di-ufie*, which looks slightly smaller in size than the female and is always on the player's right-hand side, while the female, known as *nwunye ufie*, is always on the left-hand side of the player. Each of the *Ufie* has two tongues- one male and one female. The male usually calls the music while the female responds. Interestingly, the female has a deeper tone than the male.

Slit drums are known by many different names in different cultures. In Igbo culture, the names are: *ikolo*, *ufie*, *ekwe*, and *okpokolo*. Echezona (1963) pointed out different names of the slit drum with this comment: 'Slit drum is known as *ekwe* in Onitsha area, *ekere* in Owerri area. Common names in all areas include *Okwa*, *Ikoro*, and *Uhie*. The smallest type is *ekere*, and the largest types are *Uhie* and *Ikoro*' (p. 58). Anoke (2004) stressed that:

- The slit drum in Igbo is called *ekwe*,
- The Ibibios/Efiks call it *obodom*,
- Yoruba calls it *gbedu*,
- Ogoja knows it as *ikiriko*, and
- Ghana calls it *atumpa*, *tumpan*

Chukwu (1999) argues that:

Ikoro, in some Igbo cultures, is called ufie, especially in Anambra State. In Imo State, the word 'uhie' is used; it is the name of the tree from which the ikoro is cut and carved out. The wood 'ufie ukpa' (Pterocarpus Osun) is a species of wood that has been proved to possess a strong resistance to rodents and ants that eat wood and is generally used in Igbo societies for the construction of ikoro or ufie (p. 89).

Ikolo, *ufie*, *ekwe*, and *okpokolo* are all types of slit wooden drums. Slit drums have two resonating lips about a tonal interval of a third apart. It represents a transposition of three primary speech tone levels in the Igbo language (high, middle, and low). Slit wooden drum, no matter the size, has immeasurable value in traditional Igbo music performance.

3. Construction of Slit Wooden Drums

Africans construct their musical instruments with materials they find around them. Their musical instruments are constructed depending on the materials available to them. Trees and plants endowed with natural beneficiaries are found in any vegetation. Therefore, the environment is a very determinant factor in people's music. It is a natural tendency in man to make use of the resources around him to satisfy his needs. In line with the above, Okafor (1994) noted:

Nigerian musical instruments are virtually all made of materials sourced from the local environment. Identification of material, seasoning, shaping, and application are parts of a group of a family tradition. Because Geography has tended to create a great diversity within the overall Nigerian environment, the number and the type of these instruments are impressive, and those belonging to the people of the same cultural zone might have significant differences and peculiarities (p. 191).

Igbo land is located within the Guinea Savanna of Southern Nigeria – characterized by evergreen trees, tall grasses, oil-palm, and patches of forest. The instrument maker consequently takes materials from their environment and turns them into a musical instrument that sounds to achieve the desired effects. For the construction of slit wooden drums in Igbo culture, *awala ufie* (*Eurycoma*), *ube osa* (*Canarium schweinfurth*), *osisi obala* (*ngwu*) (*Pterocarpus*), *ukpaka* (*Dialium guineense*), *oji* (*Chlorophora excelsa*) trees are all good.

However, according to Onwuegbusi, Onwunee, Akunne, Agu, Nwogbo, Nwankwo, Azodo, and Onyi, the best is (*osisi obala/ uhie*) because this species of wood has been proved to possess a strong resistance to rodent and ants that eat wood (personal communication, November, 2015).

The sound each slit drum produces does not matter on the type of wood used. Instead, it is the size that matters. It is pertinent to know that while other non-mentioned types of trees that can be used to construct the slit drum will last for years, the above-mentioned types of trees last longer and are hard to be infected with termites. They require little or no preservative measures to keep it long.

Over ninety percent of manual labour is involved in the construction of slit wooden drums. It involves hewing and scooping for several days to make a hollow in a log of wood while constructing a resonator for a slit drum. Most tedious of all is the common use of cutlass to cut large logs/trunks of wood for the construction of wooden drums resulting in serious fatigue, discouragement, and pains. The various stages which the maker of slit wooden drums passes during the construction include:

- The cutting down of the desired tree,
- Sizing of the wood,
- Marking the size of each slit,
- Chiseling to create the needed holes, which are done according to the size of the slit drum that is to be constructed

The combination of all these processes is what transmutes to a particular size of slit drum with a particular sound. Udofia (2011) noted that:

In constructing the wooden drum, the people cut a log of a tree and dig a hollow inside it. This is hollowed out and slit opened at the top to create a pair of hips, which are struck with sticks to produce sound. The log is always cut according to specific sizes of wooden drums to be made. The hollow, which is for resonance, varies in size as dictated by the sizes of the wooden drums (p. 157).

