

# COMPARATIVE EDOID: PHONOLOGY AND LEXICON

BEN OHIOMAMHE ELUGBE

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Comparative Edoid: phonology and lexicon

by

Ben Ohiomamhe Elugbe

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To my teachers in Linguistics,

Ayo Bamgboṣe  
Elizabeth Dunstan  
Carl Hoffmann  
Ian Maddieson  
Bernard Mafeni  
Kay Williamson

and also to my wife

Stella



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*List of Abbreviations*

DE	Delta Edoid
LGA	Local Government Area
NCE	North-Central Edoid
NWE	North-Western Edoid
PDE	Proto-Delta Edoid
PE	Proto-Edoid
PNCE	Proto-North-Central Edoid
PNWE	Proto-North-Western Edoid
PO	Proto-Osse
PSNWE	Proto-Southern North-Western Edoid
PSWE	Proto-South-Western Edoid
SNWE	Southern North-Western Edoid
SWE	South-Western Edoid



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## *Preface*

It is nine years now (November, 1973) since I submitted a thesis entitled 'A comparative Edoid phonology' in part fulfilment of the requirements of the Ph.D. degree. That work is the foundation for this one.

However, this is not a mere revision of my 1973 effort: it is, in general, a new work. First of all, I have collected more data. In 1973, eleven languages formed the basis of comparison and reconstruction; now there are *t w e n t y!*

Secondly, a more rigorous look at the old as well as the additional data has broadened the outlook here to the extent that there is virtually no comparison between my Proto-Edoid (PE) phonology as presented here and the same phonology as suggested in 1973. Some issues that were recognized but not tackled in 1973 have been tackled: for example, the reconstruction of PE palatals, of PE \*ə, etc. My reconstruction of a full-fledged noun prefix system for PE is also far in advance of the 1973 attempt.

However, there are some negative ways in which I have deviated from the 1973 approach. There is, here, no attempt to reconstruct lexical items within the different branches of Edoid. There is also no attempt to set my reconstructions side by side with reconstructions elsewhere in Niger-Congo. The reader must bear with me or refer, where possible or necessary, to the 1973 work.

I have, during the past few years, published articles on aspects of PE phonology. I have taken pains not to repeat myself and I have chosen, where necessary, to refer the reader to such articles. On the other hand, the ideas expressed here do not necessarily agree with ideas I have expressed elsewhere about PE phonology and reconstructions.



There is, lamentably, still no attempt to reconstruct PE tone (see section 5.1). It is a tantalising field that holds the promise of even more interesting clues to the typology and genesis of tonal systems.

This work is in three parts. Part I (chapter 1 and 2) contains a delimitation of the Edoid area (as opposed to Edo). A classification of the Edoid languages is also given. The classification is based purely on linguistic evidence which is presented in Chapter 5 (Part III). In chapter 2, I discuss the sounds of Edoid as found in the languages investigated. Apart from the fact that a study of the sounds of Edoid obviously contributes to our knowledge of human speech, I am of the opinion that the study of phonetics is vital to linguistic reconstruction.

In Part II, I present general phonological characteristics of the Edoid languages (chapter 3) and then proceed to present individual phonological sketches of twenty Edoid languages. Each sketch is presented in a ten-part format for easy reference - 1. syllable structure; 2. consonant inventory; 3. notes on consonants; 4. consonant contrasts; 5. vowel inventory; 6. notes on vowels; 7. vowel harmony; 8. tone; 9. morphology; and 10. other sources. There is thus an attempt to list, for each language, all the known sources from which further information may be got.

In Part III, I present (chapter 5) a phonology of PE. In chapter 6, I present reconstructed PE lexical items. There are two hundred and seven (207) in all.

All the data used in this work were collected personally by me (see also under Acknowledgements).

It is generally agreed that our understanding of language classification in Africa would be deeper and more dependable if we had proper classification and reconstruction of groups

at a lower level. This is one attempt at a lower-level  
classification of a group within Benue-Kwa of Niger-Congo.

Ben Elugbe  
Ibadan  
November, 1982.

PART I  
CHAPTER 1

I N T R O D U C T I O N

1.1. *Edo versus Edoid*

Throughout this work, we shall use the term Edoid for the group of Nigerian languages earlier called 'Èdo' (Thomas 1910; Westermann 1926; Greenberg 1955; Wolff 1959; Wescott 1962; and Elugbe 1973 and elsewhere) and the 'Beningruppe' (Melzian 1942). It has become clear from recent developments that the term Èdo is ambiguous because:

(a) the Èdo (Bini) (i.e. those who are from Benin City and its environs) want either to keep the name 'Èdo' for themselves or, at any rate, to apply it to themselves exclusive of any other peoples;

(b) most peoples of the northern Edoid area (from Esan (Ishan) northwards) apply it to themselves as a common tribe (though not to their languages); and

(c) the southern Edoid peoples (some of them in the Rivers State) generally deny that it applies to them (with the exception of some Urhobo, Okpè, and Isoko clans).

This ambiguity has prevented most people, including linguists, from properly understanding the linguistic situation in the Edoid areas of Bendel State. It is frequently assumed that all who claim Èdo must, of necessity, be speaking the same language. In some universities in Nigeria, 'Èdo Studies' units exist which cover only Benin. Even the Federal Radio Corporation of Nigeria assumes that a sizable area of Bendel State is covered by the News in Èdo: actually, only Benin City and its environs (approximately Oredè, Ovia, and Orhionmwon Local Government Areas) are thus covered.

The most ridiculous of the views frequently expressed in lay circles about the relationship between Èdo (Bini) and other Edoid languages is that the language of Benin City, the capital of the



great Benin Empire, is the original language of the Edoid peoples the progenitor or the ancestor language, of which all the other languages are descendants.

In 1972, Ogieiriaixi published a short monograph he called *Edo Orthography*. Elugbe (1972) immediately replied with 'Some comments on *Edo Orthography*' in which he attacked Ogieiriaixi, among other reasons, for assuming that an orthography designed for Ẹdo (Bini) could be used for the other languages (to the north of Benin City) which were assumed to be covered by *Edo Orthography*

In May 1974, the Bendel State government, under the auspices of the University of Lagos, organised a seminar on 'Edo language and its orthography'. It was meant to be a seminar on Ẹdo(Bini), but a host of other Edoid scholars invited to the seminar treated the term in its broad sense while those from the Benin Divisions treated it in its narrow sense. Thus there were papers like 'Who are the Ẹdo?' (Otite 1974), and 'Plosives and Fricatives in the Ẹdo languages' (Elugbe 1974), alongside others like 'How should we write Ẹdo?' (Amayo 1974).

The seminar, in view of this ambiguity, first addressed itself to the vexed issue of just how to apply the term 'Ẹdo'. In the end, a compromise recommendation was made to the then Mid-West Language Committee for onward transmission to the State Government that 'Ẹdo' without qualification should be understood in its broad sense while the Ẹdo language spoken in Benin City and its environs should be referred to as Ẹdo(Bini).

As it turned out, even those on the Benin side, who were party to this recommendation, and who were in a position to influence official usage, continued to pay little or no attention to this recommendation, treating any use of the term Ẹdo in its narrow Ẹdo(Bini) sense. Even the report of the seminar (published by the Ministry Education, Benin-City) was entitled 'Ẹdo language and its orthography' instead of 'Ẹdo(Bini) language, etc.' and a paper like 'How should we write Ẹdo?' was published without any

revision in the title. Obviously, the compromise recommendation had not even survived the seminar!

Unless every Edo(Bini) speaker could be educated on the problems raised by referring to his language as Edo instead of Edo(Bini) and they were all willing to make the necessary adjustment, the official recommendation would continue to differ from practical usage. Writers such as Thomas (1910) were able to use the term 'Edo' for the Edoid peoples as well as for the Edo (Bini) language. But the times have changed and there are now social, political, and educational reasons for clearing the ambiguity.

Hence I suggested in a paper sent to the organizers of the 'Seminar on Edo language' in March, 1978 (Elugbe 1978a) that the name Edo in linguistic usage - though not necessarily in ethnological or anthropological usage - be restricted to the language of Benin City and its environs. In other words, instead of Edo (Bini), we should simply say 'Edo'.

As for the larger group of which Edo is one member, I suggested that we follow a well-established tradition of linguistic nomenclature by calling them the 'Edoid' group. This name has the advantage of being neutral without being distant from the original. Thus the languages we shall be discussing in the following pages - languages like Degerema, Urhobo, Edo, Esan, Yekhee(Etsako), Ghotuo, Okpamheri, Uhami(Ishua), etc. - are all *Edoid* languages.

Apart from the need to remove ambiguity, there are some facts that support this recommendation. The Edoid languages fall into four primary subgroups - Delta Edoid (DE), South-Western Edoid (SWE), North-Central Edoid (NCE) (where Edo belongs), and North-Western Edoid (NWE). The term 'Edo' is claimed only in the North-Central area where even those applying the term to themselves accept that Benin City is 'Edo'. In the other subgroups, even where people claim Benin origin, they do not apply the term Edo to themselves and they do not refer to Benin City as Edo. Thus, although Otite (1974) presents an impassioned case against any



use of the term Èdo to the exclusion of the South-Western Edoid peoples, this attitude is missing in his 1973 work and he has admitted (personal communication) that the South-Western Edoid name for Benin City is not Èdo.

Also in support of associating Èdo with Èdo(Bini) only is the fact that the pronunciation of the name all round is so uniform that we have to conclude it was only recently introduced to the other areas. For example, there are no phonological variations of the name as you would expect with a proto-Edoid word inherited by the subgroups of Edoid. Other groups such as the Igbo have names such as 'Idu' for Benin but these are probably not the same stem as Èdo. Early references to Èdo in Cust (1883) include the spelling 'Ado' and 'Edoh' which would suggest that the name may have been \*ədo. Williamson (personal communication) has suggested the same to me while pointing out that some Delta communities still call Èdo 'Ado'.

### 1.2. *The Edoid languages and the Edoid-speaking peoples*

Edoid languages are spoken in at least three of the nineteen States of Nigeria. If we include Benue and Kwara States (see below), the figure increases to five.

That some Edoid languages are spoken outside Bendel State is not a well-known fact. Neither Thomas (1910) nor Westermann (1926) make any reference to Edoid languages outside the area now known as Bendel State, though Westermann is essentially correct in saying that the Edoid "... grenzt im Westen an das Yoruba, im Norden ans Igbira, im Osten an Igara, Ibo und Idzo, im Süden an das Idzo".

However, Talbot (1932) mentioned the existence of an Edoid-speaking people in the eastern section of the Niger Delta and Temple (1919) documented the existence of an Edoid-speaking (Unep) tribe on the eastern bank of the Niger across from the Okpella-Wepa Wanq country which is part of today's Etsako Local Government Area. Temple also mentioned the existence of an Edoid (Sibi) tribe in Kabba Province. Edoid-speaking peoples are identified

in Ondo State by Bradbury (1957), Williamson (1968), Oke (1970), and Elugbe (1971).

In what follows, the Edoid-speaking peoples and their languages are discussed geographically according to State, starting from the south and working northwards.

#### 1.2.1. *Rivers State*

There are three subgroups of Edoid-speaking peoples in the Rivers State (see Figure 1): Dẹgẹma (including Oboṅoma), Egeṅe (Engenni), and Epie-Atisa (Atissa).

The earliest record of the Egeṅe is probably the 'Igabo' wordlist in Thomas' 1914 work: Specimens of languages from southern Nigeria. Later on, Talbot (1932), in what may be considered the first clear mention of the Egeṅe (Engenni) and the Dẹgẹma, wrote that the Engenni, who had formed an ethnological puzzle for sometime, and who proudly claimed to be autochthonous, were '... branches of the Sobo [Urhobo - BE] sub-tribe of Edo, the nearest of whom are the Igabo [Isoko - BE], inhabiting a few towns to the south of Abaw, ...' The Engenni claimed that the Dẹgẹma were a break-away branch of Engenni and this was confirmed by the Dẹgẹma who claim they can still, with some difficulty, understand a bit of Engenni.

The third group of Edoid peoples in the Rivers State, the Epie-Atisa, were for a long time classified as Ijọ (Talbot 1932, Westermann and Bryan 1952). This may have been due to the fact that the Epie-Atisa came early into contact with the Kalabari and other parts of Ijọ and also to the fact that, according to Yakie (1974), some Epie-Atisa clans trace their origin to Ijọ. However, Wolff (1959) correctly classified Atisa as Edoid-speaking.

Dẹgẹma is spoken in two villages, Opu-Dẹgẹma and Kala-Dẹgẹma, on Degema Island in the Degema Local Government Area (DELGA). Oboṅoma, which is mutually intelligible with Dẹgẹma, is spoken on Abonnema Island, adjacent to Degema Island. Oboṅoma village, firmly identified as Edoid-speaking in Thomas and Williamson (1967), is situated some distance behind Abonnema town, and

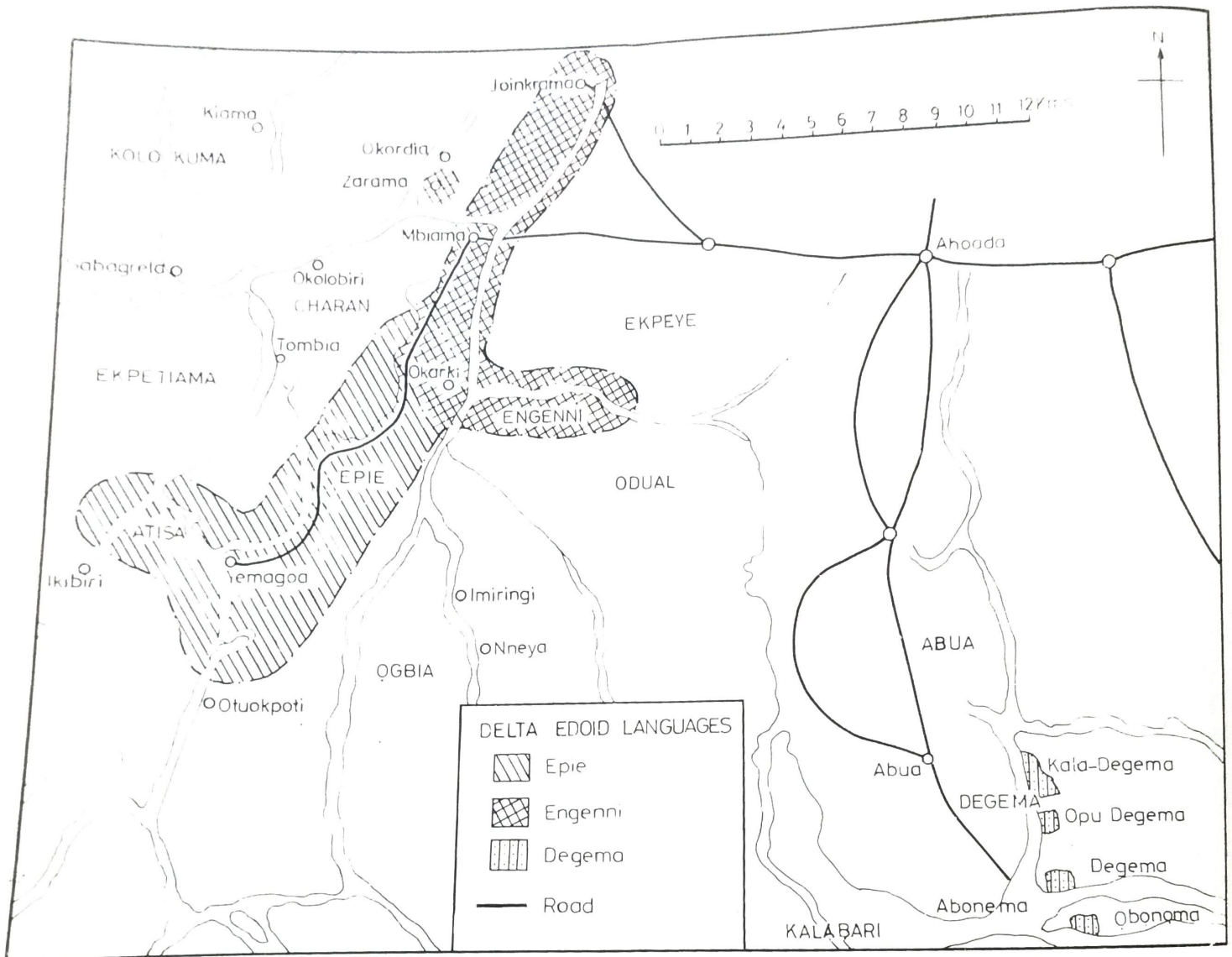


Fig.1. Edoid-Speaking areas of Rivers State (Map by courtesy of K. Williamson)



Ọbọnọma is virtually extinct as the younger generation generally speak Kalabari to the exclusion of Ọbọnọma. By contrast, the main Dẹgẹma villages display a strong attachment to the language even where, as is becoming increasingly the case, the inhabitants speak Kalabari as a second language.

Both Ẹgẹnẹ and Epie-Atịsa are spoken in an area of the Rivers State very close to the Isoko/Ẹrụwa area of Bendel State. In some parts, there is only a thin stretch of creeks and mangrove swamps, inhabited mostly by Ijọ-speaking peoples, between Isoko/Ẹrụwa country and Ẹgẹnẹ/Epie-Atịsa country. The latter are spoken in the Yenagoa Local Government Area (YELGA), in a narrow area that runs approximately from Joinkrama in the north down to just southwards from Yenagoa (see Figure 1). There is an easterly extension from opposite Okarki and a westerly extension from Yenagoa. Yenagoa is the headquarters of YELGA.

In spite of Talbot (1932), who claims that the Ẹgẹnẹ are a branch of Urhobo, the linguistic evidence clearly makes the Delta Edoid (DE) peoples independent of Urhobo or any other of the South-Western Edoid groups in the Western Niger Delta.

#### 1.2.2. *Bendel State*

The majority of Edoid languages are spoken in the Bendel (formerly Mid-Western) State. Starting from the south (Delta Province) northwards, the Edoid-speaking peoples fall into three groups: the South-Western Edoid (SWE); the North-Central Edoid (NCE); and the North-Western Edoid (NWE) (see Figure 2).

##### 1.2.2.1. *South-Western Edoid*

This is made up of five groups of Edoid-speaking peoples (Hubbard 1952; Elugbe MS).

- (a) the Eruwa (Erohwa, Arokwa) most easterly and closest to the Delta-Edoid area);
- (b) the Isoko (Igabo) (also very close to the Delta Edoid area)
- (c) the Urhobo (Sobo);
- (d) the Okpẹ; and
- (e) the Uvbiẹ (Evhron; Effurun).

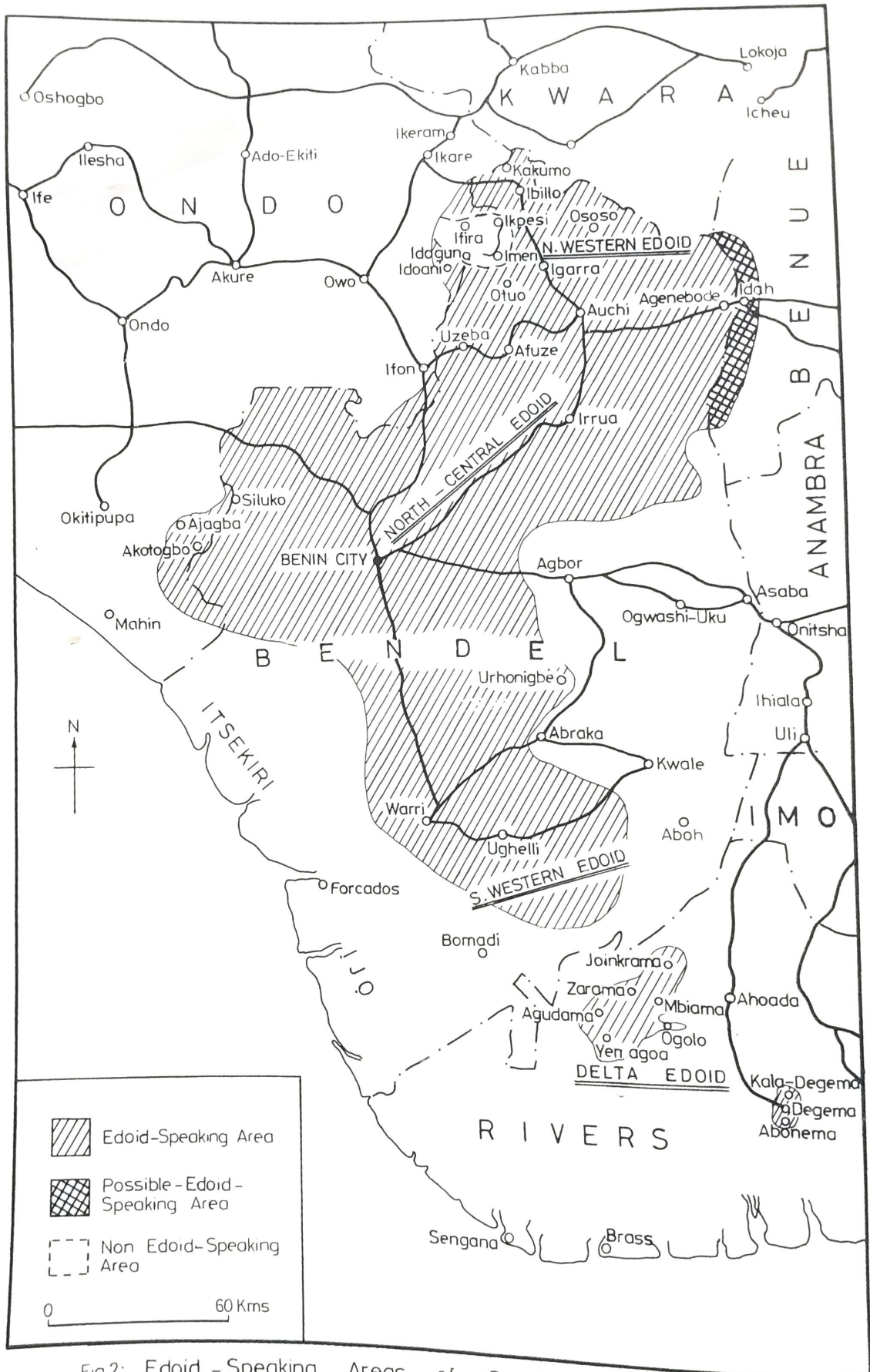


Fig.2: Edoid - Speaking Areas of Southern Nigeria

According to Hubbard (1952:96) the Èrùwa claim that they are '... the original inhabitants of the land, have an immense history behind them, have never lived anywhere else, have no connection whatever with Benin...' Thus we have the Èrùwa, like the Ègèṅ of Delta Edoid, claiming autochthony. Yet they are treated as an Isoko clan and rarely given the independent status their language would have entitled them to. Welch (1934:161) has said that although the Èrùwa invaded the Isoko at some point, it was a greater part of the Èrùwa who migrated to '... Efrun and Efferunto (sic), and a remnant remained which forms the Erohwa clan of Isoko'. The Èrùwa, on account of their economic, social and political ties with the Isoko, often speak Isoko (as a second language (cf. Ikime 1972) and are therefore often called an Isoko clan. The Isoko, on the other hand, do not understand Èrùwa and generally have no cause to learn it. I have suggested elsewhere (Elugbe 1979) that the Èrùwa claim to autochthony, apart from suggesting a long presence in the Delta, reflects the Èrùwa's unwillingness to absorb immigrant elements. Thus they will marry Isoko women but will not let their women marry Isoko men (Ikime 1972). While this has kept Èrùwa the smallest of the SWE groups, it has earned them a position of pride in which they are treated as elders.

The Isoko and the Urhobo are the largest of the SWE groups. Most outsiders think that the Edoid languages of this area are simply Isoko and Urhobo, that while Èrùwa is Isoko both Okpè and Uvbiè are Urhobo. The truth is that each of these groups speaks its own language. Although the Okpè and Uvbiè will call themselves Urhobo clans and speak the central Agbarho dialect of Urhobo which has become a lingua franca in the Urhobo area, they rightly insist that they have their own languages. According to Welch (1934) and Hubbard (1952:139), the Uvbiè trace themselves to Èrùwa. Hubbard claims the Okpè trace their origin to Benin and adds that Okpè '... contrasts with the other four in possessing fewer points of resemblance to them, and more to Bini'.



The linguistic evidence places Okpẹ squarely within SWE. As both Welch (1934) and Hubbard (1952) have pointed out, today's Isoko- and Urhobo-speaking clans did not all come from the Edoid stock. Some of the clans trace their origins to Igbo and Ijọ sources; others to Benin. However, as observed in Elugbe (1979), if Igbo- or Ijọ-speaking peoples were absorbed by an Edoid-speaking group, it must be assumed that the Edoid group were the longer- and better-settled; were the more dominant. Even the immigrants from Benin must certainly have found and been absorbed by this settled and dominant Edoid group, referred to as an aboriginal stock by Bradbury (1957).

The SWE languages are spoken in the Isoko, Ughelli, Ethiope, and Okpẹ Local Government Areas of the Delta Province of Bendel State. Işekiri (Itsekiri) and Urhobo exist side by side in the Warri Local Government Area, especially in Warri town, while some Urhobo clans extend into the Ndokwa Local Government Area.

#### 1.2.2.2. *North-Central Edoid*

The North-Central Edoid peoples occupy the following Local Government Areas of Bendel State: Ovia, Oredo, Orhiṣnmwṣn, Okpẹbho, Agbazilo, Etsakọ, Owan, and Akoko-Edo. These LGAs were created from the earlier Divisions of Benin West, Benin East, Ishan (Esan), Owan (also earlier called Ivbiosakṣn), Etsakọ, and Akoko-Edo.

The major groups in this area are: the Edo(Bini), inhabitants of the Bendel capital and its environs; the Esan immediately north of Edo(Bini) territory and contiguous with it; the Ora-Emai-Iuleha of Owan LGA; the Ghotuṣ, also of Owan; the Yẹkhee, the largest single group in Etsakọ LGA, and themselves frequently called Etsakọ by outsiders; the North Ibie of the northern parts of Etsakọ; and the Unẹme, scattered all over Akoko-Edo and Etsakọ LGAs, with some also among the Esan.

~~?~~ The following clans, not named in the list above, are most likely North-Central Edoid peoples: ~~X~~Oşoşo, Ate(Atte), Ikpeshi, Sasaru, and Enwan, all of Akoko-Edo; Okpella of Etsakọ LGA; and

Igwe and Ihievbe (Sebe) of Qwan.

In the flat country of the NCE area (i.e. from Benin City up to the foot of the Afenmai (so-called Kukuruku) Hills, the Edoid-speaking units are large. However, from Yekhee (Etsakọ) country northwards and westwards, the northern elements of NCE are scattered and, with the exception of the Yekhee area, movement from one village to another tends to coincide with a change from one language to the other. In this hilly country, North-Central and North-western Edoid peoples live side by side, sometimes within the same village! For example, Ghotuọ (a NCE language) and the Idesa dialect of Ọkpẹ (a NWE language) exist side by side at Otuọ.

In any work on the Edoid-speaking peoples, the NCE area is invariably easily identified as Edoid-speaking. It has Benin City (Eḍo), the capital city of the Benin Kingdom and the Benin Empire and capital city of the Bendel State of Nigeria, as part of it, and this has often led outsiders into thinking that every other language of the area is a dialect of Eḍo. This is far from being the case the then Midwest State Government in 1973 set up a Language Committee among whose terms of reference was to determine the dominant languages of what is now Bendel State. Along with Eḍo (Bini), the Committee found that, at least up to the Primary School level, languages for which materials have to be provided (because they were found to be dominant) included Esan, Ora-Emai-Iuleha, Yekhee, Ghotuọ, and Uneme (Ministry of Education, Benin City, 1975). It is not therefore surprising that a common Edoid-based lingua franca has failed to emerge in the NCE area.

### *1.2.2.3. North-Western Edoid*

Some NWE languages are spoken in the Akoko-Eḍo Local Government Area of Bendel while others are spoken in the Akoko area of Ondo State. The most linguistically complex area of the Edoid-speaking parts of Bendel State is the North-Western. It is even more complex in those areas where it is contiguous with the North-central Edoid. The country is hilly and linguistic communities are small. In addition, non-Edoid peoples are wedged



between Edoid communities. Thus Igarra, the Ebira-speaking Etunọ town, which is the administrative headquarters of the Akoko-Edo LGA, is actually contiguous with Enwan (NCE) and Enwan is in turn only a couple of miles from Akuku, a NWE village. Igarra is totally surrounded by Edoid-speaking communities.

As one goes further north-west, the land falls away from the hills to the main Ọkpamheri area around Ibillo and towards the Ọsse River valley. This part of the NWE area is relatively homogeneous, being occupied mostly by Ọkpamheri-speaking peoples. The other non-Ọkpamheri NWE peoples are the Ọkpẹ and the Ọlọma (within three to four kilometres of each other, west of Igarra town).

*Moresby* \* As mentioned above, a dialect of Ọkpẹ is spoken in the Idesa part of Otuọ. The Idesa do not feel they are Ọkpẹ and are fully accepted as part of Otuọ. The historical tradition is that they fled Otuọ to Ọkpẹ at some point to escape the wrath of the Ọba of Benin. By the time they returned, they had dropped their language and changed to the Ọkpẹ language.

It is of interest to note that this explanation is corroborated by the other sections of Otuọ, who pointed out that they, too, had fled at the same time in different directions, including Ipele, near Ọwọ in Ondo State. It seems that the latter managed to retain their language because the language they found at Ipele was radically different from Ghotuọ.

Mention should perhaps be made of other non-Edoid-speaking communities of the northern fringes of Bendel State. Igarra has already been mentioned above as speaking the Etunọ dialect of Ebira; Imeri on the north-western border is Yoruboid, and the languages of Kakumọ, Anyaran, and Magongo remain unclassified (cf. Ballard 1969 who refers to them as 'Nigeria Remnant' and Hoffmann 1974).

\* In the North-western Edoid area, Yoruba has emerged as a lingua franca and it is perhaps impossible to find a NWE person who does not speak at least a heavily accented variety of Yoruba as second language. *True*

### 1.2.3. *Ondo State*

North-central Edoid peoples of Ondo State are identified as Ijagbe (Ijagba) and Uhoḃe (Sobe) in Bradbury (1957). Oke (1970) identifies more communities such as Akotogbo, Gbelebu, and Iju-Osun of the Okitipupa area of Ondo as Edoid-speaking.

On the other hand, that there are North-western Edoid peoples in Ondo State was not known until recently. These NWE peoples, who occupy parts of the old Akoko and Owo Divisions contiguous with the North-Western area of Bendel State, are first clearly mentioned in Williamson (1968). Although Oke (1970:7) identified '...Epimi, Ishua ... and Idoani' as speaking 'non-Yoruba mother-tongues', he failed to see their obvious Edoid link. Elugbe (1971), after some travelling around the area, gave a detailed but far from complete account of the Edoid languages of the area: The Uhami-speaking communities live in the two Ishuas, in Oyara, and, probably, also in Shosan; the Ehuḃun live in Epimi (Ekpinmi, Ekpeme); the Ukue live in a string of villages together called Ukpe or Ikpe; and the Iyayu live in Odani where they are complemented by a Yoruboid section (see Figure 3). Elugbe (1973), quoting the Nigerian Census 1963 figures, gives the population of the NWE communities in Ondo State at about 32,000.

### 1.2.4. *Kwara State*

It is still not known whether Edoid-speaking peoples are to be found in today's Kwara State. The only hint we have is that in Temple (1919:249):

The Sibi, who are also of the Edo group, occupy four villages in the Kabba Division, but the majority of the tribe are situated in Southern Nigeria.

The Sibi, whoever they may have been, have not been mentioned by the same name by other writers. Besides, we do know that parts of what used to be known as Kabba Division are now included either in the Akoko-Edo or in the Etsako LGAs. Westermann and Bryan (1952) say that 'Kukuruku dialect cluster' is also spoken

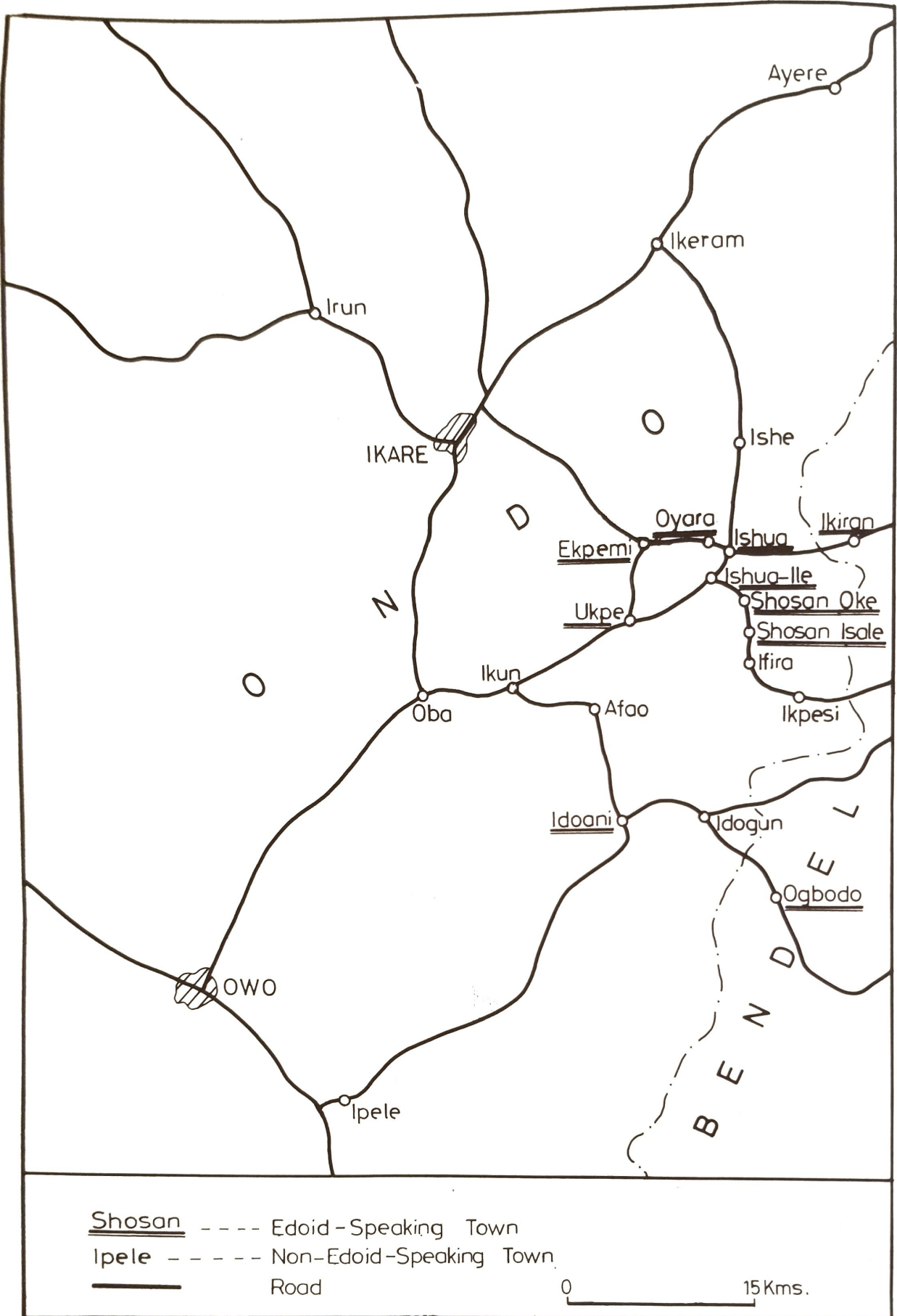


Fig.3. Edoid-Speaking Areas of Owo and Akoko Divisions of Ondo State



in Igbira Division, Kabba Province. Unfortunately, the so-called Edoid-speaking areas of Igbira Division are not specified.

#### 1.2.5. Benue State

What is clear is that the Sibi could not have been on the eastern bank of the Niger since, although Kabba province extended to the Igala Kingdom (around Idah), Kabba Division was a much smaller area. Besides, Temple (1919:248) gives an account of a different Edo tribe on the eastern bank in what is now Benue State:

The Onemi [most likely Uneme (plural; Ineme) - BE] are a small tribe who inhabit a small district between Lagos and Benin (sic), which they left early in the eighteenth century to escape the slave raids of the King of Edo. They joined with another tribe, probably the Upila [again, no doubt the Okpella/Ukpilla of Etsako LGA - BE] and crossed the Niger. They lived on roots and by hunting, but lost so many men - probably at the hands of the original inhabitants ... that they crossed the river again, but were driven out by the Filane [Fulani - BE] and finally, on the advent of the British, a section of the tribe crossed the river once more and settled in South Kabba. The tribe is, therefore, still divided.

All the facts point to the Ineme. They are known to be the most widely scattered of the North-Central Edoid peoples. The mention of 'Upila', moreover, means that they must have crossed the river from about the position of present-day Agenegbode, which is approximately opposite Idah.

Bradbury (1957:13) notes that:

... the Ineme (about 6,000) who live in a number of scattered villages in the Etsako and North-west Edo areas, ... have further settlements east of the Niger.

The clearest and most convincing evidence of all is that of Boston (1968:102) who notes that the clans in the metropolitan area of the Igala Kingdom are Igala 'by assimilation and not by origin':

The majority of them ... are of immigrant stock, and their founders are said to have come from other tribal groups ... To a smaller extent the Edo-speaking peoples across the Niger (Kukuruku) are also represented amongst these immigrant groups ...

Although Boston goes on to claim that the absorption of these immigrant stock is complete - 'They have adopted both the Igala language, and Igala forms of ceremony and ritual' - the possibility of an Edoid people still speaking an Edoid tongue on the eastern bank of the Niger around Idah remains. Boston claims the tribe of origin of the Edoid stock across the Niger is 'Inele' and although his map of the Igala Kingdom (p.149) includes a village called 'Inene', we are not told if or not there is a relationship between 'Inele' and 'Inene'. Until somebody with a linguistic bias conducts a first-hand investigation of the area in question, the question of Edoid peoples in the Igala area of Benue State will remain unanswered.

### 1.3. *Classification*

Koelle (1854) classified five languages as Niger-Delta Group B and duly listed them under 'V.B.'; 'Ibo dialects' were listed under Group A of the same Niger-Delta. The five Group B languages are:

1. Sobo (identified as Urhobo by Kelly 1968)
2. Egbele (identified as Yẹkhee (Etsakọ) by Laver 1969)
3. Bini (identified as Ẹdo(Bini) by Elugbe 1976)
4. Ihewe or Isewe (still to be formally identified, but in fact the language of the Ihievbe clan of Qwan LGA);and
5. Oloma (identified as Ọlọma by Elugbe and Schubert 1976).

One interesting aspect of Koelle's classification is that he neither wrongly classified any non-Edoid languages as Edoid nor wrongly classified an Edoid language as non-Edoid. Unfortunately, no Delta Edoid language is included in his data.

Cust (1883) draws more on the fairly confusing recordings and views of Kilham (1828), Clarke (1848), Baikie (1856), and others, to give a picture of the Edoid languages more confused than his sources. Cust is also the first printed source of the name KUKURUKU (see below) which he claims to have got from S. Crowther and confirmed from one Johnson.



Thomas (1910) correctly puts the Edoid languages together, although he again fails to mention the Edoid languages of the Eastern Niger Delta.

Westermann (1927) classifies the Edoid languages under Kwa-languages group (g). In his 1926 work on 'The Edo' Westermann is struck by similarities in lexical items between his Ewe-Twi, the Togo remnant, and the Edoid groups, so that in his comparative series at the end of the work, it is items from these Western Kwa groups that are frequently cited alongside the Edoid items. Out of 123 items Westermann finds it necessary only twice to cite a Yoruba cognate and both times, the item *oḡa* 'headman, head, etc.' is involved. However, Westermann does not claim anywhere to my knowledge that the Edoid languages are any closer to Ewe or Akan than to Yoruba or to Igbo. So his exercise may be taken as firmly establishing the Kwa-ness of Edoid.

Although Talbot (1932) associated the Delta Edoid *Èḡeḡe* (Engenni) with the Urhobo of the Western Delta, neither Melzian (1942) nor Westermann and Bryan (1952) follow this lead and they simply mention the Edoid languages from Urhobo in the Delta northwards to Kukuruku or Wepa-Wano (i.e. up to *Yèkhee* (Etsako) country.

Greenberg (1955, 1963) dutifully follows earlier writers in entering the traditional 'Bini, Ishan, Kukuruku, Sobo'.

The continued classification of 'Kukuruku' as a language, following Cust (1883) and Strub (1915-16) may have been encouraged by the establishment of a 'Kukuruku Division' later about 1955. However, there is no such language as 'Kukuruku'. The colonial administrators found it a useful term because it was already being widely used in writings on the area. Kukuruku Division included today's Akoko-Èdo, Etsako, and Qwan (then Ivbiosakon) as Districts. About the late fifties, however, the political leaders of the area raised such a fuss over the name that it was changed to Afenmai (sometimes Afemai) Division, which, simply translated, meant: 'our home' or 'our land'. Later on,

Akoko-Edo became a Division by itself and Afenmai came to mean simply Etsako and Owan. Even now that Etsako and Owan have become separate Local Government Areas, independent of each other, the name is still frequently used by the people of the area.

