

ẸNA: CODE-TALKING IN YORUBA¹

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Up to the present time, very little critical study has been done on code-talking; i.e. language distortion used to create secret languages. Code-talking differs from cryptology in that it is based on features of the language itself, and being essentially spoken, obeys the phonological rules of the language. Ẹna (code-talking in Yoruba) offers insights into the phonological, grammatical and poetic features of the language. At least four code-talking systems exist: simple disordering of syllables in a word and of words in a sentence; adding null tags to syllable units; inversion of syllables and substitution of null tags; use of vowel numbers.

Jusqu'à présent, très peu d'études critiques sur le Langage codé ont été réalisées, c'est-à-dire, sur la distortion d'une langue créant ainsi un moyen de communication secret. Ce code diffère de la cryptographie du fait qu'il est basé sur les caractéristiques de la langue même. Etant essentiellement parlé, ce système codé obéit aux règles phonologiques de la langue en question. L'"Ẹnà - langue codée du "yoruba" - nous permet d'avoir un aperçu des traits phonologiques, grammaticaux et poétiques de cet idiome. Au moins quatre systèmes sont employés pour créer un tel code: une simple confusion parmi les syllabes d'un mot et les mots d'une phrase; l'addition de syllabes nulles à celles déjà existantes; l'inversion de certaines syllabes et la substitution d'unités nulles; l'emploi de chiffres pour les voyelles.

Code-talking, or what Fromkin and Rodman² have called 'language games' apparently because of its simpler system when compared with cryptology, has been largely neglected in most languages.³ Apart from Denise François' illuminating article "Le Contrepet"³ in which, using various examples from other French writers, she discussed how 'la contrepetrie' could shed penetrating lights on the nature and subtle characteristics of French phonology, very little critical work exists on this amusing but very revealing aspect of clever language distortion.

Code-talking is used to create secret languages. The desire to prevent one's message from getting into the hands of the enemy⁴ has existed from time immemorial. This, in fact, is what modern cryptology is all about. "Cryptology (from Greek *Kryptos* 'hidden' and *logos* 'word') is the science concerned with the methods and paraphernalia employed in secret communication."⁵ The systems of codes used by governments and other bodies have become so elaborate that special code books and dictionaries have to be used. Cryptology, because it is often connected with top-security matters, hardly exploits overtly the genius of the language and so the creativity in the use of language which makes code-talking or language games an interesting study is virtually absent in cryptology. This is so because cryptology is concerned mainly with ciphers. It is written and any sign may stand for anything regardless of the phonological or grammatical rules of the language. Code-talking, on the other hand, being essentially spoken, has to obey at least the phonological rules of the language.

Ẹnà - code-talking in Yoruba - offers very interesting insights into the phonological and, to some extent, the grammatical nature of the Yoruba language. But above all, it reveals some basic poetic features of the language. At least four code-talking systems have been discovered in the Yoruba language. It is difficult to say when exactly these systems came into use. There is an age-old proverb:

"Ọrọ àsọtì ní jẹ ọmọ mi gbẹnà"

(If your child understands your code language, it is because you both share the secret). This may mean that Ẹnà is as old as the Yoruba language itself. The sad thing, however, is that the use of Ẹnà is gradually disappearing especially among the members of highly westernised and urbanised families because their competence in Yoruba, their mother tongue, is minimal. Luckily the practice is still alive with the vast majority in the rural areas. The four code systems yet identified are: Simple disordering of syllables in a word and of words in a sentence; adding null⁶ tags to syllabic units; inversion of syllables and substitution of null tags; and vowel numbers.

1. The Simple Disordering of Syllables in a Word and of Words in a Sentence.

This is the simplest system because no extraneous material is introduced to confuse the enemy. Only the normal grammatical order of the words and of the sentence is altered. For example, a sentence like: *Mo fẹ́ẹ́ lo sóko.* (I want go to farm: 'I want to go to the farm') might be encoded: *Lọ mọ́ọ́ fẹ́ kóso.* Although there are no strict rules about disordering the words in the sentence, there are rules about the tone pattern of the sentence. It will be noted that the tone pattern of the clear⁷ is retained in the Ẹnà.