Slit wooden drum as a percussion instrument is formed by hollowing a tree trunk through a lengthwise chip and sounded by beating with a stick. The edges of the slit are usually of different thicknesses to produce different pitches. It is constructed or carved out of wood. During construction, the tree is carefully fallen down and cut fresh into logs of the desired length, manually with an axe, in the past and dolma nowadays, carried home or left in the forest to dry. It is left under the sun to dry for a while, and this is called seasoning.

After this process, the logs are cut into approximate key sizes, followed simultaneously by the scrapping, scooping, trimming, and tuning process. A solid block of wood is hollowed out to leave a longitudinal opening on the upper side. The edge of this slit is of unequal thickness, and careful thinning of the flanks produces at least two sounds and many as four distinct pitches when struck. When a tree or a solid block of wood is hollowed out, it leaves a longitudinal opening on the upper side, and tuning gives it a rhythmic and melodic sound.

A simple short-handed axe was the main tool used by the slit drum craftsman in the past, though the carpenter's plane could be used for smoothing and a sharp scraping knife for fine-tuning. The inside of the log is scooped out to obtain a uniform wall about half a centimetre around each side of the wooden drum. The slit drum makers ensure the production of both high and low pitches during the construction. They impinge on this through the thickness of the two lips of the instrument – the thicker lip produces a high pitch while the thinner lip produces a low pitch.



Figure 5: Slit Wooden Drum Constructors Marking the Size of Each Slit

There are different steps to follow in constructing a slit wooden drum. The first step is the marking of the H shape with a pencil, making sure that the tongues are not the same lengths as these varying lengths will give different tones. The second step is to drill a hole in the ends of the cross makings of the H. The hole needs to be large enough to enable one to put a jigsaw blade down it. This will enable one to make the cut. The third step is to cut the tongues following the lines. One must ensure that the jigsaw blade is not too long to avoid jumping out of hand as it hits the base of the wood. The fourth step is to sand the cuts to make sure:

- There are no splinters, and
- There is enough room with the cut to enable the tongue to vibrate freely

In case the wood moves while cutting these tongues and, as a result, denies the tongues' free movement, one can re-cut the slits or sand them to allow enough free play.

The drumsticks (beaters) are fashioned from the mid-rib of palm fronds. The principle governing this choice is that beaters made of hardwood would produce sharp, harsh tones and crack and break the thin resonating lips of a slit-drum. Master craftsmen and sculptors who may not be musicians construct slit drums. They either work according to the musician's prescriptions regarding the size and species needed, or the musicians could select and buy from finished specifications. When not satisfactory, the musician could request an amendment or carry out such amendment by himself to tune and harmonize the drum timber with the other instruments of the ensemble.

4. Tools for Slit Wooden Drum Construction

The tools used to construct slit wooden drums technologically are categorized into two: the traditional and the technological tools. In the 30s, according to Agu, traditional tools were in use before the advent of modern tools (technological tools). The tools include axe, machete, chisel, local hammers, sand-paper, okirika, and others. The axe is used to cut down the large trees and the woods into different sizes according to the kind or type of slit drum to be constructed. The machete is used to prepare and cut the branches of the tree when cut down with an axe. It is also used to remove the outer body/layer of the woods before use.

Chisel as a material and technique is used for preparing the outer size and shape or digging out the hollow chamber through the narrow slit. There are long and short chisels that are used to construct different sizes of slit drums. The sand-paper is used to smooth the bodies of the slit drum before painting if necessary. The okirika is also used to carve the wood into the sizes of a slit, especially the mouth of a slit.