Needless to say, the anger expressed by the political leaders of 'Kukuruku' over the name could hardly have reflected fully the ordinary citizen's hatred for and detestation of the name. This attitude to the name can hardly be surprising to any one who knows what interpretations were given to it. The more benign interpretation was that "... they are so-called from their peculiar habit of calling out to one another in an unintelligible sound, as if a cock were crowing ..." (Cust 1883:224). The other origin frequently given, and very annoying to the Afenmai man, is also reported in Cust (1883:224): "... they are called by their conquerors Kukuruku, because they are as easily captured as the cock ... [They] do not like being so called". We have already discussed above the distribution of Edoid-speaking peoples in the Etsako, Owan, and Akoko-Edo Local Government Areas.

Wolff (1959:36) clearly mentions the Delta Edoid languages: The Kwa Branch of Niger-Congo is represented in the Delta by two of its sub-groups.

(A) Edo with four languages,

- (1) Atisa
- (2) Degema ...
- (3) Urhobo
- (4) Isoko - Engenni, a fifth Edo language of the Delta, is not included here ...

Wescott (1962) used the term 'Delta Edo' to refer to 'Yenagoa', Degema, and Engenni; that name was adopted by Thomas and Williamson (1967) and Elugbe (1973). We shall use it in its modified form, Delta Edoid (DE), to refer to Epie-Atisa, Degema and Egenen (Engenni).

Armstrong (1964) accepts Bini and Epie as Kwa and follows others before him in accepting the Edoid group represented by these two as co-ordinate with Igbo, Yoruba, and other such groups within Kwa.

Yet Voegelin and Voegelin (1964) classified Yoruba and Edoid together in a Yoruba-Edo sub-branch of Kwa. This classification is nowhere defended and cannot, indeed, be justified. Although a tendency exists to assume that the Edoid peoples are closer to the Yoruba, such thinking is often based on non-linguistic considerations.

Hoffmann (1973) and Bennett and Sterk (1977) continue the tradition of classifying Edoid as co-ordinate with Yoruba (or Yoruboid) and Igbo (or Lower Niger). The accepted position of Edoid is therefore as a sub-branch of Kwa or Benue-Kwa, or Eastern South Central Niger-Congo, co-ordinate with other groups such as Lower Niger or Yoruboid, etc.

The first comprehensive classification of the Edoid languages is that of Williamson (1968). She divides the Edoid languages into: Delta, Southern, Central, and Northern, the most linguistically diverse being the last one. A more detailed account of Northern Edoid is given in Williamson (1970 a).

Elugbe (1973) presents a new classification that benefits from Williamson (1968; 1970 a) but is nevertheless different from her classification in a number of details. Elugbe sub-classified the Edoid group into four: Delta, South-Western, North-Central, and North-Western. It is further claimed in this 1973 classification that Delta Edoid and South-Western Edoid form a South Edoid sub-branch while North-Central Edoid and North-Western Edoid form a North Edoid sub-branch. However, Elugbe (1979:88) presents a fresh view of the Edoid family tree in which each of the four sub-groups - Delta, South-Western, North-Central, and North-Western - is co-ordinate with the others. This revision is based on the discovery that the original two-way North versus South split postulated in 1973 is not supported by any convincing linguistic innovations (see Chapter 5.4).

The present internal sub-grouping of Edoid is thus as follows:

1.3.1. *Delta Edoid*

(a) Dẹgẹma

(b) Eḡeḡe (Engenni)



(c) Epie-Atisa

These three languages are relatively homogeneous, though the Dẹgẹma and the Egene are obviously closer to each other than either is to Epie-Atisa. Each of these languages has developed its own varieties, which are often along clan lines. Dẹgẹma has two main dialects, Opu Dẹgẹma and Kala Dẹgẹma, which are so alike or similar that they may be taken as one. The Ọbọnọma dialect is more clearly differentiated but is in danger of extinction since it is now spoken only by the elders, with the younger generation speaking Kalabari. My informant, Mr Tobiah Okpara Philips, told me that the Opu Dẹgẹma call themselves and their language Atala. Dẹgẹma refers to both Opu and Kala Dẹgẹma and often includes Ọbọnọma.

Ẹgẹṅẹ, better known as Engenni, has three dialects - Inedua (the northern group), Ogua (the middle group), and Ediro (the southern group). My informant, Mr Sam Ofuru, now of Government **S**ecundary School, Emohua, Rivers State, claims there are hardly any differences between these dialects. He also told me that they called themselves Ẹgẹṅẹ. Recently, I met Mr Dixon Amakiri Dikio of Bishop Dimieari Grammar School, Yenagoa, and I asked him why he told me he was Engenni instead of Ẹgẹṅẹ. I pointed out that Ẹgẹṅẹ could not have an indigenous word of the shape that Engenni has. He replied that the three groups of Ẹgẹṅẹ have no common name but they were collectively called Engenni by the Kalabari and the Ẹgẹṅẹ then modified Engenni as Ẹgẹṅẹ: the two names are therefore identical. The name Ẹgẹṅẹ will be favoured in this work and will no longer be used with its alternative.

The Epie-Atisa language has Epie and Atisa dialects. It used to be called simply Epie even where informants from Atisa had been used (as in Williamson 1970b) but some subtle complaining on the part of the Atisa has led to a change. My informant, in this case, happens to be from the Epie Clan. He was a third-year student at the University of Port Harcourt: Mr Patterson Wilfred Barugu.

1.3.2. *South-western Edoid*

- (a) Eṛuwa
- (b) Isoko
- (c) Okpe
- (d) Urhobo
- (e) Uvbie

The SWE area is also relatively homogeneous, though not nearly as homogeneous as frequently implied in the literature. The two dominant groups are the Isoko and the Urhobo and their languages have many dialectal varieties. None of the other three languages is as large or has as many dialects as either Isoko or Urhobo.

My Eṛuwa informants were Messrs. A. Akeni and E. Okochi. My data on the Uzere dialect of Isoko was taken from Mr. Ifoghale Amata, who also acted as my guide on a tour of the Isoko clans in July 1975. Uzere is accepted as the standard Isoko dialect (Mafeni 1969). My data on Urhobo are on the Agbarho dialect which is central and is what might be called the standard dialect (Mafeni 1969). My informants Messrs Ezekiel Ucho and Benson Eshegba told me that the closest dialect to Agbarho is Agbɔn. I have, since first working on Urhobo in 1970, interviewed many more people on the question of what is the standard dialect of Urhobo, and none has yet told me it is Agbɔn. Kelly (1969b) claims on the evidence of his Agbɔn informants, that it is Agbɔn, but that is obviously not correct (cf. also the Ministry of Education, Benin City 1975). I worked on Urhobo tone with Ms. Rose Olomukoro during 1980 and earlier, in 1977, with Mr Eḱrebe.

My Okpe informant was Mr Solomon Enunuaye. The Okpe call themselves Urhobo but are aware that they speak a different language from Urhobo. The Uvbie, who are also called Evhron (whence Effurun), also call themselves Urhobo, in spite of the oral traditional claim that they are a break-away Eṛuwa clan.

The complexity of the SWE area is submerged beneath the emergence of the Agbarho dialect as a lingua franca in the Urhobo areas of Urhobo, Okpe and Uvbie, and the emergence of the Uzere dialect of Isoko as a lingua franca in the Isoko and Eṛuwa areas.



A lexicostatistical count of these SWE areas in Elugbe (1975) turned up the following interesting percentages (Table 1):

TABLE 1: PERCENTAGES FROM A LEXICOSTATISTICAL COMPARISON OF THE SOUTH-WESTERN EDOID LANGUAGES

	Èrùwa	Isoko	Agbarho	Ughievbẹn	Okpẹ
Isoko	65				
Agbarho	58	74			
Ughievbẹn	55	72	87		
Okpẹ	60	63	70	66	
Uvbiẹ	60	62	70	69	66

1.3.3. *North-central Edoid*

- (a) Èdo (Bini, Èdo(Bini))
- (b) Esan (Ishan)
- (c) Ora-Emai-Iuleha (including Uọkha, Akẹ)
- (d) Yẹkhee (Etsakọ (including Wẹpa Wanọ); Kukuruku)
- (e) Unẹmẹ
- (f) Ghotuọ (including Arokho, Ikao)
- (g) Okpella-Atte
- (h) Igwẹ-Enwa-Sasaru
- \* (i) Ọsọsọ

Elugbe (1979, 1980a) classifies the a - f part of NCE into two co-ordinate sub-groups: a - c, the languages of the central plains, where there is relative homogeneity; and d - f, the languages of the southern and western fringes of the Afẹnmai Hills in the northern parts of Bendel State. \*The languages listed g - i above are left out of the family tree because their exact relationship with the rest of NCE has not been determined. *Leur's answer*

Unẹmẹ is closer to Yẹkhee than it is to Ghotuọ. It is indeed so close to Yẹkhee that it may be considered the same 'dialect cluster'. The linguistic evidence thus makes nonsense of the existing tradition, in the North-Central Edoid area, of treating the Unẹmẹ as outcasts with no connections in the Edoid area.

The Uneme are, on the linguistic evidence, solidly (North-Central) Edoid.

Yekhee, Uneme, and Ghotu display morphological characteristics more to be associated with the North-Western Edoid languages. This may be connected with their being contiguous with the North-Western Edoid area and thus forming a buffer zone between the NWE languages of the hills and the Edo, Esan, and Ora-Emai-Iuleha of the plains. These latter lack such morphologic characteristics as, for example, singular/plural-marking prefixes.

My informant for Uneme was Mr Samuel Aliu, For Ghotu I employed Mr Dele Arekamhe's services supplemented by myself. I have chosen the Auchi and the Avbianwu dialects of Yekhee. My original choice was, of course, the central Auchi dialect. I decided to include Avbianwu when I discovered that it employs a voiceless bilabial plosive where Auchi employs a voiceless labiodental fricative. Yekhee is not as homogeneous as might be suggested by the emergence of Auchi as a central dialect (Auchi town is the administrative headquarters of the Etsako Local Government Area) and the publication of Elimelech's 1976 book. Apart from the fact that Elimelech worked on a dialect quite removed from the centre, he gives the false impression that there is little or no dialectal variation in Yekhee. He also calls the language Etsako in spite of Elugbe (1973) and, more particularly, in spite of the report of the Mid-West Language Committee (Ministry of Education, Benin City 1975), a copy of which was available to him. The name Etsako was popularized by Laver (1967) who makes it clear that he is writing on a dialect of the language. However, one good reason for using the name Yekhee, which happens to be the real name, is that there are groups in the Etsako LGA who are not Yekhee-speaking. There are also some Yekhee-speaking people, such as the Ivbiadaobi of Owan Division, who live outside Etsako LGA. In this work Yekhee will be used for Yekhee(Etsako) from now on.

My Auchi informants were Mr Momoh Kadiri and Mr Robson Momoh. My informant for Avbianwu was Mr Sunday Okomilo.

4;  
H.

Ora-Emai-Iuleha is spoken by three clans - Ora, Emai, Iuleha. The hyphenated name employed here follows the realization that although these clans speak dialects of the same language, political and inter-clan rivalry do not allow one to apply the name of any one of them to the whole group. I have data on the Aoma variety of Iuleha from Mr Samuel Ileogbèn and I have some Ora items from Mrs Victoria Unuigboje.

I have, unfortunately, no data on Esan though I have read Akpamu's 1971 phonology of one of the Esan dialects. My data on Edo are from Mr Airèn Amayo who has himself since written a generative phonology of the language (Amayo 1976).

#### 1.3.4 North-Western Edoid

- (i) Southern NWE
  - (a) Ọkpẹ-Akuku-Idesa
  - (b) Ọlọma
  - (c) Ẹmhalẹ (Somorika)
  - (d) Ọkpamheri
- (ii) Ọsse
  - (e) Uhami (Ishua)
  - (f) Iyayu (Idoani)
  - (g) Ehuẹun
  - (h) Ekue

The NWE languages fall into two co-ordinate sub-groups: the Southern NWE and the Ọsse sub-group, named after the Ọsse River which forms a dividing line between the southern group and their sister languages in Ondo State. In the southern area, there is the hilly area occupied by the Ọkpẹ-Akuku, the Ọlọma, Ẹmhalẹ, and some elements of Ọkpamheri. Linguistic communities here are small and highly differentiated. Archaic features of morphology, especially of noun classes and concord, are most clearly preserved here. In 1973, I had data only on the Ibilo dialect of Ọkpamheri. Now I have data on Ẹmhalẹ from Mr L.A. Balogun and on Ọlọma from the ruler of the village, Chief John Idiabekhai. My Ibilo data came from Mr J.T.D. Orisanaiye and I have added a few more items from my friend Mr Joel Elegbe.



The Ọsse group is fairly small and Edoid groups here are wedged between Yoruboid groups. While their affiliation to NWE is straightforward, the internal sub-grouping reflected on the family tree (Figure 4) is still tentative, although Ukue and Ehuẹun are clearly closer to each other than either is to Iyayu. In my 1973 work, I grouped Ukue and Iyayu together: a more cautious approach would suggest they be kept separate for the time being.

My informants in the Ọsse area were: Mr P.A. Longe for Uhami, Mr A.O. Rotimi for Ehuẹun, and Mr Benjamin Adejubẹ for Ukue.

#### 1.4. *The family tree*

The classification just given is based on the evidence of regular sound correspondences and lexical reconstructions. It differs from Elugbe (1973) in ways that become obvious when one compares the family tree based on this classification with that in the 1973 work. (See Figure 4).

In the 1973 tree, a lexical item from any two sub-groups was considered Edoid, provided the two sub-groups came one from the South Edoid and the other from the North Edoid branch. In this classification a lexical item from any two sub-groups out of the four co-ordinate branches of Edoid would qualify as a PE item. However, any such lexical items must be assessed against the background of geographic contiguity which may sometimes be responsible for borrowing.

The historical implications of this genetic view of the Edoid languages are discussed in Elugbe (1979) and are beyond the scope of this work.

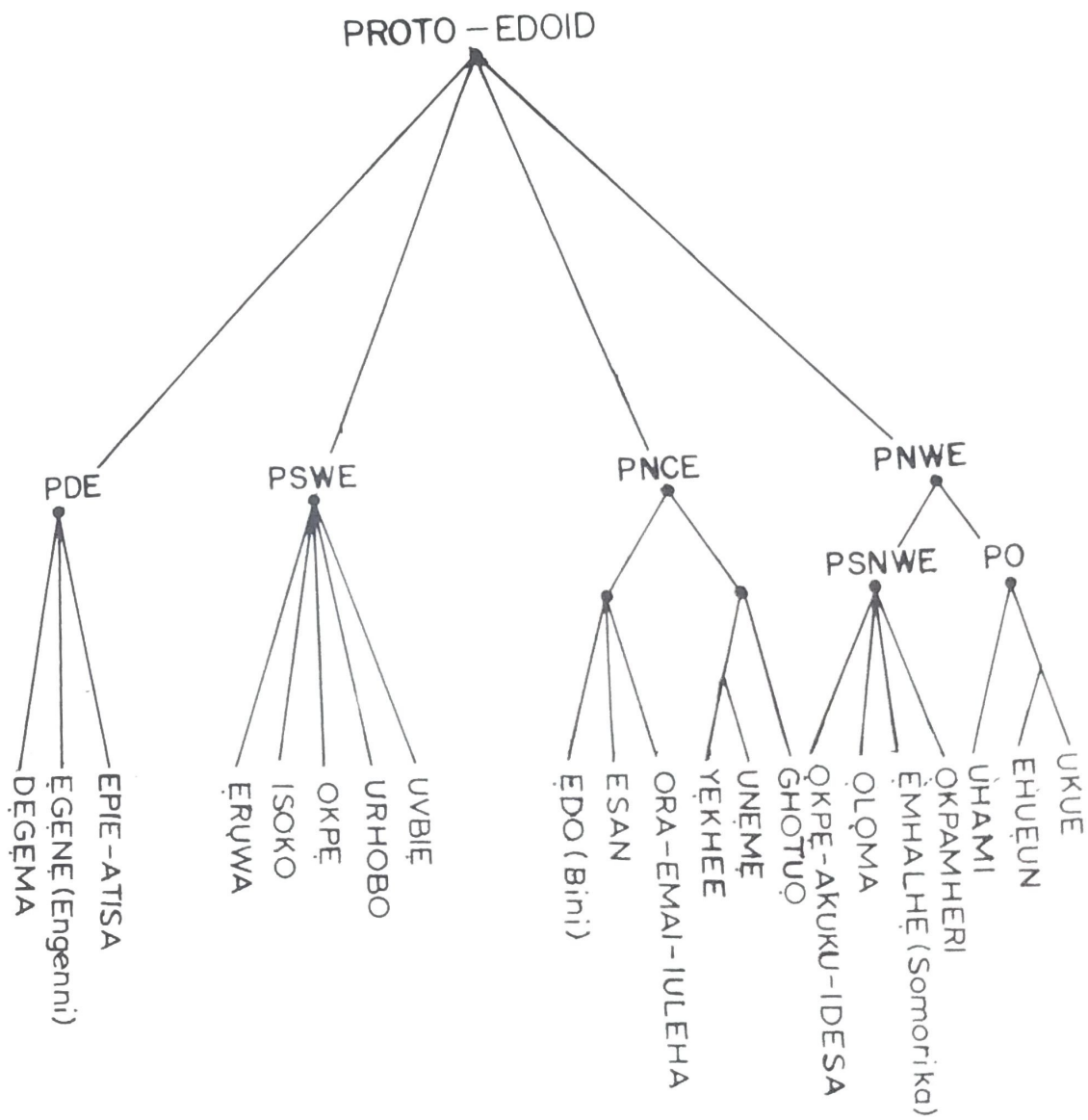


Fig. 4: The Edoid family tree

## CHAPTER TWO

### PHONETICS OF THE EDOID LANGUAGES

2.0. The Edoid languages parade an interesting array of sounds whose study has already contributed, and will continue to contribute, to our knowledge of the sounds of human language (cf. Melzian 1942; Ladefoged 1964; Mafeni 1969; Elugbe 1973, 1978b; Williamson 1977; and Lindau 1980a, 1980b).

In this chapter, we shall review our present knowledge of the sounds to be encountered in the Edoid field, concentrating, where necessary, on the more interesting phenomena.

#### 2.1. *Consonants of the Edoid languages*

Elugbe (1973) discusses consonants of the Edoid languages under five sub-groupings: stops; nasals; fricatives; rolls/trills, taps and laterals, and approximants. In addition he discusses breathy-voicing and lenisness as features of consonants in general.

That format will be broadly followed in the following discussion although, as will be seen, our terminology may not always agree with that in the 1973 work.

The phonological status of individual sounds within a given language may sometimes be mentioned, but this chapter is not concerned with phonology; it is concerned with the sounds of Edoid as seen against the background of an ultimate phonological system. Hence, unless otherwise indicated, all sounds should be understood as being phonetically transcribed even though they are not in square brackets.

#### 2.1.1. *Stops*

There are a total of twenty-two oral stops\* (including affricates) in the Edoid languages so far investigated. The stops fall into three groups: plosives, affricates, and implosives. The special case of the labial-velars will also be separately\* discussed,



#### 2.1.1.1. Plosives

Some plosives are voiceless and others are voiced. The difference between the voiceless and the voiced plosives in the Edoid languages is that the glottis is in an open state during the closure phase of the voiceless, and in a state of vibration (i.e. voicing) during the same phase of the voiced plosives. Slight aspiration was noticed with the voiceless plosives but this is nowhere significant in the Edoid languages.

Plosives were also observed to be weakly articulated (lenis) or normally articulated (non-lenis). This feature also occurs with other manners of articulation and is discussed below.

Dental plosives  $t_n$  and  $d_n$  occur in Isoko (SWE) and Ukue (NWE). More interesting, however, is the occurrence of a dental-palatal plosive in Isoko. The observation of this sound and its nasal counterpart in Isoko renders incorrect the claim by Ladefoged (1975) that a labial element is present in every case of double articulation.

#### 2.1.1.2. Affricates

The difference between an affricate and a normal plosive is in the manner of release: gentle and gradual for the affricate, sudden for the plosive.

Affricates were identified at two points of articulation: the alveolar and the palato-alveolar. In addition to the more common  $tʃ$  and  $dʒ$ , which are palato-alveolar, the alveolar affricates  $ts$  and  $dz$  occur. In none of the Edoid languages investigated was a contrast found between an alveolar affricate and a palato-alveolar one.

All the affricates are produced on a pulmonic egressive airstream. Phonologically, each affricate functions as a single consonant element.

#### 2.1.1.3. Implosives

In the Edoid languages investigated, three clearly implosive sounds were identified. By implosive here is meant a stop sound produced on a glottalic ingressive airstream, with or without

vocal cord vibration. Thus we shall recognize voiced as well as unvoiced implosives. We shall use the term 'unvoiced' deliberately to refer to implosives in which voicing is lacking. Although some (notably Greenberg 1970) have used unvoiced and voiceless interchangeably in connection with implosives, we prefer the term 'unvoiced' to the term 'voiceless', which we reserve for sounds accompanied by an open glottis.

The three implosives occurring in the languages investigated are the voiced bilabial and alveolar implosives  $\text{b}$  and  $\text{d}$  respectively and the unvoiced bilabial implosive  $\text{p}^{\text{c}}$ . This last one invariably occurs velarized and was found only in Isoko, a SWE language.

$\text{b}$  and  $\text{d}$  occur only in Delta Edoid. Thomas and Williamson (1967) report implosives in all three Delta Edoid languages - Dɛgɛma, ɛgɛɛ, and Epie-Atisa. Elugbe (1973:55,57) presents oscillogram tracings of glottal activity in  $\text{b}$  and  $\text{d}$  as recorded for ɛgɛɛ. He observed that in initial position the closure phase of  $\text{b}$  was frequently without voicing while, in  $\text{d}$ , voicing invariably preceded the release of the oral closure. In intervocalic position, however, both sounds were found to be voiced.

Lindau (1980a) looks at the same sounds in Dɛgɛma and concludes, on the basis of instrumental evidence, that "The implosives in ... Degema exhibit regular voicing throughout the closure and a relatively high intensity level." Unfortunately, neither the examples in her figures nor those in her discussion contain any reference to  $\text{d}$ . Moreover, the closure phase of word-initial  $\text{b}$  is not displayed in her figures. So we must conclude that the statement about voicing in Dɛgɛma implosives is true for  $\text{b}$  and  $\text{d}$  in all positions.

Both Elugbe (1973) and Lindau (1980a) draw attention to the presence of a negative oral pressure in the oral cavity during the production of these implosives. Such a negative oral pressure is normally caused by a lowering of the larynx with the closed glottis. In the case of fully voiced implosives we must assume that vibration of the vocal cords starts even as the larynx is being lowered.

#### 2.1.1.4. Labial-velars

Labial-velar stops were found in all the Edoid languages investigated. None of these labial-velars were truly implosive even though the auditory impression of some of them suggested they might be implosive.

In his investigation of Wepa Wanɔ, Strub (1915-16) refers to a series of sub-barred consonants including kp and gb as 'sucées explosives' (p.451), thus implying that they were 'suction' consonants or implosives. Elugbe (1980a) points out that Strub's examples coincide with examples that one would use for the lenis consonants in Yèkhee (of which Wepa Wanɔ is a dialect).

Thomas (1969) lists kp and gb as implosives in Ègèṅ. However, pressure recordings in the oral and pharyngeal cavities during the production of kp and gb in Elugbe (1973) show a negative pressure in the oral cavity and a positive pressure in the pharynx. Elugbe concludes that although some kind of implosion is heard at the lips, the positive pharyngeal pressure (behind the velar closure) indicates the presence of an egressive pulmonic airstream. The implosion at the lips is therefore the result of an ingressive velaric airstream.

It would appear that most Edoid languages employ this kind of labial-velar stop, involving a pulmonic egressive airstream and a velaric ingressive one. Ladefoged (1964) identifies this as one of the possible ways of producing labial-velar stops. Yoruba, for example, employs labial-velars of this type.

Ladefoged has also looked at the labial-velars of Èdo and claims that three airstreams are involved there. He claims, however, that in a single utterance in Èdo, a simple labial-velar stop, produced on an egressive airstream, as well as one produced on pulmonic egressive plus velaric ingressive airstreams, and a third, still more complex one, produced on a velaric ingressive plus a glottalic ingressive plus a pulmonic egressive airstream, may occur. Obviously, it does not matter which kind of labial-velar is employed in Èdo. The same situation probably holds in the other Edoid languages.



The lenis/non-lenis dimension mentioned in the case of plosives also occurs with labial-velars, but only in the case of the Yekhee dialects Auchi and Avbianwu, and in NWE languages. In these languages, the lenis/non-lenis pairs kph: kp and gbh:gb were found. The functional load of the lenis labial-velars is very low in all cases.

### 2.1.2. *Nasals*

The typical Edoid language is rich in nasals. In some of the languages it is usually the case that these are seen as allophones of non-nasal phonemes.

While oral stops occur voiced or voiceless in the Edoid languages, nasals occur voiced and breathy-voiced (murmured). The voiced nasals fall into lenis and non-lenis sets. The breathy-voiced nasals occur only at the bilabial and alveolar points, giving us  $\text{m}^h$  and  $\text{n}^h$ . Thus in Ibilu, for example,  $\text{m}^h$ ,  $\text{m}$ , and  $\text{m}$  occur as bilabial nasals while  $\text{nh}$ ,  $\text{n}$ , and  $\text{n}$  occur as alveolar nasals. *Emhalhe* (Somorika), one of the more differentiated Okpamheri dialects, also has breathy-voiced nasals.

A tapped alveolar nasal,  $\text{n}^t$ , occurs in many of the Edoid languages (see below for further discussion). The voiced labial-velar nasal  $\text{ŋm}$  occurs in Urhobo. It differs from  $\text{ŋ}^w$  in being produced without any lip rounding. Where the latter is produced with lip rounding, the former is produced with spread, firmly closed lips.

Of greater interest than the labial-velar from a general phonetic viewpoint is the occurrence of  $\text{n}^{\text{hp}}$ , a voiced dental-palatal nasal, in Isoko. When I observed this with my informant, he pointed out that some people use a pure dental in place of the dental-palatal. Donwa (1982), which is a detailed study of Isoko sounds, has confirmed this.

### 2.1.3. *Fricatives*

In the Edoid languages investigated, breathy-voiced fricatives occurred alongside voiced and voiceless ones in Isoko (SWE) and Ibilu and *Emhalhe* (NWE). This three-way distinction was found

with labiodental, alveolar, and palato-alveolar fricatives, so that for Ibibio we have:

f	v	ḽ
s	z	ʒ
ʃ	ʒ	ʒ

This means that with reference to fricatives three states of the glottis are significant: voiceless, voice, and breathy-voice. In Ibibio, breathy-voiced fricatives, which occur at the labiodental and alveolar points and which are not common, do not contrast with the voiced ones with which they are in free variation. However the three-way contrast is well-established in Ibibio and Èmhalhẹ.

The Urhobo sound ʒ is nearer the alveolar than normal palato-alveolar sounds. It would also appear to have a very short stop onset. These two aspects of it may explain why it is written 'dj' in Urhobo orthography. However, my informants accepted ʒ. It should be pointed out, too, that affricates do not normally occur in Urhobo except that tʃ and dʒ, the palato-alveolar affricates, are in free variation with c and ɟ respectively.

Labialized velar fricatives xw and ɣw occur. In the case of Urhobo and Ibibio, Ladefoged (1964) and Mafeni (1969) suggest that we are dealing with labial-velar fricatives. Ladefoged actually transcribes w for ɣw. However, these sounds are secondarily labialized; the more radical of the supra-glottal constrictions is at the velum (where there is friction); there is no matching friction at the pursed lips.

#### 2.1.4. *Trills, taps, and laterals*

One of the areas in which the Edoid languages will make the greatest contribution to phonetic theory is in that of trills/taps (rhotics) and laterals.

It is generally accepted that trills are produced with very short repeated (intermittent) closures. In a tap, the closure is equally short but not repeated. Lindau (1980b:3) puts it very clearly: "The taps appear as a single pulse in a trill. The duration of taps and single pulses [in a trill] are about the same. A tap is a frequent allophone of a trill, particularly in



intervocalic position. Trills and taps are often in free variation."

In the Edoid languages, every language has at least one rhotic which may be a trill,  $\text{r̥}$  or  $\text{r}$ ; a tap  $\text{ɾ}$ ; or an approximant  $\text{ɹ}$ . Lindau's 1980a work shows clearly how these different types may be used in idiolectal variation with some speakers favouring one kind while others favour another kind. The same speaker may sometimes vary his r-sounds. There are no non-alveolar trills in the Edoid languages.

In Edo,  $\text{r̥}$  and  $\text{r}$ , voiceless and voiced alveolar trills, occur in contrast.  $\text{r̥}$  also occurs in Urhobo. These trills do not occur nasalized. In Isoko a voiced alveolar trill  $\text{r}$  occurs alongside  $\text{ɾ}$ . Although Ladefoged (1964:58) gives the impression that Isoko employs a contrast between  $\text{l}$ ,  $\text{ɹ}$ ,  $\text{r}$ , and  $\text{ɾ}$ , the situation is in fact a little different and one wishes that Lindau (1980a) had said something about Isoko. In the Uzere dialect I found a contrast between  $\text{l}$ ,  $\text{ɾ}$ , and  $\text{r}$ . Neither the voiced alveolar/post-alveolar approximant nor its voiceless counterpart occur. I then travelled to Benin City to meet Mr Michael Marioghae who had been Ladefoged's Isoko informant. Again I found no evidence of the three-way contrasts reported in the rhotics for the Aviara dialect of Isoko.

Instead I found that Ladefoged's minimal set were rendered as follows:

<u>English</u>	<u>Ladefoged (1964)</u>	<u>Elugbe</u>
jump	òlá	ò-lá
flight	òɾá	ò-rá
yours	òrá	ò-ɾá
schism	óɾa	ó-hrà

In my transcription above I have tried to show that  $\text{ɾ}$  is in fact  $\text{ɾ̥}$ , a voiced alveolar tap with a lateral off-glide. It is occasionally rendered without a clear lateral element, but it normally has it. I have also tried to show that what Ladefoged heard as a single voiceless sound is in fact, a stem-initial cluster  $\text{h} + \text{ɾ}$ . Donwa (1982) has investigated this instrumentally and demonstrates that, in the  $\text{hr}$  cluster, it is more the case that



h becomes partly voiced than that r becomes devoiced.

Apart from r, the plain alveolar tap, and ɾ, the same tap produced with a lateral element, a tapped nasal ŋ and a tapped lateral ɺ occur in the Edoid languages. These two sounds have puzzled a number of investigators in the Edoid field, but as Elugbe (1978b) points out, tapped nasals and laterals are to be found also in non-Edoid languages.

Melzian (1937) called the tapped lateral in Èdo (Bini) "a sound intermediate between r and l" and transcribed it ɾ, thus giving the impression that it was a retroflex sound. In his 1942 work, Melzian observes accurately that this sound "stellt einen sehr kurzen einmaligen Anschlag dar, der nicht retroflex ist" (p.51). By this definition, Melzian shows that he was indeed the first to see that this sound is made with a very brief contact (tap) and is not retroflex but alveolar. The point is that the movements that achieve ɺ are the same as those for l: they are only faster (i.e. more quickly executed) for ɺ. This means simply that ɺ is of a shorter duration than l.

The observations on ɺ above are true for its nasal counterpart, ŋ. The tapped alveolar nasal has sometimes been wrongly labelled a 'nasalized tap' - clearly an impossible segment since it amounts to calling a nasal stop a 'nasalized stop'.

Tapped nasals and laterals are common in all non-Delta Edoid languages. In the Delta Edoid languages r occurs alongside ɾ which frequently corresponds to ɺ in the non-Delta Edoid languages.

Finally, the lateral approximant l occurs and may sometimes have a breathy-voiced counterpart within the same system, giving an l/ɺ contrast, as in Ibilo.

#### 2.1.5. *Approximants*

The palatal and the labial-velar approximants, y (IPA j) and w respectively, are the most common approximants in the Edoid languages. Their nasalized counterparts ÿ (IPA ĵ) and w̃ also occur.

In Ghotuɔ, weak (i.e. lenis) types of these approximants, yh and wh, also occur. wh occurs in Ibilo as an allophone of its stronger, more common counterpart, w.

The spread bilabial approximant which occurs in Urhobo and Èdo is peculiar. Even before back rounded vowels, the lips are observedly spread for this sound, especially in Urhobo where it is more spread. In Èdo, it is labiodental before front unrounded vowels. In this work, the same symbol,  $\upsilon$ , is used for all the varieties of this sound. In both Urhobo and Èdo, this sound becomes nasalized before nasalized vowels.

In the dialect of Èdo on which I have worked, the tapped nasal  $\eta$  and its lateral approximant counterpart do not occur. Instead, the voiced alveolar central approximant  $\alpha$  occurs. ~~\*~~It is nasalized  $\tilde{\alpha}$  before nasal vowels.

During the production of this sound (as produced by my informant) there is only a token movement of the tip of the tongue towards the alveolar ridge. In spite of this, however, this sound retains a lateral quality which suggests that the pulmonic egressive airstream makes its exit round the sides of the raised tongue tip. It may be that this is made possible by a depressing of the front of the tongue during the articulation of this sound. Lindau (1980a) found that only one out of four speakers had this lateral element. Her other three speakers simply used a voiced alveolar central approximant. In general in Èdo, the older generation use a tapped lateral  $\downarrow$  where the younger generation have an approximant  $\alpha$  or even no consonant at all.

$\upsilon$ , a labial-palatal approximant, occurs in the Avbiele dialect of Yèkhee (see Laver 1967) but is probably derived from  $/\upsilon/$  and  $/i/$  as reflected in the orthography: 'Avbiele' is pronounced [aɣele].

#### 2.1.6. *Breathy-voice (murmur)*

Two types of phonation are linguistically significant in every Edoid language: voiceless and voice. The definitions of these states of the glottis need no repeating here.

In addition to these two states, however, some Edoid languages (notably Ibilo and Èmhalhẹ (both Òkpamheri dialects of NWE), Unẹmẹ of NCE, and Isoko of SWE, also employ significantly

the breathy-voice (murmur) state of the glottis.

Breathy-voice involves a stricture of the glottis in which the vocal cords are not brought together throughout their entire length. The result is that the ligamentals are together while the arytenoids are apart (Ladefoged 1971, 1975). However, following the (comparatively turbulent) high rate of airflow from the lungs, the vocal cords simply 'flap in the breeze' (Catford 1964) and there is 'a notable fricative hiss' (Heffner 1950). This means that breathy-voiced sounds are invariably accompanied by some amount of friction.

It must be noted from the foregoing that while Ladefoged tells us what state of the glottis, what relative positioning of the vocal cords, gives us breathy voice, Catford and Heffner tell us what happens once pulmonic egressive air blows through the glottis in this state.

In Ibilo, breathy-voiced nasals, fricatives, and laterals occur. In Ẽmhalhẹ, Unẹmẹ, and Isoko, breathy-voiced fricatives occur. Although fricatives are thus often voiceless, breathy-voiced, or voiced, nasals and laterals are never voiceless in the Edoid languages: they are only breathy-voiced or plainly voiced.

In Ibilo, breathy-voiced sounds tend to have a voiceless initial phase while having a voiced initial phase in intervocalic position.

Speculating on the origin of breathy-voiced sounds in the Edoid languages, Elugbe (1973) calls them a half-way stage in the development from voiced to voiceless or vice versa: he concludes (p.324) that the development represents something like: voiced > breathy-voiced > voiceless. However, in Elugbe (1980a) that position is revised: "Breathy-voicing is a stage in the development of voiceless lenis PE stops into voiced [consonants] in the Edoid languages". It is seen, therefore, that there is a close historical connection between breathy-voicing and the lenis feature which we discuss next.



### 2.1.7. *The lenis feature*

Almost any writer on the consonants of any of the Edoid languages of the South-Western, North-Central, and North-Western branches has observed a feature that may be broadly grouped under the heading 'fortis/lenis'.

Phonetic descriptions of this feature often include long versus short duration of articulation; strong versus weak articulation; greater versus less muscular tension; even voiceless versus voiced; etc.

I refer to this feature simply as the lenis feature because the lenis consonants in the Edoid languages are less normal than their non-lenis counterparts (the so-called fortis). The lenis consonants are shorter and weaker than the non-lenis ones. Advancing reasons for saying that the lenis consonants are the marked set in the Edoid languages, Elugbe (1980a:41) argues that (1) the reflexes leading back to a PE lenis sound are often more varied in phonetic character than those for a corresponding PE non-lenis reconstruction; (2) the non-lenis consonants in the Edoid languages are phonetically more like the consonants in other languages than are the lenis ones; and (3) children and foreigners generally master the non-lenis consonants of Ghotuḡ before the lenis ones.

Elugbe (1980a:41-44) has given a comprehensive review of the literature on the sound systems of the Edoid languages to date, concentrating on those aspects that have to do with the lenis feature. As in 1973 and 1978b, Elugbe (1980a) sees duration as the most consistent differentiating factor between lenis and non-lenis consonants. This allows contrasts such as tapped alveolar nasal ṅ vs non-tapped alveolar nasal n and their lateral counterparts to be seen as lenis/non-lenis pairs on the same scale as bh:b, gh:g, etc.

Another general characteristic of the sound systems of languages of the Edoid group is that discussed in Elugbe (1974): an Edoid language generally has a plosive series and a matching fricative series; if it does not have a fricative series, it has

a lenis plosive series to match the non-lenis stops. At a given point of articulation (except for the alveolar, for which there are historical reasons), no Edoid language has the contrast non-lenis stop: lenis stop: fricative. In some cases, such as Avbiele (Laver 1967) lenis plosives are in free variation with fricatives; they are in turn complemented by a non-lenis plosive series.

It has already been mentioned above that breathy-voicing, which is very much in evidence in some of the Edoid languages, is tied up with the development of lenis PE stops into voiced sounds in the modern Edoid languages. Even without recourse to the historical evidence (of which they were probably unaware), Akinlabi (1979) (for Ibilò) and both Adetuyi (1979) and Laniran (1979) (for Èmhalhẹ) observe that breathy-voiced sounds in these two languages are generally shorter and less forcefully articulated than their non-breathy-voiced counterparts.

The two features of breathy-voicing and lenisness are responsible for the enrichment, in to-day's Edoid languages, of a parent system that was already elaborate by any standards. In Table 2, I give a summary of the lenis/non-lenis as well as the voiceless/breathy-voiced/voiced contrasts found in the Edoid languages.

In terms of distribution, the following summary may be made. In Ibilò and in the Yẹkhee dialects (including Èkphẹli (Elimelech 1976)), lenis plosives in free variation with fricatives contrast with non-lenis plosives. In Ọlọma, Elugbe and Schubert (1976) report that the lenis alveolar plosives differ from the alveolar *r*: the lenis *th* and *dh* are apparently not as short as *r*. Akinlabi (1979) reports the same for Ibilò, although his instrumental evidence shows no occurrence of *r* but of *r*. The evidence is therefore not yet conclusive as to whether or not we can have the contrast: tap/lenis/non-lenis at the same point of articulation.

In Unẹmẹ, Ibilò, and Èmhalhẹ, the breathy-voiced fricatives are weak and do not contrast with any set of lenis fricatives. The contrast between lenis and breathy-voiced, seen in the nasals and laterals, is neutralized in stops (which occur lenis but not

breathy-voiced) and in fricatives (which only occur more observably as breathy-voiced rather than lenis).

Table 2: *Lenis/non-lenis/breathy-voiced contrasts in the Edoid languages*

		labial	alveolar	palatal	velar	labial- velar
NASAL	lenis	mh	ṅ			
	non-lenis	m	n			
	breathy-voiced	m̃	ṅ̃			
STOP	lenis	bh	th dh		kh gh	kph gbh
	non-lenis	b	t d		k g	kp gb
FRICATIVE	lenis/br.vd.	ṽ	ž		ʒ	
	non-lenis	f v s	z		ʃ ʒ	
LATERAL (APPROXIMANT)	lenis		l̥			
	non-lenis		l			
	breathy-voiced		l̃			
(CENTRAL) APPROXIMANT	lenis			yh		wh
	non-lenis			y		w

In (2) below I give examples of minimal contrasts between voiced, breathy-voiced, lenis, and voiceless sounds in Ibilo.

(2)	m̃ɛ̃	'conceive, be pregnant'	sà	'sting'
	m̃ɛ̃	'be ripe'	žà	'bore a hole'
	mh̃ɛ̃	'I'	zà	'hold'
	fò	'be tired'	là	'be fat'
	ṽò	'behead'	l̥à	'run'
	vò	'smell'	l̃à	'go'

## 2.2 Vowels of the Edoid languages

Ten vowel qualities were identified during the course of this investigation:



[i, ɪ, e, ε, ə, a, ɔ, o, ɒ, u].

