
Music as Art and Science: An Evaluation

Eunice. U. Ibekwe

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Abstract

Music is presented in this discourse as a coin with two sides –thus as an Art also as a science. Looking at music as an Art draws one's attention to the artistic features and characteristics of music such as styles and skills of performances as in dancing, singing, playing instrument and its position in other related areas with similar attributes. On the other hand, seeing music from the perspective of a science, the study of acoustics, sound productions, mathematical relationships and intervallic applications are evident. Art involves creative thinking and inspiration to achieve an expected goal or a set objective. Science on its own employs knowledge interaction and inquiries to produce new scientific discoveries. Music co-habits these two complex entities in a seemingly integrative association. This paper therefore is a critical examination and evaluation of musical potency that qualifies it as an art as well as science. The argument is anchored on qualitative evaluation of materials drawn from related literatures and sources. It finally draws the conclusion that since music fits in properly, and performs creditably as an art, as well as maintains great affinity with science, it should be treated as a bicameral discipline.

Keywords: Art, Science, Relationship, Music, Imagination, Inspiration

Introduction

The understanding of the bicameral nature of music as art and science depends largely on a number of factors which has to do with the possession of fundamental characteristics and or common denominator as would be seen in the discussion below. In this discourse, music is singled out as possessing the quality which the rest of other disciplines of arts such as History, Language arts, Literature, Religion, Theatre, Visual Arts and others may not have.

In her definition of Music in relation to the subject of discussion, Yashika Kapoor (2016) avers, “Music, in my opinion is a mix of Science and Art”. She justifies her statement by defining both terms separately, thus,

- Science: *Science* is the concerted human effort to understand, or to understand better, the history of the natural world and how the natural world works, with observable physical evidence as the basis of that understanding.
- Art: *Art* is the expression or application of human creative skill and imagination, typically in a visual form such as painting or sculpture, producing works to be appreciated primarily for their beauty or emotional power. This also includes other forms of art where creative thinking is involved.

Music is fully located within the confines of the above definitions. According to Kapoor, anything that is concerned with our creative side should be put in the Art bucket, and that which involves human effort and understanding of natural world with observable physical evidence is considered scientific. Similarly, viewing the two terms from another perspective, Science implies, “the systematic study of the nature and behaviour of the material and physical universe, based on observation, experiment, and

measurement, and the formulation of laws to describe these facts in general terms” while “Art is a diverse range of human activities in creating visual, auditory or performing artefacts, expressing the author’s imaginative or technical skill, intended to be appreciated for their beauty or emotional power” (Wikipedia). In all these definitions, music is still operating at the centre stage.

Concept of Music

Culturally, people have conceived music in various ways such that its discussion in this platform may seem unnecessary or out of place. Nevertheless, the writer considers it relevant looking at the topic of discussion. Conceptualization of music as presented by these music giants (as their contributions are deemed most pertinent to the topic of discussion) such as Merriam 1964, Nketia 1974, Blacking 1976, Nzewi 1991, and a host of other music scholars have painted a discrete image that go beyond what uninformed construe or interpret as music. For these erudite scholars, music is human intent expressed into action to communicate ideas, portray culture, symbolize events, socialize people, and stimulate emotions and so on. For them music and humanity should not be treated in isolation. By extension, Music is described as incorporating a number of complex features in creative, artistic and aesthetic dimensions which distinctively present a unique theoretical concept that differs from one culture area to another. As a matter of fact, it should not be confined to mere entertainment medium as that would discredit its potentiality and thus reduce it to ordinary activities within the domains of little children.