Figure 6: Some Tools for Construction of Slit Wooden Drums in Igbo Culture

Some of the modern tools added to help reduce human manual labours, fatigue, and time spent constructing the wooden drum are:

- The dolma-machine,
- Filing machine,
- Panel saw,
- Hand saw,
- Spindles sander,
- Chain saw,
- Wood back remover,
- Sprayer, and
- Electric kiln seasoning machine

Presently, the dolma machines are used to cut down the trees with little or no physical power, unlike the time when makers of slit drums applied human manual labours, using an axe to cut down trees for construction. Using the dolma machine and other modern tools makes it easier for constructors to cut down strong and big trees for construction. The dolma is also used to cut the branches of the trees and the woods into different parts to construct different sizes of slit wooden drums. The filing machine presently is used in place of sand-paper to smooth the bodies of different sizes of slit drums.

5. The Tuning and Care of Slit Wooden Drums

All slit wooden drums are tuned during construction. A slit drum's tone is determined by the size of the drum body and its tonal scale. The tuning takes place during the cutting of the tongue. Tuning a drum is a long and delicate process: shaving of wood, removing or scrapping of wood from each tongue until the pitch needed is attained. Each drum note is tuned to the standard 440 pitch, which is the specific frequency of a tone that is calculated in cycles per second. While dressing the wood, the constructor keeps hitting it to determine the pitch, for the thicker lip produces a high pitch while the thinner lip produces a low pitch. According to Nzewi (1991), 'the tuning technique used when a drum requires

amendment is to chip off the out or inner layer of the appropriate lip or side of the drum' (p. 59). During the tuning process, the outer stratum or the inner stratum is chipped off to fabricate an opposite lip.

Slit wooden drum, like other musical instruments, needs to be cared for. After playing, it is kept where it is safe from fire, and termite and their positions are always checked. The nature of slit drum instruments requires keeping them in an airy room. They are also kept on top of the hearth to prevent them from getting in contact with termites, which may destroy them. The instruments are constructed with elaborate decorations. They are treated with very great care because any crack on them affects the tone. Nzewi and Nzewi (2007) wrote that:

A drum needs to be properly stored after use. The pitch and voice quality of a drum that has not been played for a while rises or drops, depending on the drum size and atmospheric condition that affects the wood. Normally larger size slit drums are stored lying on the ground uprightly in order to breathe properly. In some African cultures, the giant slit drum is stored on a raft built above the fireplace to insure the life of the voice (timbre). Playing the drum enhances its life and voice (p. 3).

Most of these instruments are subject to weather and temperature conditions because of the local materials used in their construction. Exposure to adverse weather conditions can seriously affect the pitch and tonal qualities of the slit drum. During the dry session, when the instruments are affected by weather, they are soaked in water and allowed to dry up. When the instruments are wet, they are kept under the sun and watched closely for the normal sound to be restored.

6. Challenges in the Construction of Slit Wooden Drums

Presently in Igbo culture, the makers of these indigenous musical instruments, especially slit wooden drums, are drastically losing interest in the art because of many challenges. Such include:

- Scarcity of required strong trees due to deforestation,
- Indiscriminate bush burning and
- Bush following

The cutting down of trees in some societies, either for developmental purposes, agricultural or economic purposes, has resulted in the scarcity of trees for the construction of slit wooden drums. The constructors living within Anambra State, Enugu state, and Imo now travel far distances like Edo, Ogun, and Delta State in search of required trees. As a result, a situation arises where the constructor will rent a house nearer to the forest in the State where any of the required trees is found. The unpremeditated expenses in the cause of this journey are one of the challenges the makers face in constructing slit wooden drums.

The stress that manufacturers of slit wooden drums undergo has contributed to a drastic reduction of interest in the construction of slit drums in recent times. It is envisioned that, in the near future, the manufacturers of slit wooden drums would have to hew and scoop for several days to craft a hollow in a log of wood while constructing a resonator for slit drums. Nastiest of all is the common use of cutlass to cut large logs/trunks of wood for the construction of wooden drums. Moreover, the prices at which indigenous slit wooden drums are sold are relatively low compared to the tedious manual labour, time involved in the construction, and the value of the naira. Cost ineffectiveness in this business is much apparent in the prices of slit wooden drums where the log has to be hewed and scooped to realize hollow resonators.