Of the twenty languages investigated, only Dẹgẹma had contrasts involving all ten vowels. Eẹgẹ, another Delta Edoid language, has a nine-vowel system in which ə, the tenth vowel, is an allophone of /a/.

No Edoid language employs less than seven vowels in its oral vowel system. Where the system is a seven-vowel one (as in all of NCE) the vowels are i, e, ε, a, ɔ, o, and u. For an eight-vowel system, ə is added. Ibilo is an example of an eight-vowel system in which the ninth vowel ɪ is an allophone of /i/.

The approximate articulatory positions of these vowels are shown on Fig.5.

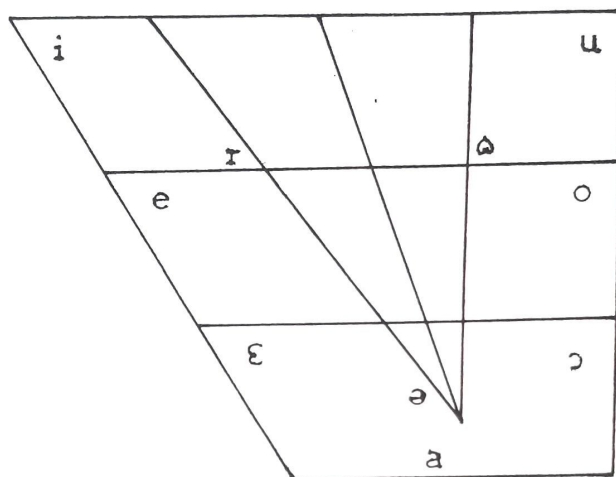


Figure 5. Edoid vowels on a Cardinal Vowel Figure

### 2.2.1. Vowel nasalization

As would be expected, vowel nasalization occurs in all the Edoid languages investigated. However, while in some of the languages nasalization occurs only after nasal consonants and is therefore not significant, in others it is non-predictable and therefore significant.

Amayo (1976) makes a distinction between nasalized vowels (those that are automatically nasalized) and nasal ones (inherently nasalized) in Edo. He makes the point that "... it is not possible to distinguish the nasal vowels from the nasalized vowels by their degree of nasalization" (pp.109-110). This observation is true of other Edoid languages in which nasalization is significant.

### 2.2.2 *Breathy-voiced (murmured) vowels*

Breathy-voiced or murmured vowels occur in those languages that employ breathy-voicing. According to Elugbe (1973:72); "Vowels that occur after breathy-voiced consonants have a breathy-voiced beginning; they are not breathy-voiced all through." Akinlabi (1979) has confirmed this for Ibibio.

### 2.2.3. *Vowel harmony*

Vowel harmony is a prominent feature in many of the Edoid languages investigated. In all the Delta Edoid, South-Western Edoid, and the Southern North-Western Edoid languages (i.e. Ọkpamheri and Ọlọma) vowel harmony is observable in verbal and noun systems. Even in North-Central Edoid and the Ọsse part of North-Western Edoid, where there is no clear evidence of vowel harmony, vestiges of harmony are to be found in the patterning of vowels in nouns and in the way vowels alternate in prefixes during the formation of the plural forms.

Vowel harmony is the process whereby the vowels of a given morpheme, word, or verbal phrase are selected from any one of two mutually exclusive sets. In Edoid, these sets are:

- I. i, e, ə, o, u, and
- II. ɪ, ɛ, a, ɔ, ɔ

I have not done any personal research into the phonetic differences between these two sets of vowels. As is well-known, after the initial bafflement over the physiological basis of vowel harmony in West African languages (it was not like the Turkish case, for example, where 'rounding', 'tongue height', etc., are the basis of harmony), resulting in the use of terms such as 'raised/lowered', 'tense/lax', etc., a break-through was achieved in 1967 with Stewart's 'Tongue root position in Akan vowel harmony', which interpreted the X-ray data in Ladefoged 1964. It was followed shortly afterwards by Pike (1967). Both suggested that the main distinguishing feature in the two sets is the positioning of the root of the tongue with its implication for the width of the pharynx. More recently, Lindau (1975) has argued

that for vowel harmony in West African languages, '... the pharyngeal size is expanded by advancing the tongue root and lowering the larynx'. Accordingly, the terminology of vowel harmony has changed from 'Advanced Tongue Root' to 'Expanded', so that linguists now talk of the Expanded set rather than the Advanced Tongue Root set.

I believe that the observations on the basis of vowel harmony in Akan (Stewart 1967, Pike 1967) and in Akan, Igbo, etc. (Lindau 1975), are true for the Edoid cases and I will in subsequent discussions use the more recent and more accurate 'Expanded'.

#### 2.2.4. *Other vowel features*

The investigator into the sounds of any Edoid language is faced, in the case of vowels, with vowel sequences which may give the impression of significant length (where the vowels are identical) or of diphthongs (where the vowels in the sequence are not identical).

However, given the ability of vowels to co-occur in the Edoid languages, and given the tonal nature of these languages, it is often very clear that long vowels come from two vowels. Thus *Èdo* *ràá* 'to steal' can hardly be interpreted as a stem with a long vowel, since there are two distinct syllables, as evidenced by the tone.

The issue of diphthongs is not that easily disposed of. Amayo (1976) has argued that there are phonetic diphthongs in *Èdo*. Examination of his data shows that he views as diphthongs cases of -jV- or -wV- which are derived from iV and uV sequences. All his data suggest that we are dealing with a glide formation rule, since in a -VV- sequence the closer of the vowels becomes non-syllabic.

\*The phonetic definition of diphthong is '... a sequence of two perceptually different vowel sounds within one and the same syllable' (Catford 1977:215). In the *Èdo* examples, we are dealing with a sequence of glide plus vowel in which the glide is very prominent and cannot be seen as part of the vowel.



I mention the issue of the formation of glides from underlying vowels because it is a very productive process in all the Edoid languages and one that every researcher in this field must grapple with.

Final devoicing of vowels has been observed in Ibilo by Akinlabi (1979). It is a feature that I have confirmed elsewhere and its effect is to shorten final vowels in stems of two (or, rarely, more) syllables. Thus in Ẹmhalẹ

órimhì 'corpse'

ánàmhì 'animal'

and in Ibilo

óṅwòṅṅò 'guinea fowl'

áthámhà 'hoe'

khòṅṅò 'fight'

the final vowels are decidedly shorter than the non-final ones. It has to be noted that final devoicing of voiced sounds is a universal phenomenon. However, Ibilo and other Edoid languages, apart from this universal tendency, also have a set of items in which the vowel of the final syllable of a non-monosyllabic word is shorter than usual. In such items the syllable affected is part of the stem.

This phenomenon probably explains why languages like Dẹgẹma (DE) now have final consonants in items like ènám 'meat', etc., where Ẹgẹṅẹ (DE) has ènàm ~ ènàmò 'meat' and Ẹmhalẹ has ánàmhì with a weak - i.e. short, partly devoiced-final vowel. We may refer to this process as vowel weakening in final position.

### 2.3. Conclusion

The phonological status of the phonetic features/characteristics discussed here is demonstrated in the phonological sketches that follow. Where necessary I discuss some of the sounds in greater detail under the relevant language.

PART TWO  
CHAPTER THREE

PHONOLOGICAL CHARACTERISTICS OF THE EDOID LANGUAGES

3.1. *Syllable structure*

It is useful to discuss the syllable in Edoid at two levels - the phonetic and the phonemic (drawing on Pike's 1947 distinction).

At the phonemic level, the two most common syllable structure types are CV and V. Dɛgɛma and Epie also allow CCV and CVC types phonemically. In the Edoid languages, only consonants (including central approximants) may occur at C, while only vowels may occur at V. Syllabic consonants do not occur at this level in any of the Edoid languages investigated.

At the phonetic level, even those languages which have only CV and V as underlying syllable structure types often have surface CCV structures, largely owing to the creation of approximants from underlying vowels as well as to the deletion of the first vowels in some CVCV stems where the second C is an r- sound or a tapped (alveolar) lateral/nasal. In such cases, the possible -C<sub>2</sub>- consonants are [ɹ], [r]/[ɾ], [y] or [w]. Typically, the latter two, [y, w], result from glide formation rules: [y] from /i, ɪ/ and [w] from /u, ʊ/. I have not found an Edoid language in which this rule or modifications and/or expansions of it do not occur:

... if a close vowel is followed by another non-close vowel, the close vowel is realised as its approximant counterpart.

Thus /CiV/ and /CɪV/ give [CyV] while /CuV/ and /CʊV/ give [CwV].

On the other hand, Delta Edoid and South-Western Edoid languages tend to have C<sub>1</sub>C<sub>2</sub>V syllable structures in which the second C is a rhotic or a tapped lateral or nasal.

For example, Ègèṅè has Cr sequences in words like:

[úkròmú] 'okro' from /úkùròmú/.

Ukue, a North-Western Edoid language, also has [Cr] sequences.

[The syllable structure of each language will be discussed in the individual phonological sketches that follow in the next chapter.]

Syllabic nasals occur phonetically in Ègèṅè but these are derived from underlying 'nasal plus vowel' sequences.

~~All~~ All the Edoid languages have nasalized vowels at the phonetic level, so that both oral and nasalized vowels occur phonetically as syllable nuclei.

Only Dègèma has closed syllables and these probably arose through the loss of a final vowel in CVCV stems (see section 2.2.4 and chapter 5).

### 3.2. Consonant contrasts

In DE, implosives occur in contrast with labial-velar stops. In all three languages, ð contrasts with ɖ and with gb.

An unvoiced velarized bilabial implosive p<sup>c</sup> occurs in Isoko, a SWE language.

Dental plosives occur in Isoko (SWE) and Ukue (NWE). In some Isoko dialects a dental-palatal plosive is used in place of the dental.

Palatal plosives do not contrast with palato-alveolar affricates. Urhobo, Ghotuṣ, and Ibilo all have palatal plosives. In Isoko, palatal plosives are in dialectal variation with dental ones.

The lenis labial-velar stops kph and gbh occur in the NWE languages in contrast with non-lenis counterparts. Yèkhee and Unèṁè are two NCE languages with this contrast.

Among nasals, the occurrence of the dental-palatal  $\hat{p}_n$  in Isoko is of interest, but, as with its plosive counterpart, most dialects use a plain dental plosive in its place..



The lenis bilabial nasal is mutually exclusive with the nasalized (spread) bilabial approximant,  $\tilde{u}$ : historically cases of  $\tilde{u}$  derive from earlier \*mh. The tapped nasal  $\eta$  does not contrast with  $\tilde{x}$ , the nasalized alveolar approximant: both  $\eta$  and  $\tilde{x}$  are usually derived from earlier \*nh. The palatal nasal  $\eta$  contrasts with  $\tilde{y}$  in Urhobo but this is not matched by a contrast between  $\eta^w$  and  $\tilde{w}$ .

Languages with lenis plosives at a particular point of articulation do not have their central fricative counterparts contrasting at the same point of articulation. Thus Emhalhe has bh but not  $\beta$ ; Ibilo has bh, kh, gh, but not  $\beta$ , x,  $\gamma$ . In dialects of Yekehe, lenis stops are in free variation with fricative counterparts.

Contrasts between bilabial and labiodental fricatives exist in Urhobo  $\phi$ , f, v, and Ehueun  $\phi$ ,  $\beta$ , f, v.

There is no contrast anywhere between z and dz. A few languages have dz and all others have z. s contrasts with ts in Auchi (Yekehe) and Ibilo.

In Ukue, s does not occur. Instead we find  $\text{ɹ}$ .

There is a variety of contrast among central and lateral approximants in the Edoid languages. In the case of laterals, the contrast is basically between a normal non-lenis voiced alveolar lateral l, and a lenis counterpart which is frequently so short as to be heard as a tapped lateral  $\text{ɺ}$ .

Bilabial approximants do not contrast with labiodental counterparts: the symbol  $\upsilon$  is used for a bilabial spread approximant in Urhobo; the same symbol represents a labiodental approximant in Edo.

Contrasts between lenis and non-lenis approximants exist in Ghotuo (see below).

### 3.3. Vowels

At a phonological level we must distinguish between (significantly) nasalized vowels and oral ones. Phonetically, nasalized vowels occur in all Edoid languages, since even oral vowels

become nasalized in positions after nasals. Automatic nasalization of this type will not be discussed here.

Normally, the half-close vowels e and o are not significantly nasalized in the Edoid languages. However, in Epie and in Urhobo ě and ǫ exist. Otherwise the vowels that are normally significantly nasalized are: ĭ, ĩ, ě, ã, õ, õ̃, and ũ.

The language with the largest inventory of oral vowels is Dęgema with ten. The smallest number of oral vowel distinctions found in any Edoid language is seven.

Vowel sequences occur and are usually two different vowels. Within stems, however, a sequence of non-identical vowels is typically 'a close vowel followed by a non-close vowel' or the reverse, 'a non-close vowel followed by a close vowel'. Thus CiV and CuV sequences or CVi, CVu, etc., occur in stems. The latter are often an indication of an earlier -C2- in the stem: thus Isoko /uzou/ 'head', /εραω/ 'meat' from Proto-Edoid stems that had a -C<sub>2</sub>-.

There is a distributional restriction on nasalized vowels: they do not occur in noun and concord prefix position.

#### 3.4. *Vowel harmony*

Vowel harmony is so pervasive in the Edoid languages that one has to assume it was inherited. In every Edoid language with eight or more vowels, vowel harmony is extensive, covering verbal and noun systems. In those languages with a seven-vowel system, vowel harmony is less in evidence and is restricted to the patterning of vowels in nouns. This is most clearly observable where plurals are formed by alternating the prefix vowel of the noun. This phenomenon is discussed, where necessary, under the relevant language.

In some cases, apparent lack of harmony is explained by the postulation of harmony at a deeper level of analysis (cf. Hoffmann's 1975 analysis of Okpe and Omamor (1973) for Uvbie). On the other hand, Uhami and Ukue appear to have lost every restriction on vowel co-occurrence and thus show no evidence of vowel harmony.

The picture that emerges from examining the operation of vowel harmony in the different languages is the division of the vowels (reserving details for the individual phonological summaries) into two harmonizing sets in which the vowel of a stem and any vowel attached to it (e.g. as subject/object pronoun or noun affix) are likely to be from the same set. From this point of view, the vowels fall into two sets:

I (Expanded)	II (Non-expanded)
i            u	ɪ            ʊ
e            o	ɛ            ɔ
ə	a

### 3.5. Tone

The Edoid languages parade an interesting array of tone systems ranging from three level tones (Ghotuṣ, NCE) to two levels, no downstep (Auchi, Avbianwu (NCE), and Isoko (SWE)) and two levels plus downstep (Èdo (NCE)).

Elimelech (1976) criticizes my 1973 analysis of Auchi on the grounds that there is downstep in the Èkphẹ̀li dialect of Yẹ̀khee. I have spoken to speakers of the Èkphẹ̀li dialect and agree that there is probably a downstep in that dialect. I have re-examined my data and had more contact with the Auchi dialect and find no downdrift or downstep there. The dialects of Yẹ̀khee do not all have to have the same tone system as the Èkphẹ̀li dialect, which is geographically distant from the central Auchi dialect of Yẹ̀khee.

It has to be pointed out that in most cases my examination of tone could not have been anything but superficial, since I had only a week within which to collect my data in the relevant area. In a group of languages in which tone and syntax are deeply intertwined, one would require a deeper study of the languages concerned to be able to make categorical statements about tone systems. Thus in the phonological sketches that follow, I shall go into detail only in those cases where my data are of such a level as to enable me to discuss details of the system concerned.

One point is of general interest and must be mentioned here: the Edoid languages, when their tone systems come to be compared,



will throw some light on the historical development of tone systems. In the SWE languages, there is generally no downdrift though there is downstep in some cases. Instead, we have a final low raising phenomenon.

The SWE area may be crucial for investigations into questions such as whether three level tone systems developed from two tone plus downdrift systems or vice versa. Already, we now know that, as in Urhobo, a language may have downstep with no synchronic evidence of downdrift (see section 4.6.8, below; see also Welmers 1969).

### 3.6. *Morphology*

Although many Edoid languages have simplified their morphology and generally fit Westermann and Bryan's 1952 typological description: "Most Roots (Verb or Noun) are monosyllabic, consisting in CV", the prevalence of second syllables in stems and the use of noun prefixes and concord prefixes lends a complexity of morphology to the Edoid languages of a kind not frequently associated with 'Kwa' languages.

The stem is of CV((C)V) structure. Few stems are longer than this, and they are often loans or onomatopoeic items.

A verb stem is thus usually of CVCV, CVV, or CV structure. In Ghotuḡ and Aoma, V or VCV verb stems occur through the loss of stem-initial consonants.

A noun (many nouns are formed from verb stems) is usually of V-CV structure (the hyphen separates the prefix from the stem). Polysyllabic nouns are of the structure V-CVCV or V-CVV, etc. Except in the few languages (usually NCE languages at the foot of the Afenmai Hills or NWE languages of the Hills) which have CV-prefixes, nouns invariably start with a vowel. Loans from outside have a prefix added on to fit this picture.

Pronouns almost invariably go with concord prefixes that are now fixed and phonologically invariable in most cases. It is only in languages of the Southern NWE sub-group that varied forms of concordial prefixes still exist. Thus although Isoko has an

invariable  $\lambda$ -nà(nà) 'this' which is used with all nouns, Ọlọma (Southern NWE) (SNWE) has  $\sigma$ -n $\sigma$  or  $l\sigma$ -n $\sigma$  or  $a$ -n $\sigma$ , etc., depending on the class of the noun to which this demonstrative refers. These points are picked up again under the phonological sketches.

The restriction of relatively elaborate concord to a small area of Edoid makes the reconstruction of this feature for Proto-Edoid difficult.

## CHAPTER 4

### INDIVIDUAL PHONOLOGIES

#### 4.1. *Dɛgɛma*

##### 4.1.1. *Syllable structure*

Of all the Edoid languages, *Dɛgɛma* has the most complex syllable structure. Where it is possible to show that CCV syllable types are derived from two underlying syllables in other Edoid languages, such an explanation is not always possible in *Dɛgɛma*.

The possible syllable structures are: V, CV, CCV, CVC, and CCVC (Thomas and Williamson 1967:21). In cases of a syllable-initial cluster, the second consonant is almost always /l/ or /r/. In a few cases, there are clusters such as /sv/ in /svèkɛ́/ 'lose' and /sn/ in /snèsɛ́/ 'hide'. However, these cases have alternate pronunciations in which the intervening vowel is recovered: /sòvèkɛ́/ 'lose' and /sìnèsɛ́/ 'hide'.

In closed syllables the arresting consonant may be any of the following: /m, n, v, l, r/.

Sequences of nasal plus consonant occur in a few items which may have been borrowed: /ònsó/ 'soap'.

##### 4.1.2. *Consonant inventory*

	m		n	ny	ŋ		nw
	b		d				
p	b	t	d		k	g	kp gb
f	v	s	z		h		
			r	y			w

##### 4.1.3. *Notes*

/ŋ/ is not widely distributed.

/ny/ and /nw/ are [ɲ] and [ɲw] respectively. They are in free variation with [ỹ] and [ỹ̃] respectively.

[ɲm] occurs in nasal plus labial-velar sequences where I treat



it as an allophone of /m/.

/v/ is realized as a bilabial fricative [β] in the environment of rounded vowels.

/f/ is also sometimes realized as [ɸ] in the same environment.

#### 4.1.4. *Contrasts*

Some of the contrasts in 4.1.2. may be amplified as shown below:

ɓ ~ b ~ gb	
/ɔ-ɓó/	'arm, hand'
/βɔ/	'build, thatch roof'
/bɔ/	'invoke juju; consult oracle'
/ɔ-gbó/	'thigh'

m ~ n ~ ny ~ ŋ ~ nw	
/ma/	'mould'
/ɛnám/	'animal'
/nyan/	'have, own'
/ɔ-ŋaŋíná/	'farm'
/a-nwó!nwá/	'shame'

l ~ r ~ ɽ ~ d	
/ɔ-lalá/	'swamp'
/rar/	'spread out'
/ɽa/	'drink (alcohol)'
/da/	'collect (rain water)'

#### 4.1.5. *Vowels*

Degema operates a ten-vowel system. It thus has the most elaborate vowel system in the whole of Edoid. The ten vowel phonemes are: /i, ɪ, e, ɛ, ə, a, ɔ, o, ɔ, u/.

They are contrasted in the following items:

u-ɽí	'alcohol'	ɽum	'mould'
ɽɪ	'eat'	a-ɽó	'face'
o-ɽégnēnyo	'old person'	ú-!ɽonó	'in-law'
ɽɛ	'buy'	ɽɔĩ	'swallow'
é-!ɽá	'river'	ɽa	'drink'

The close vowels have nasalized counterparts, /ĩ, ã, õ, ü/, which occur only as the final element in a sequence of two vowels except in a few loan words such as /àròsĩ/ 'rice'.

#### 4.1.6. Notes

Vowel sequences are numerous in Dɛgɛma. Each sequence starts or ends with a close vowel. In the few cases where a sequence involves more than two vowels the sequence begins and ends with a close vowel.

Many of these sequences end with a nasalized vowel:

/deĩ/	'fall'	/neũ/	'fart'
/ɔõĩ/	'swallow'	/i-tóũ/	'cloth'

All vowels are nasalized after nasal consonants. /i/ and /ɪ/ may be realized as [y] if they occur at the beginning of a vowel sequence; /u/ and /ʊ/ may be realized as [w] under the same conditions.

/ə/ does not occur in noun prefixes.

#### 4.1.7. Vowel harmony

Degema operates a very symmetrical harmony system in which two sets of vowels (five each) are differentiated by the feature [EXPANDED]:

EXPANDED		NON-EXPANDED	
i	u	ɪ	ʊ
e	o	ɛ	ɔ
ə		a	

Except in the case of compounds, nouns adhere strictly to the rules of vowel harmony. Verbal constructions also follow rules of harmony so that the set to which the vowel of the verb stem belongs determines the selection of vowels for pronominal and other parts of the verbal construction, such as the tense/aspect markers.

#### 4.1.8. Tone

Two tones are distinctive. It appears that there is down-drift as well as a limited downstep (cf. Thomas and Williamson

1967). I do not have the data to say more than this.

#### 4.1.9. Morphology

Some of the most interesting morphology in the whole of Edoid is to be found in the nominal and verbal systems of Dëgëma. The noun class system of Dëgëma is fully treated in Elugbe (1976a). Dëgëma nouns are classified according to gender with each gender made up of singular/plural pairings. These pairings are largely semantically determined so that the phonological shape of a word does not give a clue as to its plural form. Thus:

	u-kpé	a-	'year'
	ɔ-bɪ	a-	'leaf'
but	ú-!kúkú	í-	'waterpot'
	ó-!táí	ɪ-	'tree'

The actual realization of the pairings is determined by the rule of vowel harmony (see Elugbe 1976a).

In the verbal system, the formation of infinitives or verbal nouns from the verb stem (same as the imperative form) deserves mention here. The general rule is as follows:

In all cases the affix may be summarized as:

U-...-(A)m

where U is u- or ɔ- depending on vowel harmony rules; A is ə- or a- for the same reasons, and items in brackets are optional.

The formula just given is expanded and used as follows:

(a) with stems ending in non-close vowels, affix U-...m.

tatan	ə-tátá!né-m	'to answer'
bine	ù-bí!né-m	'to ask'

(b) with stems ending in consonants, affix U-...Am.

hir	ù-hír-!ém	'to surround'
far	ə-fár-!ám	'to tie'

If a verb ends in a close vowel, glide formation takes place:

ɔɪ	'eat'	ɔ-ɔyâm	'to eat'
ɔu	'follow'	u-ɔwêṃ	'to follow'



#### 4.1.10. *Other sources*

Thomas and Williamson (1967); Williamson (1970); Elugbe (1976a; 1981).

#### 4.2. *Egɛɛɛ*

##### 4.2.1. *Syllable structure*

An *Egɛɛɛ* syllable is normally of CCV, CV, or V structure. Every V element carries tone.

In CCV syllables, only /r/ may occur in C<sub>2</sub> position. Elugbe (1973) has argued that CrV syllables are derived from CVrV stems in which C is a velar or bilabial consonant and the two Vs are identical.

CyV and CwV sequences occur in *Egɛɛɛ*, but these are clearly derived from underlying CIV and CUV sequences respectively (low tone is unmarked):

/uɔ́í édiro/	[ùɔ́yédirò]	'native (i.e. palm)wine'
/áfɪa/	[áfɪà]	'room'
/esuei/	[èsweì]	'axe'
/áɓɔa/	[ábɓwà]	'dog'

Syllabic nasals [m̩] and [n̩] occur but are clearly derived from underlying mU and nI respectively:

[ùtòm̩]	~	[ùtòmù]	'head'	/utomu/
[òtàm̩]	~	[òtàmò]	'penis'	/otamɔ/
[èsèn̩]	~	[èsènì]	'fish'	/eseni/
[èsán̩]	~	[èsánì]	'pepper'	/esánɪ/

Note that only -CVCV stems are involved in this process, and that the deleted vowel has to be on a low tone which is then transferred on to the preceding nasal.

##### 4.2.2. *Consonant inventory*

	m		n				
	ɓ		ɗ				
p	b	t	d	k	g	kp	gb
f	v	s	z				
			l				
			r		y		w
					ỹ		w̃

#### 4.2.3. Notes

Syllabic nasals are derived as demonstrated in 4.2.1. above.

/t/ and /d/ optionally become palato-alveolar affricates [tʃ] and [dʒ] respectively before close front vowels /i/ or /ɪ/.

/s/ and /z/ also become palato-alveolar before /i/ or /ɪ/.

A sequence of an alveolar obstruent plus a close vowel will coalesce to give a palato-alveolar counterpart if followed by another vowel in the same stem:

/ti/	[tì] / [tʃì]	'play'
/di/	[dì] / [dʒì]	'hide, save'
/átɪémɛ/	[átʃémè]	'my brother/sister'
/dɪɔ/	[dʒɔ]	'sharpen'
/sɪ/	[ʃɪ]	'deny'
/zi/	[ʒi]	'bury'
/íʃioni/	[íʃòŋ]	'five'
/óziée/	[óʒèè]	'hunger'
/y/ is IPA [j].		

#### 4.2.4. Consonant contrasts

The consonant contrasts may be amplified as follows:

m ~ ɓ ~ p ~ b ~ k ~ g ~ kp ~ gb ~ v

/ma/	'mould'
/ba/	'multiply; spread (e.g. sore)'
/apapáa/	'groundnut'
/ba/	'by-pass in order to avoid'
/ka/	'stop (of rain)'
/ga/	'separate'
/kpa/	'peel'
/gba/	'search for'
/va/	'butcher; cut animal to pieces'

l ~ r ~ ɓ ~ ɗ ~ t ~ d ~ n

/e-bili/	'palm oil'
/i-rií/	'thread'
/i-ɗii/	'rope'

/ti/	'play'
/é-diro/	'(dialect of) place within Eḡeḡe'
/i-ni/	'name'
m ~ ã ~ ÿ	
/mɔ/	'bear fruit'
/ãɔ/	'be low (of river)'
/ÿɔɔ/	'drink (water)'
y ~ ÿ	
/ya/	'be in a place'
/ÿa/	'be caught in a net (of fish, etc.)'
w ~ ã	
/wɪ/	'break (of day)'
/ãɪÿɛ/	'dodge'

#### 4.2.5. Vowels

There are nine oral vowel phonemes in Eḡeḡe:

/i, ɪ, e, ɛ, a, ɔ, o, ɔ, u./

The following items show most of the vowels in minimal contrast:

/gbi/	'knit'
/gbe/	'go'
/gbe/	'steer (with paddle)'
/gba/	'search for'
/fi/	'soak through (of water)'
/fɪ/	'be tight'
/kɔ/	'pluck'
/ko/	'call'
/kɔ/	'wrap up'
/ku/	'fold'

#### 4.2.6. Notes

[ə] occurs as an allophone of /a/ when /a/ occurs with the Expanded vowels /i, e, o, u/.

Vowel nasalization occurs automatically after the nasal consonants m, n, ÿ, and ã.



Close vowels become optionally non-syllabic before other (non-close) vowels: /i, ɪ/ become [y] and /u, ʊ/ become [w].

#### 4.2.7. Vowel harmony

The vowels fall into two harmony sets:

EXPANDED		NON-EXPANDED	
i	u	ɪ	ʊ
e	o	ɛ	ɔ
(a)		a	

The two sets are mutually exclusive except for /a/ which, although basically of the non-expanded set, may go with the Expanded set sometimes and be realized as [ə].

In nouns, prefixes agree with stems in terms of the feature Expanded. In verbal constructions, pronominal and tense/aspect markers harmonize with the verb stem.

/u-tomu/	'head'
/ú-le/	'banana'
/ú-di/	'alcohol'
/í-dó/	'they stole'
/í-ɗá/	'they drank'
/ó na dó/	[ó nə dó] 'he is stealing'
/ó na d'ó/	[ó nə d'ó] 'he is buying'
/ó-vɔra/	'female'
/é-da/	'beans'
/ɔ-mɪsɪ/	'sleep (n.)'

#### 4.2.8. Tone

Elugbe (1973) (q.v.) analyzes the Ègèṅè system as two tones plus downstep, supporting his analysis with the argument that downstep occurs (repeatedly sometimes) in the flow of speech. Thomas (1969) had claimed earlier that it was a two tone plus upstep system. Elugbe agrees there is tonetic upstepping which is predictable, but insists that downstep, on the other hand, is unpredictable.

#### 4.2.9. Morphology

As compared with Dɛgɛma, Ègèné morphology is very much simplified. Nouns occur in one phonological shape and do not vary their prefixes for number or gender. Pluralization is achieved by qualifying the noun with a preposed /egue/.

Tonal variations and a number of particles are used to mark tense and aspect.

#### 4.2.10. Other sources

Thomas and Williamson (1967); Thomas (1969; 1974); Elugbe (1973).

#### 4.3. Epie

##### 4.3.1. Syllable structure

V and CV are the two common syllable types. In addition to vowels, syllabic nasals occur at V. CVC is rare.

##### 4.3.2. Consonant inventory

	m		[n]				
	ɓ		ɗ				
p	b	t	d	k	g	kp	gb
f	v	s	z				
			l				
			r	y	ɣ		w

##### 4.3.3. Notes

As with the other Delta Edoid languages, /ɓ/ contrasts with /gb/ in Epie.

/l/ does not occur before nasalized vowels, before which [n] occurs instead. [l] and [n] are therefore allophones of /l/. Similarly, the approximants /y/ and /w/ become nasalized before /ĩ/:

	/y/	→	[ỹ]
	/w/	→	[wĩ]
but	/ɣ/	→	[ɣ]

/r/ was not found before /ĩ/.

Consonants in  $-C_2-$  position in the stem had a general tendency to be shorter.

/ɣ/ and /r/ have limited distribution.

Syllabic nasals occur preceding another consonant with which they are homorganic.

#### 4.3.4. Consonant contrasts

The contrast between /ɓ/ and /gb/ is easily demonstrated along with some others in the following sets:

m ~ ɓ ~ gb ~ w	
/ma/	'mould'
/ɓãã/	'plait (hair)'
/à-gbà/	'jaw/chin'
/wãã/	'count'

#### 4.3.5. Vowels

There are nine oral vowel phonemes and nine nasal ones in Epie.

Oral vowels: /i, ɪ, e, ε, a, ɔ, o, ɔ, u/

Nasalized vowels: /ĩ, ã, ẽ, ẽ, ã, õ, õ, õ, ã/

#### 4.3.6. Notes

The close vowels may become non-syllabic in a position immediately preceding another vowel.

#### 4.3.7. Vowel harmony

In nouns as well as in the verbal construction, prefix vowels of aspectual particles, etc., are selected from the same set as the vowel of the stem. The two sets are:

EXPANDED	NON-EXPANDED
i, ĩ    ã, u	ɪ    ã    õ, ɔ
e, ẽ    õ, o	ε, ẽ    õ, ɔ
	a, ã

Some pronouns were found to have invariable forms that defied the rules of vowel harmony: ènì 'we', ɓàà 'you (pl.)', for example.



#### 4.3.8. *Tone*

Epie operates a two-tone system with downstep mostly at the end of the utterance. The status of this third level is not clear at the moment.

#### 4.3.9. *Morphology*

Epie morphology is much simpler than that of Dëgëma. In the dialect studied pluralization by prefix vowel alternation does not take place, though it may in others (see Thomas and Williamson (1967)). Tone plays a great part in verbal conjugation.

#### 4.3.10. *Other sources*

Thomas and Williamson (1967), Williamson (1970b).

#### 4.4. *Èrùwa*

##### 4.4.1. *Syllable structure*

Syllable types are V, CV, CCV. In CCV types, the second C is /r/.

##### 4.4.2. *Consonant inventory*

	m						
p	b	t	d	k	g	kp	gb
f	v	s	z	x	ɣ		
			l				
	u		r		y		w

##### 4.4.3. *Notes*

All the approximants (lateral and central) have nasal/nasalized counterparts before / $\tilde{V}$ /.

/x/ is realized as a voiceless glottal fricative.

/r/ is a voiced alveolar central approximant.

/b/ was not found before nasalized vowels, so [m] and [b] may therefore belong to the same phoneme.

##### 4.4.4. *Consonant contrasts*

See Odumosu (1973) for a detailed study of the sound system of Èrùwa.

#### 4.4.5. Vowels

Èrùwa has nine oral vowel phonemes:

/i, ɪ, e, ε, a, ɔ, o, ɔ, u/

All the nine have nasalized counterparts: /ĩ, ã, ẽ, ẽ, ã, ã, õ, õ, ü/.

#### 4.4.6. Notes

Close vowels may become non-syllabic when they occur in a sequence and are followed by other vowels.

#### 4.4.7. Vowel harmony

There is vowel harmony in Èrùwa, with the vowels falling into the two groups:

EXPANDED				NON-EXPANDED			
i,	ĩ,	ũ,	u	ɪ,	ĩ	ũ,	ɔ
e,	ẽ	õ,	o	ε,	ẽ	õ,	ɔ
					a,	ã	

There is vowel harmony in the noun as well as in the verbal construction.

#### 4.4.8. Tone

The system is two tones plus downstep. There is downdrift, so that successive highs are progressively lowered by intervening lows. The Èrùwa tone system is discussed in Odumosu (1973:33-40).

#### 4.4.9. Morphology

There is no pluralization by prefix change. These and aspect in the verb are carried by a system of particles and tonal variation.

#### 4.4.10. Other sources

Odumosu (1973).

#### 4.5. Isoko

##### 4.5.1. Syllable structure

Syllables are V, CV, or CCV. In CCV syllables, the second consonant is /r/, and the first C is a labial, velar or glottal consonant.

4.5.2. *Consonant inventory*

	m		$\overset{\text{h}}{\text{n}}$	n		$\eta^{\text{w}}$			
p	b	$\overset{\text{h}}{\text{t}}$	$\overset{\text{h}}{\text{d}}$	t	d	k	g	kp	gb
f	v			s	z	h	$\gamma$		$\gamma^{\text{w}}$
					l				
					r				
	u			r		y			

4.5.3. *Notes*

$\overset{\text{h}}{\text{n}}$  is a dental nasal [ $\overset{\text{h}}{\text{n}}$ ] in some dialects and a dental-palatal [ $\overset{\text{h}}{\text{ɲ}}$ ] in some others, including Uzere, the standard dialect described here.

$\text{/kp/}$  is an unvoiced velarized bilabial implosive [ $\text{p}^{\text{c}}$ ].

$\overset{\text{h}}{\text{t}}$  and  $\overset{\text{h}}{\text{d}}$  are palatal in some dialects. In Uzere,  $\overset{\text{h}}{\text{t}}$  and  $\overset{\text{h}}{\text{d}}$  become palato-alveolar affricates before close front vowels /i/ and /ɪ/. A sequence /tiV/ become [tʃV] and /diV/ becomes [dʒV].

$\text{/r/}$  is a voiced alveolar tap with a lateral off-glide. It sometimes comes out as a plain tap without a lateral element.

$\text{/r/}$  is a voiced alveolar trill.

In a few items, [v] is in free variation with [ṽ], a breathy-voiced labiodental fricative. As there is no contrast involved, we shall use the plain representation /v/.

$\text{/}\gamma\text{w/}$  is one composite sound: a voiced labialized velar central fricative. The labial element and the fricative element at the velum are synchronic. Ladefoged (1964) drew a distinction between an approximant /w/ and a fricative  $\text{/w}^{\text{+}}\text{/}$ . However, as there is no friction at the lips, the more radical velar constriction must be taken as the primary point of articulation, while the less radical labial element (consisting in the rounding of the lips) is considered secondary. The contrast is between  $\text{/v/}$  (an approximant with [w] as allophone) and  $\text{/}\gamma\text{w/}$  labialized velar fricative (see below).



/v/ is a voiced bilabial approximant. In the environment of rounded vowels it becomes a labial-velar approximant.

#### 4.5.4. Consonant contrasts

Ladefoged (1964:58) cites some contrasts for Isoko which, on investigation, are in need of clarification. The most famous of the claimed contrasts are /l/ ~ /ɾ/ ~ /r/ ~ /ɽ/. I have pointed out above (2.1.4) that the last case, /ɽ/, is in fact a sequence /hr/. As for '/ɾ/', it is clearly trilled in my informant's speech. Donwa (1982) has made excellent spectrograms of these sounds and /r/ comes out clearly as a trill.

As for the contrast /w<sup>+</sup>/ ~ /w/, I recognize this as a contrast between /ɣ<sup>w</sup>/ and /v/. Finally, Ladefoged has *ome* 'laugh', suggesting a contrast between /w/ and /m/. Again what we have is a CC sequence - [hw]: /hóé/ 'laugh', /ò-hóé/ 'to laugh'. My informant gives the two forms:

[hwé] and [hóé] 'laugh!'

Some of the interesting consonant contrasts are exemplified below:

m ~ n ~ ɲ ~ ŋ <sup>w</sup>	l ~ r ~ r
/ma/ 'mould'	/òlá/ 'to jump'
/nɔ/ 'ask, question'	/òrá/ 'yours'
/ɲa/ 'walk'	/òrá/ 'to fly'
/úŋ <sup>w</sup> é/ 'nose'	

p ~ b ~ kp ~ gb	ɣ ~ ɣ <sup>w</sup> ~ v ~ v
/ìpàpá/ 'groundnut'	òɣènéné 'God'
/ùtábà/ 'tobacco'	éɣ <sup>w</sup> é 'hoe'
/òkpà/ 'cock'	èvì 'goat'
/àgbà/ 'jaw'	ìvíé 'shoe'

ʈ ~ ɖ ~ t ~ d
òʈé 'pot'
ùɖè 'twenty'
ómótè 'daughter'
èdè 'day'

#### 4.5.5. Vowels

There are nine vowels: /i, ɪ, e, ε, a, ɔ, ɒ, ɔ̃, u/.  
These are exemplified in the following:

/si/	'call'
/sɪ/	'refuse'
/se/	'call'
/ósè/	'father'
/sa/	'shoot, hit'
/ísò/	'faeces'
/oso/	'rain'
/sɔ/	'sing'
/ètù/	'hat, cap'

#### 4.5.6. Notes

All vowels are nasalized after nasal consonants.

/i/ and /ɪ/ may become non-syllabic [y] before another vowel;  
/u/ and /ɔ/ may become [w].

#### 4.5.7. Vowel harmony

There is vowel harmony in the noun and in the verbal system.  
Although the vowels fall into the usual Edoid pattern:

EXPANDED		and	NON-EXPANDED	
i	u		ɪ	ɔ
e	ɔ		ε	ɔ̃
			a	

the ability of /ε/ to occur with the EXPANDED set would suggest that it be treated as the neutral vowel in the harmony system. The reasons for this are partly historical (as will be seen in chapter 5 of this work). In general, harmony is more regular in the verb system than in the noun.

##### 4.5.7.1. Nouns

(1)	u-kpè	'year'	ò-lé	'yam'
	è-nì	'elephant'	ò-kpà	'cock'
	ù-tó	'mat'	è-vì	'goat'
	ì-tú	'nails'	ó-zó	'ear'

Exceptions are found in the following which are typical of such 'mixed vowel' nouns:

- (2) ò-ṭé 'pot'  
î-sò 'faeces'  
é-gòdì 'hawk'

#### 4.5.7.2. Verb system

In the past tense examples given below, the vowel of the verb stem determines the choice of vowel in the pronoun:

- (3) ò dé 'he bought'  
ò kpé 'he killed'  
mè só 'I sang'  
mè kó 'I sewed'

When a pronoun has /a/ as its stem vowel, it uses that form with both sets:

- mà só 'we sang'  
mà kó 'we sewed'

#### 4.5.8. Tone

Mafeni (1969) analyzed the Isoko system as 'two tones plus downstep'. Writing at a time when the study of downstep/downdrift systems was the vogue, it is hardly surprising that Mafeni should have come up with that analysis.