Music as an Art

Music as has been referred to above has many attributes that qualify it as an art. For instance, every aspect of musical performances from the three outstanding domains: - singing, dancing and playing of instruments, (including the act of decorations, adornments and costuming) are all located within the confines of art. Every musical performance especially in a traditional setup involves artistic interpretation and expression of self and communal values. Taking dance as an example, it involves special skill in the movement of hands, legs and the entire body. It has to be maintained that there is a strong affinity between music and dance which can never be disputed. Dance in its perspective is a complex activity that results from strict rhythmic accompaniment or organised sounds. This interrelationship has been observed by Nketia (1974) when he affirms that,

Music that is frequently integrated with dance is bound to emphasize and develop those features that can be articulated in bodily movement or to relate its form and content to the structural and dramatic requirement of the dance, (he goes further to inform that) the importance attached to the dance does not lie only in the scope it provides for the release of emotion stimulated by music, the dance can also be used as a social and artistic medium of communication. It can convey thought or matters of personal or social importance through the choice of movement, posture and facial expression (207).

The main relationship between music and dance is that without music there won't be dance. Undoubtedly music means a lot of things to a lot of people in such a way that various nomenclatures are used to qualify it. For instance, singing a song is

designated music as well as dancing and instrumentation. Where some have specific vernacular names for each of them others do not have. Some even make use of prefix or suffix attachments to distinguish their meanings. In any case, the implication is that music connotes three major aspects of performances namely, singing, dancing, drama and playing of instruments, all representing the art.

Music as a Science

The discussion of music as science has been given a serious debate over the past centuries by various scholars. Prominently among them was Pythagoras. Aluede (2019) reports that, “in the teachings of Pythagoras and all his followers, music and arithmetic were not separate; numbers were thought to be the key to the whole spiritual and physical universe. For some Greek thinkers, “music also had a great connection with astronomy” (p.3). James Stewart (2015) gives Pythagoras’ account on the relationship between music and science (precisely mathematics) thus:

There is a long history of connection between the world of music and the world of mathematics. A squared plus B squared equals C squared; that is of course the Pythagorean theorem from basic geometry, named for the Greek philosopher and religious teacher from 5th century BCE, Pythagoras. Pythagoras taught the belief that numbers were a guide to the interpretation of the universe. Mathematics could explain everything, including music.

Legend states that one day Pythagoras was walking past a smithy’s workshop, listening to the sound of the blacksmith’s hammers on the anvil. He turned his attention to the percussive sound that was produced and noted that

some strikes sounded much higher than others. He was certain that there was a mathematical explanation for the different pitches he was hearing. So he entered the smithy's shop and observed that they were using different sized hammers. Some of the hammers were large and others smaller, but they were ratios of each other: one being twice the size of another one, one being two-thirds the size of the last. Pythagoras declared these relationships as absolute intervals of music. Pythagoras is attributed with discovering that a string exactly half the length of another will play a pitch that is exactly an octave higher when struck or plucked. Split a string into thirds and you raise the pitch an octave and a fifth. Split it into fourths and you go even higher – you get the idea. This concept is known as the overtone series or harmonic series and it is a feature of physics, affecting waves and frequencies in ways we can see and hear and ways we can't.

Pythagoras believed that the planets themselves, all heavenly bodies, rang out notes of vibration based on their orbit and distance to each other. We humans simply lack the ability to hear this music of the spheres. These mathematical ratios helped to define every system of intonation throughout history. In other words, we tune our modern day instruments using the mathematics that Pythagoras discovered almost 2,500 years ago.

Similarly, in his book, *Psychology of Music*, Carl E. Seashore's (1967) reaffirms his understanding of music as a science, he informs that his understanding of music at the early stage of life was quite different from what music really meant for

him at later years. According to him, as a young lover of music, his best definition of music was thus,

The medium through which we express our feelings of joy, sorrow, love and patriotism, penitence and praise...the charm of the soul, the instrument that lifts the mind to higher regions, the gateway into the realms of imagination. It makes the eye to sparkle, the pulse to beat more quickly. It causes emotions to pass over our being like waves over the far reaching sea. (p. xi)

The above was what music meant to him at his young age of music experience, but after his career in the science of music, he started thinking music as an astronomer would to stars, having studied astronomy. Now according to him the science of music revealed a microcosm, the operation of law and order in the structure and operation of the musical mind. He observes that, “science makes it possible to discover, measure, and explain the operations of the musical mind in the same attitude that the astronomer explains the operations of the stars” (p. Xi).

