

Dissonance and Chromatic Inflections in Traditional African Music

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ABSTRACT

Chromatics and dissonance have varying forms and concepts that have been viewed by different scholars. Exiguous information on these concepts have been provided in the ambient of cultural heritage; partly because some African music scholars have been influenced and impacted by western concepts. The need to view the so-called 'western concepts' (which emanated from Egyptian ideologies) in our music has been almost ignored and disregarded.

Diverse cultural values influence the employment of chromatics by composers and other music practitioners from different sociological or cultural backgrounds. Therefore, this investigation subsumes analysis of traditional folk song that have both chromatic and dissonance tendencies with a view to reveal their applications.

Moreover, the cultural view to tones that are produced by some of the traditional African instruments in the context of the subject of chromatics and dissonance validates the symbolic concepts. However, the socio-stylistic approach to the analysis and review of the works selected for this exploration are based on human vocal anatomy that makes its concepts differ from one culture to the other.

1.0 Introduction

This paper gives insight into the employment of chromatics by African composers or musicians. The focus here is to look at different forms of chromatic usage in Traditional African music and to theorise these forms in the practice of African music. The content of this chapter will also validate the tracing of African musical practice to that of ancient Egypt.

Moreover, it will give a platform or source for juxtaposing the usage of chromatic elements in African music with western music.

Considerably, these are achieved by demystifying its origin from the ancient Egypt - an African country. The application of chromatic forms such as polytonality, atonality, dissonance, serve as the fulcrum in analysing some elements of African music such as melody, harmony, instruments and instrumentation is actualized.

However, the purpose of this study is not deviated from the concept of chromaticism in traditional African music context which is achieved by highlighting the symbolic usages of chromatics in some selected traditional folk songs.

BACKGROUND:

1.1 The music of ancient Egypt

Arguably, the origin of chromatics is traceable to the antiquity- ancient Egypt and Greek times. Although music existed in prehistoric Egypt, it only became evident during the historical, dynastic or pharaonic period after 3100 BCE. Music formed an important part of Egyptian life and musicians occupied a variety of position in Egyptian society. Music found its way into many contexts in Egypt temples, palaces, workshops, farms, battle fields and the tomb. Music was an integral part of religious worship in ancient Egypt, so it is not surprising that them were gods specifically associated with music such as Hathor and Bes (both were also associated with dance, fertility and child birth).

Intuitively, Egyptians perceived the distinction of the perfect intervals. The two notes of each type of intervals (1st, 4ths, 5ths and 8ths) can be raised or lowered by a chromatic semitone which invariably will change a perfect interval into a discord where as the other types that are not perfect intervals (major or minor) are elastic.

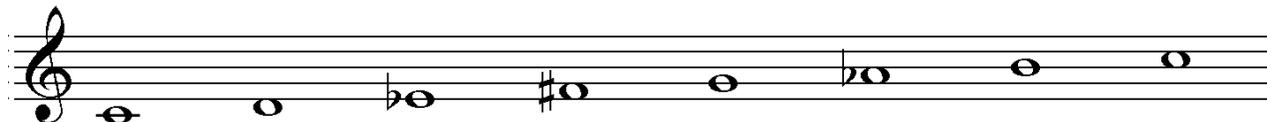
Significantly, Egyptians regarded the intervals as typical of the seasons (liken the perfect intervals to season), spring bearing the proportion of a 4th to autumn, a 5th to winter, and an 8th to summer.