As Elugbe (1976c, 1977) has demonstrated, the Isoko system is simply two tones - and nothing else. A third level is identified only at the end of a tone group before pause where all low tones are raised to mid. This phenomenon is restricted to statements and, in the case of individual lexical items, this includes citation forms.

Questions, negative constructions, and exclamations do not exhibit this feature.

#### 4.5.8.1. Final low raising

- (5) ò-bò (Lo-Lo) [ɔ̃bɔ̃] (Mid-Mid) 'native doctor'  
ù-tó (Lo-Hi) [ùtò] (Lo-Hi) 'mat'  
ú-kè (Hi-Lo) [úkè] (Hi-Mid) 'back'  
á-bó (Hi-Hi) [ábó] (Hi-Hi) 'basket'

But the same tones are low (i.e. have not been raised) in the following examples where they are non-final:

- (6) ò-bò ò d' → [òbwòd'è] '(the) doctor bought'  
 doctor he buy  
 ú-kè ò-m' → [úk'è-m'] 'my back'  
 back concord-my

There is no downdrift in Isoko; successive Highs are not lowered by intervening lows:

- (7) ò d' ù-tó → ò dútó 'he bought a mat'  
 he past-buy mat  
 ò d' ù-tó k'è Àvá → ò dútó k'Àvá 'he bought a mat  
 for Ava'

We may represent the Low-Raising Rule rather informally as in Elugbe (1976c):

- (8)  $Lo_n \rightarrow Mid_n / \_ \# \#$

Raise any number of utterance-final lows to mid.

#### 4.5.8.2. *Tone and intonation*

Low tone raising does not take place, however, if the utterance is a question or an exclamation. Let us compare (9):

- (9) Question
- |    |       |   |      |       |               |
|----|-------|---|------|-------|---------------|
| a. | ?ò-bò | - | òbò  | [_ _] | 'doctor?'     |
| b. | ?ú-kè | - | úkè  | [_ _] | 'back?'       |
| c. | ?ù-tó | - | ùtô  | [_ \] | 'mat?'        |
| d. | ?á-bó | - | ábô  | [_ \] | 'basket?'     |
| e. | ?òd'è | - | òd'è | [_ \] | 'did he buy?' |

In (9) we have questions: final lows are not raised and final highs are falling. We must conclude therefore that questions are characterized by a low tonorph (i.e. a floating low tonal morpheme) which has the effect of blocking the Lo-Raising Rule, causing final highs to fall, and simply merging with final low.

If we now take (10), made up of exclamations, we find that final lows are not raised but final highs do not fall:



(10) Exclamation

- a. !ð-b̀̀ → ðb̀̀ [ \_ \_ ] 'doctor!'
- b. !úkè → úkè [ ^ \_ ] 'back!'
- c. !ù-tó → ùtó [ \_ ^ ] 'mat!'
- d. !á-b́́ → áb́́ [ ^ ^ ] 'basket!'

The overall evidence suggests that we are dealing with an intonation feature with three characteristics:

- (a) statements: characterized by final low raising (cf. (5) above).
- (b) questions: characterized by a final low tonorph - i.e. a final floating low - which merges with a low, causes a high to fall and blocks the application of the Lo-Raising Rule (cf. (9)).
- (c) exclamations: characterized by the absence of both low raising and the final low tonorph (cf. (10)).

It would appear, therefore, that every Isoko utterance, before entering the phonological level, has a feature

STATEMENT or QUESTION or EXCLAMATION attached to it.

Our (8) above will have to be revised accordingly as (11) while (12) is added.

- (11) Lo<sub>n</sub> → Mid<sub>n</sub> / — # # ] STATEMENT
- (12) ∅ → Lo / — # # ] QUESTION

Thus an item like /ð-b̀̀/ 'doctor' will have different tonal shapes determined by intonation:

- (13) a. ð-b̀̀ → ɔ̀b̀̀ 'doctor' by (11)
- b. ?ð-b̀̀ → ðb̀̀` by (12) → ðb̀̀ 'doctor?'
- c. !ð-b̀̀ → ðb̀̀ 'doctor!'

I have followed above the simple convention of marking questions by a preceding question mark and exclamations by an exclamation mark.

What is clear from all this is that final low tone raising and final floating low insertion are not phonetically motivated processes: they are syntactically motivated.

#### 4.5.9. Morphology

In Isoko, pluralization is achieved by changing the prefix vowel of the noun. Most of this is phonologically predictable and

usually involves changing singular e-, o-, u-, to i- (plural) or singular ε-, a-, ɔ-, ɔ- to ɪ- (plural): the choice is determined by vowel harmony.

However, a few plurals in ε- and a- defy this rule. The plurals in a- are notable because they involve nouns referring to some parts of the body.

#### 4.5.10. *Other sources*

Ladefoged (1964): Mafeni (1969); Elugbe (1976c; 1977; 1978b; 1980a), Donwa (1982).

#### 4.6. *Okpẹ*

##### 4.6.1. *Syllable structure*

CCV, CV, and V syllable types are identified in Okpẹ. In the CCV type, the second consonant is ɾ, a voiced alveolar tap with a faint lateral offglide. Moreover, only labial and velar sounds may occur as the first consonant in such syllables.

/i-mrĩ/	V-CCV	'fat'
/ɔ-kpa-kõ/	V-CV-CV	'elder'
/dɛ/	CV	'buy'

In the sequence -kɔɾɔ, /ɔ/ becomes non-syllabic, giving [kwɾɔ]

/e-k'ɔɾó/	[èkwɾó]	'to gather'
-----------	---------	-------------

As in other Edoid languages, close vowels become non-syllabic between a consonant and another vowel.

/u-ríé/	[ùryé]	'river'
/o-gúá/	[ògwá]	'house'

##### 4.6.2. *Consonant inventory*

		m									
p	b		t	d	c	ɟ	k	g	kp	gb	
ɸ	f	v	s	z	ʃ	ʒ	h	ɣ			
			r	ɾ							
		u		l		y				w	

##### 4.6.3. *Notes*

The approximants are nasalized in the environment of nasalized vowels. In the case of /l/, the result is a voiced alveolar nasal [n].

The status of the palatal consonants is not clear to me. (I have only recently replaced my Okpẹ and Uvbiẹ data which I lost sometime in 1980.)

The alveolar tap is realized as a tapped nasal [ɲ] before nasalized vowels.

#### 4.6.4. *Consonant contrasts*

As can be seen from 4.6.3. above, I am not able to give a picture of the more interesting contrasts as I would normally do. There is a possibility that [ỹ], an allophone of /y/, contrasts with /ɲ/ (as in Urhobo, see 4.7.4. below):

/é-yẽ/            'sand'  
/ù-ɲé/            'housefly'

I would have to check this out for confirmation.

#### 4.6.5. *Vowels*

At a (systematic) phonemic level, there are nine oral and nine nasalized vowels in Okpẹ:

/i, ɪ, e, ɛ, a, ɔ, o, ɔ̃, u/ and /i, ī, ē, ē̃, ā, ã, õ, õ̃, ũ/.

#### 4.6.6. *Notes*

/ě/ and /õ/ do occur:

/vĩě/            'abuse'  
/gbõ/            'stink'

Hoffmann (1973) points out that phonetically both /ɪ/ and /e/ are realized as [e], while both /ɔ/ and /o/ are realized as [o].

#### 4.6.7. *Vowel harmony*

See Hoffmann (1973) for a very interesting study of vowel harmony in Okpẹ.

#### 4.6.8. *Tone*

Hoffmann (1973) marks two tones and a downstep in his examples. Until a better analysis emerges, we shall assume that Professor Hoffmann is correct.

#### 4.6.9. *Morphology*

In nouns, Okpẹ normally forms plurals by changing prefix vowels. Tone and various affixes are employed in deriving various forms of the verb.

4.6.10. *Other sources*

Hoffmann (1973).

4.7. *Urhobo*

4.7.1. *Syllable structure*

Phonologically, the possible syllable structures in Urhobo are V and CV. There are no syllabic consonants, so that only vowels occur at V.

According to Elugbe (1973), CCV syllables occur in which the second consonant is /l̥/. Such syllables are analyzed as underlyingly CVCV. It is claimed that the two V-elements being identical and separated by /l̥/, the first one is deleted. This happens only if the first consonant is labial or velar. Thus:

/ò-kì-l̥ì/ → [òkìì] 'he-goat'

4.7.2. *Consonant inventory*

	m		n		ny				
p	b		t	d	c	ɟ	k	g	kp gb
			r̥						
ɸ	f	v	s	z	ʃ	ʒ	h	ɣ	
				l					
				l̥					
		u				y			w

4.7.3. *Notes*

The laterals /l/ and /l̥/ have nasal allophones [n] and [n̥] respectively before nasalized vowels. The central approximants have nasalized allophones, also before nasalized vowels. The occurrence of /ny/, phonetically [n̥], and /y/, IPA [j], on the chart thus correctly reflects an interesting contrast between /ny/ and [j̥].

/ó!nyó/	[ó̃n̥ó̃]	'honey'
/ayě/	[à̃ỹě̃]	'they'
/yã/	[ỹã̃]	'go, walk'

/l̥/ is more often a tap with lateral offglide, [ɾ̥]

/h/ is realized as a voiceless glottal fricative.

/ɣ/ is strongly labialized before /u/; contrast between it and



/w/ is neutralized before /u/.

/h/ and /ɣ/ are heavily nasalized where they occur before nasal vowels; they become [h̃] and [ɣ̃] respectively. In addition, /ɣ/ is realized as [ŋw] before /ũ/.

#### 4.7.4. Consonant contrasts

Some interesting consonant contrasts occur in Urhobo. There is a contrast between /ɲ/ and /ɣ/. There is probably also a contrast between [ŋw], allophone of /ɣ/ before /ũ/, and [w̃], allophone of /w/ before nasalized vowels.

#### 4.7.5. Vowels

There are seven oral vowels and seven nasal vowels in Urhobo: /i, e, ε, a, ɔ, o, u/ and /ĩ, ẽ, ẽ̃, ã, õ, õ̃, ũ/ respectively.

The close back non-expanded vowel [ɔ] occurs in two items: [óvà] 'one' and [òsà] 'hawk', evidence that Urhobo originally operated a system that included /ɔ/ (see Elugbe 1973 and later in this work).

That /ẽ/ and /õ/ must be recognized in Urhobo is supported by examples such as:

/fũẽ/	[fũẽ̃]	'heal'
/gbõ/	[gbõ̃]	'smell, stink'

#### 4.6.6. Notes

As in other Edoid languages, close vowels in Urhobo become their approximant counterparts if preceded by a consonant and followed by another vowel:

/viε/	[vyẽ̃]	'cry'
/fũẽ/	[fũẽ̃]	'heal'

#### 4.7.7. Vowel harmony

Elugbe (1973), following Kelly (1969), applies the term harmony only to vowel patterning in the Urhobo verb phrase, claiming that harmony has broken down in the Urhobo noun to the extent that we can no longer speak of harmony. The vowels, on the basis of their behaviour in the verb phrase, can be divided into two sets:

## 1. EXPANDED

i, ɪ    u, ũ  
e, ē    o, õ

## 2. NON-EXPANDED

(e, ē)    ɔ, õ  
ε    ã    a, ã

It should be noted that it is /e/ and /ē/ which are partly neutral within the system; depending on the part of the verb phrase we are dealing with, /e/ and /ē/ behave sometimes as set 1 and other times as set 2 vowels. When they occur in stems, however, they invariably attract EXPANDED vowels in any affixes that may be attached to them.

4.7.8. *Tone*

The Urhobo tone system has been the subject of varying analyses by Elugbe (1973 and 1977). In 1973 I thought that the Agbarho dialect, like the Eku dialect as analyzed by Welmers (1969), was an unusual type of two tone plus downstep system, with the following characteristics:

- a) two tones plus downstep
- b) there is no downdrift
- c) downstep is restricted and not synchronically traceable to lost low tones.

I later observed that after the 'downstep', it is possible to move up to high within the same tone group. As this is a possibility normally forbidden in '2 tone plus downstep' systems, I concluded that Urhobo is a 3-level tone system (cf. Elugbe 1977).

For the present work, I have taken some more data and examined the facts a little more closely, even though many questions remain to be answered.

The facts suggest that my earlier 1973 analysis of the system as '2 tone plus downstep' is the correct one. I will briefly present below the evidence for this revision.

The facts that remain uncontroverted by additional research are that:

- a) there is no downdrift in Urhobo
- b) there is downstep;
- c) after low there is no contrast between high and downstep; yet,

d) after downstep, it is possible to go back to high within the same tone group.

The problem with Urhobo is the apparent conflict between (c) and (d) above. It would appear that one way of resolving this conflict would be to discover under what circumstances one may move from downstep back to high. Since the data at my disposal are not enough to resolve the issue, I will simply demonstrate below why Urhobo should be analysed as two tones plus downstep.

In a typical three-level tone system, the third level may have lowered allophones but the conditions under which the allotones occur can be described. In Urhobo, there may be repeated occurrence of downstep, leading to different levels of 'mid' which cannot be explained:

ó!sé            'father'            ó!nyó            'honey'            dé            'buy'  
 ó!séǎó!nyó            'father bought honey'  
 [---]

I suggest that examples like this support the analysis of the third level as a downstep.

On the other hand, in the associative construction which is marked by ǎé, there is evidence to support our point (d) above.

ó!nyó + ǎé + ó!sé [ǎǎǎǎǎǎǎǎ] 'father's honey'  
 honey            of            father [---]  
 ó!tó + ǎé + ócé [ǎǎǎǎǎǎǎǎ] 'bottom of pot'  
 ground            of            pot [---]

Urhobo also exhibits tonal manifestations of intonation which are clearly cognate with those observed in Isoko. For example, final low tones are raised in statements. This final low raising is absent in exclamations. Questions are marked by a low tonorph which merges with final lows, causing a final downglide, and causes highs to fall:

/ǎbò/            [- -]            'doctor'  
 /ókà/            [- -]            'maize'  
 /úkó/            [- -]            'cup'  
 /!ǎbò/            [ \_ \_]            'doctor!'

/!ókà/	[ <sup>-</sup> _]	'maize!'
/!úkó/	[ <sup>-</sup> <sup>-</sup> ]	'cup!'
/?àbò`/	[ <sup>-</sup> \]	'doctor?'
/?ókà`/	[ <sup>-</sup> \]	'maize?'
/?úkó`/	[ <sup>-</sup> \]	'cup?'

#### 4.7.9. Morphology

Although Urhobo nouns are pluralized by prefix vowel alteration, this is done mostly by phonological rather than by semantic rules. It is only in a few parts of the body, such as 'eye', 'tooth' and the limbs, that pluralization (in /a-/) appears to be semantically determined.

#### 4.7.10. Other sources

Kelly (1969a; 1969b), Welmers (1969; 1973), Elugbe (1972a; 1973; 1977); Olomukoro (1980).

#### 4.8. Uvbię

##### 4.8.1. Syllable structure

Apart from CV and V, CCV syllable types are found in Uvbię. Any syllable-initial cluster must start with a labial or velar consonant, followed by the alveolar tap ɾ. As in Okpę, this tap has a faint lateral element.

##### 4.8.2. Consonant inventory

	m		[n]		ny				
	p	b	t	d	c	ɟ	k	g	kp gb
	f	v	s	z	ʃ	dʒ	h		
			r	ɾ					
	ɹ		l		y			w	

##### 4.8.3. Notes

As with Okpę, it is not clear what the status of the palatal consonants is. Note that dʒ occurs where ʒ might have been expected.

The approximants become nasalized before nasal vowels. There may be a contrast between /ny/ ([ɲ]), and [ỹ].



The alveolar tap /ɾ/ has a nasal allophone [ɾ̃] before nasal vowels. [n] is an allophone of /l/.

#### 4.8.4. *Consonant contrasts*

It may be that there is no contrast between the palatal fricatives and the alveolar fricatives.

However, there is a clear contrast between the palatal and velar plosives. The affricate [dʒ] may well be an allophone of /d/ or /g/.

#### 4.8.5. *Vowels*

There are nine oral vowels and nine nasal ones:

/i, ɪ, e, ɛ, a, ɔ, o, ɒ, u/ and /ĩ, ɪ̃, ẽ, ɛ̃, ã, õ, õ̃, ã̃, ã̃̃/.

#### 4.8.6. *Notes*

The contrast between /ẽ/, /õ/ and their oral counterparts (as in Okpe and Urhobo) is worth noting.

#### 4.8.7. *Vowel harmony*

See Omamor (1973) for a detailed discussion of vowel harmony in Uvbię.

#### 4.8.8. *Tone*

Omamor (1973) marks only high and low on her Uvbię examples. I have myself not found cause to mark a third level. A non-low level (only a little higher than low) is heard at the end of utterances, but that may be due to the phenomenon of final low raising which is observable in most Edoid languages of the Delta.

#### 4.8.9. *Morphology*

Nouns in Uvbię are pluralized by prefix vowel change. Verbal nouns are formed from verb stems by the affixing of a discontinuous U... mU morpheme (obviously cognate with the U...(A)m of Dęgęma).

#### 4.8.1.0. *Other sources*

Omamor (1973).

#### 4.9. Edo

##### 4.9.1. Syllable structure

Edo has syllables of the structure CV or V. Only vowels occur at V; there are no syllabic consonants in Edo.

Vowel sequences are common and each member of the sequence represents a syllable nucleus. Thus:

ga	(CV)	'worship'
kī	(CV)	'inspect'
è-tó	(V-CV)	'hair'
raa	(CV-V)	'steal'
*ò-rüää	(V-CV-V-V)	'in-law'

##### 4.9.2. Consonant inventory

	m	[n]					
p	b	t	d	k	g	kp	gb
		ɾ	r				
f	v	s	z	x	ɣ		h
			l				
	ʋ	ɭ		y			w

##### 4.9.3. Notes

Every approximant has a nasal or nasalized allophone when it occurs before a nasal vowel. Thus:

/l̃/	→	[ñ]	'ask'
/l̃ɛ̃/	→	[ñɛ̃]	'know'

For most people of the younger generation, /l̃/ is now a central approximant with a lateral off-glide. For such speakers, this item is realized as [ɹ̃ɛ̃].

/ṽɛ̃/	→	[ṽɛ̃]	'have'
/ỹã/	→	[ɲ̃ã]	'tear apart'
/w̃ɔ̃/	→	[ŋw̃ɔ̃]	'drink'

Stops are partially nasally exploded when they occur before nasalized vowels.

##### 4.9.4. Consonant contrasts

Some interesting contrasts are exemplified in Elugbe (1973:

164-166). Perhaps the most intriguing is contrast involving the lateral and the r- sounds;

/ɾo/	'blaspheme, say forbidden things'
/ro/	'praise'
/l̥o/	'give out pus (of boil, etc.)'
/lo/	'use'

\* For a long time, Edo orthography had problems coping with the contrasts involved here because the letter 'r' was being used to write both /r/ and /l̥/. An interesting solution was found at a seminar in Lagos in 1974 when it was decided to write /r/ as 'rr' and /l̥/ as 'r'!

#### 4.9.5 Vowel inventory

There are seven oral vowels in Edo: /i, e, ε, a, ɔ, o, u/ and five nasal ones: /ĩ, ẽ, ã, õ, ù/.

#### 4.9.6. Notes

In vowel sequences in which a close vowel is followed by a non-close vowel or one from which it differs in respect of lip rounding, the close vowel becomes non-syllabic:

/ògìè/	[ògyè]	'chief'
/ífwé/	[ífwé]	'wing'

#### 4.9.7. Vowel harmony

Vowels co-occur freely in Edo. However, Elugbe (1973:168) has mentioned that if a noun has an ɔ-prefix, it is also likely to have ε, a, or ɔ in the stem. Elugbe also points out that there are only two exceptions to this rule in his data.

#### 4.9.8. Tone

Amayo (1976) traces the history of the analysis of Edo tone and credits Elugbe (1971, 1973) and Welmers (1973) with the first correct analysis of Edo as 'two tones plus downstep'. Amayo then reveals the interesting fact that 'downstep' applies not only to high tones but also to low tones. Thus there is a difference between:

/íyó # ' # òkpè/ → [íyó!kpè] 'palm wine tapper's money'  
 /íyó # ' # ókpè/ → [íyókpè] 'money for a flute'.

The point is that the influence of a low tone on a high (or low!) tone remains even after the low tone is deleted, giving us downstepped highs and downstepped lows.

Edo is thus one of the very few Edoid languages whose tone system is basically understood.

#### 4.9.9. Morphology

Although it is relatively easy to show that an Edo noun is made up of a stem and a prefix, there are few nouns in which pluralization by prefix alternation takes place. Elugbe (1973:168) gives a list of the nouns which fall into this group. A look at Elugbe's list reveals that all the nouns concerned are 'human/relationship' nouns: child, child of, enemy, male/man, person, relative, and woman.

#### 4.9.10. Other sources

Melzian (1937;1942); Wescott (1962); Dunn (1968); Elugbe (1971; 1973); Mid-West Ministry of Education, Benin City (1974); Amayo (1976).

#### 4.10. Aoma

##### 4.10.1. Syllable structure

CV and V are the only possible types of syllable in Aoma.

##### 4.10.2. Consonant inventory

	m		[n]				
p	b	t	d	k	g	kp	gb
			r				
f	v	s	z	x	y		
			l				
			ɾ	y	h	w	

##### 4.10.3. Notes

Approximants have nasal or nasalized allophones before nasal vowels.



#### 4.10.4. Consonant contrasts

The contrast between /l/ and /ɫ/ on the one hand and between /ɫ/ and /r/ on the other is worth noting (cf. the Èdo case).

#### 4.10.5. Vowel inventory

Seven oral vowels and five nasal vowels occur in Aoma:  
/i, e, ε, a, ɔ, o, u/ and /ĩ, ẽ, ā, õ, ũ/.

#### 4.10.6. Notes

Close vowels have approximant allophones when they occur before non-close vowels.

#### 4.10.7. Vowel harmony

There is no evidence of vowel harmony in Aoma.

#### 4.10.8. Tone

Only two levels, high and low, are distinctive. As I have only lexical items in this language, I cannot say more than this.

#### 4.10.9. Morphology

Nouns are not pluralized by changing prefixes. Some verbs start with vowels. Such cases (for example: /e/ 'eat'), are derived from historical CV stems whose consonant has been lost in Aoma.

#### 4.10.10. Other sources

Elugbe (1973).

### 4.11. Auchí

#### 4.11.1. Syllable structure

Only vowels are syllabic in Auchí and a syllable is of the structure CV or V.

/bɛ/ is CV 'harvest (fruit)'

/ò-kò/ is V-CV 'vehicle'

Vowel sequences occur in stems and are interpreted as syllable sequences:

/è-fèè/, V-CV-V 'falsehood'

/ù-yàè/, V-CV-V 'tail'

/í-fùà/, V-CV-V 'wing'

4.11.2. *Consonant inventory*

	m		n					
	mh							
p	b	t	d	k	g	kp	gb	
		ts	dz	kh	gh	kph	gbh	
			r					
f	v	s						
	u		l	y		w		

4.11.3. *Notes*

The h-series represent a lenis series on which a lot has been written. All dialects of Yekhee have a lenis/non-lenis distinction. (See Laver 1967, 1969; Elugbe 1973, 1974, 1980a; Elimelech 1976.)

The only lateral in the Yekhee dialects is a tapped one, regarded as lenis.

The alveolar affricates optionally become palato-alveolar before /i/. The sequences /tʃiV/ and /dʒiV/ become [tʃV] and [dʒV] respectively:

/tʃi/	[tʃi] or [tʃi]	'to snuff, smoke'
/ɔdzi/	[ɔdzi] or [ɔdzi]	'crab'
/atsie/	[àtʃè]	
/ilidzía/	[iɫidzâ]	

This observation holds for /s/ and /n/, which may give [ʃ] and [ɲ] in the same environment.

4.11.4. *Consonant contrasts*

The contrast between lenis and non-lenis consonants is of general interest. Of particular interest is the contrast between lenis labial-velars and non-lenis ones. The contrast between labials and labial-velars (lenis and non-lenis) is exemplified in the following:

p: b: kp: gb: kph: gbh: m: mh: f: u: w	
/papa/	'spread/mix mud with the hands or feet'
/ba/	'plait'
/kpa/	'vomit'
/gba/	'tie'
/kpha/	'raise high'

/égbha/	'a type of itching seed (= 'devil bean')
/ma/	'mould'
/mha/	'we, us'
/fa/	'cut (rope, thread, etc.)'
/va/	'butcher'
/va/	'you (pl.)'
/wa/	'be lost'

The following items bring the velars into the picture:

/kaka/	'be dry'
/ga/	'worship'
/khayε/	'abuse, insult'
/ghagha/	'repair, mend'

#### 4.11.5. *Vowel inventory*

There are seven oral vowels; there are no nasal vowels.

/i, e, ε, a, ɔ, o, u/.

#### 4.11.6. *Notes*

In vowel sequences, the close vowels /i/ and /u/ are realized as their glide counterparts when they occur before other vowels.

All vowels are nasalized after nasals. Elugbe (1973) has the minimal contrasts:

/di/	'tie'	/ni/	'recover (from illness)'
/de/	'fall'	/ne/	'guess'
/dε/	'buy'	/nε/	'defecate'
/da/	'drink (alcohol)'	/na/	'run'
/dɔ/	'wrestle'	/nɔ/	'ask'
/do/	'weave'	/no/	'use'
/du/	'carry'	/nu/	'rub'

#### 4.11.7. *Vowel harmony*

Only faint traces of an earlier vowel harmony system exist in Auchi and these are not in the verbal system but in the noun system.

#### 4.11.8. *Tone*

Two levels are significant - high and low. In my 1973 work, I say that there is no downdrift or downstep in Auchi. Elimelech

(1976) worked on the Ẹkphẹ̀li dialect of Yẹ̀khee and says there is downdrift and downstep there. I had a brief contact with that dialect recently and it would appear that Elimelech's observations on Ẹkphẹ̀li are correct. However, I listen almost daily to speakers of the central Auchi dialect (see chapter 1) and detect no down-drift there. There is no reason why different dialects of Yẹ̀khee should exhibit identical low-level phonetic characteristics.

#### 4.11.9. *Morphology*

Pluralization in Auchi is by prefix vowel alternation. This is generally phonologically determined except in the case of a few parts of the body with plural in a.

#### 4.11.10. *Other sources*

Different people have worked on different dialects of Yẹ̀khee: Strub (1915-16) on Wepa Wanọ, a rather more distant dialect which he called 'Kukuruku'; Laver (1967, 1969) on the Avbiele dialect, Elugbe (1973) on Auchi and Avbianwu; and Elimelech (1976), the most detailed work on any dialect so far, on Ẹkphẹ̀li.

#### 4.12. *Avbianwu*

##### 4.12.1. *Syllable structure*

As for Auchi: CV, V.

##### 4.12.2. *Consonant inventory*

	m		n				
	mh						
p	b	t	d	k	g	kp	gb
		ts	dz	kh	gh	kph	gbh
			r				
f	v	s					
	u		l	y		w	

##### 4.12.3. *Notes*

Conventions are as for Auchi, these two being very close dialects. However, /p/ is more widely used here (see chapters 1 and 5).



4.12.4. *Consonant contrasts*

The observations for Auchi are largely true here although I do not have the data to exemplify contrasts in the same way as I did for Auchi.

4.12.5. *Vowel inventory*

/i, e, ε, a, ɔ, o, u/. There are no nasal vowels.

4.12.6. *Notes*

As for Auchi (section 4.11.6).

4.12.7. *Vowel harmony*

There is no vowel harmony in Avbianwu.

4.12.8. *Tone*

From the lexical items at my disposal only two levels are found to be distinctive: high and low. There is apparently also neither downstep nor downdrift here.

4.12.9. *Morphology*

Pluralization in Avbianwu is as in Auchi.

4.12.10. *Other sources*

See under Auchi. The only sources I am aware of are Elugbe (1973), a very brief sketch, and Elimelech (1976), a word list.

~~4.13.~~ 4.13. *Uneme (Eturu)*

4.13.1. *Syllable structure*

Syllables are CV or V.

4.13.2. *Consonant inventory*

	m		n				
	mh		nh				
p	b	t	d	k	g	kp	gb
				kh	gh	kph	gbh
		ɾ	r				
f	ɸ	v	s	ʒ	z	h	ħ
	u		l		y		w

#### 4.13.3. Notes

As with Yekhee, Unem̄ is rich in consonants. Breathy-voicing is identified as a distinctive feature here (as in most of NWE, see 4.16 and 4.17). Otherwise, the contrasts are almost exactly as for Auchi and Avbianwu.

The alveolar nasal /n/ and the fricatives /s, ʒ, z/ have palatal and palato-alveolar allophones respectively before /i/.

#### 4.13.4. Consonant contrasts

The contrasts f: v: v and s: ʒ: z are of interest in addition to the widespread lenis: non-lenis contrasts. The lenis feature is apparently realized as a breathy phonation feature in the fricatives, so that lenisness and breathy-voicing are in complementary distribution in the Unem̄ consonant system. The speakers of the language reflected this in their practice of writing both with an h after the relevant consonant.

/is̄ð/	'faeces'	orth.:	is̄h
/éʒ̄ð/	'ear'		ésh̄
/zɔlɔ/	'abuse'		zɔlh̄
/fɔ/	'be wet'		fɔh̄
/väli/	'pay (debt)'		fhali
/èvá/	'two'		eva

#### 4.13.5. Vowel inventory

Seven vowels occur: /i, e, ε, a, ɔ, o, u/. There are no nasal vowels.

#### 4.13.6. Notes

Vowels are nasalized after nasals, including after /ñ/, a nasalized glottal fricative.

Close vowels become non-syllabic in CiV or CuV sequences.

#### 4.13.7. Vowel harmony

Unem̄ does not operate a harmony system.

#### 4.13.8. *Tone*

In the limited data available, two levels are found to be distinctive: high and low. A third level that sounds like a mid or downstep level is also identified. This third level does not occur frequently and may well be evidence of a 'limited downstep'.

#### 4.13.9. *Morphology*

Plural forms of nouns have different vowel prefixes from singular forms. The rule relating singular to plural is basically phonologically determined, although a few items (mostly parts of the body) retain plural forms in a-.

#### 4.13.10. *Other sources*

An alphabet is suggested for Uneme in the report of the Mid-West Language Committee (Ministry of Education, Benin City, 1975). A southern dialect (not clearly identified) is included in the word lists in the Appendix attached to Elimelech (1976).

#### 4.14. *Ghotuq*

##### 4.14.1. *Syllable structure*

Syllables are of the type CV and V, Only vowels occur at V.

##### 4.14.2. *Consonant inventory*

	m		n					
	mh		nh					
p	b	t	d	k	g	kp	gb	
			r					
f	v	s	z	x	ɣ	h	ħ	
	ʋ		l		y		w	
			lh		yh			

##### 4.14.3. *Notes*

The h- series represent lenis varieties.

/h/ and /ħ/ are glottal fricatives, the second one being nasalized.

Before back rounded vowels, /ʋ/ usually has a weak labial-velar approximant allophone - [wh].

The sequences /kiV/ and /giV/ frequently give [cV] and [ʃV] respectively (mid tone is unmarked):

/okìà/ → [õcà] 'journey; welcome!'  
 /gíà/ → [ʃâ] 'laugh'

As with /k/ and /g/, /siV/ and /ziV/ often yield [ʃV] and [ʒV] respectively:

/si/ 'pull, draw' plus /àmè/ 'water'  
 /si àmè/ 'draw water' → [ʃàmè]  
 /zìè/ → [ʒê] 'open a lock'  
 /nh/ and /lh/ are alveolar taps [ɲ] and [ɺ] respectively.

#### 4.14.4. Consonant contrasts

Elugbe (1978b) and Elugbe and Hombert (1975) focus attention on lenis/non-lenis distinctions in Ghotuɔ. Some interesting examples of contrasts are given below:

mh : m		nh : n	
/mhɛ/	'see'	/ìnhò/	'mother'
/mɛ/	'peel off'	/ìnɔ/	'like this'
lh : l		yh : y	
/ilhá/	'(animal) fat'	/ìyho/	'yaws'
/èla/	'cow'	/ìyò/	'liver'
		/uyhà/	'family'
		/ùyà/	'tail'
		/iyá/	'palm fruit waste after oil is extracted'

#### 4.14.5. Vowel inventory

There are no nasal vowels in Ghotuɔ: the oral vowels are seven: /i, e, ɛ, a, ɔ, o, u/.

#### 4.14.6. Notes

All vowels are nasalized after nasals and after /h̃/. The close vowels /i/ and /u/ become non-syllabic when they are preceded by a consonant and followed by another vowel:

/fíà/ → [fyâ] 'look for'  
 /lúè/ → [lwê] 'press into pulp'



/gúò/            [gwô]            'vibrate'

#### 4.14.7. *Vowel harmony*

There is no vowel harmony in Ghotuò. A faint suggestion of it may be in the fact that, in the process of pluralization, u-, o- and a- singular prefixes become i- and ε-, while ɔ- singular prefixes become e-.

#### 4.14.8. *Tone*

There is no doubt that Ghotuò operates a three-level tone system and that the third level should be interpreted as 'mid'. There are no restrictions on the mid level in Ghotuò. Elugbe (1973) makes a convincing case for this view of Ghotuò tone.

#### 4.14.9. *Morphology*

Pluralization is by prefix vowel alternation. Among the languages included in this study, Ghotuò is the only NCE language that makes extensive use of a CV- prefix, VV-:

γo-bò	'hand'	a-bò (pl.)
γa-wà	'dog'	io-wà (pl.)

Pluralization, except in the case of a- and io- plural prefixes, is by phonological rule.

The loss of PE \*dh in Ghotuò has created verb stems without an initial consonant. Thus: /e/ 'eat', though the older generation still say 'eat' with a tapped lateral: [l̥ê].

#### 4.14.10. *Other sources*

Elugbe (1972a, 1973, 1978b); Elugbe and Hombert (1975).

#### 4.15. *Qloma*

##### 4.15.1. *Syllable structure*

CV, V

4.15.2. *Consonant inventory (Systematic phonetic)*

	m		n		ɲ		ŋw		
	mh		nh						
p	b	t	d	c	ɟ	k	g	kp	gb
		td	dh			kh	gh	kph	gbh
f	ɸ	v	s	ʒ	z	ʃ	ʒ	h	
			l						
	ɸ		r		y			w	

4.15.3. *Notes*

My data on Ọlọma are geared towards an analysis of the noun class system of the language (cf. Elugbe and Schubert 1976).

The h-series should be of interest here, in particular the contrast between the lenis alveolars th and dh and the non-lenis t and d. It should be noted that th and dh are a little auditorily longer in duration than the alveolar tap [ɾ].

The lateral /l/ is a lenis one and, in spite of occurring in the name of the language, is very sparsely distributed in the language.

The inventory is a systematic phonetic one and it may well be that some of the palatals are allophones of alveolar consonants.

4.15.4. *Consonant contrasts*

Although I do not have much data on this language, I am sure that all the lenis/non-lenis distinctions I have indicated in the inventory will be found to be phonological.

4.15.5. *Vowel inventory*

There are seven oral vowels in Ọlọma: /i, e, ε, a, ɔ, o, u/. There are no nasal vowels.

4.15.6. *Notes*

All vowels are nasalized after nasals. A glide formation rule exists, as in other Edoid languages.

4.15.7. *Vowel harmony*

It would appear that Ọlọma only recently changed from a nine-

#### 4.15.2. Consonant inventory (Systematic phonetic)

	m		n		ɲ		ŋw		
	mh		nh						
p	b	t	d	c	ɟ	k	g	kp	gb
		td	dh			kh	gh	kph	gbh
f	ɸ	v	s	ʒ	z	ʃ	ʒ	h	
			l						
	ɸ		r		y			w	

#### 4.15.3. Notes

My data on Ọlọma are geared towards an analysis of the noun class system of the language (cf. Elugbe and Schubert 1976).

The h-series should be of interest here, in particular the contrast between the lenis alveolars th and dh and the non-lenis t and d. It should be noted that th and dh are a little auditorily longer in duration than the alveolar tap [ɾ].

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The inventory is a systematic phonetic one and it may well be that some of the palatals are allophones of alveolar consonants.

#### 4.15.4. Consonant contrasts

Although I do not have much data on this language, I am sure that all the lenis/non-lenis distinctions I have indicated in the inventory will be found to be phonological.

#### 4.15.5. Vowel inventory

There are seven oral vowels in Ọlọma: /i, e, ε, a, ɔ, o, u/. There are no nasal vowels.

#### 4.15.6. Notes

All vowels are nasalized after nasals. A glide formation rule exists, as in other Edoid languages.

#### 4.15.7. Vowel harmony

It would appear that Ọlọma only recently changed from a nine-

vowel to a seven-vowel system. (We note, for example, that the closely-related Ẹmhalhe, see section 4.16, operates a nine-vowel system.) The effect of this is, of course, to disrupt the vowel harmony system. Thus we now have nouns in which ε, a, ɔ are prefixed to stems with i, e, o, u.

It so happens, however, that the prefix system has retained its own harmony so that where a singular prefix has a lower set vowel, for example, its plural counterpart must be from that set.

Elugbe and Schubert (1976) have mentioned and exemplified this phenomenon; I give a token demonstration below:

Singular	Plural		alternation
ì-sò	ì-sò	'faeces'	i - i
é-nè	í-nè	'snake'	e - i
ó-kò	í-kò	'fowl'	o - i
ù-tùmhù	ì-tùmhù	'tail'	u - i
é-nhàmhì	é-nhàmhì	'meat'	ε - ε
á-tù	é-tù	'antelope'	a - ε
ó-fì	é-fì	'rat'	ɔ - ε

The point here is that the plural prefix vowels are i and ε and the choice of i or ε is determined by agreement with the set to which the singular vowel prefix belongs. For the purposes of this prefix-internal harmony, therefore, the two sets are:

<u>1</u>	and	<u>2</u>
i	u	ε      ɔ
e	o	a

Outside of this, vowels co-occur indiscriminately between prefix and stem.

#### 4.15.8. *Tone*

Two tones have been identified: high and low. From preliminary observation, it would appear that the Ọlọma tone system is very similar to that of Auchi (section 4.11).

#### 4.15.9. *Morphology*

The most elaborate noun class system in Edoid is to be found in Ọlọma and it is presented in Elugbe and Schubert (1976). The



interesting features of this system include the fact that ghV- and rV- prefixes occur and are matched with ghV- and rV- concord prefixes. Above all, gender is defined here both on the basis of noun prefix pairing as well as on that of concord.

#### 4.15.9 Other sources

Koelle (1854) first published data on Ọlọma and got Westermann (1926) interested in its CV- prefixes. See also Elugbe and Schubert (1976).

#### 4.16. Ẹmhalhẹ (Somorika)

##### 4.16.1. Syllable structure

According to Ọyalẹ (1979), Ẹmhalhẹ syllables are of the structure CV or V.

##### 4.16.2. Consonant inventory (systematic phonetic)

	m		n		ɲ		ɔw		
	mh		nh						
p	b	t	d	c	ɟ	k	g	kp	gb
	bh	th	dh					kph	
			r						
			ɾ						
f	v	θ	s	ʒ	z	ʃ	ʒ̃	h	h̃
			l			y			w
			lh						

##### 4.16.3 Notes

The consonant system of Ẹmhalhẹ is very rich in distinctions. The most obvious, apart from the traditional categories of place and manner, is the presence of the h- series, representing lenis consonants and matched in the fricatives by a breathy-voiced series.

/lh/ is a tapped alveolar lateral [l̥].

/ɾ/ is an alveolar tap with a faint lateral off-glide.

The trilled /r/ occurs in a very limited number of items.

Adetuyi (1979) and Ọyalẹ (1979) both claim no contrast between /th/ and /θ/. In my data, there is a distinction between these

two. /θ/ is a voiceless dental central fricative while /th/ sounds like a voiceless lenis alveolar plosive.

#### 4.16.4. *Consonant contrasts*

Although some useful work already exists on Ẹmhalḥẹ, it is still not clear whether all the contrasts indicated in my inventory will survive a thorough analysis of the Ẹmhalḥẹ consonant system.

#### 4.16.5. *Vowel inventory*

There are no nasal vowels in Emhalhe. There are, phonetically, nine oral vowels: [i, ɪ, e, ɛ, a, ɔ, ɒ, ɔ, u]. Phonologically, however, Ẹmhalḥẹ is an eight-vowel system: /i, e, ɛ, a, ɔ, ɒ, ɔ, u/.

#### 4.16.6. *Notes*

/i/ is realized as [ɪ] when it occurs with vowels which are non-expanded - i.e. /ɛ, a, ɔ, ɒ/ (see below).

All vowels are nasalized after nasal consonants.

#### 4.16.7. *Vowel harmony*

Ẹmhalḥẹ makes extensive use of vowel harmony both in its nominal and verbal systems. The vowels fall into two groups within the harmony system - an expanded set: /i, e, o, u/ and a non-expanded set /ɛ, a, ɔ, ɒ/.

In a few stems, /i/ occurs with vowels from the non-expanded set. It is then realized as [ɪ]. However, there are exceptional cases in which /i/ occurs as a prefix to an /a/-stem and yet is realized as [i]. In such cases, we are probably dealing with a stem which, historically, had [ə].