Interpretation of Musical Mind

Seashore further explains or throws more light into what a musical mind connotes. According to him, “musical mind is a hierarchy of talents, branching out along certain trunk line into the rich arborisation, foliage, and fruitage of tree” (p. 2). In his further interpretation of musical mind which was based on the analysis of the musical medium, that is the physical sound, he made the following assumptions,

That a musical mind must be capable of sensing sounds, of imaging these sounds in reproductive and creative imagination, of being aroused by them emotionally, of

being capable of sustained thinking in terms of these experiences, and ...of giving some form of expression of them in musical performance or in creative music (p. 1).

In his summary, what musical mind involves is “the possession, in serviceable degree, of those capacities which are essential for some form of the hearing, the feeling, the understanding, and ordinarily, for some form of expression of music, with a resulting drive or urge toward music” (p. 2). Therefore, one can now say that having a musical mind implies the ability to hear, feel, understand and meaningfully interpret musically. In other words, music must be heard, understood before it is interpreted as music. He then concludes that, “it is not easy to pass from mere love and practice of music to an intelligent conception of it” (p. Xi). Obviously there is a very big difference between enjoying music for the mere love of it and conceptually appreciating music for what it is. For the later, one needs to combine musical mind with intellectual ability for better understanding and appreciation. Little wonder then, while discussing music presentation and appreciation in African perspective, Nzewi, (2007) contends that, “Africa conceptualizes music in two primary and interconnected perspectives”. These according to him, implies that a musical arts production and presentation that is accredited in the public space must have the qualification of:

- Making *musical sense*, which is an intellectual activity concerned with the conformations of sound, phonic resources, and artistic wholeness in musical arts theatre (and)
- Making *musical meaning*, which mandates creative logic and grammar to accomplish philosophical and

psychological intentions as well as strategize human-making structures and presentational dynamics. (p.115)

This implies that even in traditional perspectives certain level of attainment is required before acceptance is guaranteed. Music has more to it than mere love of it. To a lover of music, say, a singer or an instrumentalist, music may be just there to give relief and enjoyment, but a musical intellect may focus on or draw his satisfaction from the arrangement and presentation of musical forms and structures which depend on the intellectual level of a musician. Therefore, music appreciation has so many dimensions to it. The way a composer appreciates and enjoys music is quite different from the way a non-composer appreciates it bearing in mind all the technicalities involved in terms of good melodies, rhythmic configurations, harmonic structures, principles of concords and discords.

Attributes of Musical Sound

Sound has four main attributes namely, pitch- (height or depth), intensity- (loudness or softness), duration- (length of time the pitch lasts) and timbre- (tone quality) which are dependent upon the physical characteristics of the sound wave which starts operating at the early life of an individual. According to Seashore, the sense of pitch, the sense of time, the sense of loudness, and the sense of timbre are largely inborn and function from early childhood. He adds that “after a comparatively early age they do not vary with intelligence, with training, or with increasing age except as the exhibition of these capacities is limited by the child’s ability to understand or apply himself to the task” (p. 3). He emphatically maintains that, “the sense of pitch depends upon the structure of

the ear, just as acuity of vision depends upon the structure of the eye” (p. 3).

Seashore's evaluation holds that, a person who has only an average sense of pitch can never become a good violinist or a great singer; but with the other three skills (time, loudness and timbre) well developed, he may become a pianist or a composer of great distinction. Likewise, a person relatively lacking in dynamic capacities cannot become a great pianist, but might well find success with voice or wind instruments. He submits that it is not that the musician always engages in fine distinctions; it is rather that his possession of a fine sensitivity makes him live dominantly in that musical atmosphere to which he is most sensitive and responsive, even when he employs the most dissonant, rough, or un-rhythmic characteristics of sound.