1.2 Ancient Egypt Chromatic Forms

Lise Manniche, based on her examination of portrayals of ancient Egyptian harps) concludes that the Egyptians also know of and used scales with chromatics (half-step) or even smaller intervals (microtones). This would seem to be confirmed by recent work by others with reconstructions of ancient Egyptian reed pipes or nays tuned to various scales. These include the diatonic scale in the minor mode, the chromatic scale; the twelve-degree scale based on half steps as on the white and black keys of the piano and certain “enharmonic” scales (Winzip archive)

(Uneiformtablets found in the city of ugant in modern Syria document the existence of scale and all seven modes as far back as 3000 years ago. The mesopotarnian texts in particular, document a system of turning a lyre in the seven diatonic modes and even a description of the triton (augmented fourth or diminished fifth interval) as the “under” interval of a given mode. Apparently, only the triton was considered “dissonant” by the ancient mesopotanians- which fact

alone has implications both for melodic and harmonic practice. The various modes were derived by a tuning cycle called a “cycle of fifths”- the very same cycle used to tune a folk harp “by ear” today. The resulting “temperament” of the “modes would have been “Pythagorean”- that is, the same temperament noted by the Greek philosopher Pythagoras (who studied music and mathematics in Egypt and Mesopotamia before founding his famous school) (Winzip archive). The Egyptian heptatonic scale which is formed from an octave is chromatic in nature.



The Egyptian Heptatonic Scale

With reference to the definitions of chromatics earlier mentioned in the first chapter, “chromatic notes are traditionally understood as harmonically in essential embellishments, shadings or inflections of diatonic notes”. (free encyclopedia on line). This research has somewhat proven that one definition can’t explain all about chromatics.

Wikipedia defined chromaticism as the use of chromatic scales, chords and modulations. Justine shir-cliff (1965) in his book titled, ‘chromatic harmony’ described chromatic forms as thus:

“The behavior of tones and chords within an unchanging tonality,
Modulation of related keys,
The functions and nomenclature of non-harmonic tones” (32)

1.3 THE REVIEW OF CROMATIC FORMS IN AFRICA

Although African music has been overshadowed by its highly rhythmic patterns which makes it unique, different sources from history has enlightened us about the origin of some western styles of music which were influence by the African styles through slavery ancient Egyptian civilization and colonization.

On the other hand there are musical genres that have been adopted by Africans due to European influence through colonization. Genres such as highlife, Afro-beat, African Jazz, Reggae haven been the medium or means for redirecting the so-called western form of music - chromatic inclusive.

Undoubtedly, the styles of African music are made up of hybrid of African and western elements or forms.

The definitions of chromatic forms are applied with relevance and in accordance to their usages in the three basic divisions of African music - traditional African music, popular music and be reviewed, analyzed, and discussed based on the subject matter (chromatic forms) under the following elements, melody, harmony, instruments and instrumentation. Theoretically, chromatic forms such as dissonance polytonality, atonality and chromatic embellishment will be employed for the analysis and review.

The adoption of the theoretical basis mentioned above is partly in agreement with the content in the encyclopedia Britannica which state, “African tone systems may be derided into the following families and sub families:

1. Equi-tonal systems, based on the principle of equal intervals
2. Monophonic systems based on octaves, fifths and further, and
3. Systems based on the experience of instrumental harmonics.

“DISSONANCE is similar to an accidental in that the note combination is not ‘correct’ when looking at the key the music is written in, but it’s also not just a random wrong note. In the case of dissonance though, the in expected note(s) form a chords, chord progression or harmony/coutermelody, not just one surprise not sitting out in a melody”.

Polytonality is the use of more than one key simultaneously (Music Encyclopedia 301). **Atonality** describes music that lacks a tonal center or key. Atonality in this sense usually describes compositions written from about 1908 to the present day where a hierarchy of pitches focusing on a single, central tone is not used another notes of the chromatic scale function independently of one another (Kennedy 1994).