Laniran (1981) devotes considerable attention to vowel harmony and records some useful data.

#### 4.16.8. *Tone*

I do not know of any other Edoid language with greater complexity of tone (at least on the surface) than is found in Ẹmhalḥẹ. It would appear that three levels are distinctive and the mid level is not to be interpreted as a downstep.

Laniran (1981) also tackles the problem of *Ẹmhalẹ* tone, and confirms some observations of mine: in nouns as lexical items, initial lows become high-falling while final non-lows are realized with a fall. The result is that:

LL → [ \ - ]  
 LH → [ - \ ]  
 HL → [ - - ]  
 HM → [ - \ ]

I have also observed (though this is still to be properly checked out) that there seems to be neutralization of contrast between high and mid immediately following a low tone.

#### 4.16.9. Morphology

Adetuyi (1979), Laniran (1979), and Oyalẹ (1979) all have a lot to say about the noun class system of *Ẹmhalẹ*. It is another Southern North-Western Edoid (SNWE) language in which CV- concord prefixes occur alongside CV- noun prefixes.

#### 4.16.10. Other sources

*Ẹmhalẹ* was the subject of investigation by a group of students of the Department of Linguistics and Nigerian Languages at Ibadan and the outcome of their study is in Adetuyi (1979), Laniran (1979), and Oyalẹ (1979). Laniran returned later to do another year of linguistics, producing her 1981 work on *Ẹmhalẹ* vowel harmony and tone.

#### 4.17. *Ibilo* ✱

##### 4.17.1. Syllable structure

CV and V (Elugbe 1973).

##### 4.17.2. Consonant inventory

	m		n		ɲ		ŋw ✱
	mh		nh				
	ṃ		ṅ				
p	b	t	d	k	g	kp	gb
	bh	th	dh	kh	gh	kph	gbh
		ts	dz				
			r				



f v̄ v s ʒ ʃ ʒ h h̄  
 l y w  
 lh  
 ɺ

#### 4.17.3. Notes

Ibilo operates the richest consonant system of all the Edoid languages. There are no less than forty phonological consonants within it and, at a systematic phonetic level, the figure rises.

Ibilo is also the only language to contrast breathy-voicing with lenisness within the same manner of articulation, giving us the contrasts m: mh: m̃:; n: nh: ñ; and l lh: ɺ.

/r/ is freely realized either as [r] or as [ɾ].

/dz/ is realized [dz] and [z] in free variation.

[c] and [ɟ] occur as allophones of /k/ and /g/ respectively before /i/ (Elugbe 1973). [ɲ] and [ŋw] are also analysed as allophones of /n/ in the same work.

#### 4.17.4. Consonant contrasts

Akinlabi (1979) has an impressive investigation of Ibilo consonants. Apart from confirming the lenisness and breathy-voicing contrasts in Elugbe (1973), Akinlabi unearthed many more and the inventory given above has gained a lot from his investigation.

However, many of the contrasts implied here are dying out. For example, I noted that although there is contrast between /th/ and /t/ and between /dh/ and /d/, the lenis alveolars occur only in stems with two consonants - i.e. in CVCV stems. The lenis consonants are also more common in -C<sub>2</sub>- stem position than in C<sub>1</sub>- position. In fact, I notice that one of the two examples cited by Akinlabi in support of the occurrence of /dh/ is dhaɲɔ 'look for' I happen to know that the verb 'look for' does not start with a lenis plosive but with a non-lenis one. It is not surprising therefore that Akinlabi's figure 6 to which we are referred for evidence contains oscillomink tracings of ùgbhàdho 'maize' and



nothing of the verb 'look for'.

#### 4.17.5. *Vowel inventory*

Elugbe (1973) has an interesting minimal set to exemplify the contrasts within the eight-vowel system of Ibilò. The vowels are /i, e, ε, a, ɔ, o, ω, u/ and the examples given are:

/dzi/	'come'	/dzɔ/	'throw'
/dze/	'fall'	/dzo/	'weave'
/dzε/	'germinate'	/dzω/	'buy, sell'
/dza/	'take'	/dzu/	'tie'

#### 4.17.6. *Notes*

Vowel nasalization is automatic and occurs immediately following a nasal consonant.

As in Èmhalhẹ (section 4.16.6) [ɪ] occurs as an allophone of /i/ when the latter occurs with the non-expanded vowels /ε, a, ɔ, ω/.

#### 4.17.7. *Vowel harmony*

There is vowel harmony in both the nominal and the verbal systems of Ibilò. The vowels fall into two harmony sets of four each: the expanded /i, e, o, u/ and the non-expanded /ε, a, ɔ, ω/.

#### 4.17.8. *Tone*

Ibilò exhibits a 'two tone plus downstep' system. There is no evidence of synchronic downdrifting in my data, although Akinlabi (1979) rather routinely claimed downdrift exists in Ibilò. One notices that Akinlabi presents no instrumental evidence of downdrift even though he presents such evidence to show that high, low, etc., tones occur.

The downstep in Ibilò is limited in occurrence and is unlikely to be successfully analysed as a 'mid' tone.

#### 4.17.9. *Morphology*

Ibilò has a noun class system that compares very well with those already mentioned for Ọlọma and Èmhalhẹ. There are CV-prefixes and there are CV-concord prefixes. Class pairing

(gender) is largely semantically determined. Obiḡmah (1979) undertook a modest study of the Ibilo noun class system - with some interesting revelations.

#### 4.17.10 *Other sources*

Elugbe (1973); Akinlabi (1979); and Obiḡmah (1979).

#### 4.18. *Uhami*

##### 4.18.1. *Syllable structure*

CV or V.

##### 4.18.2. *Consonant inventory*

	m		n	ḥ				
p	b	t	d	k	g	kp	gb	
			r					
f	v	s	z	h				
			l		y		w	

##### 4.18.3. *Notes*

/k/ and /g/ have palatal allophones [c] and [ɟ] respectively before /i/.

/n/ has a palatal allophone, [ɲ], before /i/.

/s/ has a palato-alveolar allophone, [ʃ], before /i/.

##### 4.18.4. *Consonant contrasts*

Uhami has one of the simplest consonant systems of any Edoid language. (For the geographic location of Uhami and its relationship with Ọlḡma, Ẹmhalḡ, Ibilo, and other Southern North-Western Edoid languages, see chapter 1).

##### 4.18.5. *Vowel inventory*

/i, e, ε, a, ɔ, o, u/

##### 4.18.6. *Notes*

All vowels are nasalized after nasal consonants.

##### 4.18.7. *Vowel harmony*

There is no trace of vowel harmony in Uhami.

#### 4.18.8. *Tone*

Within the scope of the limited data at my disposal, high and low tones were found to be distinctive. A third mid level was also identified but it will probably be analysed as a downstep. Elugbe (1973) gives an example that suggests there may be down-drift in Uhami but makes the point that his informants were inconsistent with tone.

#### 4.18.9. *Morphology*

Uhami and the other languages of the Ọsse cluster have the simplest morphology in Edoid, a fact that may not be unconnected with their being totally surrounded by Akokoid/Yoruboid languages. There is no pluralization of the kind noted elsewhere in Edoid and stems are mostly monosyllabic.

#### 4.18.10. *Other sources*

Elugbe (1973).

#### 4.19. *Ehuẹun*

##### 4.19.1. *Syllable structure*

As with other NWE languages, CV and V syllable types are attested in Ehuẹun.

##### 4.19.2. *Consonant inventory*

b		t	d	k	g	kp	gb
		ɾ	r				
ɸ	β	f	v	s	z	h	
				l		y	w

##### 4.19.3. *Notes*

/k/ and /g/ have palatal allophones before /i/.

/s/ also has a palato-alveolar allophone before /i/. According to Elugbe (1973) /β/ is a nasal [m] before nasal vowels.

/l/ also has a nasal allophone, [n], before nasal vowels.

/y/ and /w/ also have nasalized allophones before nasal vowels.

/h/ has a velar allophone, [x], before close vowels /i/ and /u/.

#### 4.19.4. *Consonant contrasts*

Ehuḡun, like Uhami (section 4.18) and Ukue (4.20), has a consonant system with contrasts much reduced beyond the level found in other non-Ḡsse Edoid languages.

#### 4.19.5. *Vowel inventory*

There are seven oral vowels and five nasal ones. The oral vowels are /i, e, ε, a, ɔ, o, u/ and the nasal ones are /ĩ, ẽ, ã, õ, ũ/.

#### 4.19.6. *Notes*

As usual, /e/ and /o/ have no nasal counterparts. /i/, /ĩ/, /u/, and /ũ/ have approximant counterparts as mentioned for other Edoid languages.

#### 4.19.7. *Vowel harmony*

There is no evidence of vowel harmony in my Ehuḡun data.

#### 4.19.8. *Tone*

Elugbe (1973) makes the point that the Ehuḡun system is probably in a fluid transitory stage. Arguing that the system lends itself to a three-level (high, mid, low) analysis as well as to a 'two tone plus downstep' one, Elugbe nonetheless opts for a three-level analysis.

#### 4.19.9. *Morphology*

See section 4.18.9.

#### 4.19.10. *Other sources*

Elugbe (1973).

### 4.20. *Ukue*

#### 4.20.1. *Syllable structure*

CV, V.

#### 4.20.2. *Consonant inventory*

b	t̪	d̪	t	d	k	g	kp	gb
β	f	v	r̥	r	h			
			l			y		w



#### 4.20.3. Notes

Ukue has no /s/ or /z/; instead of /s/ we find /r̥/ which is in fact a post-alveolar fricative [ɻ̥]. /r/ is a voiced alveolar trill.

The velar plosives, /k/, /g/, have palatal allophones before /i/.

/r̥/ is realized as [ʃ] before /i/.

[m] occurs as an allophone of /β/ while [n] is an allophone of /l/ - both before nasal vowels.

#### 4.20.4. Consonant contrasts

See section 4.19.4.

#### 4.20.5. Vowel inventory

Oral vowels are: /i, e, ε, a, ɔ, o, u/.

Nasal vowels are five in number: /ĩ, ẽ, ã, õ, ũ/.

#### 4.20.6. Notes

Ukue and Ehuẹun differ from Uhami in having significant vowel nasalization. /e/ and /o/ have no nasal counterparts.

#### 4.20.7. Vowel harmony

There is no evidence of vowel harmony in my Ukue data.

#### 4.20.8. Tone

Two significant levels are attested in my data: high and low. In items borrowed from Yoruba, mid tone occurs.

#### 4.20.9. Morphology

See section 4.18.9.

#### 4.20.10. Other sources

Elugbe (1973).

## PART THREE

### CHAPTER 5

#### PROTO-EDOID PHONOLOGY

##### 5.0. *I n t r o d u c t i o n*

In this chapter I present the essence of this whole exercise which was designed to culminate in the reconstruction of Proto-Edoid phonology. There is one major area of investigation that is sadly lacking in my effort: tonal reconstruction. In extenuation of that omission (which I say is deliberate) I offer the explanation that one would require a separate project, devoted solely to the investigation of PE tone. I investigated many languages with different kinds of tone system: three plain level tones; two level tones plus downstep (but not downdrift); two level tones plus final low raising; classical two level tones plus downdrift; etc. Somewhere within all this - in combination or with modification - lies the system operated in PE.

As is well known, the data that will give us a useful insight into the segmental aspects of the phonology of a given tone language may not suffice to give us the same insight into its tonal aspects. This fact is already evident from the sketchy and uncertain nature of the statements that I have made about tone in most of the languages whose sound systems I presented in chapter 4.

In the following pages, therefore, we shall not speculate on the nature of the tone system of PE. It seems clear, however, that PE may not have classified its verbs tonally, though its nouns did fall into different tone groups. This follows from our observation that this state of affairs exists in the modern Edoid languages.

Two notational conventions arising from the foregoing are that tone will not be marked in reconstructed PE items and that my earlier practice of not marking tone on verb stems cited from any Edoid language will continue.

The rest of this chapter is devoted to non-tonal aspects of PE phonology and morphology.

5.1. *The consonant system of PE*

5.1.1. *The inventory*

In Table 3, I present a systematic phonetic inventory of the consonants reconstructed for PE:

TABLE 3: PROTO-EDOID CONSONANTS

STOP											
Implosive											
			ɓ		ɗ						
lenis	ph	bh	th	dh	ch	ʔ	kh	gh	kph	gbh	
Plosive											
non-lenis	p	b	t	d	c	ɟ	k	g	kp	gb	
NASAL											
lenis		mh		nh				N			
non-lenis		m		n							
FRICATIVE											
	f	v									
APPROXIMANT											
				l		v	G			w	

Table 3 highlights a number of issues which require further discussion: the occurrence of implosives; the extensive reconstruction of lenis/non-lenis sets; the reconstruction of labial-velars instead of labialized velars; etc.

5.1.2. *The implosives*

Two implosives - i.e. stop consonants with glottalic suction - have been reconstructed for PE. They are \*ɓ and \*ɗ, the voiced bilabial and the voiced alveolar implosives respectively. Although synchronic evidence of suction is to be found only in DE (we ignore the occurrence of [p<sup>c</sup>], an unvoiced velarized bilabial implosive, in Isoko (SWE) for the time being), the evidence for its reconstruction in PE is straightforward.

As can be seen from Tables 4 and 5, there are two sources for the implosives in Delta Edoid: original PE implosives \*ɓ and \*ɗ and PE voiced lenis bilabial and alveolar plosives. In other words, Delta Edoid introduced a rule which shifted voiced lenis bilabial and alveolar plosives to their implosive counterparts.



Table 4  
Correspondences for PE labials

	Proto-Ędoid	f	ph	p	v	β	bh	b	mh	m
DE	Degema	f	f	f	v	β	β	b	m	m
	Ęgene	f	f	f	v	β	β	b	m	m
	Epie	f	f	p	v	β	β	b	m	m
SWE	Ęruwa	f	v	f	v	b	ɸ	b	ɸ	m
	Isoko	f/h	ṽ	f	v	b	ɸ	b	m	m
	Okpe	f	φ	f	v	b	ɸ	b	m	m
	Urhobo	f	φ	φ	v	b	ɸ	b	m	m
	Uvbię	f	?	?	v	b	ɸ	b	m	m
NCE	Ędo	h	h	f	v	b	w/v	b	ṽ	m
	Aoma	h	h	f	v	b	β	b	m	m
	Auchi	f	f	f	v	b	ɸ	b	mh	m
	Avbianwu	f	f	p	v	b	ɸ	b	mh	m
	Unęme	f	f/h	f	v	b	ɸ	b	mh	m
	Ghotuę	f	f	f	v	b	ɸ	b	mh	m
NWE	Qlęma	f	f	f	v	b	?	b	m	m
	Ęmhalę	f	?	f	v	b	b	b	mh	m
	Ibilo	f	?	f	v	b	bh	b	mh	m
	Uhami	f	f	f	v	b	v	v	m	m
	Ęhuęun	f	f	f/φ	v	b	b	β	m	m
	Ukue	f	f	f	v	b	b	b	m	m



Table 5  
Correspondences for PE alveolars and palatals

	Proto-Èdoid	th	t	ɖ	dh	d	l	nh	n	ch	c	tʃ	y
	Dègema	t	t	ɖ	ɖ	d	?	n	n	s	s	z	y
DE	Egèṅè	t	t	ɖ	ɖ	d	l	n	n	s	s	z/y	y
	Epie	t	t	ɖ	ɖ	d	l	n	n	s	s	z	y
	Èrṳwa	r/t	t	d	ɹ	s	l	ĩ	n	y	s	?	?
	Isoko	r/t	t	d	f	t̃	l	f	n	z	s	dʒ	?
SWE	Okpè	r̥	t	d	f	s	l	f	n	r̥	s	tʃ	?
	Urhobo	r̥	t	d	l	c	?	ŋ	n	r̥	s	ʒ	?
	Uvbìe	r/t	t	d	f	c	?	ŋ	n	s	s	ʒ	?
	Èdo	r̥	t	d	l̥	d	l	ĩ	n	h	s	z	y
	Aoma	r	t	d	∅	d	l	∅	n	h	s	z	∅
	Auchi	r	t	d	l	d	n	l	n	s	ts	dz	y
NCE	Avbianwu	r	t	d	l	d	n	l	n	s	ts	dz	y
	Unèṅè	ɹ	t	d	l	d	n	ŋ	n	sh	s	z	y
	Ghotuo	r/t	t	d	∅/l	d	l	ŋ	n	h/ʒ	s	z	y
	Ọloma	h	h	d	l̥	z	?	ŋ	n	z	s	?	?
	Èmhalhè	h	h	d	r	z	?	ŋ	n	z̃	s	tʃ	?
	Ibilo	h	h	d	r	dz	?	ŋ	n	z̃	s	tʃ	ʃ
NWE	Uhami	s	h	d	r	z	r	n	n	s	s	tʃ	h
	Ehueṅun	ɹ̥	s	d	r	z	?	n	n	ɹ̥	s	tʃ	?
	Ukue	ɹ̥	t̃	d	d	ɖ	?	n	n	ɹ̥	ɹ̥	y	h

Thus:

- (1) \*bh > ɸ (cf. 'dog', 'oil')  
\*dh > ɖ (cf. 'eye', 'swallow', 'eat')

Although the shifts in (1) involved only the changing of a lenis feature to a suction one (which is natural enough when we recall that implosives are generally considered weak) it should be noted that the rule was restricted to 'voiced bilabial' and 'voiced alveolar'. There is no example of a voiceless lenis consonant of PE becoming implosive in to-day's languages.

Outside DE, a suction consonant, p<sup>c</sup>, occurs only in the SWE language, Isoko. However, this sound is derived from both PE lenis and non-lenis labial-velars.

The loss of suction outside DE was achieved by the simple expedient of changing suction consonants, \*ɸ, \*ɖ to non-suction b and d. (See Tables 4 and 5; see also 'be many', 'buy', etc.).

### 5.1.3. Labial-velar stops

Four labial-velar stops must be reconstructed for PE: kph and kp (voiceless) and gbh and gb (voiced). The evidence for this is interesting.

In Table 6 below, the first point that strikes one about the columns for \*gbh and \*gb is the occurrence of voiceless reflexes for \*gb in SWE. Once we take devoicing into account (see 5.1.5 below), all we have to do is find out which original labial-velar stop has voiceless reflexes and which does not. To put the question directly: in SWE, did devoicing in labial-velars occur with the lenis \*gbh or with the non-lenis \*gb? Since non-lenis sounds are more likely to become devoiced, it is more plausible to say that it is PE non-lenis \*gb that has voiceless reflexes in SWE.

The second point is the reconstruction of labial-velars instead of labialized velars. Evidence in support of this is the fact that labial-velar reflexes are more common than labialized velar ones (see Table 6).

Table 6

Correspondences for PE velars and labial-velars

	Proto-Ēdoid	kh	k	gh	g	kph	kp	gbh	gb	w
DE	Degema	k	k	w	?	kp	kp	gb	gb	?
	Ēgēne	k	k	w	?	kp	kp	gb	gb	w
	Epie	k	k	w	g	kp	kp	gb	gb	
	Ēruwa	h	k	w	?	kp	kp	gb	gb	?
SWE	Isoko	h	k	ɣ	ɣ	p̣	p̣	gb	p̣	?
	Okpē	y/w	k	h	?	kp	kp	gb	*kp	?
	Urhobo	h	k	ɣ	?	xw	kp	gb	xw	?
	Uvbiē	h	k	g	?	kp	kp	gb	xw	?
	Ēdo	x	k	ɣ	g	kp	kp	gb	gb	?
NCE	Aoma	x	k	∅	g	xw	kp	gb	gb	∅
	Auchi	kh	k	ɣ	g	kph	kp	gb	gb	∅
	Avbianwu	kh	k	ɣ	g	kph	kp	gb	gb	?
	Uneme	kh	k	h	g	kph	kp	gb	gh	yh
	Ghotuq	h	k	∅	g	xw	kp	gb	gb	∅
	Oloma	?	k	∅	?	?	kp	gb	gb	?
NWE	Ēmhalhe	?	k	g	g	kph	kp	gb	gb	w
	Ibilo	kh	k	g	g	kph	kp	gb	gb	w
	Uhami	k	k	g	g	kw	kw	gb	gb	w
	Ehueun	k	k	g	g	kw	kw	w	gb	w
	Ukue	k	k	g	g	kw	kw	gb	gb	w

5.1.4. *Palatal plosives*

One peculiarity observable in the palatal obstruent columns of Table 5 is the absence of palatal reflexes. This might have led one to reconstruct alveolars from the three sets of correspondences (as did Elugbe 1973). As there are already convincing correspondences from which the alveolar stops were reconstructed in Table 5, one would be tempted to postulate alveolar affricates and/or fricatives to account for what are presented as palatal columns in the table (see (2a) below).

However, examination of the alveolar and the palatal obstruent columns in Table 5 reveals that (a) PE \*d has palatal/dental reflexes in SWE and (b) PE \*ch and \*c have alveolar reflexes in SWE. Taking these observations into account, one can reconstruct additional stops - this time at the palatal place (as seen in (2b)):

(2)	<u>a</u> (cf. Elugbe 1973)		<u>b</u> (cf. table 3 above)
	Implosive	ɖ	ɖ
	Plosive lenis	th dh - -	th dh ch -
	non-lenis	t d - -	t d c
	Affricate	ts dz - -	- - - -
	Fricative	s s' - -	- - - -

Examination of Tables 5 and 7 reveals a curious series of shifts including that in which PE \*d became devoiced as well as palatalized in SWE, as seen in Table 7.

TABLE 7: PROTO-SOUTH-WESTERN EDOID ALVEOLAR/PALATAL OBSTRUENTS

PE	*th	*t	*dh	*ɖ	*d	*ʄ	*c	*ch
PSWE	*th	*t	*dh	*d	*c	*ʄ	*s	*z
Èrùwa	t	t	r	d	s	z	s	z
Isoko	r	t	ɾ	d	t	d	s	z
Okpẹ	ɾ	t	ɾ	d	s	ʄ/z	s	r
Urhobo	ɾ	t	l̥	d	c	ʒ	s	r
Uvbiẹ	r	t	ɾ	d	c	ʄ	s	r



A total view of the alveolar/palatal obstruent situation in PE compared with its reflex in PSWE shows that there is no need to reconstruct affricates or fricatives at the PE level. What we see in (3) below is the full implication of Table 7:

(3)	PE	*ɖ	>	PSWE	*d
		*th	>		*th
		*t	>		*t
		*dh	>		*dh
		*d	>		*c
		*ch	>		*z
		*c	>		*s
		*ʃ	>		*ʒ

These shifts from PE to PSWE can be explained in terms of two developments: first is the palatalization and devoicing of PE \*d in SWE; second is the subsequent 'fronting' of the original palatals into alveolars. It must have been a typical drag-chain situation.

In order to fully understand all this, we must quickly look at the loss of suction in all but the Delta Edoid subgroup. The PE implosives \*ɓ and \*ɖ simply lost their suction feature and became plosives in SWE (see Tables 4 and 5), thus triggering the following events:

(4)	PE	*ɖ	>	PSWE	*d
		*d	>		*c
		*ch	>		*z
		*c	>		*s

The picture which emerges from all this is so clear that there seems little need to explain it further. We have only to explain why we reconstruct palatal \*ch and \*c where there are no palatal reflexes. A look at Table 5 shows that the relationship between the reflexes for \*ch, on the one hand, and \*c, on the other, is exactly parallel to what we observe in the case of other lenis/non-lenis pairs such as th:t; nh:n, etc. And once we thus accept that \*ch and \*c form a lenis/non-lenis pair, \*c has to be a palatal.

Finally, it is observed in Table 3 that I have not reconstructed \*ɣh to match \*ɣ. There are a number of items which suggest that there may have been \*ɣh in Proto-Edoid but they all involve the sequence -iV and have g- or gh-/ɣ- reflexes in some cases. It thus appears easier to explain such cases as deriving from \*ghiV-. (See 'send', 'twenty'.) In some respects, even the reconstruction of \*ɣ requires further support.

#### 5.1.5. *Devoicing*

Table 5 shows very clearly that PE \*d has voiceless reflexes in the whole of SWE. Although devoicing was observed and documented in Elugbe (1973:328-330), its role in the reconstruction of the over-all PE consonant system was not appreciated.

However, as pointed out above (section 5.1.3), recognition of the role of devoicing enabled us to separate PE \*gbh from \*gb: in the 1973 work, the inclusion of \*gbh was an act of faith. Similarly, the recognition of the role of 'palatalization and devoicing' of PE \*d in SWE (section 5.1.4.) enabled us to find a solution to the issue of whether or not there were palatals in PE.

It is significant from a general point of view that devoicing is here associated with non-lenis consonants. The opposite of this process in the Edoid context is 'breathy-voicing' which is associated with lenis consonants.

#### 5.1.6. *Lenis/non-lenis*

The most widely discussed feature of the Edoid languages is the lenis feature (see Elugbe 1980a for a comprehensive review of the literature). I have already discussed this feature in Chapter 2. The lenis consonants are the h-series in Table 3.

As I pointed out in the 1980a work, most of the sound shifts observed in Edoid hinge on the development of this feature in the individual languages. As can be seen from Tables 4, 5, and 6, lenis consonants of PE have the most varied reflexes in the Edoid languages. The examples of \*bh vs \*b, \*mh vs \*m, \*dh vs \*d, etc., amply demonstrate this. The implication of this is that the lenis

consonants are marked while the non-lenis ones are unmarked. My reference to this distinction as a lenis/non-lenis one is meant to reflect this implication.

Synchronic evidence for seeing the lenis as the marked set derives from two observations: (1) the non-lenis consonants are phonetically more like what we find in languages which have no lenis/non-lenis distinction. For example, a native speaker of Ibilo will equate the non-lenis voiced alveolar lateral approximant [l] with the English lateral approximant [l]; (2) children (as well as foreign learners of an Edoid language) more easily master the non-lenis consonants than the lenis ones (see Elugbe 1980a:41 where this point is amplified with a Ghotuḡ example).

#### 5.1.6.1. *Lenisness and consonant weakening*

Both weakening and hardening in consonants represent a movement along the stricture scale. In consonant weakening the movement is down the scale, towards possible termination - often called zero. In hardening, the movement is up the scale (cf. Williamson 1977).

Consonant weakening can thus be seen as a process in which a stop becomes a fricative, then an approximant, and, finally, zero. In general, it is the lenis sounds that have been most prone to weakening. It is, for example, unusual to have a zero reflex for any of the PE non-lenis consonants, whereas lenis sounds have frequently been lost.

If we agree with Foley (1977:50) that 'weakening applies preferentially to weak elements', then our observation that lenis sounds are more prone to weakening than non-lenis ones confirms the view that lenis consonants are weaker than non-lenis ones.

##### 5.1.6.1.1. *Non-affricated stop becomes affricated*

This represents an example of weakening because although there is still a stop element in the affricate, there is also a fricative element in it and the sudden release in the non-affricated stop has been converted into a gradual one. Thus



- (5) \*c > ts  
       \*ɟ > dz

There are not many examples of this in the data now available, but it is supported by examples from the two Yekhee dialects of Auchi and Avbianwu as in 'faeces', 'shoot/hit', and 'choose'.

5.1.6.1.2. *Labial-velar becomes labialized velar*

In Elugbe (1980a) these were treated in the reverse - i.e. as cases of labialized velar becoming labial-velar, and therefore as examples of hardening. However, as pointed out in section 5.1.3. above, postulating \*kw, etc., instead of \*kp, etc., has no advantage and makes us postulate PE \*gw when the evidence is overwhelmingly for \*gb.

In terms of explanation, the weakening of the labial element, to change a case of double to one of secondary articulation, is more to be expected. The shifts involving \*kph and \*gb can thus be seen in stages:

- (6)a. \*kph > kw (in Ọsse, e.g. 'beat drum')  
       b. \*kph > xw (Urhobo, Aoma, Ghotuọ - 'beat drum')  
       c. \*gb > xw (Urhobo, Uvbiẹ - 'ten', 'beat/kill')

Now not only can we say that stage (6a) precedes stage (6b,c), we also have fewer shifts to postulate than if we had reconstructed PE labialized velars. Cases in (6c) are interesting because we assume that PE \*gb > PSWE \*kp, then weakened to xw in Urhobo and Uvbiẹ. In the case of Urhobo, the \*kp derived from PE \*gb was treated the same way as \*kph; Uvbiẹ and Ẹrụwa would appear to have kept \*kph and \*gb separate - in each case, with a weaker reflex for PE \*gb (see Table 6).

The cases in which a w-reflex turns up for an original labial-velar stop can be seen as a logical extension of this process: examples are PE \*gbh in Ehuẹun and PE \*gb in Ẹrụwa.

5.1.6.1.3. *Other degrees of weakening*

Since weakening is one continuous process, it is difficult to discuss the different stages independently of each other. For



example, the following stages of weakening exist (in addition to cases such as (5) and (6));

- (7) a. stop > fricative
- b. fricative > approximant
- c. approximant > zero

What we find in the Edoid situation is that different languages have carried the weakening process to different levels. In Ẹdo (Bini), PE \*kh > x; in Ghotuṣ \*kh > h. It is assumed here that at an earlier stage, the Ẹdo rule was true of Ghotuṣ which then proceeded to further weaken x > h.

In the same way, PE \*dh > ɺ in a number of Edoid languages. But the reflex of \*dh in Ẹruwa is ɾ; in Aoma it is Ø. The weakening of this original lenis stop to zero obviously goes through a number of stages. So, we do not say here that stops become zero, since evidence of intermediate stages exists.

Although the point has been made that lenis sounds are more prone to change - and to weakening in particular - there are examples of non-lenis stops which have weakened into fricatives. For example, the merging of \*ph and \*p in a number of these languages is due to the fact that, along with \*ph, \*p also becomes a fricative in the same languages. In Uhami, \*bh and \*b have merged, yielding v. In Dẹgẹma, Ẹgẹnẹ, Ghotuṣ, etc., many original stops (both lenis and non-lenis) have fricative reflexes. Thus, although PE lacked any fricatives other than the labiodental ones, (7a) is responsible for many Edoid languages being rich in fricatives (cf. also Elugbe 1974).

It is obvious, therefore, that (7b) could hardly be substantiated unless it was based on the cases of fricatives derived from other PE consonants. A reference to the tables of sound correspondences easily shows that where a PE stop weakened into a fricative, the process was carried further in some cases so that fricatives became approximants.

Finally, we do find cases of Ø-reflexes for stops - notably for \*dh and \*gh. In the case of \*dh we assume intermediate stages such as ɺ and ɾ. In that of \*gh we assume intermediate

y and/or w stages.

Unlike the case of PE stops and fricatives derived from PE stops, there are cases of a direct loss of a PE approximant. In 'song' and 'say' PE approximants must have been lost in those languages showing a  $\emptyset$ -reflex.

However, cases of epenthetic y or w must not be confused with original approximant reflexes of \*y, \*w, or some other consonants. Let us take the typical development of PE \*dh in some NCE languages.

- (8) a. First, \*dh > ɺ (a short/tapped alveolar lateral approximant, a sound that has baffled many investigators).  
b. Then ɺ > ɹ (a voiced alveolar central approximant).  
c. Finally ɹ >  $\emptyset$  (the approximant ɹ, already lacking in any central contact, is lost).  
d. But  $\emptyset$  > y (after loss of ɹ, a palatal approximant develops!).

The two items 'eat' and 'do, make' are very interesting here.

In some dialects of Edo (Bini), 'eat' is ye; it is e or æ in some others; and still ɺe in a number of others. In Ghotuḡ, the same person may say e 'eat' on one occasion and then yhe (with a weak palatal approximant) on another occasion. Yet the older generation consistently say ɺe 'eat'.

When we compare epenthetic cases of y (as in 'eat', 'do') with cases of original \*y (such as 'song') it becomes clear that in determining whether, in a particular case, we are dealing with epenthesis or a weakening to zero, we have to be careful to take the full set of correspondences involved in that item into account.

#### 5.1.6.2. *Lenisness and consonant hardening*

There are two cases to be considered here: (i) a lenis sound takes on the phonetic character of its non-lenis counterpart; (ii) a lenis sound becomes implosive (without any change in the point of articulation).

5.1.6.2.1. *Lenis sounds become non-lenis*

There are many examples of a lenis/non-lenis contrast being lost at a given place of articulation through the hardening of a lenis consonant, resulting in a merger with its non-lenis counterpart. For many Edoid languages (for which see Tables 4-6), this was a simple way of reducing the role of lenisness in the consonant system. Some examples are given in (9):

- (9)a. \*bh > b ('goat', 'dog')
- b. \*th > t ('tree')
- c. \*dh > d ('eat', 'do/make', etc.)
- d. kh > k ('to fight', etc.)
- e. kph > kp ('beat (drum)', 'horn')
- f. gbh > gb ('dance', etc.)
- g. mh > m ('my', etc.)
- h. nh > n ('meat', 'know')

It should be noted that in spite of (9f), which can be confirmed for all Edoid languages of the northern area, Yekhee dialects, Uneme (NCE), Oloma, Emhalhe and Ibilo (NWE) all retain an occasional gbh in their sound systems, although it has been impossible so far to link gbh-stems in such languages with PE stems which are reconstructable within available data.

5.1.6.2.2. *Lenis sounds become implosive*

Examples of this have been discussed in section 5.1.2.

5.1.7. *Consonants in -C<sub>2</sub>- position*

A look at the reconstructed PE stems will reveal that only the lenis sounds \*dh, \*ch, \*G and \*mh, \*nh, and \*N were permissible stem-medial consonants in PE. It also happens that the development of these consonants in medial position frequently differed from their development in stem-initial position.

The general tendency has been towards a reduction of the number of syllables in stems through (10):

- (10) PE \*CVCV > CVC > CV

or through (11):

- (11) PE \*CVCV > CVV > CV

In other words, stem reduction is achieved by first dropping the final vowel and then the  $-C_2-$ , now turned final consonant. Alternatively, the medial consonant is lost, yielding a vowel sequence which will be followed by later simplification of the sequence.

The fact that  $-C_2-$  should be a lenis consonant is not surprising. In a given stem, there is probably less effort available for a final syllable than for an initial syllable. This phonetic fact and the tendency of lenis consonants to further weaken and get lost have combined to create monosyllabic stems on a wide scale in the modern Edoid languages.

In the stem-reduction process, the DE languages have favoured (10) while the rest of Edoid have favoured (11). In (12) we compare some PE stems with their reflexes in the different sub-groups of Edoid.

(12)

	DE	SWE	NCE	NWE	Gloss
PE	Dəgəma	Isoko	Auchi	Ibilo	
E-nhamhɪ	è-nám	à-ràò	ε-lamhi	à-ṇà	meat
dedhi	der	ṭeṭei	rele	dzeli	be long
pɔchɪ	fɔsɛ	(vɔavɔ)	fɔ	fɔʒi	be cold
khɔnhɪ	kɔn	hɔrɪ	khɔe	khɔṇɔ	fight
ghU-chɔGɪ	ó-!sóó	ó-zó	é-ubò	ó-žbò	ear
dhI-kiNə	ú-!kié	é-ké	é-kèè	là-cà	egg

(12) is, of course, not fully representative of every possibility, but it does show the occurrence of final consonants in a DE language (as a result of (10)) where we have CV and CVV elsewhere. On the other hand  $-G-$  and  $-N-$  have been lost in DE while a sizable percentage of other  $-C_2-$  are retained even outside DE. Our claim about (10) and (11) is thus a rather simplified generalization. The reconstruction of  $-C_2-$  (usually the consonant of the final syllable) is done on an individual basis for each of the items where it is possible to reconstruct one at all.



Even so, a few generalizations must be made. For example, our -N- has no segmental reflex in any known Edoid language. It may never have been realized except as nasalization of surrounding vowels (see under section 5.2.2. below). On the other hand, we have segmental reflexes of -G- in 'ear', 'twenty', 'house'. It would appear that a kind of velar nasal or a nasalized velar (approximant?)  $\tilde{y}$  occurred, presumably as a nasal counterpart of G which was either a lenis velar stop or a velar fricative or approximant. The decision to reconstruct -G-, rather than -gh-, is based on the observation that its segmental reflexes in the Edoid languages are restricted to only a couple of languages in the NCE/NWE border area.

Our reconstructions must be taken at the systematic phonetic level. Underlyingly, the voiced lenis nasals [mh] and [nh] were probably /bh/ and /dh/ respectively. Once we link -G- and -N- in the same way, we can say that, phonologically, only \*/bh/ (in its nasal allophone only), \*/dh/, \*/ch/ (no nasal allophone has been reconstructed for this so far) and \*/G/ occurred at -C<sub>2</sub>- in PE.

Finally, a study of -C<sub>2</sub>- development should probably be based on a study of what the different -C<sub>2</sub>- consonants do, as determined by their place of articulation. Thus, no Edoid language has a segmental reflex for the velar -N-. But many retain actual reflexes of PE bilabial, alveolar, and palatal -C<sub>2</sub>-. In DE, bilabials and alveolars are retained. In Isoko, an occasional alveolar is retained. In Auchi, reflexes of the bilabial and alveolar -C<sub>2</sub>- occur. However, in Ibilo, only original PE alveolar and palatal -C<sub>2</sub>- have developed into actual phonetically available reflexes.

## 5.2. *The vowel system of PE*

### 5.2.1. *The inventory*

A ten-vowel system is postulated for PE. It is also postulated that any of these vowels could be nasalized in the environment of nasals; in particular, our reconstructed \*N may not have been realised as anything but nasalization of vowels around it (see sections 5.1.7 and 5.2.2.). Finally, it is suggested that PE

operated an elaborate but symmetrical vowel harmony system of the West African cross-height type (see section 5.2.3).

(13) PE vowels

i	u
ɪ	ʊ
e	o
ɛ	ɔ
ə	
a	

#### 5.2.2. Vowels, nasals, and nasalization

In 1973, I suggested that significant vowel nasalization occurred in PE and that of all the vowels only \*e and \*o had no significantly nasalized counterparts. This suggestion was based on the observation that no \*ẽ and \*õ could be convincingly reconstructed for PE.

Nasalization in the modern Edoid languages is often traceable to PE -mh- and -nh-, i.e. -C<sub>2</sub>- nasals, which have been lost. But there are also cases where synchronic nasalization is not traceable to PE lenis nasals in -C<sub>2</sub>- or any other position. It is for such cases that significant nasalization is postulated, giving us C $\tilde{V}$  and C $\tilde{V}\tilde{V}$  examples in the 1973 work. In the 1977 work by Elugbe and Williamson, PE \*C $\tilde{V}$  and \*C $\tilde{V}\tilde{V}$  are said to have been derived from a pre- or early Proto-Edoid form in which a velar nasal -C<sub>2</sub>- occurred. Thus

(14) 1973  $\omega$ -thãĩ  
 1977  $\omega$ -thaŋɪ  
 1980a and present work:  $\omega$ -thaNɪ

My present position is a modification of the 1977 position. The postulation of N is for PE rather than a pre-PE stage; but I do not claim that the consonant responsible for nasalization in such cases was exactly -ŋ-.

In making a case for a Pre-PE -ŋ-, Elugbe and Williamson point to two facts which are relevant: (1) the irregularity of having

-mh- and -nh- but not -ŋh- or -ŋ- (our -N-), and (2) the derivation of significant nasalization from the loss of -mh- and -nh-. Their examples are sufficiently interesting to warrant reproduction here in a modified form (see (15) and (16) below).

If we assume that the typical PE stem was CVCV (and occasionally CV, CVV or CVC), in which -C<sub>2</sub>- was frequently a nasal -mh-, -nh-, or -N-, we find that all Edoid languages have lost -N-, with faint traces left in the form of vowel nasalization, while the bilabial and alveolar -mh- and -nh- are retained here and there. Using Dɛgɛma, ɛgɛɛ (DE), Isoko (SWE), Aoma (NCE), and Ibilo (NWE) as examples, we find that

(15)	Proto-Edoid	CVmhV	CVnhV	CVNV;
	> Dɛgɛma	CVm	CVn	CṼṼ/CVV
	> ɛgɛɛ	CVm	CVn/CVnV	CVV
	> Isoko	CVV	CVɾV	CVV/CV
	> Aoma	CVmV	CṼ	CṼ
	> Ibilo	CV	CVnV	CV

The languages in (15) are not representative of what happens within each subgroup of Edoid. For example, the Isoko examples obscure the fact that PE -mh- is retained as -m- in Okpɛ, also a SWE language. However, they do give an idea of the variety of processes by which vowel nasalization and stem reduction have taken place in Edoid. (16) is a practical demonstration of (15) with examples (note in the case of Dɛgɛma that CṼṼ is derived from PE \*CVNI while CVV is derived from \*CVNA, where I = i ~ ɾ and A = ə ~ a, depending on vowel harmony):

(16)	PE	E-nhamhɾ	khɔnhɾ	U-thaNɾ	dhI-kiNə
	De	è-nám	kɔn	ó-!thǎí	ú!kíé
	Eg.	à-nám(ə)kɔn(ɾ)		è-tàì	í-kìè
	Is.	à-ràò	hɔɾɾ	ú-ré	é-ké
	Aoma	é-àmì	xɔĩ	ó-rǎ	é-kè
	Ibilo	à-nà	khɔɲɔ	ú-ɾà	lá-cà
	Gloss	meat	fight	tree	egg

It is not possible to say that all the Edoid languages drop -mh- before -nh- or vice versa. What is clear is that the most unpopular -C<sub>2</sub>- is the velar -N-. Beyond that, some languages have dropped -nh- while retaining -mh- (e.g. Aoma); some others have dropped -mh- while retaining -nh- (e.g. Ibilo).