Sources of Musical Sound

Human voice is described as the earliest known source of sound. Other musical sounds can as well be generated through the vibration of other elastic or non-elastic bodies or materials such as stretched membrane or string, example drum, violin, piano and so on, piece of bent rod or metal, example tuning fork, clapperless bell and so on, vibration through the air column, example all wind instruments, sound generated from wood instruments such as slit wooden drum, wood block, xylophone and so on. All these produce sounds which are interpreted as musical sounds. But before they are interpreted as musical sounds, they must have passed through series of processes of hearing mechanism from the outer ear through the middle ear to the inner ear. All these have been scientifically proven to be true

Art and Science of Musical Inspiration and Imagination

A musician's level of musicality at times depends largely on the degree of his or her natural ability. One thing is the flowing or perceiving of sound by inspiration, another is the mathematical interpretation of the sound in a musical form. A person lacking in musical ability may not know when an image or an inspiration comes as to utilize it in a musical production. A musician visualizes music through creative imagination, that is having the ability to build ideas in one's mind.

According to Seashore, "the musician lives in a world of images, realistic sometimes even to the point of a normal illusion" (p. 5). Under inspiration a composer may be spiritually elevated and thus think or compose in a way which transcends ordinary realm. Some of the sources of inspiration include physical and supernatural phenomena, environmental features and cultural events. For instance, man's belief system enhances religious, initiation and cult compositions. Composers who live in the littoral would want to draw their inspirations from things around the river. Cultural events such as festivals, rite of passages and so on may constitute sources of inspiration. It can also be felt through an in-depth study of existing creative work or build up from an array of fantasies. Inspiration and imagination require special ability before they can be fully utilized.

Art and Science of Musical Emotions and Therapy

Music generates emotions which can be positive or negative in a hearers' sub-consciousness. In his reflections on emotions and morality, Olaleye, (2016), infers that "the science of emotion concerns human feelings such as love, fear, anger, hatred, excitements and general reactions" (p. 5).

In other words, music can produce any kind of reaction as the case may be. Unguided music may be provocative while an ordered music may be suiting to mind. Adeoye in Olaleye (2016), reports that,

Music works on the autonomic nervous system, controlling blood pressure, heart beat and part of the brain that controls feelings and emotions. When slow rhythms are played our heartbeat slow down, this helps us to breathe slowly, thus reducing muscle and psychological tension.

(p. 10)

In another instance, Asagoili as quoted by Agbo and Keke (2013), maintains that “the heart tends to synchronize with the rhythm of the music, (that) fast songs produce a fast heartbeat, which in turn will influence chemical changes in the blood stream and potentially arouse the emotions” (p. 263). Psychologically, music works on human psyche as well as physically impacts on the entire body system. Confirming the therapeutic powers of music on the paper titled, *Dancing off illness: A study of the therapeutic technique of the dancing prophets of the Esan, Edo State of Nigeria*, Aluede and Omoera (2009) assert,

healing in Iyayi society is achieved in diverse ways. The texts of their songs provide a concrete base for music therapy. The effects of the song texts are psychotherapeutic because through them patients are spoken to directly and consequently counceld (sic) while explaining the techniques used in psychotherapy... Iyayi healers have five steps which they follow in healing their patients... (p. 17).

It could be deduced here that therapy can be effected through song texts, dance and so on as the case maybe. What is essential is the method of application and the receiver's disposition.