The term- atonality describes music that does not conform to the system of tonal hierarchies that characterized classical European music between the seventeenth and nineteenth centuries. (lausky, perle and Headlan 2001). More narrowly still the term is sometimes used to describe music that is neither tonal nor serial especially the pre-twelve-tone music of the second vinnese school, principally Alban Berg, Arnold Schoenberg, and anton webern (Lansky, Perle and Headlam 2001). According to John Rahn, however, atonal general means only that the piece is in the western tradition and Is not “tonal” (Rahn 1) “Serialism arose partly as a means of organizing more coherently the relations used in the pre-serial ‘free atonal’ music Thus many useful and crucial insights about even strictly serial music depend only on such basic atonal theory” (Rahn 2)

I do not totally agree with Rahn, attributing atonal music to western style only - it’s a fallacy. It is of course inherent in African music culture as well and that is the essence of this study.

The term “atonality” itself has been controversial Arnold Schoenberg, whose music is generally used to defined the terms, was vehemently opposed to it: arguing that the word ‘atonal’ could only signify something entirely inconsistent with the nature of tone. To call any relation of tones atonal is just as farfetched as it would be to designate a relation of colours aspectral to a complementary. There is no such antithesis “(Schoenberg 432). He preferred the term “pan-tonal”. For some the term continues to carry negative connotations.

In Africa, whenever signers sings, they will hear it in some key and it may not be the right one, but the point is they will sign it with a tonal sense. It isn’t only the signers but also the listeners. The listener will hear tonality in everything.

The above observation was deduced from Westergard (96), when he discussed about the criticism of the concept of atonality.

1.4 THE CONCEPT OF DISSONANCE AND CHROMATICS IN TRADITIONAL AFRICAN MUSIC

In this section, this study reviews and analyses the chromatic and dissonant contents of traditional African music by demystifying the chromatic forms in melodic content, harmonic content, instruments and instrumentation in the context of cultural divergence or diversity in Africa.

The focus here is to review, theorise, and analyze the chromatic forms and content of traditional African music in practice so as to validate the link between African musical practice and that of ancient Egypt in the context of chromatic concept.

1.5 Traditional Melody

There are folk songs from Nigeria which melodic lines are traditionally polytonal or atonal.

For instance, the melodic line of the Ekiti songs are polytonal in nature. With reference to the concept of poly tonality. Atonality, traditionally Ekiti tunes are naturally derived from speech tone.

This correlates with some researchers' view as documents in a scribe. Newswire at the Duke University center for cognitive neuroscience Durham N.C which states;

“The use of 12 tone intervals in the music of many human culture is rooted in the physics of how our vocal anatomy produces speech”. (P:2)

Consequently, this research proves that polytonality and atonality is evident in some traditional folk songs. An instance can be taken from an Ekiti song titled “Oluwa ku ise”.

1.5 Methodology

The traditional song is written on staff notation (see fig. 4a) this can also be written on three different keys. Hence, this shows why it's difficult for a musician (accompanist) to identify the key quickly while singing the folk song. The reason is not far-fetched from its polytonality, partly modalities and atonal tendencies.



Fig. 4a: Oluwa Ku Ise

This is illustrated on the staff in a way that the folk song can sound same way on different keys. This achieved by starting with the same note and if it's written on 3 different keys, it will sound on the same tonality without altering the tonal centers and the melodic intervals.

In practice, the illustration and analysis have shown that traditional Ekiti songs like some other traditional folk songs and with notes that seem unsatisfactory (not fully closed) which suggest continuity.

Microtones are observed in Ekiti songs when rendered due to the tonal reflection in their speech tones which is a significant characteristic of a traditional folk music, according to the some researchers (Neuroscientists) view sited earlier;

“The use of 12 tone intervals in the music of many human cultures is rooted in the physics of how our vocal anatomy produces speech”(2009).