It should be recalled again that our reconstruction is at a systematic phonetic level. Therefore, our surface PE \*CVmhV, \*CVnhV, and \*CVNV may have been underlyingly \*/CVbhṼ/, \*CVdhṼ/, and \*/CVG̃Ṽ/ respectively. Cases which we now reconstruct as \*CVN would be \*/C̃V/ or \*/CVG̃~/. However, our \*CVNV (possibly < \*/CVG̃Ṽ/) were reconstructed as \*C̃ṼṼ in the 1973 work. The case made by Elugbe and Williamson (1977) provides some non-Edoid comparative-historical evidence for my position here.

### 5.2.3. *Vowel harmony*

The distribution of vowels in the reconstructed PE lexicon leads to the conclusion that PE operated vowel harmony of the Kwa type in which the vowels fall into two sets, one characterised by an expanded pharynx and the other by the absence of such expansion (cf. Lindau 1975; Stewart 1967). The two sets, classified in terms of Lindau's feature, are shown in (17):

(17)	Set 1		Set 2	
	Expanded pharynx		Non-expanded pharynx	
	i	u	ɪ	ʊ
	e	o	ɛ	ɔ
	ə		a	

According to the vowel harmony rule, all affix vowels had to agree with stem vowels in terms of the feature of pharynx width; in the case of polysyllabic stems, all the vowels had to agree in pharynx width.

There is a reduced role for vowel harmony in the Edoid languages, and it is observed that the more the vowels in a given system, the greater the role of vowel harmony. Thus vowel harmony is virtually non-existent in the North-Central Edoid languages (Èdo, Auchì, Ghotuò, etc.), where the original ten-vowel system has been reduced to seven. In Delta Èdoid where ten-vowel systems



exist, vowel harmony is at its most symmetrical and obligatory. The NWE and SWE situations are intermediate between these two extremes.

#### 5.2.4. *Vowel system reduction*

The implication of postulating a ten-vowel system for PE is that most Edoid languages have reduced the original system in various ways. The first step is to prove that we are dealing with reduction rather than expansion in the Edoid situation. That is easily done by examining Table 8, where it is clear that while \*i and \*e have regular i- and e- reflexes in the Edoid languages, \*ɪ shifts to i, ɪ, e, or ε! Similarly, while \*u and \*o have u- and o- reflexes respectively, \*ɔ has reflexes ranging from u, ɔ, to o or ɔ. These observations are parallel to what happens in the case of \*ə and \*a. \*ə has a very varied set of reflexes but \*a does not.

Our next task is to draw some generalizations from the way in which the original ten-vowel system has been reduced in the Edoid languages.

- (18) a. In the nine-vowel systems, there is no /ə/.
- b. In the eight-vowel systems, there is no /ə/ and no /ɪ/.
- c. In the seven-vowel systems, there are no /ə, ɪ, ɔ/.

An example of (18a) is Eḡeḡe. Ibilo is an example of (18b) while all NCE provide examples of (18c). An examination of the individual systems in (18a, b) will show that [ə] remains as an allophone of /a/ in the case of (18a) while [ɪ] remains as an allophone of /i/ in (18b).

In the ten-vowel system of Degema, /ə/ is forbidden in noun prefix position; in the nine-vowel system of Eḡeḡe, /ɪ/ and /ɔ/ are forbidden in prefix position. It would appear that this is one of the ways in which vowel system reduction is likely to be initiated.

The following diagram in (19) summarises the preceding discussion.

TABLE 8: VOWEL CORRESPONDENCES IN EDOID

		i	ɪ	e	ɛ	ə	a	ɔ	o	ɔ	u
DE:	Ḑẹḑema	i	ɪ	e	ɛ	ə	a	ɔ	o	ɔ	u
	Ḑẹḑeḑe	i	ɪ	e	ɛ	e	a	ɔ	o	ɔ	u
	Epie	i	ɪ	e	ɛ	e	a	ɔ	o	ɔ	u
SWE:	Ḑḗḗwa	i	ɪ	e	ɛ	ɛ	a	ɔ	o	ɔ	u
	Isoko	i	ɪ	e	ɛ	e/ɛ	a	ɔ	o	ɔ	u
	Okpe	i	ɪ	e	ɛ	ɛ	a	ɔ	o	ɔ	u
	Urhobo	i	e	e	ɛ	ɛ	a	ɔ	o	o	u
	Uvbie	i	ɪ	e	ɛ	ɛ	a	ɔ	o	ɔ	u
NCE:	Ḑdo	i	e	e	ɛ	a	a	ɔ	o	o	u
	Aoma	i	e	e	ɛ	a	a	ɔ	o	o	u
	Auchi	i	e	e	ɛ	a	a	ɔ	o	o	u
	Avbianwu	i	e	e	ɛ	a	a	ɔ	o	o	u
	Uneme	i	e	e	ɛ	ɔ	a	ɔ	o	o	u
	Ghotuḑ	i	e	e	ɛ	a	a	ɔ	o	o	u
NWE:	Ḑlḑma	i	ɛ	e	ɛ	a	a	ɔ	o	u/ɔ	u
	Ḑmhalhe	i	ɛ	e	ɛ	a	a	ɔ	o	ɔ	u
	Ibilo	i	ɛ	e	ɛ	a	a	ɔ	o	ɔ	u
	Uhami	i	i	e	ɛ	a	a	ɔ	o	u	u
	Ehuḑun	i	i	e	ɛ	a	a	ɔ	o	u	u
	Ukue	i	i	e	ɛ	a	a	ɔ	o	u	u

(19)

i	u
ɪ	ʊ
e	o
ɛ	ɔ
	ə
	a

Although \*/ə/ is not reconstructed in my 1973 work, there is no doubt that it should have been reconstructed. The inclusion of Dɛgɛma and Unɛmɛ in my data added a new dimension to the picture; but even without that, the correspondences observed in 'two' and 'river' were enough to have suggested \*ə in the first instance.

Just how versatile \*ə has been is evidenced by the variety of reflexes shown in Table 8 and in (19).

#### 5.2.5. *Vowel sequences*

Vowel sequences are widely attested in the Edoid languages. The sequences are either closing or opening. A closing sequence of vowels is one in which the final vowel is closer (i.e. higher on the Height scale) than the first. On the other hand, an opening sequence is one in which the final vowel is more open (i.e. lower on a Height scale) than the first.

Thus we find opening sequences such as -iV, -ɪV, -ʊV, and -uV in which V is lower than the close i, ɪ, ʊ, u. On the other hand typical closing sequences are -ei, -aɪ, -ɔɔ, -ou, etc.

There are more sequences in a typical modern Edoid language than we postulate for Proto-Edoid. This arises from the fact that most Edoid languages have zero-reflex for the PE -C<sub>2</sub> -mh-, -nh-, etc. (see section 5.1.7 above).

In assessing the validity of our reconstruction of any item, it has to be recalled that in some of these languages, vowels in sequence in stems (whether originally in sequence at the PE level or derived later from CVCV stems) have sometimes coalesced to form other single vowels.

It is not unusual to find cases such as (20):

(20) uə / o  
əa > ə

It is impossible to draw generalisations here and the validity of each case should be considered in isolation. The point is made in Elugbe (1973) that languages of the Qssę cluster of NWE show more evidence of coalescence than anywhere else in Edoid. I have no evidence to alter that observation.

### 5.3. *Proto-Edoid morphology*

I have argued above that the typical PE stem was of the structure CVCV. Some stems were obviously more than two syllables, just as some were monosyllabic.

In C<sub>1</sub>- position of the stem, every consonant could occur, with the exception of -G- and -N- which occurred only as stem-medial consonants (see section 5.1.7 above).

However, in -C<sub>2</sub>- position, only a few lenis consonants occurred and these, reconstructed at a systematic phonetic level, were the oral -dh-, -ch-, and -G- and the nasal -mh-, -nh- and -N- (see section 5.2.2. for a discussion of the possible relationship between the oral and the nasal consonants).

If consonants in stem-medial position were restricted to a handful of lenis consonants, possible stem-final vowels were even more restricted: only \*i, \*ɪ, \*ə and \*a are reconstructed in -C<sub>2</sub>V position (the case of 'lick' is probably two stems from \*la 'lick' and \*dhəNɪ 'swallow' or some other such combination). When we take vowel harmony into account, then we can say that only \*I and \*A occurred stem-finally because every second/final syllable in Edoid agreed in pharynx width with other vowels in the stem. Thus we postulate that the system of vowel harmony operated by PE made the vowels in a given stem to be all with an expanded pharynx or all with a non-expanded pharynx.

In the modern Edoid languages, affixes of various types are attested. In some of them, affix vowels take a non-expanded shape in agreement with non-expanded stem-vowels and take an expanded shape with expanded stem vowels.



PE operated a noun class system in which a noun was marked by a singular/plural pair of prefixes. There is also evidence to suggest that each singular/plural class of nouns attracted concordial elements by which grammatical reference to it was marked. While the noun prefixes can be convincingly reconstructed, the concordial elements attached to them may not be equally easy to reconstruct. That is because only the Southern-NWE languages have retained a fairly elaborate, semantically based system of concord in their noun classes. Elsewhere, agreement between a given noun and its modifier, for example, is limited to number.

5.3.1. *Noun prefixes of PE*

The following noun prefixes may be reconstructed for PE:

(21)	sg. prefixes	pl. prefixes	single-class prefixes
	CV-: ghU-	V-: A-	V-: A-
		I-	I-
	V-: U-		U-
	I-		
	E-		
	O-		
	A-		

Each capital letter in (21) summarizes two alternants determined by vowel harmony. Thus U- represents an u ~ o alternation; I = i ~ ɪ; E = e ~ ε; O = o ~ ɔ; and A- = ə ~ a. It is unlikely that tone played a part in the determination of noun classes in PE because no modern Edoid language has shown any evidence of the involvement of tone in noun classification of any type - gender or number. The noun prefixes listed in (21) are paired as in (22):

- (22)
1. ghU-/A-
  2. U-/A-
  3. U-/I-
  4. dhI-/A-
  5. I-/A-
  6. O-/A-

7. O-/I-
8. E-/I-
9. A-/I-
10. A-
11. I-
12. U-

The reconstructed PE pairings are compared with Proto-Bantu and Proto-Benue-Congo (De Wolf 1971) class pairings in Table 9 below.

TABLE 9. PROTO-EDOID, PROTO-BANTU AND PROTO-BENUE-CONGO CLASS PAIRINGS AT A GLANCE.

	PE	PB	PBC
1.	ghU-/A-	15/6	ku/a
2.	U-/A-	15/6	ku/a
3.	U-/I-	3/4	bu/í, ú/ti
4.	dhI-/A-	5/6	li/a
5.	I-/A-	5/6	li/a
6.	O-/A-	1/2	ù/ba
7.	O-/I-	3/4?	bu/í, ú/ti?
8.	E-/I-	9/10	ì/í
9.	A-/I-	13/5?	?
10.	A-	6	ma, a?
11.	I-	?	?
12.	U-	14?	bi, bu ?

Reconstructed PE nouns are cited with their pairing prefixes, so that there is no need to give a list of the membership of each pairing here.

### 5.3.2. Concord in PE

There is evidence of concord in every branch of Edoid. However, it is only in the Southern-NWE languages that concord involves more than number. In Ọlọma, for example, it has been

demonstrated that semantic demarcation plays a role in the determination of concord (see Elugbe and Schubert 1976; Elugbe 1982). In (23), we note that concord elements are neither identical with nor predictable from the noun prefixes;

(23) Ọlọma

a.	i	ô-kphò	pl	í-kphò	'river'
	ii	ô-kphó		ô-nò	'this river'
	iii	í-kphó		é-nò	'these rivers'
b.	i	ó-gbhò	pl.	í-gbhò	'wizard'
	ii	ó-gbhó		á-nò	'this wizard'
	iii	í-gbhó		é-nò	'these wizards'
c.	i	à-fè	pl.	lò-fè	'house'
	ii	á-fé		á-nò	'this house'
	iii	ló-fé		lé-nò	'these houses'
d.	i	lè-kò	pl.	à-kò	'tooth'
	ii	lé-kó		ló-nò	'this tooth'
	iii	á-kó		á-nò	'these teeth'
e.	i	lê-cà	pl.	á-cà	'egg'
	ii	lê-cá		ló-nò	'this egg'
	iii	á-cá		é-nò	'these eggs'

Thus 'river' and 'wizard' both have an o-/i- prefix pairing but attract different demonstrative concord markers. Noun prefixes agree in expanded pharynx with the vowels of the noun stem (see section 5.3.1. above).

Even so, there is evidence to suggest that the vowels involved in concord in PE were a singular-marking \*ɔ-, a plural-marking \*ɪ-, and a semantically-determined singular/plural \*a-. For example, the full range of demonstrative concord elements in Ọlọma are:

(24)

sg.	ɔ	lɔ	ghɔ
pl.	ɛ	lɛ	ghɛ
sg./pl.	a		

The corresponding elements in Dẹgẹma (in spite of its elaborate noun prefix system) are sg. ɔ and plural ɪ. It may well be that

an additional a- element will be identified later in Dəgəma. In the SWE Isoko, the corresponding items are also ɔ and ɪ; in NCE Ghotuo they are ɔ and e.

It may well be then that it will be possible eventually to reconstruct the concordial elements of PE. Since we reconstruct PE CV- noun prefixes on the evidence of the Southern North-Western Edoid languages (with some help from NCE languages contiguous with them), we may also have to reconstruct CV- concord elements. In that case, the consonants involved will be \*dh and \*gh.

To sum up, then, a PE noun was made up of a stem and a prefix. If it was used with a modifier, there was a concordial element attached to that modifier to indicate that the modifier in question was referring back (since the order was N + Modifier) to the noun.

### 5.3.3. Morphology of the verb in PE

PE verb stems were also of the general shape CVCV, though CV, CVV and other polysyllabic verb stems apparently occurred. The vowels of any verbal affixes such as subject pronouns, subject concord markers, tense/aspect markers, etc. were presumably required to agree in harmony with those of the verb stem.

Although I have not undertaken a deep study of verbal constructions in Edoid, I have been able to determine (Elugbe 1984) that PE employed a gerund-marking morpheme reconstructed as:

(25) \*U...(A)mhI

which was a discontinuous morpheme realized as \*u...(ə)mhi if the verb stem had expanded vowels and as \*u...(a)mhɪ if the vowels of the verb stem were non-expanded. Moreover, the optional (A) (= ə ~a) was deleted if the preceding stem vowel was not a close front or back vowel. The examples in (26) would thus probably be realized as shown here:

(26)

	PE verb stem		derived gerund
a.	mi 'wring (clothes)'	u-mi-əmhɪ >	umyəmhi 'wringing (clothes)'



- |    |    |         |             |         |           |
|----|----|---------|-------------|---------|-----------|
| b. | cɔ | 'sew'   | ɔ-cɔ-amhɪ > | ɔcwamhɪ | 'sewing'  |
| c. | do | 'weave' | u-do-əmhi > | udomhi  | 'weaving' |
| d. | ɔɛ | 'buy'   | ɔ-ɔɛ-amhɪ > | ɔɔɛmhɪ  | 'buying'  |

#### 5.4. Evidence for the internal Edoid sub-grouping

In Chapter 1, I presented a classification of Edoid, giving details of its internal subgrouping. However, the reader was referred here for the evidence that supports that classification.

In the 1973 work, I suggested that the first Edoid split was a two-way one, giving us a South and North Edoid main branching. But I also said (p. 341) that the North Edoid branch is 'unfortunately, not supported by any sound shifts ...' It is also observed that even the South branches (made up of DE and SWE) are not convincingly united by any observed innovations.

It was not until 1979 that I took the logical step of postulating a four-way primary branching on the Edoid tree. That was when I gave more weight to innovation rather than to my knowledge that DE and SWE are very close geographically (in spite of the natural barrier provided by the Niger) and that NCE and NWE languages exist side by side all over northern Bendel State.

Even the most cursory look at our tables of consonant correspondences will reveal that each of the four branches stands on its own and no two or three of them can be united by common innovation.

We observe, for example, that in DE, the original PE voiced lenis bilabial and alveolar plosives became implosive. This is not shared by any other branch.

The South-Western Edoid branch palatalized and devoiced the original voiced non-lenis alveolar plosive \*d. PE \*gb was also devoiced. Again, no other branch shares this.

Unlike SWE, what NWE did with PE \*d was to weaken it to dz and z. Again, no other branch shares this.

If NCE is not so clearly established by any such innovations not observed elsewhere, it can at least be separated on the

grounds that it does not share such innovations. On the other hand, it is only in NCE that we find every language involved in the shifts PE \* $\text{ɪ}$  > e and \* $\text{ɔ}$  > o (see Table 8).

In the light of all this, the so-called lexical evidence advanced for the unity of DE and SWE into a South Edoid branch and of NCE and NWE into a North Edoid branch in the 1973 work must be explained in terms of gaps in my data and in terms of proximity. DE and SWE have tended to be influenced by Lower Niger (Igboid) and Ijọ. NCE and NWE have tended to be united by being part of the Edo Kingdom (as opposed to the Benin Empire). Linguistically, there is no evidence to unite them to the exclusion of the other two, singly or jointly.

Finally, it must be repeated that the geographic spread of Edoid, starting from the Delta, is DE, SWE, NCE, and NWE. Therefore, if cognates for a particular item are found in two non-contiguous branches, it certainly should be regarded as a PE item. On the other hand, items in two contiguous branches should be held suspect. Ordinarily, they should be considered PE since the four branches are co-ordinate; but considering the possibility of borrowing, one should be wary of reconstructing such items for PE. Cases falling into this category will be considered individually on their own merit, taking the general patterns of sound change into account.

## CHAPTER 6

### PROTO-EDOID RECONSTRUCTIONS

#### *6.0. Notes on the presentation of PE reconstructions*

In the following pages, I present Proto-Edoid reconstructions and the comparative series from which they are reconstructed. The languages (twenty in all) are displayed in order from the southernmost to the northernmost - i.e. from Dɛgɛma to Ukue (see Figures 2 and 4). The reconstructions are numbered from 1-207. Below each reconstruction is a comparative series on which the reconstruction is based.

As in other chapters, I have used symbols closest to the IPA representation of the sounds concerned. I have employed diacritics, where necessary, to indicate phonetic characteristics not accounted for in the IPA inventory. Such diacritics and any special use of IPA symbols are explained below.

In the presentation of the comparative series, I have used a mixture of orthographic and systematic phonetic representation. Where there is a marked difference between the two, I either give only the phonetic form or give both side by side, with the phonetic one in square brackets.

The reconstructions are presented in alphabetic order using the stem consonant:

b	(1-2)	k	(103-118)
bh	(3-13)	kh	(119-127)
ɓ	(14-22)	kp	(128-135)
c	(23-35)	kph	(136-137)
ch	(36-49)	l	(138-40)
d	(50-62)	m	(141-149)
dh	(63-71)	mh	(150-154)
ɗ	(72-76)	n	(155-163)
f	(77-82)	nh	(164-166)

g	(83-85)	p	(167-173)
gh	(86-89)	ph	(174-179)
gb	(90-94)	t	(180-186)
gbh	(95-98)	th	(187-191)
ɟ	(99-102)	v	(192-201)
		w	(202-203)
		y	(204-207)

Note that although gb and gbh should have come before gh, I have chosen to place gh immediately after g, its non-lenis counterpart. Such a shift was not necessary with the other.

The following conventions are employed in the phonetic transcription.

(i) An h after a consonant symbol indicates a lenis counterpart. Thus bh is a voiced lenis bilabial plosive. Note, in particular, the lenis labial-velars kph and gbh and, in Unẹmẹ, the lenis fh and sh! The digraph rh, on the other hand, is simply an orthographic representation for ɾ (in Okpẹ, Urhobo, and Ẹdo) or ʀ (in Unẹmẹ, Ehuẹun, and Ukue).

(ii) In addition to the "normal" [l], a voiced alveolar tapped lateral [ɺ] occurs in a number of languages. [ɺ̃] is the nasal counterpart of [ɺ].

(iii) [ɺ̥] is a voiced alveolar tap with a lateral offglide. It is assumed here to be a later stage of development from \*dh than ɺ (see section 5.1.6.1.3.).

(iv) The digraph vb represents [ʋ], which is a voiced bilabial (spread) approximant except in Edo where it is definitely labiodental.

(v) In Isoko, kp is phonetically [p<sup>c</sup>], an unvoiced velarized bilabial implosive.

(vi) Breathy-voicing (or "murmur") is shown by adding the diacritic diacritic [̤] to the consonant symbol, e.g. [ʒ̤] or [l̤].

Tone is fully marked in nouns: ^ indicates high, ` low, and - mid. I have left tone unmarked where I am not sure of it. In



verb stems, tone is not marked because none of the languages included here makes lexical use of tone in verbs.

Non-cognate items are placed in brackets. Doubt about cognation or non-cognation is indicated by a question mark.

A dash (-) means that I do not have that item in my data for that particular language. All items are from my own data,

Noun prefixes harmonize with stem vowels as stated in section 5.3.1. above.

The correspondences observable in the comparative series are not always absolutely in agreement with the tables. Lack of agreement is often attributable to the individual environment. Close vowels (especially i/ɪ) or sequences of a close vowel and another vowel often exert influences which are different from the expected line of change. Nasalization also causes changes which differ from the normal, but are not surprising. Unlike in the 1973 work, no attempt is made to justify individual reconstructions. In general, the cognate items are easy to identify and the reader is in a position to judge the relative merits of a given reconstruction based on the data presented.

The languages (twenty in number) are listed according to the classification in Figure 4: the Delta Edoid (DE) languages, followed by the South-Western Edoid (SWE) languages, the North-Central Edoid (NCE), and the North-Western (NWE) languages in that order. This arrangement reflects a geographic south-north movement from the southernmost Dɛgɛma to the northernmost Ukue.

6.1. Proto-Edoid reconstructions

1. Proto-Edoid		*be-	'slice, trim, etc.'				
DE:	Ɖegema	-		SWE:	Ɖruwa	berɪ	'tear, split'
	Ɖgene	be	'slice, cut into two'		Isoko	berɪ	"
	Epie	-			Okpe	berɛ	"
					Urhobo	beɪɛ	"
					Uvbie	-	
NCE: Ɖdo		be		NWE:	Ɖloma	-	
	Aoma	-			Ɖmhalhe	-	
	Auchi	be			Ibilo	be	'peel off, trim'
	Avbianwu	-			Uhami	-	
	Uneme	-			Ehueun	-	
	Ghotuo	be			Ukue	bẽ	
2. Proto-Edoid		*bi	'be black'				
DE:	Ɖegema	bi		SWE:	Ɖruwa	(toɪ)	
	Ɖgene	bi			Isoko	biebi	
	Epie	bi			Okpe	bi	
					Urhobo	bi	
					Uvbie	ùbíbi	'it is black'
NCE:	Ɖdo	è-bíé!bí	'darkness'	NWE:	Ɖloma	-	
	Aoma	bi			Ɖmhalhe	-	
	Auchi	vbisi [visi]			Ibilo	ù-bì	'darkness'
	Avbianwu	bie			Uhami	visina	
	Uneme	òbí(lìkì)	'darkness'		Ehueun	bhibhi [βiβi]	
	Ghotuo	bihi			Ukue	biba	

3. Proto-Edoid \*bha- 'be red'

DE: Dẹgẹma	(yatə)	SWE: Ẹrụwa	babarɪ
Ẹgẹṅẹ	(ɔe)	Isoko	vavai
Ẹpie	(fufu)	Okpẹ	baɪɪ
		Urhobo	vava
		Uvbie	vavari

NCE: Ẹdo	baa	NWE: Ọloma	(ʒimhi)
Aoma	bae	Ẹmhalhe	(h̄umhɛ)
Auchi	(luɛ)	Ibilo	(mɛ)
Avbianwu	(luɛ)	Uhami	vavae
Uneme	(ali)?	Ehueun	βaβari
Ghotuo	(umhɛ)	Ukue	bari

4. Proto-Edoid \*bhar/\*bhadhr 'you (pl.)'

DE: Dẹgẹma	(ə-maĩ)	SWE: Ẹrụwa	wa
Ẹgẹṅẹ	baɪ	Isoko	-
Ẹpie	baa	Okpẹ	-
		Urhobo	vba [va]
		Uvbie	-

NCE: Ẹdo	wa	NWE: Ọloma	-
Aoma	bhabha[βaβa]	Ẹmhalhe	-
Auchi	vbae [vae]	Ibilo	wawa
Avbianwu	vbavba [vava]	Uhami	u-va
Uneme	vbavba [vava]	Ehueun	u-wari
Ghotuo	vbavba [vava]/ [vaa]	Ukue	wai

5. Proto-Edoid \*U-bhaGɪ / \*U-baGɪ 'house, room'

DE:	Degeṃa	ó-vāī [óβāī]	SWE:	Erɔwa	ò-wá i-
	Egeṃe	-		Isoko	(ù-ùòù) i- ?
	Epie	-		Okpe	[òɣwá]
				Urhobo	ù-wèvbī?
				Uvbie	(u-vū)
NCE:	Edo	ò-wá	NWE:	Qloma	(à-fè)
	Aoma	ó-à		Emhalhe	(ū-kpā)
	Auchi	ó-vbà [óvà]		Ibilo	(ú-kpò)
	Avbianwu	ó-vbà [óvà] 'room'		Uhami	(ò-dé)
	Uneme	ó-vbà [óvà]		Ehueun	(ò-dé)
	Ghotuṓ	o-vbàghì [òvàyì]		Ukue	(ò-dé)

6. Proto-Edoid \*bhe- 'be wide'

DE:	Degeṃa	βε (ω)	SWE:	Erɔwa	-
	Egeṃe	βε		Isoko	-
	Epie	-		Okpe	-
				Urhobo	-
				Uvbie	-
NCE:	Edo	υε	NWE:	Qloma	-
	Aoma	-		Emhalhe	-
	Auchi	υε		Ibilo	-
	Avbianwu	-		Uhami	-
	Uneme	-		Ehueun	-
	Ghotuṓ	υε (γa)		Ukue	-



7. Proto-Edoid \*bhiənhə 'ask'

DE:	Degema	bine'	SWE:	Eruwa	vbie(rē) [vyeɛē]
	Egene	bine		Isoko	-
	Epie	(pulu)		Okpe	(no)
				Urhobo	(no)
				Uvbie	(no)
NCE:	Edo	no	NWE:	Oloṃa	-
	Aoma	bhi [βi]		Emhalhe	buena
	Auchi	vbi [vi]		Ibilo	bhiṃahi [βiṃahi]
	Avbianwu	(no)		Uhami	viena
	Uneme	mhiṃo		Ehueun	bhiārā [miārā]
	Ghotuo	mhiṃa		Ukue	miarā

8. Proto-Edoid \*A-bhidhi I- 'oil'

DF	Degema	è-bír ì-	SWE:	Eruwa	è-urí
	Egene	è-bìlì		Isoko	è-urì
	Epie	è-bìlì		Okpe	è-mrì
				Urhobo	è-urì (also 'fat')
				Uvbie	è-urì
NCE:	Edo	è-ví (also 'fat')	NWE:	Oloṃa	é-ùṃì ru-ùila (pl.)
	Aoma	è-βìrì (also: 'fat')		Emhalhe	é-bìlì
	Auchi	á-ùlì		Ibilo	é-bhì
	Avbianwu	á-ùlì		Uhami	é-vìrì
	Uneme	á-ùlì í-		Ehueun	è-βìrì
	Ghotuo	ò-ì í-		Ukue	é-bìrì

9. Proto-Edoid \*bhichɪN(a) (or: \*bhichɪ ?) 'sleep(v.)'

DE: Dẹgẹma	məsɛ (cf. mɛsɛ 'dream (v.)')	SWE: Ẹrɔwa	vbɪzɛ
Ẹgẹṅẹ	mɪsɛ	Isoko	vbɪzɛ
Ẹpɪe	βɛrɛ (cf. βɛsɪnɛ 'dream (v.)')	Okpẹ	mɛrhɛ̃
		Urhoho	vβɛrhɛ̃ [vɛrɛ̃]
		Uvbiẹ	mɪrhɛ̃
NCE: Ẹdo	vbɪɛ	NWE: Ọlọma	-
Aoma	mɛhɛ̃	Ẹmhalhẹ	mhɛzɛ mɛzɪnɛ 'dream!'
Auchi	(ghuɛ)	Ibilo	mhɔzɛ
Avbianwu	(ghuɛ)	Uhami	vɪsɛ
Unẹmẹ	(wɛa)	Ehuẹun	bhirhɛ̃
Ghotuọ	ihɛ (archaic form: vbɪzɛ)	Ukue	birhɛ̃

10. Proto-Edoid \*U-bhichɪ 'sleep (n.)'

DE: Dẹgẹma	-	SWE: Ẹrɔwa	ò-vbìzɛ́
Ẹgẹṅẹ	ò-mìsɪ̀	Isoko	ò-vbìzɛ̀
Ẹpɪe	(à-σɔ-βéɛɛ)	Okpẹ	ò-mérhɛ̀
		Urhobo	ò-vbèrhɛ̀
		Uvbiẹ	ò-mèrhɛ̀
NCE: Ẹdo	ò-vbé	NWE: Ọlọma	-
Aoma	ó-mèh	Ẹmhalhẹ	ó-mhèzè
Auchi	ó-ghùɛ	Ibilo	ó-mhòzè
Avbianwu	-	Uhami	ó-vɪsè
Unẹmẹ	ó-wè	Ehuẹun	ì-bhìrhɛ̀
Ghotuọ	ghɔ̀-hè	Ukue	-

11. Proto-Edoid \*bhuNənhə 'have, possess'

DE:	Deḡema	(ɲan)	SWE:	Ḥruwa	-
	Eḡeḡe	buene		Isoko	-
	Epie	-		Okpe	-
				Urhobo	-
				Uvbie	-
NCE:	Edo	vɛ̃	NWE:	Ọloma	-
	Aoma	-		Ḥmhalhe	(ɲanɛ)
	Auchi	mho		Ibilo	(ɲanɛ)
	Avbianwu	-		Uhami	-
	Uneme	-		Ehueun	-
	Ghotuɔ	mheɲɛ		Ukue	-

12. Proto-Edoid \*A-bhəa I- 'dog'

DE:	Deḡema	á-bòà í-	SWE:	Ḥruwa	(à-râkò)
	Eḡeḡe	á-bòà		Isoko	è-bò -ì-
	Epie	à-bóà		Okpe	(à-ɛ́ímúá múá)
				Urhobo	(è-lákò)
				Uvbie	(è-râmkò) < ɛ-râmo 'animal' and a-kò 'teeth'
NCE:	Edo	à-wá	NWE:	Ọloma	ghá-wà rɔ-
	Aoma	á-wà		Ḥmhalhe	wá-bòà rɔ-
	Auchi	á-ghùà [áɣwà]		Ibilo	á-bhòà
	Avbianwu	á-ghùà [áɣwà]		Uhami	à-bùà
	Uneme	á-wà í-		Ehueun	ɛ̄-bò ? but see 'goat'
	Ghotuɔ	ghā-wà í-		Ukue	ɛ́-bò ? but see 'goat'

13. Proto-Edoid \*E-bh<sub>o</sub>r I- 'goat'

DE:	Degema	è-ḅóîr ì-	SWE:	Erɔwa	è-vbí [èuí] ì-
	Egēṅē	(ó-kìà)		Isoko	è-vbí [èuí] ì-
	Epie	(e-kedi)		Okpẹ	è-vbé [èu'é]
				Urhobo	è-vbé [èu'é]
				Uvbiẹ	è-vbí [èuí]

NCE:	Edo	è-wé	NWE:	Ọloma	-
	Aoma	é-wè		Emhalhẹ	(ú-gìrì)
	Auchi	é-ghùè [éɣwe]é-		Ibilo	(í-dzìlì)
	Avbianwu	é-ghùè [éɣwè]é-		Uhami	é-vlè
	Uneme	é-vbè [éuè] í-		Ehuẹun	ē-bì
	Ghotuọ	ē-wè ē-		Ukue	é-bì

14. Proto-Edoid \*baNa 'plait (hair)'

DE:	Degema	(kpa)	SWE:	Erɔwa	(me)
	Egēṅē	baa		Isoko	(me)
	Epie	baã		Okpẹ	(me)
				Urhobo	(me)
				Uvbiẹ	(me)

NCE:	Edo	(mɔ) ?	NWE:	Ọloma	-
	Aoma	ba		Emhalhẹ	ba
	Auchi	ba		Ibilo	(dzo)
	Avbianwu	ba		Uhami	ba
	Uneme	ba		Ehuẹun	ba
	Ghotuọ	ba		Ukue	ba



## 15. Proto-Edoid

\*biə 'give birth, bear (child)'

DE:	Ḑeḡema	biə	SWE:	Ḑeḡwa	viə
	Ḑeḡeḡe	biə		Isoko	ye
	Epie	biə		Okpe	viə
				Urhobo	viə
				Uvbie	viə

NCE:	Ḑo	biə	NWE:	Ḑoḡma	
	Aoma	βiə		Ḑmhalhe	bia
	Auchi	via		Ibilo	bia
	Avbianwu	via		Uhami	bia
	Uneme	biə		Ehueun	bia
	Ghotuḡ	bia		Ukue	bia

## 16. Proto-Edoid

\*U-βi I- 'leaf'

DE:	Ḑeḡema	à-βí	à-	SWE:	Ḑeḡwa	à-βí	ì-
	Ḑeḡeḡe	è-βí			Isoko	à-βì	ì-
	Epie	-			Okpe	à-βé	è-
					Urhobo	à-βè	è-
					Uvbie	à-βì	è-

NCE:	Ḑo	è-βé		NWE:	Ḑoḡma	ghó-βì	é-
	Aoma	é-βè			Ḑmhalhe	-	
	Auchi	ó-βè	é-		Ibilo	ó-βè	é-
	Avbianwu	ó-βè	é-		Uhami	è-βì	
	Uneme	é-βè			Ehueun	è-βhí	[èβí]
	Ghotuḡ	ghō-βè	ē-		Ukue	è-βí	

17. Proto-Edoid ghU-Ḃᵛ A- 'arm, hand'

DE:	Dẹgẹma	ḁ-Ḃᵛ ḁ-	SWE:	Ẹrụwa	ḁ-Ḃᵛ	
	Ẹgẹne	ᵛ-Ḃᵛ		Isoko	ḁ-Ḃᵛ	ḁ-
	Epie	ḁ-Ḃᵛ		Okpe	ḁ-Ḃᵛ	ḁ-
				Urhobo	ḁ-Ḃᵛ	ḁ-
				Uvbie	ḁ-Ḃᵛ	
NCE:	Ẹdo	ḁ-Ḃᵛ	NWE:	Ọloma	ghᵛ-Ḃᵛ	ḁ-
	Aoma	ᵛ-Ḃᵛ		Ẹmhalhe	wᵛ-Ḃᵛ	ḁ-
	Auchi	ᵛ-Ḃᵛ ḁ-		Ibilo	ᵛ-Ḃᵛ	ḁ-
	Avbianwu	ᵛ-Ḃᵛ ḁ-		Uhami	ᵛ-Ḃᵛ	
	Uneme	ᵛ-Ḃᵛ ḁ-		Ehuẹun	ᵛ-wᵛ	
	Ghotuọ	ghᵛ-Ḃᵛ ā-		Ukue	ᵛ-Ḃᵛ	

18. Proto-Edoid \*ḂᵛN 'build, thatch(roof)'

DE:	Dẹgẹma	Ḃᵛ	SWE:	Ẹrụwa	Ḃᵛ
	Ẹgẹne	Ḃᵛ		Isoko	Ḃᵛ
	Epie	Ḃᵛ		Okpe	Ḃᵛ
				Urhobo	Ḃᵛ
				Uvbie	Ḃᵛ
NCE:	Ẹdo	Ḃᵛ	NWE:	Ọloma	-
	Aoma	Ḃᵛ		Ẹmhalhe	-
	Auchi	Ḃᵛ		Ibilo	-
	Avbianwu	(Ḃᵛ)		Uhami	Ḃᵛ
	Uneme	-		Ehuẹun	Ḃᵛ
	Ghotuọ	Ḃᵛ		Ukue	Ḃᵛ

19. Proto-Edoid \*-bu- 'sand, dust'

DE:	Degema	(ì-kpé'kplēm)	SWE:	Erɔwa	(é-mu) ?
	Egɛɛ	è-bùmù		Isoko	(ô-u'kpè)
	Epie	è-bùmù		Okpɛ	-
				Urhobo	ù-bù
				Uvbiɛ	(í-mu) ?