Bad roads and poor transportation systems also affect the construction of slit drums in Igbo culture. At times, the bigger and biggest slit drums are constructed inside the forest due to bad roads and poor transportation systems in our society, coupled with the heaviness of the trees involved. Most of the time, the big trucks conveying these big logs tend to break down on the roads and stay for days or weeks, even months, before being fixed as a result of bad roads, which leads to a serious delay in the construction and more stress added. The constructors also find it difficult to convey their constructed slit wooden drum to either the market or their destinations due to bad roads, which, to a large extent, discourages many others from venturing into the construction business. The challenges encountered by various makers of the slit wooden drum have drastically reduced their interests and also discouraged intending makers from participating in the construction or making of slit drums,

Another challenge that the constructors of slit wooden drum face in Igbo culture are poor or low demands of the instrument. The low patronage of the instrument is one of the negative effects of technology in African musical practices. Most music practitioners in Igbo culture have embraced Western musical instruments, using them to fill up the spaces which our traditional instruments are supposed to occupy. Agu (2010), in a paper titled 'The Music Scene in Technological Era: The Nigerian Experience', presented at the 9th International Conference of the Association of Nigerian Musicologists held at the University of Uyo, posited that:

Many have rejected their traditional music and musical instruments in preference to the technologically advanced foreign ones. As a result, they have lost the opportunity to acquire basic local knowledge of their traditional music and musical instruments. Their inadequacies in basic folk knowledge are some of the adverse effects of technology on folk/traditional music creativity and delivery. These factors affect their cultural concepts of materials utilized for music creation and construction of musical instruments (p.9).

Technology has positively as well as negatively affected African traditional music. The introduction of television, radios, films or disc spinners has helped commercialize African traditional music. Western styles, instruments, foreign rhythms, costumes, Western scales, and European harmonic systems were introduced, which have helped to subvert African traditional music. Western musical instruments now accompany traditional music against our own traditional instruments. Most of our traditional musicians use Western instruments in their traditional music performances and, in the process, discourage our traditional instrument makers. The embracement of Western musical instruments can easily be seen in studio recordings where tone generators, drum machines, and other Western instruments are used to produce

any tone, including the tones of the indigenous instruments. Even in stage performances, people now prefer artificial sounds to natural sounds. Thus, the instrument makers are drastically discouraged.

7. The Effects of Technology on the Construction of Slit Wooden Drums

Technology has brought many changes to people's way of doing things, especially in traditional music performances. Oguoma and Chukwukwe (2009:196) aver, 'technology refers to processes and activities (human and material) which are geared towards solving human problems. Technology has severely affected the mode of instrument construction in Igbo culture.' Agu (1989) identifies technological impacts on the Nigerian folk music scene. He surveyed the positive and negative gains brought about by technology on the practical experiences in musical arts creativity and delivery in Nigeria, with a view to:

- Opening our minds and thoughts to the reality of the technological impact on our musical activities,
- Helping or guiding us curve out ways of achieving best results through the reasonable application of technological traits on the Nigerian music heritage

He posited that technology has both positive and negative effects on our traditional music system. The negative effect is seen much in attitudes that affect our traditional music and set treacherous procedures for the growth and sustenance of our cultural values. Some of these instrument makers have lost their skills, knowledge, and abilities due to their attitude towards life. The mentality of 'I do not want to suffer or die' has turned most of them into lazy and incompetent persons, forgetting what the bible says 'that if you do not work, you should not eat'. Some prefer an easy life, and considering the stress to pass during this instrument construction, they prefer giving up the business.

The invention of modern technological tools used in the construction of slit wooden drums has both positive and negative impacts on the construction of the slit drum. The transition from the traditional mode to the technological mode of constructing slit drums saw the indigenous makers encountering one problem or the other. The recent innovation and adaptations that have been witnessed in the evolution of traditional music over the years informed the developments in the construction of slit wooden drums (Agu, 2005). However, he maintained that the spirit of all these developments, modern influences that impinge on the construction of the wooden drum, the traditional musical performance, and organology, had not been allowed to be swept away in musical ideologies of the African society.

Positively, technological tools have made the construction of slit wooden drums less unwieldy. Cutting down a tree using traditional tools can take several days. However, if you use modern tools, it will take only a few minutes. In that manner, human manual labours, fatigue, and time spent in the construction of slit wooden drums are drastically reduced, showing that all manual labour involved in the construction of slit wooden drums is mechanically possible. Instead of using a local axe to cut down big trees for construction, one can now use a dolma machine. But in as much as modern equipment has made the construction of slit wooden drums less cumbersome, the accessibility of these modern equipment, like the dolma cutting machine, filling machine, and others, has remained a major challenge faced by the constructors of slit drums. Lack of funds is the challenge here. Modern power tools that can help reduce human manual labours, fatigue, and time spent constructing slit wooden drums are hard to access due to lack of funds. Those constructors who cannot afford them engaged in hiring the services of those who own them, making the production cost so outrageous that they cannot make much profit at the end of the construction. However, those few constructors who can afford the fund to purchase the modern equipment necessary to construct the slit wooden drum are enjoying the business.