Additional observations and deductions from theoretical and practical experiences are enumerated as follows;

1. Musicians (performers) find it difficult to select an appropriate key for this traditional tune because it is perceived on different keys simultaneously.
2. Practically, if an Ekiti man sings ‘Oluwa ku ise’, there are some micro-tonal inflections that will be observed in the manner of rendition which goes with vibratos as a result of natural speech tones.
3. Writing the song on staff notation shows that there are possible accidental notes (chromatic notes). This is however, subject to the key adopted for writing the music. (See fig. 1b).
4. It is partly modal (as in the medieval period, Islamic chants or Gregorian chant) in the sense that it does not involve all the seven notes of any ecclesiastical modes but of a fixed scheme of intervals. This is also perceived while listening to *Oluwa Ku Ise* melody on different keys.
5. Dissonance is formed when harmonizing the folk tune traditionally by employing resultant notes of the traditional song to form intervals of 4th, consecutive 5ths, 2nd and 7th.
6. The implication of polytonality and atonality is that an accompanist and a singer who understand this theory could be performing the music on different perceived keys without the audience knowing.

AS IT SOUNDS ON Cmajor



AS IT SOUNDS ON Fmajor

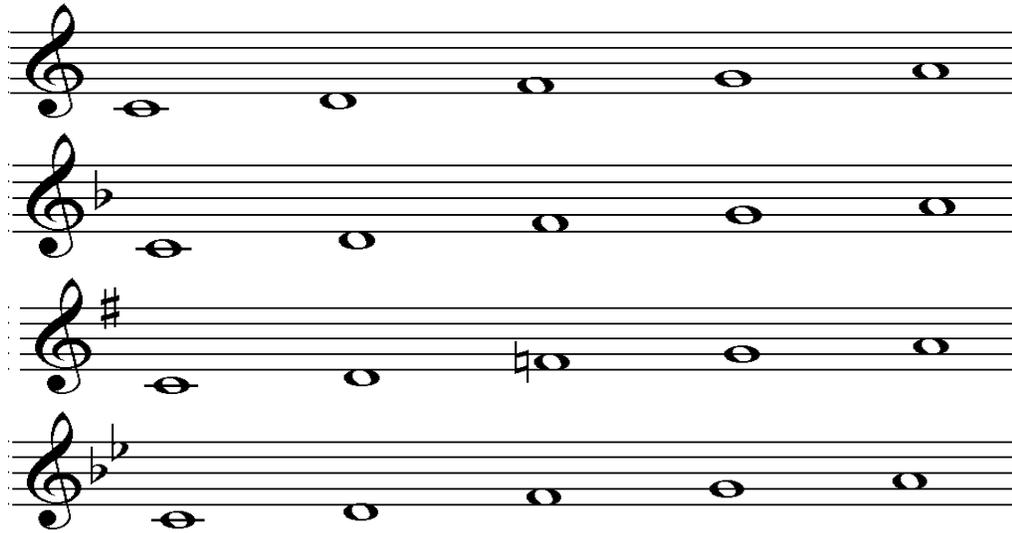


AS IT SOUNDS ON Gminor OR B^bmajor

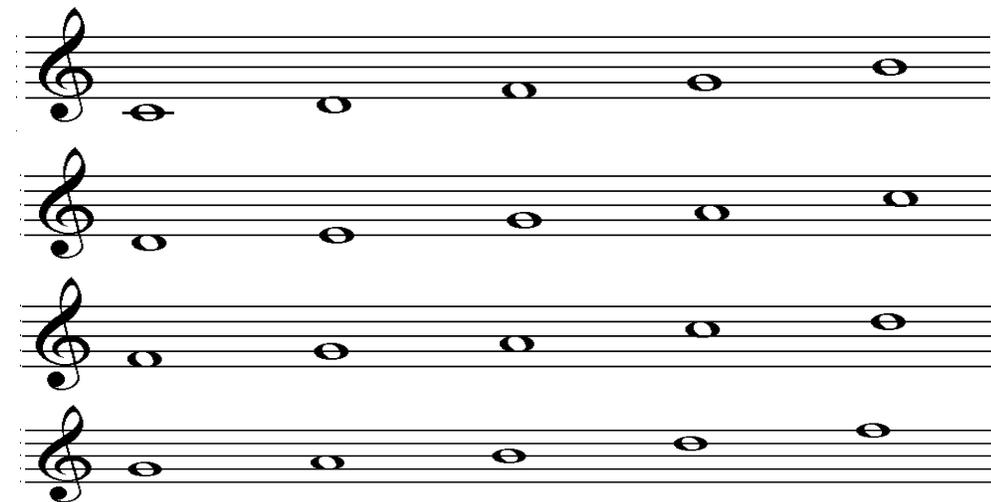


Fig. 1b: Oluwa Ku Ise

THE RESULTANT SCALES



7. On each key as shown above, each note of the degree of scale can be permuted or rearranged only by taking it as the root. This is because every note on each key can sound as the tonic and thereby suggest atonality.



In Mali, musicians categorized their music into two classifications, one is Manding music and the other one is pentatonic music.

Traditionally, the manding music uses a full diatonic scale with a number of characteristic chromatic note which has long taken over Malian music.

Although African music is analysed and discussed on the basis of Western theories of analysis, the theory has to be applied in a cultural and traditional context. This notion is similar to Dr. Gilbert Rouget's ideology that was quoted in a book review of his 'music and songs' where he analyzed the eight cult dance songs from Dahomey. He states;

“Although the judicious use of Western terminology is a necessity in any analysis of this kind and the term “chromatic” should be understood in the main sense intended by the author...”(1:30)

After listening to the accompanying record and studying Dr. Rouget's transcriptions, this reviewer feels that chromatics can nearly always be set within a distinct “tonality” containing some kind of tonic and other functional tones. (Such “tonality” would not of course, be of the traditional western kind, since the intervals are in most instances far from the Western tempered ones).