NCE:	Edo	à-hùè	NWE:	Oloma	-
	Aoma	è-bùbù		Emhalhe	(é-žāžānì)
	Auchi	(è-kè)		Ibilo	(è-kè)
	Avbianwu	i-dabu		Uhami	(é-hèrì)
	Unɛmɛ	ibubu 'dust stirred by a whirlwind'		Ehuɛun	(ì-sāā)
	Ghotuɔ	ì-bùbù		Ukue	(ì-rhíá)

20. Proto-Edoid \*bunhə 'break (a stick)'

DE:	Degema	bun	SWE:	Erɔwa	(biri) ?
	Egɛɛ	kuɓunese		Isoko	-
	Epie	ɓunu		Okpɛ	burhũ
				Urhobo	(virhĩ)
				Uvbiɛ	buð

NCE:	Edo	bũ	NWE:	Oloma	-
	Aoma	(guɔɔ)		Emhalhe	buɔu
	Auchi	(khuli)		Ibilo	(bi) ?
	Avbianwu	(khuli)		Uhami	munu
	Unɛmɛ	muɔi		Ehuɛun	bunu
	Ghotuɔ	ɔu ?		Ukue	buna

21. Proto-Edoid \*buN 'be many'

DE:	Degema	-	SWE:	Eruwa	bu
	Egene	bu		Isoko	bu
	Epie	-		Okpe	bũ
				Urhobo	bũ
				Uvbie	-
NCE:	Edo	bũ	NWE:	Oloma	bu
	Aoma	bũ		Emhalhe	bu
	Auchi	bu		Ibilo	bu
	Avbianwu	bu		Uhami	-
	Uneme	bu		Ehueun	-
	Ghotuq	bu		Ukue	-

22. Proto-Edoid \*O-bo A- 'doctor'

DE:	Degema	ò-bò	è-	SWE:	Eruwa	ò-bò	ì-
	Egene	ò-bò			Isoko	ò-bò	ì-
	Epie	ò-bò			Okpe	ò-bó	
					Urhobo	ò-bò	è-
					Uvbie	ò-bò	
NCE:	Edo	ò-bó		NWE:	Oloma	á-bù	
	Aoma	ó-bò			Emhalhe	ó-bò	é-
	Auchi	ó-bò	é-		Ibilo	ó-bò	é-
	Avbianwu	ó-bò	í-		Uhami	ò-bù	
	Uneme	ó-bò	í-		Ehueun	ó-bù	
	Ghotuq	ó-bò	e-		Ukue	ó-bu	



23. Proto-Edoid \*ca 'shoot hit'

DE:	Degeṃa	sa	SWE:	Erṃwa	sa
	Egeṃe	sa		Isoko	sa
	Epie	sã		Okpe	sa
				Urhobo	sa
				Uvbie	sa

NCE:	Edo	(fi)	NWE:	Oḷoma	sa 'sting'
	Aoma	sa		Emhalhe	(fie) see 'throw'
	Auchi	tsa		Ibilo	sa
	Avbianwu	(pi)		Uhami	sa
	Uneme	sa		Ehueun	(zo)
	Ghotuo	sa 'hit; sting, bite (of snake, etc.)'		Ukue	rha

24. Proto-Edoid \*I-cəN(ə) 'faeces'

DE:	Degeṃa	l-sɔ̄	SWE:	Erṃwa	(í-nèṃ <sup>w</sup> ù) cf. 'defecate'
	Egeṃe	(á-kpà)		Isoko	í-sò
	Epie	(ì-kpá)		Okpe	í-sò
				Urhobo	í-sò
				Uvbie	í-sò

NCE:	Edo	l-sã	NWE:	Oḷoma	l-sò
	Aoma	l-sò		Emhalhe	l-sò
	Auchi	l-tsò		Ibilo	è-sò
	Avbianwu	l-tsò		Uhami	í-sò
	Uneme	l-sò		Ehueun	l-sò
	Ghotuo	l-sò		Ukue	l-rhò [lɔ̄]

25. Proto-Edoid \*cε 'be effective (of juju); come true (of oracle, prophecy, etc.)'

DE:	ƉeƉema	-	SWE:	Ɖɛɽwa	-
	ƉeƉeƉe	-		Isoko	-
	Ɖie	-		Okpe	-
				Urhobe	sε
				Uvbie	-
NCE:	Ɖo	sε	NWE:	Ɖloma	-
	Aoma	-		Ɖmhalhe	-
	Auchi	-		Ibilo	tse
	Avbianwu	-		Uhami	-
	Uneme	-		Ehueun	-
	Ghotuo	sε (hε)		Ukue	-

26. Proto-Edoid \*ci 'pull'

DE:	ƉeƉema	(bi) 'push'	SWE:	Ɖɛɽwa	si(vĩ)
	ƉeƉeƉe	(bi)si 'push'		Isoko	si
	Ɖie	(kpõ)		Okpe	si(mi) 'drag'
				Urhobe	si(o)
				Uvbie	si(mi)
NCE:	Ɖo	si	NWE:	Ɖloma	-
	Aoma	si		Ɖmhalhe	fi
	Auchi	tsi		Ibilo	fi
	Avbianwu	(vɔ)		Uhami	si
	Uneme	tʃi		Ehueun	si
	Ghotuo	si		Ukue	rhi

27. Proto-Edoid \*i-ciənhi 'nine'

DE:	Degema	(ò-vó ótemi-gbe) 'one from ten'?	SWE:	Eruwa	i-zìdrì
	Egene	(ò-vómò)		Isoko	ìí-zí
	Epie	(ò-vòmómòlgbèè)		Okpe	ì-rhíní
				Urhobo	ì-rhìlì
				Uvbie	i-rhìni
NCE:	Edo	ì-híì	NWE:	Oloma	ì-síní
	Aoma	ì-síì		Emhalhe	ì-siéni
	Auchi	ì-tsíìlì		Ibilo	ì-siè
	Avbianwu	ì-tsíì		Uhami	ì-siéni
	Uneme	ì-tjínì		Ehueun	ì-sīrī
	Ghotuo	ì-sī		Ukue	ì-rhiéni

28. Proto-Edoid \*ciN 'spin (thread)'

DE:	Degema	-	SWE:	Eruwa	-
	Egene	(baa) see 'plait (hair)'		Isoko	(kpofo)
	Epie	(so)		Okpe	(gbaro)
				Urhobo	si
				Uvbie	(rhūō)
NCE:	Edo	sī	NWE:	Oloma	-
	Aoma	sī		Emhalhe	si
	Auchi	do see 'weave'		Ibilo	(kpi)
	Avbianwu	-		Uhami	(ta)
	Uneme	tji		Ehueun	(ba) see 'plait (hair)'
	Ghotuo	si		Ukue	(ta)

29. Proto-Edoid \*A-ciANɪ 'saliva'

DE:	Degema	a-sai	SWE:	Eruwa	(i-zí)?
	Egene	à-ʃèì < à-sìèì		Isoko	ì-yhà ?
	Epie	à-sìèè		Okpe	é-rhèrhè [érèrè]?
				Urhobo	é-yà
				Uvbie	(ímí-ènù)

NCE:	Edo	à-sèè	NWE:	Oloṃa	è-sè
	Aoma	è-sèè		Emhalhe	è-sè
	Auchi	è-tʃɛi < à-tsièì		Ibilo	è-sè
	Avbianwu	a-tɛɛ		Uhami	á-sè
	Uneme	è-sèṇì		Ehueun	ì-sè
	Ghotuṣ	èè-sè		Ukue	ì-rhè [îṣè]

30. Proto-Edoid \*cɔ 'sew'

DE:	Degema	(kɔl)	SWE:	Eruwa	(ka)
	Egene	so		Isoko	(ko)
	Epie	so		Okpe	(ko)
				Urhobo	(ko)
				Uvbie	(ko)

NCE:	Edo	(dɔlɔ)	NWE:	Oloṃa	(khuru)
	Aoma	so		Emhalhe	(kpeɛ)
	Auchi	tso		Ibilo	(kpali)
	Avbianwu	tso		Uhami	(kpe)
	Uneme	(ba)		Ehueun	(bunu)
	Ghotuṣ	so		Ukue	(kpe)



31.	Proto-Edoid	*cə	'sing'		
DE:	Ɖegema	(kpor)	SWE:	Ɖruwa	so
	Ɖgene	(kpori)		Isoko	so
	Epie	(kpoli)		Okpe	so
				Urhobo	so
				Uvbie	so
NCE:	Ɖdo	so	NWE:	Ɖloma	su
	Aoma	so		Ɖmhalhe	so
	Auchi	tso		Ibilo	so
	Avbianwu	tso		Uhami	su
	Uneme	so		Ehueun	su
	Ghotuo	so		Ukue	rhu

32.	Proto-Edoid	*cəaGɪ	'carry (load on head)'		
DE:	Ɖegema	soaɪ	SWE:	Ɖruwa	(wa)
	Ɖgene	soa		Isoko	(uɔ)
	Epie	-		Okpe	(kpaɪɪ)
				Urhobo	-
				Uvbie	(bo)
NCE:	Ɖdo	-	NWE:	Ɖloma	-
	Aoma	-		Ɖmhalhe	soa
	Auchi	(du)		Ibilo	soa
	Avbianwu	(du)		Uhami	-
	Uneme	(du)		Ehueun	sua
	Ghotuo	sua		Ukue	rhua

33. Proto-Edoid \*O-COE A- 'father'

DE:	Deḡema	ó-sā	SWE:	Ḙṛuwa	-
	Eḡeṇe	à-sà		Isoko	ó-sè í-
	Epie	à-só (nṵmṵ)		Okpe	ó-sè é-
				Urhobo	ó-sē é-
				Uvbie	à-sè
NCE:	Ḙdo	(è-rhá)	NWE:	Ọlọma	í-thà
	Aoma	(è-rà)		Ḙmhalhe	-
	Auchi	(è-rà)		Ibilo	ì-ṣà
	Avbianwu	(è-rà)		Uhami	ó-sùè
	Uneme	(é-rhà)		Ehueun	(ú-wà)
	Ghotuḡ	(ì-rà)		Ukue	ó-rhù

34. Proto-Edoid \*CO N 'crawl, drag, draw (e.g. snail); flow'

DE:	Deḡema	-	SWE:	Ḙṛuwa	-
	Eḡeṇe	sṵ 'flow'		Isoko	su 'flow (of river)'
	Epie	-		Okpe	-
				Urhobo	-
				Uvbie	-
NCE:	Ḙdo	sṵ	NWE:	Ọlọma	-
	Aoma	-		Ḙmhalhe	-
	Auchi	tsu		Ibilo	-
	Avbianwu	-		Uhami	-
	Uneme	-		Ehueun	-
	Ghotuḡ	su		Ukue	-

## 35. Proto-Edoid

\*A-coNa

I-

'night'

DE: Dẹgẹma  
Egẹne  
Epieà-só ì-  
à-sò  
-SWE: Eruwa à-só ì-  
Isoko à-sò ì-  
Okpe à-só  
Urhobo à-sò è-  
Uvbie à-sòNCE: Edo  
Aoma  
Auchi  
Avbianwu  
Uneme  
Ghotuoà-só  
á-sò  
é-ṣùá  
é-ṣùá  
á-sù  
ghã-hòNWE: Oloṃa ghá-úzá  
Emhalhe wà-zòzè rò-  
Ibilo á-zò  
Uhami (è-dùzì)  
Ehueun (ū-dzì)  
Ukue á-rhù [áṣũ]

## 36. Proto-Edoid

\*chamhɪnha

'forget'

DE: Dẹgẹma  
Egẹne  
Epiesamɪne  
samɪne  
samɪnaSWE: Eruwa saaro  
Isoko (tɔɔɔɔ)  
Okpe (sɛɛɛɛ) ?  
Urhobo (cɔɔwɛɔɔ)  
Uvbie (cɔɔɔɔɔ)NCE: Edo (miamia)  
Aoma (ee áà)  
Auchi (yele ábò)  
Avbianwu (yee yá)  
Uneme (yele a)  
Ghotuo hamhaNWE: Oloṃa -  
Emhalhe zamhɪnha  
Ibilo zamhɪe  
Uhami (yere áà)  
Ehueun (ɔere wíà)  
Ukue (yere a)

37. Proto-Edoid \*iɪ-chaGɪ 'three'

DE:	Degema	i-saɪ	SWE:	Eɾuwa	iɪ-sa
	Egeɲe	é-sa		Isoko	ìí-sa
	Epie	ì-sáã		Okpe	e-sa
				Urhobo	èé-rhà
				Uvbie	è-sà

NCE:	Edo	è-há	NWE:	Oɽoma	èé-sà
	Aoma	èé-hà		Emhalhe	èé-sà
	Auchi	èé-hàè		Ibilo	èé-sà
	Avbianwu	é-là ?		Uhami	é-sà
	Uneme	èé-shà		Ehueun	ē-sà
	Ghotuo	èē-sà		Ukue	è-rhá

38. Proto-Edoid \*-chaN 'six'

DE:	Degema	í-yí-sà	SWE:	Eɾuwa	í-zà
	Egeɲe	è-yí-sà		Isoko	ì-zí-zà
	Epie	ì-yī-sáã		Okpe	é-rhà
				Urhobo	èé-sá
				Uvbie	é-rhà

NCE:	Edo	èé-hà	NWE:	Oɽoma	è-rhèrhà
	Aoma	èè-hà		Emhalhe	è-zí-zà
	Auchi	èè-sà		Ibilo	zázà
	Avbianwu	é-sà		Uhami	ésé-sàì
	Uneme	é-shùà		Ehueun	ìsò-sà
	Ghotuo	ìè-hà		Ukue	ìrhó-rhà



39. Proto-Edoid \*E-ch(i)ənhi I- 'fish'

DE:	Dẹgẹma	è-sén	ì-	SWE:	Ẹrụwa	ímî-yèrĩ
	Ẹgẹne	è-sènì			Isoko	ì-yèl (pl.)
	Epie	è-sènì			Okpẹ	é-rhènì ?
					Urhobo	(é-mé-nì) ?
					Uvbiẹ	è-rènì
NCE:	Ẹdo	é-hěě		NWE:	Ọlọma	-
	Aoma	è-hěě			Ẹmhalhẹ	-
	Auchi	è-sèè			Ibilo	é-ŋ <sup>w</sup> ènà í- ?
	Avbianwu	è-sèl			Uhami	(í-fè)
	Unẹmẹ	(í-fhèlê)			Ehueun	è-ʃèrì < e-rhierĩ
	Ghotuọ	èè-ʒè ìì-			Ukue	è-ʃèrì < e-rhierĩ

40. Proto-Edoid \*i-chiə 'seven'

DE:	Dẹgẹma	ì-síé(vò)	SWE:	Ẹrụwa	i-rũē ?
	Ẹgẹne	i-sio(ve)		Isoko	ìí-hḡé ?
	Epie	ì-síò(vè)		Okpẹ	ì-rhíḡúé
				Urhobo	í-γúnē ?
				Uvbiẹ	i-ḡurhuo ?
NCE:	Ẹdo	ì-híḡ	NWE:	Ọlọma	ì-rhoḡḡúà
	Aoma	ì-híḡ		Ẹmhalhẹ	ì-ʒúóḡà
	Auchi	ì-sé(ìùà)		Ibilo	ʒóóḡà
	Avbianwu	ì-sé(ìùà)		Uhami	ì-síé(nà)
	Unẹmẹ	ì-ʃíḡ		Ehueun	ì-hī(òrà)
	Ghotuọ	ì-hī(ḡà)		Ukue	ì-hí(ònà)

41. Proto-Edoid \*chiəmhi 'be good'

DE:	Dẹgẹma	som	SWE:	Ẹrụwa	(mroma)
	Ẹgẹṅẹ	somi		Isoko	(voma)
	Ẹpie	(si)som(u)		Okpẹ	rhomu
				Urhobo	yo(ma)
				Uvbiẹ	rhomu
NCE:	Ẹdo	(maa)	NWE:	Ọlọma	ẓemhi
	Aoma	hɔmɔ		Ẹmhalhẹ	ẓimhi
	Auchi	somhi		Ibilo	ẓemhi
	Avbianwu	so		Uhami	siemi
	Unẹmẹ	(ó-nó)-shè 'the good one'		Ehueun	(hūrĩ) ?
	Ghotuọ	zemhi		Ukue	rhimi

42. Proto-Edoid \*U-chiəmhi A- 'head'

DE:	Dẹgẹma	ù-tóm à-	SWE:	Ẹrụwa	ù-zòvũ ì-
	Ẹgẹṅẹ	ù-tòmù		Isoko	ù-zòù ì-
	Ẹpie	ù-tòm		Okpẹ	ù-rhómú ì-
				Urhobo	ù-yòvĩ ì-
				Uvbiẹ	(é-kpè)
NCE:	Ẹdo	ù-húvũ	NWE:	Ọlọma	ghí-kà
	Aoma	ù-hòmò		Ẹmhalhẹ	ù-khèmhì í-
	Auchi	ù-sò í-		Ibilo	í-khàmhà
	Avbianwu	ù-sò		Uhami	ù-kèmì
	Unẹmẹ	ù-shòmhì		Ehueun	u-hù
	Ghotuọ	ù-sò		Ukue	ù-kòmì

43. Proto-Edoid \*ii-chiNənhi 'five'

DE:	Degema	ì-súón	SWE:	Eruwa	íì-sòrì
	Egēṅe	ì-sìòṅì		Isoko	ìí-sòì
	Epie	ì-sīōṅ		Okpe	ì-sioṛí
				Urhobo	ì-yòṅì
				Uvbie	i-sioṛí

NWC:	Edo	ì-sé	NWE:	Oloṃa	ìí-ṣè
	Aoma	ìí-hèrè		Emhalhe	ìí-ṣèṅì
	Auchi	í-sè		Ibilo	í-ṣè
	Avbianwu	í-sè		Uhami	í-siè
	Uneme	ìí-shè		Ehueun	ī-sièrì
	Ghotuṅ	ìí-ṣè		Ukue	ì-rhíṅì

44. Proto-Edoid \*O-chi- I- 'man, male'

DE:	Degema	(ó-mò)-sì 'male'	SWE:	Eruwa	-
	Egēṅe	(ó-m-)ò-sì		Isoko	ó-zàì 'man'
	Epie	(m) ó-sī 'male'		Okpe	ó-rhàrì
				Urhobo	(ó-ṣàlè)
				Uvbie	(ò-rèkòà)

NCE:	Edo	(ò-kplá)	NWE:	Oloṃa	à-ṣì è-
	Aoma	(óm-)ó-hè		Emhalhe	ó-zì
	Auchi	(óm-)ò-sì 'girl'		Ibilo	(óh-)ò-zì
	Avbianwu	(ó-móo)		Uhami	ò-sì 'man'
	Uneme	(ó-m-)ò-sè		Ehueun	(óh-)ò-rhì
	Ghotuṅ	(óm-)ò-hì		Ukue	(ók-)ò-rhì



45. Proto-Edoid \*ghU-chəGi A- 'ear'

DE:	Degema	ó-sṵṵ	á-	SWE:	Eruwa	(í-yṵ) (noun derived from yṵ 'hear')
	Egēṅ	é-sò			Isoko	ó-zó í-
	Epie	í-sṵṵ			Okpe	ò-rhó [òrṵ] è-
					Urhobo	ò-rhó [òrṵ] é-
					Uvbie	è-sṵ
NCE:	Edo	è-hó		NWE:	Oloma	ghó-zṵ é-
	Aoma	é-hò			Emhalhe	wó-zṵ é-
	Auchi	é-vbò [évbò]			Ibilo	ó-zṵ é-
	Avbianwu	é-wò			Uhami	é-sò
	Uneme	é-shò			Ehueun	ē-rhò [ērṵ]
	Ghotuṵ	ghṵ-hòghì [ghṵhòghì] è-			Ukue	é-rhò [érṵ]

46. Proto-Edoid \*A-chuə I- 'penis'

DE:	Degema	(ò-dúdu ì-)	SWE:	Eruwa	(í-tè)
	Egēṅ	(òtàmò)		Isoko	ó-híó í-
	Epie	(ò-tòṵòlṵ)		Okpe	ó-síó
				Urhobo	ó-ṵó
				Uvbie	ù-rhó
NCE:	Edo	é-kíá ?	NWE:	Oloma	-
	Aoma	é-kùè ?		Emhalhe	rà-zì
	Auchi	(è-vèè)		Ibilo	ù-zṵ ì-
	Avbianwu	(è-vèè)		Uhami	ù-hò
	Uneme	(í-kpeveli)		Ehueun	ù-rhò
	Ghotuṵ	ī-slà [ī-ṵà] general word for sex organs		Ukue	ù-rhù



47. Proto-Edoid \*O-chuə I- 'hunter'

DE:	Degema	-	SWE:	Erɔwa	(ò-bèr bɛ́fí)
	Egɛɛ	(ò-bídààzì)		Isoko	ó-zúé
	Epie	-		Okpɛ	ò-rhúé
				Urhobo	ò-rhùè ì-
				Uvbiɛ	ò-rhúè
NCE:	Edo	ò-húé	NWE:	Oloma	ó-sùè é-
	Aoma	ó-hùè		Emhalɛ	-
	Auchi	(à-glìdè)		Ibilo	(ɔ-dē) from Yoruba -d 'hunter'
	Avbianwu	(à-glìdò)		Uhami	(ɔ-dɛ)" "
	Unɛmɛ	(á-ɟédè í-)		Ehuɛun	(ɔ-dɛ)" "
	Ghotuɔ	ò-rùà ɾ-		Ukue	(ɔ-dɛ)" "

48. Proto-Edoid \*chuənhə 'hear'

DE:	Degema	suene	SWE:	Erɔwa	yō
	Egɛɛ	siono		Isoko	yhō
	Epie	sōū		Okpɛ	rhō [r̥ō]
				Urhobo	yō
				Uvbiɛ	so
NCE:	Edo	hō	NWE:	Oloma	žo
	Aoma	hō		Emhalɛ	žo
	Auchi	sɔ		Ibilo	žo
	Avbianwu	sɔ		Uhami	huo [hwo]
	Unɛmɛ	shɔ		Ehuɛun	rhō [ɾō]
	Ghotuɔ	ʒo		Ukue	rhō [ɾō]

49. Proto-Edoid \*I-chuəNi; I-chuveNi A- 'nose'

DE:	Degema	í-súvèì [ísúvèì] á-	SWE:	Eruwa	ú-wèè
	Egēṅe	ú-sùèì		Isoko	ú-ṅwé í-
	Epie	ù-súḃē		Okpẹ	ì-rhúé
				Urhobo	ú-wé í-
				Uvbiẹ	ì-rhūō
NCE:	Edo	í-húé	NWE:	Oloṃa	ú-rhùò í-
	Aoma	í-hùè		Emhalḅe	ú-sù í-
	Auchi	í-sùè		Ibilo	ú-sùò
	Avbianwu	í-sùè		Uhami	í-sù
	Uneme	í-shùè		Ehuḅun	í-rhò
	Ghotuḷ	ì-rùè		Ukue	í-rhò

50. Proto-Edoid \*da 'take (something)'

DE:	Degema	ya(ə)	SWE:	Eruwa	(tɔlɔ)
	Egēṅe	da(fə)		Isoko	(tɔlɔ)
	Epie	(tɔɔ)		Okpẹ	(ha) ?
				Urhobo	(tɔlɔ)
				Uvbiẹ	(rhɔ)
NCE:	Edo	(rhie)	NWE:	Oloṃa	-
	Aoma	(mu)		Emhalḅe	za(hɛ)
	Auchi	(rue)		Ibilo	dza
	Avbianwu	(rue)		Uhami	za
	Uneme	(rhie)		Ehuḅun	za
	Ghotuḷ	da		Ukue	da

51. Proto-Edoid \*U-daN I- 'grey hair'

DE:	Degema	ò-dáí	ì-	SWE:	Eruwa	-
	Egene	-			Isoko	-
	Epie	ì-dãã			Okpe	-
					Urhobo	-
					Uvbie	-
NCE:	Edo	-		NWE:	Oloṃa	ghó-zè é-
	Aoma	-			Emhalhe	-
	Auchi	-			Ibilo	-
	Avbianwu	-			Uhami	-
	Uneme	-			Ehueun	-
	Ghotuo	ghō-dè	ē-		Ukue	-

52. Proto-Edoid \*E-də I- 'river'

DE:	Degema	é-dè	í-	SWE:	Eruwa	í-sè
	Egene	é-dè			Isoko	é-ṣè (í-)
	Epie	é-dè			Okpe	(ù-rhíé)
					Urhobo	(ò-rhíé)
					Uvbie	(ù-rhíè)
NCE:	Edo	è-zè		NWE:	Oloṃa	-
	Aoma	é-dè			Emhalhe	(ó-kè)
	Auchi	é-dà	é-		Ibilo	(ó-kphò)
	Avbianwu	é-dà	é-		Uhami	(ú-kò)
	Uneme	é-dò			Ehueun	(ó-kè)
	Ghotuo	ē-dà	ē-		Ukue	(ù-kòù)

53. Proto-Edoid \*dedhi 'be long (of stick)'

DE:	Deḡema	de	SWE:	Ḥruwa	sosori
	Ḥgeḡe	deri		Isoko	tetei
	Epie	didiel		Okpe	seri
				Urhobo	(guno)
				Uvbie	ceceri

NCE:	Edo	(tã)	NWE:	Ọloma	-
	Aoma	(lua)		Ḥmhalhe	zeri
	Auchi	(reḡe) ?		Ibilo	dzeli
	Avbianwu	(nua)		Uhami	zeri
	Uneme	zeḡe		Ehueun	zeriri
	Ghotuḡ	(rehe) ?		Ukue	(gbolo)

54. Proto-Edoid \*deNi 'fall'

DE:	Deḡema	deĩ	SWE:	Ḥruwa	ze
	Ḥgeḡe	dei		Isoko	tje < tie
	Epie	deĩ		Okpe	se
				Urhobo	je
				Uvbie	rie

NCE:	Edo	de	NWE:	Ọloma	ze
	Aoma	de		Ḥmhalhe	ze
	Auchi	de		Ibilo	dze
	Avbianwu	de		Uhami	ze
	Uneme	de		Ehueun	ze
	Ghotuḡ	de		Ukue	de



55.	Proto-Edoid		*dɛGɪ	'sell'	
DE:	Ɖɛɣɛma	dɛɪ	SWE:	Ɖɪɾuwa	zɛ
	Ɖɛɣɛɲɛ	dɛɪ		Isoko	zɛ
	Epie	dɛɛ		Okpɛ	rhɛ
				Urhobo	ʃɛ
				Uvbiɛ	rhɛ
NCE:	Ɖɛdo	-	NWE:	Ɖɪlɔma	-
	Aoma	-		Ɖɛmhalhɛ	(gɔ)
	Auchi	-		Ibilo	-
	Avbianwu	-		Uhami	zɛ
	Unɛmɛ	-		Ehuɛun	zɛ
	Ghotuɔ	-		Ukue	dɛ

56.	Proto-Edoid		*di-	'tie (rope)'	
DE:	Ɖɛɣɛma	-	SWE:	Ɖɪɾuwa	siri
	Ɖɛɣɛɲɛ	dii		Isoko	ɾuru ?
	Epie	dĩĩ		Okpɛ	surhu ?
				Urhobo	culu ?
				Uvbiɛ	(gba)
NCE:	Ɖɛdo	de ?	NWE:	Ɖɪlɔma	-
	Aoma	dĩ		Ɖɛmhalhɛ	(gɛ)
	Auchi	di		Ibilo	dzu ?
	Avbianwu	di		Uhami	see 'tie (bundle)'
	Unɛmɛ	(gɛ)		Ehuɛun	" "
	Ghotuɔ	(gɛ)		Ukue	" "

57. Proto-Edoid \*do 'steal'

DE:	Ɖẹgẹma	do	SWE:	Ɖrụwa	so
	Ɖgẹnẹ	do		Isoko	to
	Epie	dō		Okpẹ	so
				Urhobo	co
				Uvbiẹ	co

NCE:	Ɖdo	(rhaa)	NWE:	Ɖloma	zo
	Aoma	do		Ɖmhalhẹ	zo
	Auchi	(tue)		Ibilo	dzo
	Avbianwu	(tue)		Uhami	zo
	Unẹmẹ	do, do(ḷo)		Ehueun	zo
	Ghotuọ	do		Ukue	do

58. Proto-Edoid \*do 'weave'

DE:	Ɖẹgẹma	do	SWE:	Ɖrụwa	(wō)
	Ɖgẹnẹ	do		Isoko	(zuo)
	Epie	dō		Okpẹ	(rhūō)
				Urhobo	(rhuvō)
				Uvbiẹ	(rūō)

NCE:	Ɖdo	do	NWE:	Ɖloma	-
	Aoma	do		Ɖmhalhẹ	zo
	Auchi	do		Ibilo	dzo
	Avbianwu	do		Uhami	(ki)
	Unẹmẹ	do		Ehueun	(ki)
	Ghotuọ	do		Ukue	(rhā)



61. Proto-Edoid \*A-du- ?? 'louse'

DE:	Degema	ù-dúv ì-	SWE:	Eruwa	ù-zú ì-
	Egene	(è-kpèlès)		Isoko	ò-tù ì-
	Epie	(ù-gbútōm)		Okpe	ì-rhù
				Urhobo	ò-ʃù ì-
				Uvbie	ò-rhù ì-

NCE:	Edo	ì-rhù	NWE:	Oloṃa	-
	Aoma	ì-rù		Emhalhe	ò-gù ì-
	Auchi	à-rù ì-		Ibilo	ò-dzù ì-
	Avbianwu	à-rù ì-		Uhami	(è-rì) ?
	Uneme	ì-zù		Ehueun	(è-dĩ) ?
	Ghotuṣ	ì-dū 'bedbugs'		Ukue	(è-díì) ?

62. Proto-Edoid \*dᵛ 'bargain'

DE:	Degema	dᵛ	SWE:	Eruwa	-
	Egene	dᵛ		Isoko	-
	Epie	dᵛ		Okpe	(ve)
				Urhobo	-
				Uvbie	cᵛ

NCE:	Edo	-	NWE:	Oloṃa	-
	Aoma	-		Emhalhe	-
	Auchi	-		Ibilo	dzo 'buy, sell'
	Avbianwu	-		Uhami	-
	Uneme	-		Ehueun	-
	Ghotuṣ	do		Ukue	-



63.	Proto-Edoid	*U-dhamɿ	A-	'tongue'	
DE:	Degema	ò-ɕém à-	SWE:	Eṛuwa	ò-ròvó ì-
	Egēṇe	ò-ɕémò		Isoko	è-ròò
	Epie	ì-ɕémò		Okpe	ò-rémò è-
				Urhobo	è-l'èṣṣè
				Uvbie	
NCE:	Edo	á-l'áṣṣè	NWE:	Oḷoma	-
	Aoma	ó-èṃì		Emhalhe	ò-dèmè ?
	Auchi	ó-l'èmhì		Ibilo	ó-rè é-
	Avbianwu	ó-l'èmhì		Uhami	è-dòmì ?
	Uneme	é-ṇ'èmhì		Ehueun	(èrè-rā-unù)
	Ghotuṛ	ghī-l'è;		Ukue	é-dàmì
		ghī-l'él'è			

64.	Proto-Edoid	*O-dhimhi	A-	'corpse'	
DE:	Degema	ò-ɕím è-	SWE:	Eṛuwa	ò-rìvì ì-
	Egēṇe	(ó-zú)		Isoko	ò-ṛì ì-
	Epie	(ì-ɕóṣ)		Okpe	ò-ṇímí
				Urhobo	ò-l'ìṣṣì ì-
				Uvbie	ò-ṇìṃì ì-
NCE:	Edo	ò-l'ìṣṣì	NWE:	Oḷoma	ó-rìmhì í-
	Aoma	ó-ìṃì			(é-rìmhì 'land of the dead')
	Auchi	ó-l'ìmhì á-		Emhalhe	ó-rìmhì í-
	Avbianwu	ó-l'ìmhì á-		Ibilo	(ó-khù) í-
	Uneme	ó-ṇìmhì		Uhami	(ò-gù)
	Ghotuṛ	ò-ìmhì ā-		Ehueun	(ò-gù)
				Ukue	(ó-gù)

65. Proto-Edoid \*dhr 'eat'

DE:	Degema	dɪ	SWE:	Eruwa	ɾɪ [ɾɪ]
	Egene	dɪ		Isoko	ɾɪ
	Epie	dɪ		Okpe	ɾe
				Urhobo	le
				Uvbie	ɾɪ

NCE:	Edo	le/ɾe	NWE:	Oloṃa	re
	Aoma	e		Emhalhe	re
	Auchi	le		Ibilo	re
	Avbianwu	le		Uhami	ri
	Uneme	le		Ehueun	ri
	Ghotuo	e		Ukue	di

66. Proto-Edoid \*dhodho 'think, consider'

DE:	Degema	-	SWE:	Eruwa	-
	Egene	-		Isoko	ɾoɾo
	Epie	-		Okpe	ɾoɾo
				Urhobo	lolo
				Uvbie	ɾoɾo

NCE:	Edo	loo/ɾoo	NWE:	Oloṃa	-
	Aoma	oo		Emhalhe	-
	Auchi	(gbhala)		Ibilo	ì-ròrò 'thought'
	Avbianwu	(gbhae)		Uhami	-
	Uneme	ì-lòlò 'thought'		Ehueun	(rūrā)
	Ghotuo	i-oo 'thought'		Ukue	-

67. Proto-Edoid \*dhɔNɪ 'swallow'

DE:	ƉeƉema	ɔɔĩ	SWE:	Ɖɔwa	(sɔ)ɔɔ
	ƉeƉe	ɔɔ		Isoko	lɔ
	Epie	ɔɔĩ		Okpe	ɔɔ
				Urhobo	lɔ
				Uvbie	lɔ

NCE:	Ɖo	(mi)lɛ	NWE:	Ɖoma	(ɟina rɛ)
	Aoma	ɟɔɔ ?		Ɖmhalhe	lɛ
	Auchi	(mi)lɛ		Ibilo	(lɛwɛ)
	Avbianwu	(tso)lɛ		Uhami	(kpami)
	Uneme	(mi)lɔ		Ehueun	(kpamu)
	Ghotuo	lɔlɔ		Ukue	(kpamɔ)

68. Proto-Edoid \*dhu 'do, make'

DE:	ƉeƉema	(kpene)	SWE:	Ɖɔwa	ru [ɔu]
	ƉeƉe	(wuru)		Isoko	ɔu
	Epie	(wulu)		Okpe	ɔu
				Urhobo	lu
				Uvbie	ɔu

NCE:	Ɖo	lu/ɔu	NWE:	Ɖoma	ri
	Aoma	(ɛhɛ)		Ɖmhalhe	ri
	Auchi	lu		Ibilo	ri
	Avbianwu	lu		Uhami	(ma)
	Uneme	lu		Ehueun	(sɛrɛ)
	Ghotuo	i/yi		Ukue	di

69.	Proto-Edoid	*O-dhudhu	I-	'cotton'
DE:	Dẹgema	(á-flāfà)	SWE:	Ẹrụwa (ú-vólàhá í-)
	Ẹgẹnẹ	(ì-rìì)		Isoko ò-lúlú
	Epie	(ì-bìlákà)		Okpẹ ò-rúrú
				Urhobo ò-lúlú í-
				Uvbie ò-rúrú
NCE:	Edo	ò-lúlú	NWE:	Ọloma ó-nùnú í-
	Aoma	ò-úú		Emhalhẹ ó-lòlò í-
	Auchi	ó-lùlù í-		Ibilo (ú-tsi) í-
	Avbianwu	ó-lùù		Uhami ò-rúrú
	Unẹmẹ	óò-lù í-		Ehueun (ò-dàgũ)
	Ghotuọ	ò-lùlú í-		Ukue (ù-gú)

70.	Proto-Edoid	*U-dhuNi; U-dhiNi	A-	'rope'
DE:	Dẹgema	ù-áíú à-	SWE:	Ẹrụwa (ú-fì í-)
	Ẹgẹnẹ	ì-áìì		Isoko (ú-fì í-)
	Epie	ù-áìì		Okpẹ (ù-fí)
				Urhobo (ú-fì) í-
				Uvbie (ú-fì)
NCE:	Edo	ì-rí	NWE:	Ọloma ghú-rìghì í-
	Aoma	ú-ì		Emhalhẹ ú-rì í-
	Auchi	ú-lì í-		Ibilo ú-rì í-
	Avbianwu	ú-lì í-		Uhami ú-dì
	Unẹmẹ	ú-lì í-		Ehueun ù-rì
	Ghotuọ	ù-ùghì í-lghì		Ukue (ulakpa)



71. Proto-Edoid \*dhI-dh<sub>o</sub> A- 'eye'

DE:	Degema	à-ɖó	'face'	SWE:	Eruwa	à-ró[axu](pl.)
	Egēṅe	à-ɖò			Isoko	è-ɖò à-
	Epie	à-ɖò			Okpe	è-rò
					Urhobo	a-lo
					Uvbie	à-ɖò

NCE:	Edo	à-lò/à-ɣò		NWE:	Oloṃa	(ú-nògò)?
	Aoma	è-ò			Emhalhe	râ-rò è-
	Auchi	(úkp-)è-lò à-lò (pl.)			Ibilo	ú-lò ?
	Avbianwu	(úkp-)è-lò à-lò (pl.)			Uhami	à-rù
	Uneme	(úkp-)è-lòlì (íkp-)à-lò (pl.)			Ehueun	(à-dù) ?
	Ghotuo	èè-ò à-			Ukue	(è-dù) ?

72. Proto-Edoid \*ɖa 'to drink (alcohol)'

DE:	Degema	ɖa		SWE:	Eruwa	da
	Egēṅe	ɖa			Isoko	da
	Epie	ɖa			Okpe	da
					Urhobo	da
					Uvbie	da

NCE:	Edo	(wɔ)		NWE:	Oloṃa	da
	Aoma	da			Emhalhe	-
	Auchi	da			Ibilo	da
	Avbianwu	da			Uhami	da
	Uneme	(hɔ)			Ehueun	da
	Ghotuo	(ŋ <sup>w</sup> ɔ)			Ukue	(yɔ)

## 73. Proto-Edoid

\*dɛ

'buy'

DE:	Degema	dɛ	SWE:	Erɔwa	dɛ
	Egene	(dɔ)		Isoko	dɛ
	Epie	dɛ		Okpe	dɛ
				Urhobo	dɛ
				Uvbie	dɛ
NCE:	Edo	dɛ	NWE:	Oloma	dɛ
	Aoma	dɛ		Emhalhe	dɛ
	Auchi	dɛ		Ibilo	dɛ
	Avbianwu	dɛ		Uhami	dɛ
	Uneme	dɛ		Ehueun	dɛ
	Ghotuo	dɛ		Ukue	dɛ

## 74. Proto-Edoid

\*U-di

A-

'oil palm'

DE:	Degema	i-di e-; u-di a- 'palm wine'	SWE:	Erɔwa	e-di i-
	Egene	u-di 'wine (general)'		Isoko	o-ríe
	Epie	e-di		Okpe	(o-vbanɪ)
				Urhobo	u-di 'wine (general)'
				Uvbie	o-ríe
NCE:	Edo	u-di	NWE:	Oloma	-
	Aoma	u-di		Emhalhe	o-ɪ pl. u-ɪ
	Auchi	u-di í-		Ibilo	o-rí í-
	Avbianwu	u-di í-		Uhami	i-di
	Uneme	u-di í-		Ehueun	i-rí
	Ghotuo	ghí-i (also ghí-ɪ)		Ukue	f-di

75. Proto-Edoid \*U-ɖiə- A- 'heart, liver'

DE:	Dɛgɛma	ù-ɖíóm à-	SWE:	Ẹrɔwa	(ú-ví-)ú-dù
	Ẹgɛɛ	(i-kpebi)		Isoko	ú-dù í-
	Epie	à-ɖìòmù		Okpɛ	ù-króm-)ú-dù
				Urhobo	(ú-bí-)ú-dù
				Uvbiɛ	(ó-bí-)ú-dù
NCE:	Ẹdo	ù-dù	NWE:	Ọlọma	-
	Aoma	ú-dù		Ẹmhalhɛ	(rà-mò)
	Auchi	ù-dù ì-		Ibilo	(ú-ḷòkhò)
	Avbianwu	(ò-kpè)		Uhami	(ò-xùò)
	Unɛmɛ	ù-dù ì-		Ehuɛun	(ɔ-kǎ) cf. Yoruba
	Ghotuɔ	ù-dù ì-		Ukue	ɔ-kǎ, 'heart'
					(ó-kǎ) " "

76. Proto-Edoid \*ɖumhi 'pound (in mortar)'

DE:	Dɛgɛma	(vutu)	SWE:	Ẹrɔwa	duvbũ
	Ẹgɛɛ	(sɔ)		Isoko	du
	Epie	ɖumu (only in the Atisa dialect)		Okpɛ	dumu
				Urhobo	duvbũ
				Uvbiɛ	dumu
NCE:	Ẹdo	duvbũ	NWE:	Ọlọma	-
	Aoma	dumu		Ẹmhalhɛ	dumhu (only of herbs, etc.)
	Auchi	ḷumhì		Ibilo	(gbe)
	Avbianwu	ḷumhì		Uhami	dumu
	Unɛmɛ	numhu		Ehuɛun	dubhũ [dumũ]
	Ghotuɔ	umhì		Ukue	(gbe)

77. Proto-Edoid \*fadhɪ 'tie (bundle); make (rope)'

DE:	Degema	far	SWE:	Erɔwa	-
	Egɛɛ	-		Isoko	-
	Epie	-		Okpɛ	-
				Urhobo	-
				Uvbiɛ	-
NCE:	Edo	-	NWE:	Oloma	-
	Aoma	-		Emhalhe	-
	Auchi	-		Ibilo	fari
	Avbianwu	-		Uhami	fari
	Unɛmɛ	-		Ehuɛun	fari
	Ghotuɔ	vai		Ukue	fari

78. Proto-Edoid \*O-fɛdh- 'wind'

DE:	Degema	ò-fɛrɔ̀ ì-	SWE:	Erɔwa	(ú-fò)
	Egɛɛ	(ó-vílóvò)		Isoko	(ò-fòù)
	Epie	(ò-vùlòvùlò)		Okpɛ	à-vɛ́ɛ́
				Urhobo	(à-ɸòɸò)
				Uvbiɛ	à-vɛ́ɛ́
NCE:	Edo	(è-hóhò)	NWE:	Oloma	-
	Aoma	(è-fíoro)		Emhalhe	(ò-víɛzɛ)
	Auchi	(é-fòfò)		Ibilo	(è-vèlèvèlè)
	Avbianwu	(á-fófò)		Uhami	(ú-nínì)
	Unɛmɛ	(á-vèvè)		Ehuɛun	ò-fɛ́ɛ́fɛ́ɛ́
	Ghotuɔ	(ì-òvòvò)		Ukue	(ó-flòrò)



79. Proto-Edoid \*-fɪNa 'nail (finger)'

DE:	Degema	(à-vé (pl.))	SWE:	Eruwa	(è-ví)
	Egēne	(é-vè)		Isoko	(ù-tú)
	Epie	-		Okpe	ì-fífá <b>bó</b> (a-bɔ = 'hand')
				Urhobo	í-fífá <b>bò</b> (a-bɔ = 'hand')
				Uvbie	ú-fâ <b>bò</b> (a-bɔ = 'hand')

NCE:	Edo	í-híé	NWE:	Oloma	ì-é-fùà é-
	Aoma	é-híé		Emhalhe	ó-fià é-
	Auchi	é-fié (pl.)		Ibilo	émhò-fòà
	Avbianwu	(ukp-)ó-fié		Uhami	(è-vié)
	Uneme	é-fièni		Ehueun	(í-vì)
	Ghotuo	ēē-fùè ēē-		Ukue	(é-vì)

80. Proto-Edoid A-fofo I- 'wind'

DE:	Degema	(ò-fèrô)	ì-	SWE:	Eruwa	ú-fò
	Egēne	(ó-vílóvò)			Isoko	ò-fòù
	Epie	(ò-vùlòvùlò)			Okpe	(à- <b>véré</b> )
					Urhobo	à- <b>phòphò</b> )
					Uvbie	(à- <b>véré</b> )

NCE:	Edo	è-hóhò	NWE:	Oloma	-
	Aoma	(è-fioro)		Emhalhe	(ò-víēzē)
	Auchi	é-fòfò		Ibilo	(è-vèlèvèlè)
	Avbianwu	á-fófò		Uhami	(ú-nínì)
	Uneme	(á-vèvè)		Ehueun	(ò-fārēféré)
	Ghotuo	ì- <b>uòuò</b>		Ukue	(ó-flòrò)

