
STRUCTURAL LEVELS OF RHYTHM AND FORM IN AFRICAN MUSIC

with particular reference to the West Coast

by

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The theories propounded by Heinrich Schenker, the great early 20th Century German theorist, as enunciated in several treatises culminating in *Der Freie Satz*, 1935, have aroused enormous controversy among music theorists. We are aware that some of our readers may not be familiar with the works and theories of Schenker. Since many of Schenker's works are still not available in translation, we gladly refer interested readers to some of Schenker's theories available in the works of other theorists,¹ including notably: Katz (1935), Sessions (1935), Mann (1949), Jonas (1954), Forte (1959), Salzer (1962), Beach (1969), Komar (1971), and Rothgeb (1972), among others. In spite of the controversy which surrounds Schenker's theories, even those who are not at all in sympathy with his ideas tend to accept, even if reservedly, the principle of the existence of the three structural levels in all tonal music. It is fair then to say that there is a measure of agreement in regard to structural levels in music.

Stated simply, the theory postulates that each piece of music is made up of three main structural levels. The back-bone structure, the skeleton on which the whole musical composition is built, is termed the *background*. This background material, according to Schenker's theory, is prolonged in diverse ways — by means of such techniques as the composing out of intervallic or chordal relationships, register transfers and other means of prolongation — to yield a *middle-ground* structure. To this middle-ground structure something else of a rather decorative nature is added to produce the *foreground* structure, which is finally heard by the listener. Many aspects of the music heard by the listener belong to the foreground level, which may merely be a means of prolonging the harmonic, melodic or other tonal materials of earlier levels.

At this point probably a comparison with architecture will help illustrate the point. A building is first constructed with a skeleton, the frame that marks out the main structure and foundation of the building. Usually this main structure is made of some durable material, like steel or concrete, able to bear the weight of and lend support to other materials that may be laid above or beside it. This frame stands for the background. Then comes the middle-ground structure of the building: the walls, rooms, doors, windows, roofs, cellars, stairs, chimneys, and such other features that define the building and its purpose. At the foreground level of this building lie such things as the paint, the furniture, the chandelier or lampshades, and the translucent glass of the bathroom windows. These items can be changed, removed or added to, replaced or relocated, without making any significant structural change to the building.

Indeed we know that virtually every work of art has these three structural levels. On a painting of Da Vinci or Michelangelo, for example, one can certainly distinguish between the outline of the whole frame, with its structural and kinetic order, which belongs to the background, and the tiny touch of color on a portion

of a nose, or part of the print of a robe – that genius of craftsmanship which gives the final touch of a Da Vinci or a Michelangelo – which surely belongs to the foreground level and does not significantly change the structure or kinetic dynamism of the fresco. It may be worth pointing out here that Michelangelo's sculptures often leave a portion of the marble unliberated, exhibiting in living presence the diverse levels of form in execution. In fact, his set of four "captives", the prisoners which are semi-liberated figures in marble that lie in the "Boboli Gardens" in Florence, demonstrate vividly the principle of structural levels, in this case working in reverse order (on account of the nature of the art of marble sculpture), as a system in the execution of form in works of art. As Michelangelo himself wrote, "The greatest artist has no single concept which a rough marble block does not contain already in its core."²

So in virtually all artistic expressions, drawing, painting, sculpture, pottery, basket weaving, dancing, or music, there exist various depths of structure of which three principal levels may be distinguished.

Although these levels are distinguishable in other spheres of African music, our concern in this paper is to draw the parallel of structural levels with respect to rhythm and form in African music. We shall take our examples from the West Coast of Africa for two main reasons. It is probably to be admitted that while East African music and the music of Southern Africa show a more interesting exposure in the development of melodic lines, the music of the West Coast does tend to show a more sophisticated structure in rhythm and formal organization. Moreover, scholars seem to have made more studies of West African rhythm than of the rhythmic devices employed by African musicians from other parts of the continent. In fact, to the best of our knowledge, apart from the early studies made by Jones of Zambian musical rhythm, more studies seem to have been made of Ghanaian rhythm – in particular Ewe dance drum rhythms – than the rhythm of probably all other areas of Africa combined. Several reasons account for this, but there is no need to go into them now.