Art and Science of Music in the Classroom

The study of sounds above is purely linked with Physics. Mathematics deals extensively with counting of figures, multiplications, additions and subtractions. Music offers the much needed help in solving simple mathematical calculations and also has to do with retentiveness. Simple mnemonics are employed to aid retention such as number of days that make one month, names of Rivers in the World and Africa, and some basic elementary sciences such as features or characteristics of animals. For instance, a game song which children learn at early stage of their development such as, *one anụ n'efe efe?* –which animal can fly? is to teach children simple elementary science. According to Ibekwe (2018),

This particular game song has many variations. It can be to ascertain which animals that have four legs -*one anụ n'ukwụinqo?*, which animals have horns?-*one anụ na mpi?*, which animals can crawl? -*one anụ na-akpu akpu?* or which animals have hairs? – *gini na aji?*and so on. The essence is for the children to be able to identify each animal with the correct feature or movement, any mistake attracts punishment. Children are meant to think fast because the caller will also be fast. He/she will be calling the names of animals but the moment an animal that does not belong to the group is called, each participant is expected to remain quiet, anybody that answers or breaks the silence becomes an offender. (pp. 89-90)

All these are represented musically and children enjoy them as they sing them as well as learning the essential message of the lesson.

Inter-relatedness of Music and Other Disciplines of the Arts

Music is arguably a consummation of other branches of the arts such as History, Languages, Literature, Religion, Theatre, Visual Arts, and Philosophy and so on. In each of these, music is fully integrated as would be subsequently discussed.

Music and History

History is the study of the past events, which can be described in oral or written document, particularly as it concerns human. In his description of historical research, Osuala (2005) avers that, “historical research may be considered as embracing the whole field of human past as broad as life itself” (p.162) Every community of the world keeps record of her events, protect and preserve it for posterity. In discussing African Music as a record keeper, Nzewi (2003) contends that,

In traditional African cultures, songs, poetry and archaic musical arts theatre could be repositories of historical records. Costumes, instruments and other production properties could carry historical texts. Some musical arts genre may be conceived specifically to relate and update historical accounts; such are the griots ... vocal artistes that specialize as repositories of historical records in the Sene-Gambia region of Western Africa – and the praise singers in some South African cultures. (p.18)

African musicians are always sensitive to their environment and musical expectations and thus they employ historical facts as the main ingredients in choosing their texts during composition. As a result, they capture every eventful period and make full use of the relevant texts – both spoken and written information in their composition. They employ such eventful phenomena as –

Independence Day anniversary, outbreak of influenza or epidemic, war, hunger, flood or fire incidence, death and other related events that need to be remembered, so that whenever the music is played, it refreshes the memories of the old and informs or equips the minds of the young.

Music and Philosophy

Philosophy as a concept has no single definition. Different definers have come up with a number of definitions based on different areas of speculations. Oguejiofor (2010) captures that right philosophy must possess three fundamental features which include context, flexibility, and dynamics. Stressing further it applies that philosophy concerns everything that impinges on human, which specifically bothers on wisdom, knowledge, ideas and behaviour of man and his environment. These attributes are most relevant to African music. African music obviously has some set goals which guide its performance and which invariably hinges on man's ability to harness and explore the potentials around him for optimal result. The philosophy of African music can better be appreciated from its cultural and social perspectives.

The philosophy of African music in its capacity to preserve, conserve, propagate and consolidate culture is quite outstanding, even in the face of global cultural fluidity and dynamism. The use of song texts, costumes, body movements, and designs on musical instruments still identifies a particular culture. Even body designs and adornments of performers still make culture statements and act as a pointer to the owners of such tradition. Music is so knitted to culture that for one to fully understand the context of a given musical performance, one has to primarily understand the culture of the people that owns the music. Just as Nettl in Onyeji (2008) opines that, "a music cannot be properly understood and

appreciated without some knowledge of its social and cultural context". (124) He further states that, "what determines the nature and character of the music of a particular society is something – we may not know what, but something in the character of the culture" (124) Suffice it to say that the performance of African music implies the full exposition of the culture of African people. Agreeably, Akpabot (1986) advocates that, "one way of knowing about the culture of a people is to examine how they conceptualize their music" (37). Summarily, music interprets the culture in such a way that a society is never complete without it.