Mo fẹẹ lo sóko - M HH M HM and

Lọ mọọ fẹ kóso - M HH M HM

This is the greatest guide towards the decoding of the message. The position of the tone phoneme in Yoruba is perhaps more crucial than that of any other phoneme. Drum language depends upon this. Once a tone pattern is given, several sentences are possible on that pattern. One readily recalls the drum signal of the Nigerian Broadcasting Service with the tone pattern:



.....This isgerian.....casting..... H
.....broad.....ser..... M
the Ni.....vice. L

which had been creatively interpreted into many possible sentences, some of which are: *Bólúbàdàn bá kú ta ní ó jọyè?* (When the Olubadan dies, who will ascend the throne?), *Bélò Gàngàngúnḡún onímú orù;* (Huge Belo with nose like small pot), *O jẹgẹdẹ dúdú inú n ta bọ̀n!* (He ate green plantains, his belly is swelling). The relevance of this digression is that the tone pattern of the clear, retained in the message in system one, helps in the correct ordering of the words already provided. A competent speaker of the Yoruba language will find that words in the message bear strange tones and will try to see which tones go with which words in his experience. Once he is able to do this, the re-ordering of the words becomes easier.

2. The Addition of Null Tags to Syllabic Units.

When a clear is to be encoded, the null is tagged to every syllable of the utterance. In this system the null consists of an open syllable - CV. The consonant of the null syllable is constant throughout the message but the vowels are variable because they have to be identical with the vowel of the preceding clear syllable. The system also allows two possible choices of consonants. But once a choice is made consistency must be maintained throughout the message. The choice is between the voiceless labio-dental fricative [f] and the voiced velar plosive [g]. The form of the null syllable is therefore:

[f] or [g] + a vowel

So a clear like: *Mo fẹẹ lọ sóko*
will be encoded: *Mof fẹf lọg sọg kogo.*

The sentence is broken down into syllables and the null syllable is tagged on to each syllable following the rules earlier described. The consonant chosen in this case is [g] and the vowel that will follow it in each case will be identical with that of the preceding syllable: [o] for *Mo* to give *Mogo* and [ɛ] for *fẹ* to give *fẹgẹ*.

We also notice that in this system the natural tones of the clear are retained in the message and the tones of the null tags are also identical with those of the clear syllables: for example the tone on *Mo* is mid, so is that on *go*; the tone on *fẹ* is high and so is that on '*gẹ*' etc. The effect of this tonal agreement is poetic. The rise and fall of speech tones is usually exploited to great advantage in Yoruba poetry. In ordinary speech, tones do not occur regularly in identical pairs. But in this example, the occurrence of tones in identical pairs throughout the message produces a sing-song effect which we consider poetic. Ordinary speech tones now move in 'couplets' to produce a rhythm of emphatic progress.

The poetic nature of this and other systems is evidenced by the overriding status of phonological rules over those of grammar. We notice an amount of 'poetic' licence in the way a sequence of two identical vowels is treated. A sequence of two identical vowels in Yoruba is normally treated as two syllables as long as each bears its own tone. In this particular system of Ẹnà, however, if the two vowels in a sequence in the clear bear identical tones, the two vowels will be treated as one syllable in the message. Whereas if the two identical vowels in a sequence in the clear bear different tones, they are treated as two separate syllables in the message. For example in a sentence like *Ayaa Délé na 'ajáa' rẹ* (Wife Délé beats dog her: Délé's wife beats her dog) the double vowel in *ayaa* will be treated as one syllable in the message while those in '*ajáa*' will be treated as two: thus *Aga yaga Véyé léyé nagan aga jágá aga rẹngẹ*.

In this same system, there is a way of marking stops and pauses. The last null syllable in each pause group of the message is preceded by the syllabic nasal [ŋ]. In the example given above, the ŋ comes before '*gẹ*' in *rẹngẹ* because it marks the end of the sentence. The same thing happens in smaller pauses. In a clear like *Bí mo bá dé, mo fẹfẹ lọ sóko*, (When I return, I want go to farm) where there is a pause after *dé* the message will be encoded:

Bígí mogo bágá déngé, mogo fẹfẹ logo sógó kongo.