As we stated elsewhere (Ekwueme, 1972, p. 248) form is rhythm in the long span:

It is the organization of rhythmic units and patterns over a long period that yields phrases, sections, and parts, in a piece of music. The analysis of these sections and their relationships, describes the architecture, or form, of the piece of music, hence form may be described as rhythm in the long span.

We intend to show that West African musical rhythm is based on a skeleton – a background structure which we may simply call the "form" of the music. In a general way, this is reduceable to an A-B form, or simply a "Call and Response" or "Call and Refrain" form, in which a soloist (or a group) makes a statement, and a chorus (or another group) makes a response. This response may be identical with the call or it may be a different answer which occurs regularly at specific intervals. We have shown that although there may be artistic embellishments such as the overlapping (real or implied) of "call" and "response" sections, there is in general a balance between the two in temporal duration.

We can then say that the background of the bulk of most African musical rhythm is a duple statement or pulsation, in the long span, in binary form. This duple statement – or a dual, symmetrical balance – may be slightly altered at various levels without significantly changing the structure of the music.

Let us take an example from melody. As we have shown in our article "Linguistic

Determinants of Some Igbo Musical Properties" (Ekwueme, 1974) a melodic line may be rendered in several different ways in order to allow for changes in words. These melodic changes, however, belong to a higher, less significant level, and do not really alter the basic theme of that melodic line. We showed elsewhere (Ekwueme, 1972) that in order to arrive at a true understanding of the form of a piece of music we have to take into account such musical features as those we have termed *constants* and *variables*, and such other features which we group as *essential* and *non-essential* elements.

Constants and variables

It is important to ascertain in the music those things which are constant (not subject to any significant change), and those things which are variable (subject to several changes during the course of a performance, or at different performances).

Certain elements in the music may be constants. For example, a regular rhythmic pattern in a particular instrument occurring without change throughout the duration of the piece will be considered a *constant*. An unchanging melodic line that uses exactly the same tune and words is a constant. A chorus refrain that is always the same and is repeated at regular intervals in each performance is a constant.

A tune that alters its melodic line sometimes, or whenever it reappears, is a *variable*. An accompaniment that is either irregular in pattern or inconsistent in timing or mode of occurrence is a variable. An occasional interjection of spoken words or other emotional expression (such as the pulsation of lips) by singers or dancers in the course of a performance, which is not a regular feature of the song, is a variable.

Essential and non-essential elements

Certain constants and variables may or may not be useful in the assessment of the form of a piece of music. For example, an occasional interjection of a verbal uttering of indefinite pitch, by a person or group of persons during the performance of the music, will not help very much in determining the architectural background of the music. So it may be considered *non-essential*. A regular response of the same tune by a chorus, defining a temporal duration of invariable recurrence would, in all probability, be helpful in assessing the form of the song. We can, therefore, deem it *essential*.

We have so far established two classes of categories to be considered in the determination of the form of a piece of African music:

- i. Constants (C) and Variables (V).
- ii. Essential (E) and Non-essential (N) elements.

It is safe to assume that those factors which are both essential and constant, would be more likely to help in assessing form, than those which are non-essential and variable. A guiding hierarchy of usefulness may be established as follows:

- EC (Essential, constant)
- EV (Essential, variable)
- NC (Non-essential, constant) and
- NV (Non-essential, variable)

The first two groups will tend to belong to the middle-ground level, while the latter two appear to be foreground material which does not change the structure of

the music in any serious way.

We pointed out that the background structure tends to be in binary form, with two distinct parts. The existence of two parts implies the existence also, real or inherent, of yet a third part: the antecedent, the consequent part, and their combination. In every binary form, therefore, there is a third part. By the same token, every duple time also implies a third or triple time. It is rather like the Hegelian theory, which, with a Thesis and an Antithesis, yields a Synthesis.

West African musical rhythm is made up of the combination of duple and triple rhythm, or perhaps better stated, binary and ternary subdivisions of units of time, belonging to the middle-ground structure. There are various levels of the combination of duple and triple time.