8. Socio-Cultural Implications of Slit Wooden Drums

In Igbo culture, the giant (*ikolo*) and the medium (*ufie*) slit wooden drums are regarded as sacred instruments. The giant slit wooden drum often forms part of the emblems or symbols of a town, and it often describes the picturesque characteristics of the town. It is placed at the center of the marketplace or village square under a housed shelter. The large slit wooden drum (*ufie*) instrument is a peculiar instrument that solemnly reminds members of the society of its rich culture, and the sound is uniquely Igbo and can be identified as such. *Onwuka* (2010), on the socio-cultural implications of *ufie* instruments, stated that:

Socio-culturally, ufie instruments are said to be surrogates of a titled man and his wife, who are usually engaged in romantic dialogue during musical interplay. They are, therefore, held in high esteem, handled with the utmost care, and treated with such great honour as is given to any titled man or woman. Against this background, it is a taboo for any female or the uninitiated to touch, carry, beat or even push down the ufie drums. Where one infringes on this exceptional tradition, he or she is said to have violated the ufie and shall be required to perform the purification ritual (isepu ya aka n'ufie,) which entails presenting them with a live white cock. (p. 181)

This is in concord with Nettl's view of instruments in the world's culture (1964:206), 'instruments usually have significance beyond the strictly musical. They frequently function as sex symbols, especially the flute and drum for males and females, respectively. The sexual symbolism of the instruments plays an important part in musical life'. Instruments can be used to study cultural value systems and symbolism. In Igbo culture, a large drum is more of a woman than a small one which is considered male, possibly because the higher tone of the smaller drum sounds aggressive and the deeper tone of the larger drum sounds mild and sonorous. This is contrary to what Sachs in Nettl (1964) points out, that Western culture would probably call the larger of the two drums 'male' and the smaller 'female'.

The slit wooden drum (*ufie*) ensemble is considered so sacrosanct that women are not allowed to play the instrument. In modern times, this may not resonate well with the advocates of equal rights for men and women. It gives the overt impression that Igboland is a man's world. However, does this show a denigration of the women folk? Nothing suggests that there is any form of conspiracy culturally conceived against women in this regard. However, even the idea of

di-ufie and *nwunye ufie*, as well as the division of the *ufie* proper into male and female tongues, shows that there is a certain and unmistakable duality in the conception of the Igbo worldview. This division pertains more to the role and not to the superiority and the dignity.

Another implication of this study relates to the dearth of performance of slit wooden drum (*ufie*) ensemble. More and more, Igboland is being overrun by Christian doctrines and practices. Some of these frown at Igbo traditional customs like *Ichi ozo*. Even the Christianization of the *ozo* (*ozo uka*) has not allowed the institution to retain its pristine dignity and popularity among the people. The consequence is that more people are beginning to see the *ozo* title taking as unimportant. The opinions of the *ozo* title holders, their enviable social status, and privileges have all been subverted by a new way of life that does not depend on any of those past values. Therefore, very few people are interested in the ceremonies that showcase slit wooden drum (*ufie*) instruments and music. Christians bury their members without the slit wooden drum (*ufie*). Other social, philanthropic, and national awards are more respected today than the *ozo* title. So a reversal of value order is witnessed in a way that affects *ufie* instrument and music, the makers and performers.

In considering the axiological implication, axiology being the philosophical study of values, there is a link between the *ufie ozo* instrument and music and the values which the *ozo* status enforces. The decline of interest in *ozo* title-taking invariably affects the slit wooden drum (*ufie*) instrument and music and, indirectly, the traditional values that the *ozo* stands for. Such values like hard work, honesty, truth, justice, dignity, respect, responsibility and common good are all implicated as positive aspects of the *ozo* status. Suppose more towns, communities, and even institutions revive the interest of Igbo people in this music, which speaks volumes about identity. In that case, even the socio-economic well-being of the makers of the instruments and performers will be positively affected.