In his music analysis of the Dahomey song, he mentioned the concept of the so-called “atonality” of deviations (particularly on sustained notes), as well as other distinctly non-western interval sizes which has the same similarity to some of our folk songs (as described in Ekiti song).

The influence of the Arabic idioms are derived from the ancient Egypt musical idioms which is also evident in the frequent glissando (as also observed in Malian music) which are commonly noticed in traditional African songs when rendered.

“This glissando tends to blur many of the intervals” G. Rouget, 1963, p.8 who somehow identify glissando with chromaticism.

Consequently, this validates the use of these idioms in some of the Islamic influenced traditional African genres like Were, Apala and so on.

Traditional African Chromatic Instruments

There are African musical instruments that are chromatic in tones, such as the Malian chromatic Mbira and some other African traditional instruments that fall in this category.

Arguably, the West African Dundun drum (known as talking drum) that is found in Ghana, Nigeria and other West African countries are microtonal in sound.

It is produced and played in such a way that it can produce the tonal inflection of words. This unique microtonal pitch system is derived from the blending of African tonal language and the craftsmanship of fashioning the hourglass –shaped heads that are capable of modulating melodically through a varying range of pitches when played. This is a confirmation of what Francis Tovey said,

“The micro-tonic pitch system makes African melody subtle and can be disorienting to those accustomed to hearing performance of tempered scale that are fixed and standardized” (40).

He also said that

“it is interesting that the interval of the triton (augmented further or diminished fifth) is a salient feature in both vocal and instrumental music throughout Africa” (22).

The statements above affirm the tonal perception of some microtonal-pitched instruments -be it voice or any other musical instruments. The dangling of tones in semitone intervals suggests chromatic movements.

CONCLUSION

The review of some works in this paper has evidently shown that Traditional African music is not without chromatics and that its usage is symbolic.

Naturally, oral tradition has been translated or transcribed into both vocal and instrumental music in African tradition.

Although all forms of chromatics are not that elaborately employed in traditional African music, it is culturally inherent in some of the locally made musical instruments which were made to reflect the tonal shift in traditional languages.

Moreover, some forms such as atonality, modality and dissonance are systematically illustrated under chromatic forms in both African melody and harmony to reveal the chromatic tendencies in traditional African music through analysis.

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