Accompaniment patterns

There are two standard rhythm patterns in West African music. The first which we termed Rhythm Pattern 1, RP1, is the shorter one and is made up of the rhythm of ♩ ♩ ♩ | reduceable to a common denominator of 3+2+2 units of time. We see that it has a combination of ternary and binary subdivisions of time. Observe also that the unit with the ternary subdivision occurs twice, and the one with the binary subdivision occurs once: $2+1=3$.

Rhythm Pattern 2, RP2, is built upon ♩ ♩ ♩ ♩ ♩ | which may be grouped as 2+2+3+2+3. Again observe the combination of duple and triple time units and that the triple unit occurs twice while the duple unit occurs three times.

These accompaniment patterns belong to the middle-ground level. We know that each rhythm pattern is a cyclic form, which may begin at any point in its sequence. Example 1 shows various versions of RP2 (beginning at different points in the cycle). We also know that each pattern may be internally varied. RP1, for example, is often

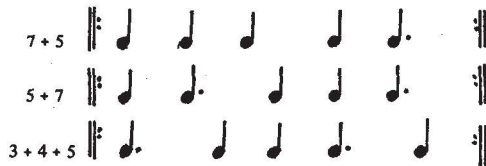


Fig. 1

varied to ♩ ♩ ♩ | which, by our score, gives three occurrences of the quarter note and two of the eighth note. Or, if one prefers, three of duple duration and two of single duration in 2+1+2+1+2 relationship.

As the rhythm pattern can be any combination that keeps the order of the notes in a cycle, and any of the dotted quarters could be broken up into a quarter plus an eighth, or vice versa (in internal variation), the five variations in Example 2 are all versions of the same RP2.

It is, however, always clear that behind each rhythm pattern, lies a regular steady duple pulse dividing the whole pattern in a binary balance, whether or not the initial points of both halves are acoustically stressed. Some of the diverse levels of combinations of binary and ternary subdivisions of time may best be illustrated by Example 3 which shows variations of RP2.

This pattern, (RP2) as shown (Example 2) is often varied by breaking up the dotted rhythms ♩ (triple time) into ♩ (1+2 time) thus: ♩ ♩ ♩ ♩ ♩ |



Fig. 2

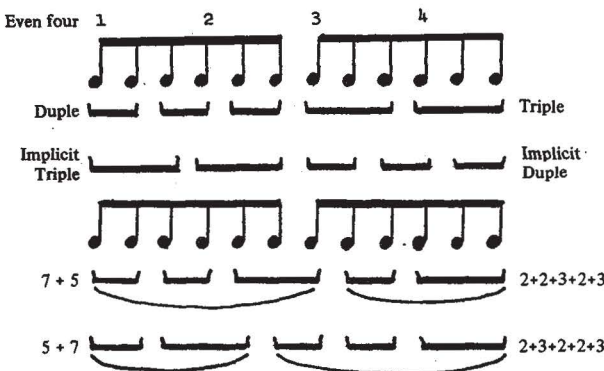


Fig. 3

When this happens, the accent may also shift to make the rhythm pattern $\underline{J} \underline{J} \underline{J} \underline{J} \underline{J} \underline{J} \underline{J} \underline{J}$ (the third variation in Example 2), which naturally divides into two halves of mixed metres (or mixed rhythmic units), where the relationship of binary and ternary subdivisions of the same unit of time is again very clear. RP2 is also easily divided into four pulses or beats. When we group the attacks in the pattern into the four pulses we have an interesting discovery as the four pulses would then fall as shown in Example 4.



Fig. 4

If we examine these four pulses we notice:

- There are altogether three patterns, one of which occurs twice.
- The repeated pattern occurs on a "strong" pulse and on a "weak" pulse.
- Each internal pattern is made up of two features, *attack* and *no-attack*, one of which occurs twice. If we use (+) to show attack, and (-) to show no-attack, we have four pulses thus represented: (1) + - + (2) - - - (3) + + - (4) + - +.