9. Summary and Conclusion

Slit wooden drum is one of the oldest and prominent instruments used by old people of Igbo, and new people also need it. Based on the level of development in African society, the construction process needs to change to meet up with the context of continuity and change. The slit wooden drum construction in Igbo culture is fundamentally based on the kind of vegetation and trees that are bounded in the society. The tools for the construction of it are categorized into two:

- The traditional or feudal tools used in the olden days, and
- The modern or technological tools

The constructors of slit wooden drums in Igbo culture face many challenges. The stress they undergo has drastically reduced their interest in constructing the slit wooden drums. This is because of the scarcity of wood for its construction due to deforestation, indiscriminate bush burning, and bush fallowing. Constructors now travel far distances to get desired trees for construction. Reducing the use of physical power in the process of construction led to the transition from the traditional mode of construction to the modern one. The effects of technology on the construction of slit wooden drums revealed that the use of modern technological equipment had made one of the positive effects. Even though the construction of slit wooden drums is less cumbersome, the accessibility of them remains one of the major challenges. One of the challenges is also low or no patronage because of market demands.

10. Suggestions/Recommendations

Therefore, to overcome all these challenges, the makers should come together:

- To form a formidable union/organization that should work closely with the various governments of their states at all levels in policy formulation, allocation, and implementation,
- To avert possible government policies that may encourage deforestation and indiscriminate cutting down of trees that leads to scarcity of trees and woods for use in the construction of the slit wooden drums

The government should make provisions available:

- For a special intervention fund for the makers of slit wooden drums to enable them to enhance and access the necessary tools/materials used for the construction of slit wooden and
- For the procurements of better trucks that are capable of conveying these big logs to their destinations

Bad roads should be repaired equally to overcome the delays encountered due to bad roads.

There is a need to form an instrument technological guild that will join the instrument constructors, technology builders, and modern instrument construction tools owners/sellers who can make the assessments of modern tools easier for the constructors who cannot afford them. There should be the formation of technological moulders of different shapes built according to the sizes of slit wooden drums. This will make the construction process easier and encourage more people can enter the business. It will just entail fixing the wood inside the mould, and it will carve the slit out. It will be more attractive than those constructed manually, even with modern technological tools, and more people will delve into the business. It recommends the evolution of more multifarious tools that can mass produce such musical instruments.

Just as there is a metal or an aluminium musical pot that is in use other than a clay pot, there is a need to evolve a slit aluminium drum or a slit metal drum as an alternative to a slit wooden drum. This is because it will avert the issue of scarcity of required trees for the construction of slit wooden drums. Such will be more whimsical than the wooden drum and more attractive that more people will like to venture into the business. More awareness should be created among Igbo people to make them understand that there is a significant difference between natural and artificial sounds. They should be encouraged to embrace indigenous instruments rather than western ones.

This study recommends that strong and big markets should also be established for both exhibition and disposition of African traditional musical instruments, and traditional African event makers should always patronize the makers of the indigenous instruments to boost their morals. In that way, the perplexed instrument constructors will have *metanoia* in this art to understand that all these manual processes involved in constructing slit wooden drums are mechanically

possible. Other challenges can equally be solved in one way or the other to see to the growth of this business rather than losing it. Thus, rich people will be motivated to invest in such a business and find it lucrative and worthy.