Africans maintain the philosophy of communalism. The social function of African music validates its communal nature and purpose. Traditionally, performance in Africa favours communal participation or group activities. Group performances often evoke societal appeal more than individual expression probably as a result of close association or interaction existing between the performers and the audience. Obviously, performances or music making in African context foster socialization in dual capacities, firstly are the performers who enjoy a common bond of oneness and communalism within the group, and secondly, the audience who share the same communal fraternity through direct or indirect participation. Regarding the importance of musical activities on social development among children, individuals are trained to associate, accommodate, and relate with one another in a friendliest way. Also Individual differences are tolerated, while harmonious co-existence is ensured. Music as a social activity provides supporting material for public interactions enhances greater chances of adaptability and situational adjustment in one's life experiences.

Folksongs and folktales in traditional circle remain the vehicle or transporting media of societal values. They instruct,

advise, admonish, encourage, criticize, and in fact address the overall personality construct of man. Little wonder then, children engage or are exposed to them quite early in life, so that by the time they become adults they have come to a full realization of societal norms and also attained a formidable mental reasoning to face possible environmental challenges or manipulations.

Therefore, the idea behind music making in African culture cannot be adequately perceived if removed from its social context. According to Oguguo (2003) “the power and strength of music lie in its potentiality and capacity to address the entire personality structure of man” (p.130). It is therefore believed that music offers the greatest avenue for socialization and “a person without solid social foundation lacks sound and complete life development” (Ibekwe, 2009b: 56).

Music and Religion

Religion is another practice which any African man does not take for granted and that informs the type of bond or affiliation existing between religion and music making among Africans. They strongly believe in the existence of Supreme Being and various divinities and deities that minister to the Supreme Being. There is also a belief in the ability and power of music in the transformation and transcendence of worshippers beyond the celestial borders and link the supernatural powers in a kind of spiritual communion.

The type of affinity that exists between Man and Supernatural Beings is well articulated in the type of music ordained for the worship of gods and goddesses. Music making in Africa takes into cognizance the religious inclination of the people such that the content of music in most cases portrays articles of faith, words of invocation, oblation, libation and incantation. There is hardly any religious celebration that goes without music or

which music does not constitute the central or rallying point of such event. Even in cult practices, initiations and festivals, the position of music is not compromised.

Music and Language Arts

Language is a means through which people interact, communicate, exchange ideas, understand and be understood in their dealings with each other. According to Okonkwo (2008), “without language, there will be no humanization, no civilization, no socialization, no culture and no stability” (5). She also cited Nwosu who states that, “language is a means of understanding ourselves and our society and of resolving some of the problems and tensions that arise from human interaction” (5). Ibekwe (2010) affirms that, “the relationship that exists between music and language lies in their ability to communicate (and) among different cultures, the ways their music flow depend on their word usages or texts” (p.67). It is to be summarized that the essence of language and music is to interact and communicate, which facilitates other functions such as socialization, civilization and so on. Every traditional society has various ways of transmitting her culture to her younger generations, and for the Africans, music is one of the major ways.

According to Ogugua (2003) “music conveys meaning, at times more than a word or sentences in a language can convey because of the problem of language and the ‘must’ for language to obey the rules of syntax and grammar which music does not obey and yet conveys meaning” (p.119). So for the fact that music enjoys freedom of expression unlike spoken words, it becomes most obvious that music continues from where language stops. Writers such as Merriam (1964) and Nettl (1964) had earlier made

similar observations. In their opinions language finds its highest expression in music, according to Merriam.

In song, the individual or the group can apparently express deep-seated feelings not permissibly verbalized in other contexts, that song itself gives the freedom to express thoughts, ideas and comments which cannot be stated baldly in the normal language situation. It appears then that song texts, because of the special kind of license that singing apparently gives, afford an extremely useful means for obtaining kinds of information which are not otherwise easily accessible. (p.193).