We have used two standard patterns, RP1 and RP2, to show that rhythm patterns can be and often are internally varied. These variations, being relatively non-essential variables, belong to the foreground level. But in spite of these variations, behind each pattern (as we have pointed out) is the inherent pulse, which is a shorter version – a sort of temporary prolongation – of the binary subdivision which constitutes the background material of the antiphonal structure of the music.

Right at the top of the foreground material also lies the work of the master drummer. His dexterity of performance does not, at any time lose sight of the middle-ground and background levels of the music. The Atsimevu Drummer or the Atilogwu Dance leader, is busily decorating the rhythm by his own improvisations. Each nuance, each slap of the palm or fingers on the drum head, each drop of the drum stick, often also further decorated with accompanying facial contortions and other bodily gestures, is a foreground embellishment, like the stroke of the paint brush of Rembrandt, a decorative motif on the column of a building by Sir Christopher Wren, a chandelier in a French chateau, a spot on the weather-beaten rough surface of a stone that forms the relatively microscopic piece of an Egyptian pyramid, or the colorful patterns on a piece of *Akwete* or *Kente* cloth. The rhythms of the master drummer, like the subtle gestures of an expert *Atilogwu* dancer, belong to the foreground.

As Lord Haley (1956 p. 71) says:

The art of a dancer consists in his ability to make a personal contribution of his own creation whenever he dances, provided he keeps within the main framework of the dance, and it is the business of the master drummer to improvise a sequence of rhythms which, though coordinated with other drums, shall yet be a spontaneous comment in rhythms, on the style of each dancer.

The personal contribution of each performer in an African musical ensemble, his improvised variations on rhythm patterns, the spontaneous comments, verbal or otherwise, of singers or dancers, are all foreground material which decorate the music. These are always introduced in conscious understanding of the structural materials of the middle-ground and background levels which underlie the whole music.

In conclusion and also to demonstrate musically some of the ideas we have been discussing, we shall make an analysis of an Igbo song by a group of *Egbeni Oba*, which may be loosely translated “the King’s Musketeers”, from Awkuzu in the Anambara region of the East Central State of Nigeria.

Analysis

This is one of the “songs without end”, in that there is no special ending, and the number of times the main part is sung depends entirely on circumstances that are outside the realm of music. The section here analysed (as recorded) shows no clear beginning or ending, but is a portion containing some six cycles of what may be called the entire song. Apart from occasional incidents (such as a gun shot heard some time in the course of the performance – which, incidentally, did upset the soloist a little) that fall under the category of non-essential variables, each repeat of the cycle is identical.

Like many songs from West Africa, the basic format of this is that of antiphonal alternation between solo and chorus (see score of vocal parts, Example 5). There are ten phrases of almost equal duration. The solo phrases are slightly longer than those sung by the chorus, as they generally begin by overlapping the end of the

Solo
 Na Rwo-ki-k'e -je-go n'Aw-ku - zu we je g'e-we- talum e - gwu;
Chorus
 O - do-gwu e - je - be - go n'A - ku-zu 'ka o je g'e-we-talum e -
 gbue - nat
 gwu;
 E - nyim o - ma o - gbue - nat
 Ro- bert e - je - go n'Aw - ku-zu we
 je g'e-we-talum e - gwu;
 E-nyim o - ma o - gbue - na, o -
 gbue - da, o - gbue - na!
 A-nyi si n'Aw - ka
 na - b'U-kwulu; O je-l'U-kwu-lu o-ba o fu - r'i - fe, E,
 o - do -
 E - nyim o - ma o - gbue - nat

Fig. 5 "Egbeni oba",
 Musketees' Song, Awkuzu

choral phrases, and end on the "down-beat" of the choral refrain. The song, however, falls into the two main divisions. The first half has solo and chorus alternating, but the second half has only the chorus.

There is a constant rhythmic pattern marker which could be notated as ♪♪♪♪ or ♪♪♪♪ and it recurs throughout the song. This is indeed a version of RP1, easily seen when the note values are doubled thus: ♪♪♪♪ or ♪♪♪♪ . Each phrase of the music lasts for the duration of about two such pattern markers. The

solo phrase, here to be called (a), is basically the same each time. The basic material of the chorus, labelled (b), is slightly shorter, even though it still occupies two PMs (pattern markers).