11. References

- i. Adedeji, F. (2014). Theories in Christian sacred musicology: An African perspective. In C. Aluede, S. Kayode & F. Adedeji (Eds). *African Musicology: Past, present, and Future. A Festschrift for Mosunmola Ayinke Omibiyi-Obidike* (pp. 103-117). Ile-Ife: Timade Ventures.
- ii. Agu, D.C.C. (1989). The influence of technology on musical creativity and performance in present-day Nigeria. In J. E. Nnadi (Ed.). *The humanities in contemporary Nigerian education*. (pp. 115-122). Eha-Amufu: College of Education, Eha-Amufu.
- iii. Agu, D. C. C. (1990). The primacy of music in Igbo traditional religion. In E. Ekpunobi and I. Ezeaku (Eds). *Socio philosophical perspective of African traditional religion*. Awka: New Age Pub.
- iv. Agu, D. C. C. (2010). The music scene in the technological era: The Nigerian experience. A paper presented at the 9th Annual National Conference of the Association of Nigerian Musicologists. Akwa Ibom: University of Uyo.
- v. Akpabot, S. E. (1986). *Foundation of Nigerian traditional music*. Ibadan: Spectrum Book Ltd.
- vi. Anoke, K. N. (2004). *The cultural implication of music and dance*. Enugu: Idika Press (Nig.).
- vii. Carrington, J.F. (1969). *Talking drums of Africa*. New York: Negro University Press.
- viii. Chukwu, S.K. (1999). Taxonomy of Igbo musical instrument: An organological case study of Ihitte-Uboma instrumental resource. An unpublished M.A. thesis in Ethnomusicology. Enugu: University of Nigeria Nsukka.
- ix. Echezona, W. W. C. (1963). *Ibo musical instruments in Ibo culture*. Ph.D. Thesis. Michigan State University, Ann Arbor, Michigan University Microfilms.
- x. Echezona, W. W. C. (1965). Igbo music in Nigeria. *Nigeria Magazine* (84), 44-52.
- xi. Ekwueme, L.E.N. (1977). Igbo performing art. Unpublished paper presented to the music department of Alvan Ikoku College of Education Owerri.
- xii. Emeka, L. (1961). Ama ama amasi amasi dance of the spirit among the Igbo people of Nigeria. A paper for Bollagie Study and Conference Centre. Italy.
- xiii. Friedman, T.L. (2005). *The world is flat: The globalization world 1 the twenty-first century*. London: Penguin Group Ltd.
- xiv. Ibekwe, E. U. (2011). Traditional music technology and National development. *Awka Journal of Research in Music and the Arts*. (8), 78-85.
- xv. Nettl, B. (1965). *Folk and traditional music of the Western Continents*. New Jersey: Pentice Hall.
- xvi. Nketia, J. H. K. (1975). *The music of Africa*. New York: W. W Norton and Company.
- xvii. Nwobu, S.N. (2012). *Ufie music in Ozo institution: A study of selected Igbo town in Nigeria*. Deutshland: Lambart Academic Publishing GmbH/Co.KG.
- xviii. Nwobu, S. N. (2013). The function and spiritual connotations of traditional music performance with particular reference to ufie music in Igboland. *Afrrev Ijah: An International Journal of Arts and Humanities*. 2(3), No. 7. (pp.192-209).
- xix. Nwobu, S. N. (2015). The leadership role of a musicologist in 21st century Africa. *African Research Review: An International Multi-disciplinary Journal, Bahir Dar, Ethiopia*. 9(2) No.37 (pp. 1-12).
- xx. Nzewi, M. (1991). *Musical practice and creativity. A traditional African perspective*. Bayreuth Germany: IWALEWA-Haus.
- xxi. Nzewi M. & Nzewi O. (2007). *A contemporary study of the musical arts*. 5,(2). CIIMDA: African indigenous knowledge system.
- xxii. Nzewi, M. & Nzewi, O. (2009). *African classical ensemble music. (Theory and drum-based concert series)*. CIIMDA: African indigenous knowledge system.
- xxiii. Obicheta, J.C. (2005). *Egwu ozo and its socio-cultural implications in Umuawulu community. Awka South Local Government Area. Anambra State, Nigeria*. An unpublished M.A. thesis. Enugu: University of Nigeria Nsukka.
- xxiv. Ofuani, S. (2011). The Nigerian musical instrument technology as a prospective economic industry: A call for its development. *Obodom Journal of Music and Aesthetics*. 1 (2). 181- 189. Akwa Ibom: University of Uyo.
- xxv. Oguoma, P. and Chukwukwe, S. (2009). The technology of agbachaa ekuru nwa. *Alvan Journal of Music and Humanities*. 1 (2). 196 – 208. Owerri: Alvan Ikoku Federal College of Education.
- xxvi. Okafor, R.C. (1994). Minstrelsy in Ezeagu local government area. In *The Nigerian field*, 59, 9-25
- xxvii. Onwuekwe, A. I. (2011). Nigerian musical instruments. *Obodom Journal of Music and Aesthetics*. 1 (2). 134- 142. Akwa Ibom: University of Uyo.
- xxviii. Udofia, S. (2011). Ecological effect on the forensic musicological ideals of the wooden drum music composition in Africa. *Obodom Journal of Music and Aesthetics*. 1 (2). 154- 161. Akwa Ibom: University of Uyo.