There is a simpler variant of this second system. Here, as in the system just described above, the null is tagged onto every syllable of the clear. But the code element (the null) in this case is poly-syllabic. It could be either *ńlolo* or *ńtiri*. So a sentence like *Mo fẹfẹ lọ sóko*, would be encoded:

Mó ńtírí fẹ́ ńtírí lóńtírí sọńtírí kóńtírí

We notice that in this system there is neither vowel nor tone agreement between the clear and the null syllables. The null *ńtírí* retains its form in any environment. We also notice that all the original tones of the clear have been distorted and are replaced by high tones throughout: *Mó-fẹ́-lọ-só-kó* and then the null, which has a fixed tonal pattern is affixed to each syllable, so that all groups of the message have a common tone pattern: HH LL. In this system there are no ways of marking pauses. The overall effect is the rhythm of a lullaby - rather monotonous but none the less poetic.

3. The Inversion of End-of-group Syllables and Substitution of Null Tags.

This system is a little more complicated. Unlike the others earlier discussed, it operates not only on the syllable, but also on the sense groups. The nulls used are *ń* and *tín*. When a sense group has been determined by a competent speaker of the language, the last syllable of that group is brought to the beginning of that group. The null syllable *ń* is then prefixed to the inverted syllable, then the other null syllable *tín* replaces that last syllable of the sense group. So a clear like *Bí mo bá dé / mo fẹ́ẹ́ lọ / sóko*, where about three sense groups could be determined (marked by the strokes) is then encoded into the message:

ńdè bí mo bá tín, / ńlọ mo fẹ́ẹ́ tín, / ńkòsọ tín.

The determination of sense groups depends, to a large extent, on the speaker. The smaller the sense group, however, the more complicated the message becomes. Looking closely at the system, we notice that the null *ń* introduces each sense group. We also notice that this syllabic nasal together with the inverted syllable (transferred from the end to the beginning) bear low tones always, irrespective of what tone the transferred syllable originally had. All the other syllables retain their clear (original) tones. But the case of the null *tín* is different. It takes on the tone of the syllable it replaces in each case. For example in the first sense group of the message above, it bears a high tone *tín* because it replaces *dé*, and in the second sense group it bears the mid tone *tín* because it replaces *lọ* etc. To encode a word like *Ládélé* in this system, since the last syllable of the word *lé* has a high tone, *tín* which will replace it will adopt the high tone: *ńlèládétín*.

4. Vowel Numbers.

This system seems to have come with the advent of literacy. In this system there are no nulls. It is a system based, unlike the others, on the orthography of the language. Syllables and sense groups are here not important. One has to know one's spellings

very well to be able to operate this system. The peculiarity of this system is that it rules out the illiterate. It is virtually a school-boy game. It has two variants: one recognising only five vowels in the language: a e i o u, implying that the difference between the half-open vowels and the half-close vowels is only minimal and does not need to be emphasised. This first variant therefore uses five numbers; [a] is one, [e] is two; [i] is three; [o] is four, and [u] is five. The order is that in which they appear in the alphabet. So ɛ [ɛ] is just three dot and ɔ [ɔ] is four dot. This emphasizes the fact that the base of this system is orthographical and not phonological. The dot (.) is what used to differentiate the half open from the half-close vowels (e-ɛ; o-ɔ) in the old orthography. The numbers are pronounced as in English. All consonants are treated as syllables with the addition of the vowel [à] as pronounced in Yoruba. So [b] in a word will be pronounced [bà] and [l] [la] etc, but in the written message only the consonants are written.

So the clear *Mo fẹ́ẹ́ lọ sóko*, will be encoded M4 f22 14 s4ks (pronounced Mâ four fâ twenty-two dot lâ four dot sâ four kâ four). four).