Such freedom which performers or musicians enjoy in the use of words accord them ample opportunity to tackle any situation without fear, though at times it lands them into trouble. Another area where music and language function on equal capacity is in culture representation. A particular culture can be identified through their verbal or spoken expression as well as vocal accent. While discussing the role of language in this era of globalization, Ezenwafor and Ezenwafor (2010) infer that “beyond its role in communication/information dissemination, it performs the dual function of preserving historical artefacts and cultural identity” (p.593). Music provides the best avenue for identifying an ethnic group hence all her norms and values are manifested through it. Language and music are two compatibles which so much depend on each other for effective functioning and operations.

Ordinarily, it was observed that mothers and nursemaids are the primary media of child’s training. They first introduce children to their mother tongue through lullabies. There is no better language of expression or communication which a traditional woman uses to transmit this musical lesson other than the local

language. When a child is well acculturated in the musical tradition of his society he has already overcome the primary stage of word and speech formation problems. Storytelling, folktales or songs, simple game songs are some of the traditional values which are rendered in local languages. Agu (2010), is of the opinion that “the interaction of music and language is more intense in Africa than elsewhere in the world” (p.14).

Music and Theatre

Theatre, drama and music are intricately inter-related that one cannot exhaustively discuss theatre in exclusion of drama and music. In theatre, performances are given dramatic exposition to enhance the better understanding of the real situation. This is exactly what dance does through signs and gestures. In his discussion on modern musical theatre, Nzewi (1991) states that, “the Igbo musical theatre is a thorough mix of the creative disciplines of music, drama, dance and plastic arts” (p.150). He further stresses that,

The drama component (involves) symbolic acting which selects environment scenic setting and timing and present a cast of human actors, embodied spirit actors s well as animal characters demonstrated on stage (through) mimes and gestures...the dance component ... conveys Igbo cultural rhythm and choreotechnics, which employs body and poetry and body aesthetics to depict the human body as symbolic and metaphoric medium. Plastic arts provide eloquent costumes, symbolic icons and props, features and colours which enhance movement dynamic character, acting, visual aesthetics and psychological effect. (p.151)

As was earlier stated, dance as a branch of music employs gesture and acting which are indispensable tools in drama. The relationship

between music and drama as elements of theatre becomes more outstanding and well integrated when terms such as musical theatre, music drama, opera, dance drama, ‘vaudeville’ or ‘variety show’ masque and total theatre are discussed.

In other words, theatre cannot operate in total isolation from music. Both music and theatre employ visual arts which are observable creative works borne out of imagination to emphasize aesthetic disposition of the arts. These include paintings, pictures, costumes, make-ups and so on. Agreeably, visual arts are essential tools in the expression of music theatre and drama. The use of costumes and make-ups as visual designs in dance and drama also enhance performance impact.

Conclusion

From the above discussion, music has scientific abilities as well as artistic dispositions. Invariably, science and art are described as activities undertaken by man to achieve a desired result. While Arts represent creative human expressions, Science involves critical examination, experimentations, scientific inquiries and discoveries. Music imperatively portrays a dual characteristic as both an art and science. To explore or find out how music works in human brain and or sub consciousness, it requires the working together of musicians and the whole lots of neuroscientists, psychologists, biologists, physiologists, physicists and educationists to unravel such therapeutic mysteries. And for a musician to explain how musical impulses are created during composition, it also requires a scientific experimentation. The emotional, psychological and therapeutic effects of music on humans are all accessible through scientific process. Music is all about human. In some psychiatrics homes researches have shown that music helps to ascertain the level of sanity and stability of

human person and so help to determine the right treatment for a particular patient. On the other hand, music is an art in terms of performance and equally has direct link with other arts disciplines such as history, religion, language art, theatre, symbolic and visual and plastic arts as well as philosophy. Therefore, music is quintessentially a factor of human existence with bicameral status.

Eunice. U. Ibekwe

Department of Music

Nnamdi Azikiwe University, Awka

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