The first half of each cycle of the song has five phrases with (a) and (b) alternating, such that (a) occurs three times, sandwiching (b)'s occurrence of two times, in quasi-rondoic form: a,b,a,b,a. The last repeat of (a) is sometimes slightly varied; so we could also call this first half a,b,a,b,a'. Thereafter, for the entire second half, the chorus takes over. (b) begins this section, then the second part of (b), labelled (x) here, occurs twice, making up one phrase of 2 PMs which should really be called (b') but we chose to label (c). Then follows a variation of the material of (b), and it is this that we have labelled (b'). A new material (d) of one phrase (2 PMs) which widens the range of the song a little (by a minor third to be precise), leads back to a final repeat of (b) to complete the cycle. This second half thus becomes another rondoic form

$$b, \overbrace{c, c}^{(x, x)}, b', d, b$$

(2nd part of
b repeated)

The whole song thus gives us two sections in quasi-rondo form:

$$\overbrace{a, b, a, b, a'}_Y \quad \overbrace{b, \overbrace{c, c}^{(x, x)}, b', d, b}_Z$$

It is interesting to note that

- i. The piece still falls into two main sections, giving an "antiphony" in the long span.
- ii. The material (b) is always an "answer" to every "call", giving us a form:

$$a, b, a, b, a', b, c, b, d, b.$$

The implication here that the fourth and fifth "calls" of the solo have been omitted and taken over by the chorus is clear. We may narrow the form more simply as

$$3(a+b) + 2(\emptyset+b)$$

where \emptyset is either a version of (b) or some new material. We may even further summarise it as $5(\mathcal{C}+b)$, where \mathcal{C} is a variable "call".

- iii. Although the solo takes part only in the first half of the song, it is the extended part (overlapping part of the chorus) in the section, in an apparent attempt to make up for its long rest period to come.

The total picture of the whole song, however, may best be illustrated in the graphic representation (Example 6) which clearly shows the extension and other overlaps.

Observe that this song which is apparently irregular (in that it has 5 units) is interesting, for $5=3+2$, another level of the combination of duple and triple units of time which we have discussed. We may, for instance, recall that RP2 is made up of $5+7$ units.

It is our hope that in this discussion, we have demonstrated that form is merely rhythm in the long span, and that the rhythm of African music is built on three

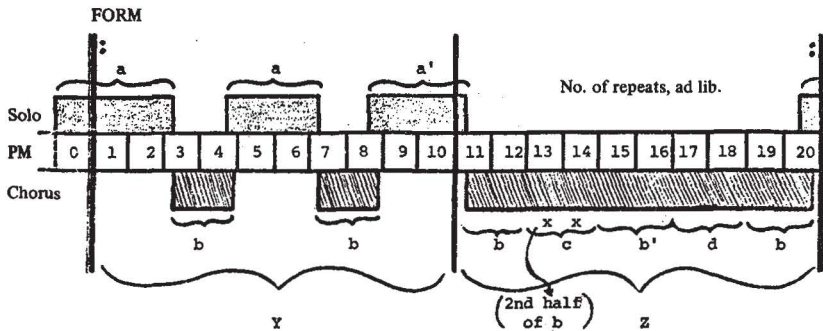


Fig. 6 "Egbent oba", graphic representation

distinguishable structural levels. The background material is a skeleton of the structure which gives us the form of the music often reduceable to the antiphonal "call and response" or "call and refrain" pattern; the middle-ground contains rhythm motifs such as the standard patterns and other delimiters on which the music is based, while decorative motifs such as are employed by the master drummer are merely foreground material which do not significantly affect the structure of the music.

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NOTES

- 1 To the best of our knowledge, the only book of Heinrich Schenker yet to appear in English translation (by Elizath Mann Borghese) is *Harmony* (1906), edited with an Introduction by Oswald Jonas. Chicago: The University of Chicago Press (1954).
- 2 The quotation, part of the translation of a Sonnet by Michelangelo, is taken from William Fleming's *Arts and Ideas* (Third Edition). New York: Holt, Rinehart and Winston. (First Edition published by Henry Holt and Company, New York, 1955).