The second variant is the one that recognises seven instead of five vowels:-

a - 1, e - 2, ɛ - 3, i - 4, o - 5, ɔ - 6, u - 7

The process of encoding is the same, only the vowel numbers are now different. *Mo fẹ́ẹ́ lọ sóko*, will now be M5 f33 16 s5k5. This variant reflects a better awareness of Yoruba phonology in that it realizes the ɛ [ɛ] is not just a variant of e [e] but a totally different vowel. This is the variant now in vogue among writers.⁸

In both variants we notice that tones of the original clear are disregarded since there is no way of showing tones on mere figures that now represent the vowels. If there is a sequence of two or three vowels, the resultant figure will be treated as one. For example, *àíjẹ* (not eating) will be encoded 13j2 (pronounced thirteen jâ two dot) using the first variant, *láàárọ̀* (in the morning) will be encoded 1111r4 (lâ one hundred and eleven rà four dot). There is no way of showing pauses in this system. "To the uninitiated, the language is transformed to gibberish, but for the players, the distortion hardly interferes with communication and adds special amusement."⁹

Here now are examples of messages from the four systems for easier at-a-glance comparison:

Clear: *Súnmọ̀ni làá mọ̀șe ẹ̀ni, ẹ̀nìyàn gbókèèrè nìyì.* (Moving close, we know the deeds of a person, people look honourable when watched from afar.)

Messages:

System 1: Simple disordering of syllables in a word and of words in a sentence:

Mòsúnni şèélámq niq èyànni régbòòkè yíni.

System 2: The addition of null tags to syllabic units:

*Súngún mógán nigin làgà ágá mógán şege ege nigin
ègè nigin yàngàn gbógó kègè nègè nigin yìngì.*

System 3: Inversion of end-of-group syllables and substitution of null tags:

*Ñ nisúnmq̄tin ñşèlàámq̄tin ñ niq̄tin, ñyàn ènitin,
ñrègbókèètin ñyinitin.*

System 4: Vowel numbers:

Variant 1.

S5nm4n3 111 m4S2 2n3 2n3yln

gb4k22r2 n3y3.

Characteristics of the Four Systems

Codes	Nulls	Unit of Operation	Tones	Double Vowels	Pauses
System 1	No nulls	Words and sentences	Original rhythm retained	Pre-served	Not marked
System 2	Monosyllabic/nulls	The syllable	Original retained/agreement	Pre-served	Marked
Variant	Polysyllabic nulls	The syllable	Distorted (all high)	Treated as a single vowel	Not marked
System 3	ñ, tin	Sense groups and syllables	Original preserved	Pre-served	Marked
System 4	Numbers represent vowels	The letter	Distorted	Pre-served	Not marked

In conclusion one can say that these Ẹnà systems have exploited the genius of the Yoruba language in interesting ways, and are therefore peculiar to the language. System one emphasizes the crucial rôle of the tone phoneme in Yoruba and drops some hints on the rôle it could play in poetic rhythm. System two with its variant, which operates on the syllable also reveals some facts about the language. It admits of no consonant clusters. Loan words with clusters are forced into the Yoruba language structure: V or CV syllable structure.

One also notices that these Ẹnà systems, with the possible exception of system 4 which operates on the letter, work with open syllables since all Yoruba syllables are open. A language having closed syllables cannot operate these systems because the arresting consonants will not be catered for.

System four has a historical importance for the Yoruba language. It developed with the advent of western education and demands literacy as a condition for its use. The fact that the numbers are pronounced in English shows that western education came to Yoruba-

land through the English language. The gradual improvement of the Yoruba orthography is also demonstrated in the variant that recognises seven instead of five vowels since the latest developments in the orthography emphasize the proper differentiation between the half-open and the half-close vowels.

NOTES

¹ A revised version of a paper presented in 1970, at a Seminar of the School of African and Asian Studies, University of Lagos.

² Fromkin and Rodman. 1974. *An Introduction to Language*. Holt, Rinehart and Winston Inc., New York.

³ François, Denise. 1966. *Le Contrepet* in *La Linguistique* (Revue Internationale de Linguistique Générale). Presses Universitaires de France, Paris 2, p. 31.

⁴ Anyone who is not supposed to understand the message.

⁵ Encyclopaedia Britannica Vol. 6.

⁶ A null is a meaningless form added to confuse the enemy.

⁷ A clear is the plain words before encoding.

⁸ See Akinlade, E.K. 1974, *Alosi Qlqqq*, Longman p. 114 for an example. Akinlade introduces here an innovation by using 'x' to mark word boundaries.

⁹ Fromkin and Rodman op. cit., p. 274.