81. Proto-Edoid \*fumhi 'swell'

DE:	ƉeƉema	fu	SWE:	Ɖruwa	fi(ri)
	ƉeƉeƉe	fuo		Isoko	fu
	Epie	fue		Okpe	fu
				Urhobo	(vbɔ [vɔ])
				Uvbie	fu(ru)
NCE:	Ɖdo	hivbiã [hiũĩã]	NWE:	Ɖloma	-
	Aoma	humu		Ɖmhalhe	(bie)
	Auchi	fumhi		Ibilo	(bio)
	Avbianwu	fumhi		Uhami	(mina)
	Uneme	fumhu		Ehueun	(zɔ)
	Ghotuɔ	vumhi		Ukue	(dhɔ)

82. Proto-Edoid \*fɔɛnhɪ; fɔɪnhɪ 'wash (clothes)'

DE:	ƉeƉema	-	SWE:	Ɖruwa	-
	ƉeƉeƉe	fɔɪɪ		Isoko	(hɔ) see 'wash (body)'
	Epie	-		Okpe	fɔ(rhɔ)
				Urhobo	fɔ(rhɔ)
				Uvbie	fɔɪɪ 'wash (things)'
NCE:	Ɖdo	hɔ	NWE:	Ɖloma	fue
	Aoma	-		Ɖmhalhe	-
	Auchi	fɔ		Ibilo	fɔɛɪ
	Avbianwu	fɔ		Uhami	fɛ
	Uneme	fɔ		Ehueun	fũ
	Ghotuɔ	fue		Ukue	fũɛ

83.	Proto-Edoid	*gu-	'weed, dig'	
DE:	Degema	-	SWE: Eruwa	-
	Egenē	-	Isoko	-
	Epie	gu	Okpe	-
			Urhobo	-
			Uvbie	-
NCE:	Edo	gua	NWE: Oloṃa	-
	Aoma	gua	Emhalhe	-
	Auchi	gua	Ibilo	-
	Avbianwu	gua	Uhami	-
	Uneme	hualo 'hoe, weed'	Ehueun	-
	Ghotuo	gua 'hoe, weed'	Ukue	-

84.	Proto-Edoid	*-guə	'hoe (n.)'	
DE:	Degema	(è-sóà i-) <sup>1</sup>	SWE: Eruwa	é-wè í-
	Egenē	(à-sóà) <sup>1</sup>	Isoko	è-γwé
	Epie	(à-sóà) <sup>1</sup>	Okpe	e-kwɔo ?
			Urhobo	é-wùlò
			Uvbie	(è-rhò)
NCE:	Edo	è-gúé	NWE: Oloṃa	(è-rè)
	Aoma	è-gúè	Emhalhe	(à-rè)
	Auchi	è-gúè	Ibilo	(á-támhà)
	Avbianwu	è-gúé	Uhami	(ù-lòlò)
	Uneme	è-gúè	Ehueun	(ē-hérè)
	Ghotuo	(è-gbā) ?	Ukue	(ò-lé1è)

1 cf. Ghotuo ghā-sùè 'a  
a small kind of hoe'

85. Proto-Edoid \*gwa 'hoe, dig'

DE:	Degema	(bul)	SWE:	Eruwa	é-wè 'hoe(n.)'
	Egēne	(vie)		Isoko	è-ghúé [èγwé]
	Epie	gu 'dig'		Okpe	'hoe (n.)'
		(see also item 83)		Urhobo	-
				Uvbie	-

NCE:	Edo	gua	NWE:	Oloṃa	
	Aoma	gua		Emhalhe	hoa(ce)
	Auchi	gua		Ibilo	gwa
	Avbianwu	gua		Uhami	gua
	Uneme	gua		Ehūeun	gua
	Ghotuo	gua		Ukue	gua

86. Proto-Edoid \*u-gheGi/u\*-ɣheGi 'twenty'

DE:	Degema	ì-yéú	SWE:	Eruwa	u-gie [udze]
	Egēne	í-yèì		Isoko	ù-dè
	Epie	ì-yéē		Okpe	ù-zé
				Urhobo	ù-zè
				Uvbie	ù-ɣè

NCE:	Edo	ù-gíé	NWE:	Oloṃa	ú-èghì
	Aoma	ú-è		Emhalhe	ú-yè 'score'
	Auchi	ú-wè		Ibilo	(ó-gbhòlò)
	Avbianwu	ú-wè		Uhami	ú-yè
	Uneme	ú-è		Ehūeun	(ū-gbòrò)
	Ghotuo	ū-èghì [ūèγì]		Ukue	(ú-gbàrò)



87. Proto-Edoid \*ghia/\*ɣhia 'send (someone to do something)'

DE:	Ɖeɣema	-	SWE:	Ɖɾɯwa	gi [dʒi]
	Eɣeɳe	(vio)		Isoko	(vi)
	Epie	-		Okpe	ɟe
				Urhobo	[ʒe]
				Uvbie	ɟe

NCE:	Ɖo	gie	NWE:	Ɖloma	-
	Aoma	gie		Ɖmhalhe	(ve)
	Auchi	ghie		Ibilo	(ve)
	Avbianwu	ghi		Uhami	(vie)
	Uneme	-		Ehueun	[dʒe]
	Ghotuo	(e)ghe [eɣe]		Ukue	yi

88. Proto-Edoid \*ghu 'die'

DE:	Ɖeɣema	wu	SWE:	Ɖɾɯwa	wu
	Eɣeɳe	wu		Isoko	ghu [ɣwu]
	Epie	wu		Okpe	hu
				Urhobo	ghu [ɣwu]
				Uvbie	gu

NCE:	Ɖo	ghu [ɣu]	NWE:	Ɖloma	u
	Aoma	ũ		Ɖmhalhe	wu
	Auchi	ghu		Ibilo	gu
	Avbianwu	ghu		Uhami	gu
	Uneme	ɦu [ɦũ]		Ehueun	gu
	Ghotuo	ũ		Ukue	gu

89.	Proto-Edoid	*E-ghuNi	I-	'tortoise'
DE:	Dẹgẹma	è-wí ì-	SWE:	Ẹrụwa (ò-rókí)
	Egẹne	è-wìl		Isoko -
	Epie	è-wìl		Okpẹ (ò-gbêyì)
				Urhobo (à-náùkè)
				Uvbie -
NCE:	Èdo	è-gúf	NWE:	Ọlọma -
	Aoma	é-ì		Ẹmhalhẹ é-wì
	Auchi	é-ghì		Ibilo é-gùì
	Avbianwu	é-ghì		Uhami é-gì
	Unẹmẹ	é-hù [éhù]		Ehueun ē-gùè
	Ghotuọ	è-ù		Ukue é-gùì

90.	Proto-Edoid	*gbeGi		'beat, kill'
DE:	Dẹgẹma	gbie	SWE:	Ẹrụwa we
	Egẹne	gbei		Isoko kpe
	Epie	-		Okpẹ kpe
				Urhobo hue [xwe]
				Uvbiẹ hue [xwe]
NCE:	Èdo	gbe	NWE:	Ọlọma -
	Aoma	gbe		Ẹmhalhẹ gbe
	Auchi	gbe		Ibilo gbe
	Avbianwu	gbe		Uhami gbe
	Unẹmẹ	gbe		Ehueun gbe
	Ghotuọ	gbe		Ukue gbe

91. Proto-Edoid \*-gbeNi 'ten'

DE:	Degema	ì-gbéí	SWE:	Eruwa	í-kpè
	Egeng	í-gbè		Isoko	ìí-kpè
	Epie	í-gbēē		Okpè	ì-kpè
				Urhobo	í-hùè [íxwè]
				Uvbie	ì-kpè

NCE:	Edo	ì-gbé	NWE:	Oloṃa	lí-gbé
	Aoma	ì-gbé		Emhalḥe	ì-gbē
	Auchi	ì-gbé		Ibilo	ì-gbè
	Avbianwu	ì-gbē		Uhami	ì-gbé
	Uneme	ì-gbé		Ehūḥun	ì-gbē
	Ghotuḡ	ì-gbēè		Ukue	ì-gbē

92. Proto-Edoid \*gbiə (or gbəi?) 'laugh'

DE:	Degema	gbɛɪ	SWE:	Eruwa	wɛ
	Egeng	gbɛ		Isoko	hue
	Epie	gbɛɪ		Okpè	kiɛ ([cɛ]) ?
				Urhobo	xwɛ
				Uvbiḡ	kwe

NCE:	Edo	giɛ	NWE:	Oloṃa	gbia
	Aoma	giɛ		Emhalḥe	gbia
	Auchi	giɛ		Ibilo	gbia
	Avbianwu	giɛ		Uhami	gia
	Uneme	ɟɛ		Ehūḥun	gia
	Ghotuḡ	gia		Ukue	gia

93. Proto-Edoid \*gbɔ 'newness'

DE:	Degema	-	SWE:	Eruwa	-
	Egene	-		Isoko	kpɔkpɔ 'be new'
	Epie	-		Okpe	(kpɔ)kpɔ 'be new'
				Urhobo	(kpɔ)kpɔ 'be new'
				Uvbie	(kpɔ)kpɔ 'be new'
NCE:	Edo	ó-gbɔ̀	NWE:	Oloṃa	-
	Aoma	ò-gbɔ̀		Emhalhe	-
	Auchi	ò-gbɔ̀mhì		Ibilo	-
	Avbianwu	ò-gbɔ̀mhì		Uhami	-
	Uneme	(ó-nò)-gbɔ̀ 'the new one'		Ehueun	-
	Ghotuo	ò-gbɔ̀		Ukue	gbɔgbɔ 'be new'

94. Proto-Edoid \*A-gbɔN 'life; world'

DE:	Degema	-	SWE:	Eruwa	-
	Egene	-		Isoko	-
	Epie	-		Okpe	-
				Urhobo	à-kpɔ̀
				Uvbie	-
NCE:	Edo	à-gbɔ̀	NWE:	Oloṃa	à-gbɔ̀ 'people'
	Aoma	à-gbɔ̀		Emhalhe	è-gbɔ̀ 'people'
	Auchi	à-gbɔ̀		Ibilo	-
	Avbianwu	à-gbɔ̀		Uhami	-
	Uneme	a-gbɔ̀		Ehueun	-
	Ghotuo	à-gbɔ̀ also 'people'		Ukue	-



95. Proto-Edoid \*gbha 'tie'

DE:	Ɖẹgẹma	-	SWE:	Ɖrụwa	(siri)
	Ɖẹgẹ	(dii)		Isoko	gba 'tie (into bundle)'
	Epie	(diī)		Okpẹ	gba
				Urhobo	gba
				Uvbiẹ	gba
NCE:	Ɖdo	gba	NWE:	Ọloma	-
	Aoma	gba(1o)		Ɖmhalhẹ	(gε)
	Auchi	gba		Ibilo	(dzu)
	Avbianwu	(di)		Uhami	(fari)
	Unẹmẹ	(gε)		Ehuẹun	(fari)
	Ghotuọ	gba (of a rope bridge)		Ukue	(fari)

96. Proto-Edoid \*A-gbhamhɪ (I-?) 'chin, jaw'

DE:	Ɖẹgẹma	(ókp-)á-ṅmgbà á- ?	SWE:	Ɖrụwa	à-gbàvbǎ ì-
	Ɖẹgẹ	àgbà		Isoko	à-gbà ì-
	Epie	à-gbǎ		Okpẹ	à-gbǎ
				Urhobo	é-gbā
				Uvbiẹ	é-gbǎ
NCE:	Ɖdo (Bini)	à-gbàvbǎ	NWE:	Ọloma	à-gbà
	Aoma	à-gbǎ		Ɖmhalhẹ	à-gbà
	Auchi	à-gbà		Ibilo	à-gbàgbà
	Avbianwu	à-gbà		Uhami	à-gbàmì
	Unẹmẹ	à-gbà		Ehuẹun	à-wǎ
	Ghotuọ	à-gbà		Ukue	à-gbǎ

97. Proto-Edoid \*o-gbhaN 'thirty'

DE:	Degema	(lyèùnìgbéí) 'twenty and ten'	SWE:	Erüwa	ó-gbà
	Egēṅe	(iyenigbei) 'twenty and ten'		Isoko	ó-gbà
	Epie	(yenigbee)		Okpe	ó-gbà
				Urhobo	ó-gbā
				Uvbię	ó-gbà
NCE:	Edo	ó-gbà	NWE:	Ọloma	á-gbà
	Aoma	ó-gbà		Emhalhe	(ó-gbhòlítègbê) 'twenty and ten'
	Auchi	(úwe íkpamhigbé) 'twenty and (some) ten'		Ibilo	(ógbhòlétègbé) 'twenty and ten'
	Avbianwu	(úwe íkpamhigbé) 'twenty and (some) ten'		Uhami	ó-gbà
	Uneme	ó-gbà		Ehueun	ó-gbā
	Ghotuọ	ɔ-gbà		Ukue	ó-gbà

98. Proto-Edoid \*gbhe 'dance'

DE:	Degema	(BENE)	SWE:	Erüwa	gbe
	Egēṅe	(BINE)		Isoko	gbe
	Epie	(da)		Okpe	gbe
				Urhobo	gbe
				Uvbię	gbe
NCE:	Edo	gbe	NWE:	Ọloma	-
	Aoma	(khĩē)		Emhalhe	-
	Auchi	gbe		Ibilo	gbe
	Avbianwu	gbe		Uhami	(mɔnɔ)
	Uneme	gbe		Ehueun	(mɔrɔ)
	Ghotuọ	gbe		Ukue	(mɔnɔ)

99. Proto-Edoid \*ɟɛ 'choose'

DE:	Dẹgẹma	(sɔ)	SWE:	Ẹrụwa	sɛ(1ɛ)
	Ẹgẹnẹ	yɛ		Isoko	dʒɛ
	Epie	die ?		Okpẹ	ɟɛ
				Urhobo	ʒɛ
				Uvbiẹ	ʒɛ
NCE:	Ẹdo	zɛ	NWE:	Ọlọma	-
	Aoma	zɛ		Ẹmhalhẹ	yɛ
	Auchi	dzɛ		Ibilo	ɟɛ
	Avbianwu	dzɛ		Uhami	ɟɛ
	Unẹmẹ	zɛ		Ehuẹun	ɟɛ
	Ghotuọ	zɛ		Ukue	yɛ

100. Proto-Edoid \*O-ɟi A- 'thief'

DE:	Dẹgẹma	ò-zí	è-	SWE:	Ẹrụwa	ò-dʒí	ì-
	Ẹgẹnẹ	ò-zì	< ò-zì		Isoko	ò-dʒì	ì-
	Epie	ù-zì	'theft'		Okpẹ	ò-hí	ì-
					Urhobo	ò-zì	ì-
					Uvbiẹ	ò-ɟì	ì-
NCE:	Ẹdo	ò-yí		NWE:	Ọlọma	ó-yì	
	Aoma	ó-ì			Ẹmhalhẹ	ó-yì	
	Auchi	ò-ghì(à-tó,			Ibilo	ò-ɟì	
	Avbianwu	ò-ghì(à-tó)			Uhami	ó-ɟí	
	Unẹmẹ	ó-ì			Ehuẹun	(ā-rhò)	
	Ghotuọ	ò-zì(ghā)	ì-		Ukue	(á-rhò)	

101.	Proto-Edoid		*U-ɟɪ-, *-ɟɪa, ? A-	'blood'	
DE:	Degema	ɪ-zala	SWE:	Erɔwa	à-zí
	Egɛɛ	(à-bàrà)		Isoko	à-zè
	Epie	à-zàrà		Okpɛ	(ò-bàrà)
				Urhobo	(ò-bàrà) è-
				Uvbie	(ò-bàrà)
NCE:	Edo	(è-sáǵìè)	NWE:	Ọloma	à-zè
	Aoma	(ɛ-ri)		Emhalhe	à-zè
	Auchi	(à-rai) ɪ-		Ibilo	à-dzè
	Avbianwu	(ó-rà)		Uhami	è-zè
	Uneme	(á-rànì)		Ehueun	è-rè
	Ghotuɔ	òò-dè à-		Ukue	è-dè

102.	Proto-Edoid		*A-ɟuəNi	I-	'axe'
DE:	Degema	(è-gbùgbú ɪ-)	SWE:	Erɔwa	è-zué ɪ-
	Egɛɛ	u-suei		Isoko	è-ɣwèi ɪ-
	Epie	è-sùí		Okpɛ	(ù-kéké)
				Urhobo	(ù-ɟ(úrhé) ɪ-) ?
				Uvbie	è-vhùè
NCE:	Edo	(ù-ɣàvã)	NWE:	Ọloma	-
	Aoma	ú-zè		Emhalhe	ú-zè
	Auchi	ù-dzé ɪ-		Ibilo	ù-dzé ɪ-
	Avbianwu	ù-dzé ɪ-		Uhami	(é-dò)
	Uneme	ú-zè		Ehueun	(a-rhù)
	Ghotuɔ	ù-zè í-		Ukue	(ù-gàmà)



103. Proto-Edoid \*ka 'be dry'

DE:	Ɖẹgẹma	(gb̄or)	SWE:	Ɖr̄uwa	(aa) ?
	Ɖgẹnẹ	(yas̄ɪ) ?		Isoko	(yaya) ?
	Epie	(yas̄ɪ) ?		Okpẹ	ka
				Urhobo	(ya) ?
				Uvbiẹ	(yaya) ?
NCE:	Ɖdo	ka	NWE:	Ɖl̄oma	(hughu)
	Aoma	ka		Ɖmhalhẹ	kara
	Auchi	kaka		Ibilo	(f̄o)
	Avbianwu	ka		Uhami	(hura)
	Unẹmẹ	ka		Ehufeun	(huiri)
	Ghotuọ	kaka		Ukue	(huere)

104. Proto-Edoid \*O-ka I- 'maize'

DE:	Ɖẹgẹma	(ò-mbiàkpá)	SWE:	Ɖr̄uwa	ó-kà í-
	Ɖgẹnẹ	á-kà		Isoko	ó-kà
	Epie	à-kâ		Okpẹ	ó-kà é-
				Urhobo	ó-kà é-
				Uvbiẹ	ó-kà é-
NCE:	Ɖdo	ó-kà	NWE:	Ɖl̄oma	-
	Aoma	ó-kà		Ɖmhalhẹ	(ú-bākpā í-)
	Auchi	ó-kà é-		Ibilo	(ù-gbhàdó) cf. Yoruba àgbàdò
	Avbianwu	ó-kà é-			'maize'
	Unẹmẹ	(òò-kpà)		Uhami	(ó-gbàdó) "
	Ghotuọ	ó-kà ẽ-		Ehufeun	(ì-gbàdò) "
				Ukue	ó-kà

105. Proto-Edoid \*kadɪ 'carve (wood)'

DE:	Ɖegema	kaɪ	SWE:	Ɖruwa	kari
	Ɖgene	kari		Isoko	kari
	Epie	kaɪ		Okpe	(dʒaɾɔ)
				Urhobo	kaɛ
				Uvbie	kaɪ
NCE:	Ɖdo	ka	NWE:	Oloma	-
	Aoma	xae		Emhalhe	kare
	Auchi	khæ		Ibilo	kaɪ
	Avbianwu	kha		Uhami	kari
	Uneme	kaɪ		Ehueun	kari
	Ghotuo	hai		Ukue	kai

106. Proto-Edoid \*U-kə I- 'back, behind, rear side'

DE:	Ɖegema	ì-kó(súm)	SWE:	Ɖruwa	ù-kè (usually with é-rìuì 'rear, back side')
	Ɖgene	(ó-gbò)		Isoko	ú-kè í-
	Epie	ù-kó(ɔ̀ùmù)		Okpe	ù-gbú-kò
				Urhobo	ù-gbú-kò ì-
				Uvbie	ù-(dú-)kè
NCE:	Ɖdo	i-(ye-)ke	NWE:	Oloma	-
	Aoma	í-kèké (usually with è-hìml = íkèkéhìml)		Emhalhe	(é-ɟìmhì)
	Auchi	í-(tsì-)kè		Ibilo	(è-ɟì)
	Avbianwu	í-(tsì-)kè		Uhami	(é-ɟìml)
	Uneme	ì-kè 'behind'		Ehueun	(e-hù)
	Ghotuo	ù-kè 'hunch back'		Ukue	(è-ɟìml)

107. Proto-Edoid \*kɛGi 'split'

DE:	Degema	kɛɪ	SWE:	Erɔwa	(bɛɪɪ)
	Egɛnɛ	kɪɛ		Isoko	-
	Epie	kɛɛ		Okpɛ	kɛɣɛ̃
				Urhobo	(bɛɪɪɛ)
				Uvbiɛ	(bɛɪɪɪ)
NCE:	Edo	(va)	NWE:	Oloma	-
	Aoma	(valɔ)		Emhalhɛ	tarɪɛ
	Auchi	(tsɔɔɔ)		Ibilo	kiɛ 'tear'
	Avbianwu	(tsɔ)		Uhami	kiɛ
	Unɛmɛ	(sɛ)		Ehueun	-
	Ghotuɔ	ki 'cut'		Ukue	kiɛ

108. Proto-Edoid \*I-kɛN 'earth (soil)'

DE:	Degema	(i-kpɛ̃kplɛ̃m)	SWE:	Erɔwa	ĩ-hè
	Egɛnɛ	see 'ground'		Isoko	(ɛ̃-kpɛ̃)
	Epie	-		Okpɛ	é-yè
				Urhobo	(è-kpɛ̃)
				Uvbiɛ	-
NCE:	Edo	ɔ-kè 'sand'	NWE:	Oloma	-
	Aoma	è-kè		Emhalhɛ	è-kɛ (also 'ground')
	Auchi	è-kè (also 'sand')		Ibilo	è-kè (also 'sand')
	Avbianwu	è-kè			a-kɛ 'ground'
	Unɛmɛ	è-kè		Uhami	è-kè à-kè 'ground'
	Ghotuɔ	è-kè		Ehueun	è-kè (also 'ground')
				Ukue	è-kè " "

109. Proto-Edoid \*A-ki I- 'market'

DE:	Dẹgẹma	è-kí ì-	SWE:	Ẹrụwa	è-kí ì-
	Ẹgẹṅẹ	è-kì		Isoko	è-kì
	Ẹpie	è-kì		Okpẹ	é-yì
				Urhobo	è-kì
				Uvbiẹ	è-kì
NCE:	Ẹdo	è-kì	NWE:	Ọlọma	ghè-kì
	Aoma	è-kì		Ẹmhalhẹ	wè-kì rù-kì
	Auchi	à-kì ì-		Ibilo	è-cì
	Avbianwu	à-kì		Uhami	è-cì
	Unẹmẹ	à-kì		Ehuẹun	è-hi
	Ghotuọ	ghò-kì		Ukue	è-kì

110. Proto-Edoid \*U-ki I- 'moon (pl. months)'

DE:	Dẹgẹma	(ò-bâm)	SWE:	Ẹrụwa	(ò-vèrĩ ì-)
	Ẹgẹṅẹ	ù-kì		Isoko	(ò-vèi ì-)
	Ẹpie	ù-kì		Okpẹ	(ì-bíám)
				Urhobo	(é-ménàvè)
				Uvbiẹ	(o-miṅam)
NCE:	Ẹdo	ù-kì	NWE:	Ọlọma	ghù-kì rù-
	Aoma	ù-kì		Ẹmhalhẹ	ù-kì è-
	Auchi	ù-kì ì-		Ibilo	ù-kì ì-
	Avbianwu	ù-kì ì-		Uhami	ù-kì
	Unẹmẹ	ù-kì (or à-kì)		Ehuẹun	(ò-kpā)
		ì-		Ukue	(ò-kpā)
	Ghotuọ	ù-kì ì-			



111. Proto-Edoid \*A-kiə I- 'he-goat'

DE:	Degema	(è-kpé ì-)	? SWE:	Eruwa	(è-kpí ì-)
	Egēne	ó-kìà		Isoko	ò-kɛ̀l ì-
	Epie	-		Okpe	(ì-kpí)
				Urhobo	ó-kìì
				Uvbie	(ó-kórhí í-) ?

NCE:	Edo	(ò-u-)ú-xò	NWE:	Oloṃa	ú-cò ì-)
	Aoma	óβíú-xò		Emhalhe	ù-kìò [ûcò]
	Auchi	úyú-kò íyí-		Ibilo	ù-kìò [ûcò]
	Avbianwu	ò-ké ì-		Uhami	ù-kìè [âcè]
	Uneme	(ú-úkhò)		Ehueun	ù-kìò [ûcò]
	Ghotuṃ	(ū-kò ì-)		Ukue	ù-kio [ûcò]

112. Proto-Edoid \*dhI-kiNə A- 'egg'

DE:	Degema	ú-kīē í-	SWE:	Eruwa	í-kè
	Egēne	í-kìè		Isoko	é-ké í-
	Epie	ì-kíē		Okpe	ì-yé
				Urhobo	ú-ké í-
				Uvbie	ú-ké i-

NCE:	Edo	è-ké	NWE:	Oloṃa	íé-cà à-
	Aoma	ê-kè		Emhalhe	rá-cà é-
	Auchi	é-kèè		Ibilo	ílá-cà é-
	Avbianwu	é-kè e-		Uhami	é-kàpè
	Uneme	é-kèṃì		Ehueun	ì-hīē
	Ghotuṃ	ēē-kè		Ukue	ì-kè

113. Proto-Edoid \*koko 'gather (things)'

DE:	Dẹgẹma	(kuroi)	SWE:	Ẹrụwa	koko
	Ẹgẹṅẹ	(kilokpoli)		Isoko	koko
	Epie	(kpe)		Okpẹ	koko
				Urhobo	(wε)koko
				Uvbiẹ	koko

NCE:	Edo	koko	NWE:	Ọlọma	-
	Aoma	(si)koko		Ẹmhalhẹ	(kωεrε)
	Auchi	koko		Ibilo	(kωl̩εsε)
	Avbianwu	nanɔ		Uhami	(hurɔ)
	Unẹmẹ	(kugbe)		Ehuẹun	(hurɔ)
	Ghotuọ	(wa)koko		Ukue	(kuεrhε)

114. Proto-Edoid \*O-kokodhoko I- 'cock' (onomatopoeic)

DE:	Dẹgẹma	-	SWE:	Ẹrụwa	ò-kòkòróòkò
	Ẹgẹṅẹ	-		Isoko	-
	Epie	-		Okpẹ	ò-kòkòr̩ókò
				Urhobo	ò-kòkòl̩ókò
				Uvbiẹ	-

NCE:	Edo	-	NWE:	Ọlọma	-
	Aoma	-		Ẹmhalhẹ	ò-kòkò 'chicken'
	Auchi	-		Ibilo	ò-kò ì- 'chicken'
	Avbianwu	-		Uhami	ò-kòkò 'chicken'
	Unẹmẹ	-		Ehuẹun	ò-hō 'chicken'
	Ghotuọ	ò-kòkòr̩ókò		Ukue	ò-kókò 'chicken'

115. Proto-Edoid \*kɔ 'plant, sow'

DE:	Ɖegema	(kper)	SWE:	Ɖɔwa	kɔ
	Ɖegene	(gbou)		Isoko	kɔ
	Epie	(gboɔu)		Okpe	wɔ
				Urhobo	kɔ
				Uvbie	kɔ

NCE:	Ɖdo	kɔ	NWE:	Ɖloma	-
	Aoma	kɔ		Ɖmhalhe	kɔ
	Auchi	kɔ		Ibilo	kɔ
	Avbianwu	kɔ		Uhami	kɔ
	Uneme	kɔ		Ehueun	kɔ
	Ghotuo	kɔ		Ukue	kɔ

116. Proto-Edoid U-kɔ I- 'boat/canoe; mortar'

DE:	Ɖegema	ò-kɔ	SWE:	Ɖɔwa	ò-kɔ	ì-
	Ɖegene	ò-kò		Isoko	ò-kò	ì-
	Epie	ò-kò		Okpe	ò-wɔ	
				Urhobo	ò-kò	è-
				Uvbie	ò-kò	

NCE:	Ɖdo	ò-kɔ	NWE:	Ɖloma	ghò-kò	rɔ-
	Aoma	ò-kò		Ɖmhalhe	wò-kò	è-
	Auchi	ó-kò		Ibilo	ó-kò	é-
	Avbianwu	ó-kò é-		Uhami	ó-kò	
	Uneme	ó-kò é-		Ehueun	ò-kò	
	Ghotuo	ghò-kɔ è-		Ukue	ó-kò	

117. Proto-Edoid \*ku 'pour'

DE:	Degema	(dudu)	SWE:	Eruwa	ku
	Egene	see 'scatter'		Isoko	ku
	Epie	(ɲwiɲi)		Okpe	(rhie)
				Urhobo	ku(o)
				Uvbie	ku
NCE:	Edo	see 'scatter'	NWE:	Oloṃa	ku
	Aoma	ku		Emhalhe	ku
	Auchi	ku		Ibilo	ku
	Avbianwu	ku		Uhami	see 'scatter'
	Uneme	ku		Ehueun	" "
	Ghotuo	ku		Ukue	" "

118. Proto-Edoid \*dhI-kɔN A- 'tooth'

DE:	Degema	à-kó à-	SWE:	Eruwa	à-kó (pl.)
	Egene	à-kò		Isoko	à-kò
	Epie	à-kò		Okpe	á-wò (pl.)
				Urhobo	à-kò
				Uvbie	à-kò
NCE:	Edo	à-kò	NWE:	Oloṃa	lè-kò à-
	Aoma	à-kò (pl.)		Emhalhe	rà-kò à-
	Auchi	è-kò à-		Ibilo	à-kò
	Avbianwu	(úgb-)è-kò		Uhami	à-kò
		à-kò		Ehueun	à-kù
	Uneme	à-kò		Ukue	à-kù
	Ghotuo	èè-kò à-			



119. Proto-Edoid \*U-khəNi I- 'navel'

DE:	Degema	(ù-ɖúm à-)	SWE:	Eruwa	(ú-tùlè í-)
	Egəne	(ù-ɖùmù)		Isoko	ú-hùòhùò í-
	Epie	(ù-ɖùmù)		Okpe	è-rhúrhè
				Urhobo	ù-hòhí
				Uvbie	(è-rhúrhù) ?
NCE:	Edo	ù-xò	NWE:	Oloṃa	-
	Aoma	ù-xò		Emhalhe	(ú-tùà í-)
	Auchi	(úkp-)ù-khò		Ibilo	ó-kò 'umbilical cord'
	Avbianwu	(úkp-)ù-khò		Uhami	èrè-kò
	Uneme	ù-khò í-		Ehueun	ò-hò
	Ghotuo	ò-hòyì è-		Ukue	ò-kò

120. Proto-Edoid \*A-khiNə I- 'housefly'

DE:	Degema	(ú-mómò)	SWE:	Eruwa	(ú-η <sup>w</sup> úvò)
	Egəne	(é-mómò)		Isoko	[ó-η <sup>é</sup> ]
	Epie	(óβomó)		Okpe	ù-yé í-
				Urhobo	ú-yé í-
				Uvbie	(ò-vbòmó è-)
NCE:	Edo	ì-kíá	NWE:	Oloṃa	ghé-cà í-
	Aoma	í-jè		Emhalhe	wè-cà í-
	Auchi	á-khìà í-		Ibilo	è-cà
	Avbianwu	á-khìà í-		Uhami	í-cà
	Uneme	í-khìò		Ehueun	ì-cà
	Ghotuo	ghā-cà í-		Ukue	ì-cà

121. Proto-Edoid \*khɪNa 'walk, go'

DE:	Ɖegema	(ta)	SWE:	Ɖɔwa	ya
	Ɖegene	(bɪɗa)		Isoko	[ɲnã]
	Epie	(ta)		Okpe	nã
				Urhobo	yã
				Uvbie	ʒa

NCE:	Ɖdo	xĩã	NWE:	Ɖloma	ca
	Aoma	sĩã		Ɖmhalhe	kia [tʃà]
	Auchi	khia		Ibilo	kia [cà]
	Avbianwu	khia		Uhami	kia [cà]
	Uneme	khia		Ehueun	kĩã [cà]
	Ghotuo	kia [câ]		Ukue	kĩã [cà]

122. Proto-Edoid \*O-khɔkhɔ I- 'chicken (domestic fowl)'

DE:	Ɖegema	ó-hóhò í-	SWE:	Ɖɔwa	(à-rífé)
	Ɖegene	(à-fènì) see		Isoko	(à-rífè)
	Epie	'bird'		Okpe	(ò-rílélé)
		ɔ-wɔɔ		Urhobo	ó-hò é-
				Uvbie	ò-òò

NCE:	Ɖdo	ò-xóxò	NWE:	Ɖloma	ó-khò í-
	Aoma	ò-xóxò		Ɖmhalhe	see 'cock
	Auchi	ó-khò é-			(onomatopoeic)'
	Avbianwu	ó-khò è-		Ibilo	see " "
	Uneme	ó-khókhò é-		Uhami	" " "
	Ghotuo	ò-hò ẽ-		Ehueun	" " "
				Ukue	" " "

123. Proto-Edoid \*khənhɪ 'to fight, war'

DE:	Degema	kəɲ	SWE:	Eruwa	həɾĩ
	Egene	kəɲɪ		Isoko	həɾɪ
	Epie	kəɲɪ		Okpe	wəɲɔ
				Urhobo	həɲɛ
				Uvbie	həɲɪ

NCE:	Edo	khɔ [xɔ]	NWE:	Oloṃa	-
	Aoma	khəĩ [xəĩ]		Emhalhe	-
	Auchi	khəe		Ibilo	khəɲɔ
	Avbianwu	khə		Uhami	kəɲɔ
	Uneme	khəɲi		Ehueun	kəɾĩ
	Ghotuṣ	həɲɔ 'to war, feud'		Ukue	kəɲɔ

124. Proto-Edoid \*khuə- 'open, close'

DE:	Degema	kuiẽ	SWE:	Eruwa	ku
	Egene	kuei 'open'; kuu 'close'		Isoko	-
	Epie	kiye 'open'; kuu 'close'		Okpe	kurhu 'close'
				Urhobo	(rhurhu)
				Uvbie	(rhie) 'open (door)'

NCE:	Edo	xui (also 'lock')	NWE:	Oloṃa	khueze 'cover'
	Aoma	(fi)		Emhalhe	kukie 'open'; kukuaʒɪ 'close'
	Auchi	khu(no) 'close'		Ibilo	kuie 'open'
	Avbianwu	khu(nu) khunua 'open'		Uhami	ku(a) 'open'; kuzu 'close'
	Uneme	khuze 'close'		Ehueun	kū(ba) 'close'
	Ghotuṣ	xue 'open'		Ukue	(werhe) ? 'close'

125. Proto-Edoid \*kh<sub>o</sub>- 'be heavy'

DE:	Deḡema	k <sub>o</sub> r	SWE:	Ḥruwa	(gb <sub>o</sub> vb <sub>o</sub> )
	Eḡene	k <sub>o</sub> ε		Isoko	(gbεgbεdε)
	Epie	-		Okpe	ghua [ɣwa]
				Urhobo	h <sub>o</sub> h <sub>o</sub>
				Uvbie	h <sub>o</sub> h <sub>o</sub>

NCE:	Ḥdo	khua [xwa]	NWE:	Ḥloma	-
	Aoma	khua [xwa]		Ḥmhalhe	-
	Auchi	khua		Ibilo	k <sub>o</sub>
	Avbianwu	khua		Uhami	k <sub>o</sub> o
	Uneme	khua		Ehueun	h <sub>o</sub>
	Ghotuo	( <sub>o</sub> -l <sub>o</sub> -)khua [xwa] 'the great/heavy one'		Ukue	k <sub>o</sub> a

126. Proto-Edoid \*kh<sub>o</sub>ε 'wash (body)'

DE:	Deḡema	-	SWE:	Ḥruwa	h <sub>o</sub>
	Eḡene	(du)		Isoko	h <sub>o</sub>
	Epie	(kεε)		Okpe	w <sub>o</sub>
				Urhobo	h <sub>o</sub>
				Uvbie	(rh <sub>o</sub> ua)

NCE:	Ḥdo	xuε	NWE:	Ḥloma	k <sub>o</sub>
	Aoma	xuε		Ḥmhalhe	k <sub>o</sub>
	Auchi	khue		Ibilo	k <sub>o</sub>
	Avbianwu	khue		Uhami	k <sub>o</sub>
	Uneme	kh <sub>o</sub>		Ehueun	k <sub>o</sub>
	Ghotuo	k <sub>o</sub>		Ukue	k <sub>o</sub>



127. Proto-Edoid \*dhI-kh<sub>o</sub>mhɪ A- 'war'

DE:	Degema	ì-ṛòṃ	SWE:	Eruwa	è-mó
	Egene	è-wòṃò		Isoko	è-mò
	Epie	ì-wòṃo		Okpe	o-wòṛĩ
				Urhobo	(ò-fòvì)
				Uvbie	ò-hòṇì

NCE:	Edo	ò-kúḍò ?	NWE:	Oloṃa	ré-hùmhù
	Aoma	ó-siò		Emhalhe	rá-hòmhò
	Auchi	ó-khò é-		Ibilo	lǎ-hò
	Avbianwu	ó-khò é-		Uhami	éré-hùmù
	Uneme	ó-khòṇì		Ehueun	ērē-hù
	Ghotuo	ò-hò ē-		Ukue	é-hùmì

128. Proto-Edoid \*kpa 'vomit'

DE:	Degema	(toko)	SWE:	Eruwa	(rere)
	Egene	(bɪɔ)		Isoko	(geli)
	Epie	(ṛwamò)		Okpe	gērē
				Urhobo	kpa
				Uvbie	(ɟinenu)

NCE:	Edo	kpa	NWE:	Oloṃa	kpa
	Aoma	kpa		Emhalhe	kpa
	Auchi	kpa		Ibilo	(ba)
	Avbianwu	kpa(nɔ)		Uhami	(ba)
	Uneme	kpa		Ehueun	(ba)
	Ghotuo	kpa		Ukue	(ba)

129. Proto-Edoid \*E-kpa I- 'bag'

DE:	Degema	(ôṅm-gbá)-kpa	SWE:	Eṛuwa	è-kpá ì-
	Egēṅe	à-kpà		Isoko	è-kpà ì-
	Epie	à-kpā ?		Okpe	(à-bòmá)
				Urhobo	(é-kpù)
				Uvbie	(é-kpóló)

NCE:	Edo	(é-kpò)	NWE:	Oḷoma	-
	Aoma	è-kpà		Emhalhe	(ò-žòžòžò) è-
	Auchi	è-kpà è-		Ibilo	(à-kpò)
	Avbianwu	è-kpà è-		Uhami	(à-kpò)
	Uneme	è-kpà		Ehueun	(à-kpò)
	Ghotuo	è-kpà è- (for native doctor or hunter)		Ukue	(à-kpò)

130. Proto-Edoid \*O-kpa I- 'cock'

DE:	Degema	(ó-hóhómòsì) 'male fowl'	SWE:	Eṛuwa	(ò-kòkòrókò) see 'cock (onomatopoeic)'
	Egēṅe	(à-fèní mòsì) 'male fowl/ domestic bird'		Isoko	ò-kpà ì-
	Epie	(o-wɔɔ mɔsɪ)		Okpe	(o-gborhualɛ)
				Urhobo	(ò-kòkòlókò)
				Uvbie	ò-kpà

NCE:	Edo	ò-kpà	NWE:	Oḷoma	ò-kpà
	Aoma	ò-kpà		Emhalhe	ò-kpà è-
	Auchi	ò-kpà è-		Ibilo	ò-kpà è-
	Avbianwu	ò-kpà è-		Uhami	ò-kpà
	Uneme	ò-kpà		Ehueun	è-kpà
	Ghotuo	ò-kpà è-		Ukue	è-kpà

131. Proto-Edoid \*U-kpəN A- 'cloth'

DE:	Dẹgẹma	(ì-tóú à-)	SWE:	Ẹrụwa	(ò-hó ì-)
	Ẹgẹṅẹ	(ó-tàrì)		Isoko	(ò-hò ì )
	Epie	(à-kànì)		Okpẹ	ó-wè
				Urhobo	à-ṛmá
				Uvbiẹ	(ò-hṣ)

NCE:	Ẹdo	ù-kpṣ	NWE:	Ọlọma	ú-ṛwàẏè í-
	Aoma	ú-kpṣ		Ẹmhalhẹ	ū-ḡê
	Auchi	ú-kpṣ		Ibilo	(à-cà)
	Avbianwu	ú-kpṣ		Uhami	(è-véè)
	Unẹmẹ	ú-kpṣ í-		Ehueun	(à-rhà)
	Ghotuọ	ū-ṛwàhè ī- (but cf. ū-kpṣ in names and idiomatic expressions)		Ukue	(à-rhà)

132. Proto-Edoid \*kpe- (or kphe- ?) 'think'

DE:	Dẹgẹma	(mavakne)	SWE:	Ẹrụwa	(kele) ?
	Ẹgẹṅẹ	kpe(bi)		Isoko	-
	Epie	-		Okpẹ	-
				Urhobo	-
				Uvbiẹ	-

NCE:	Ẹdo	-	NWE:	Ọlọma	-
	Aoma	-		Ẹmhalhẹ	ku
	Auchi	-		Ibilo	-
	Avbianwu	-		Uhami	kpe(re)
	Unẹmẹ	-		Ehueun	-
	Ghotuọ	kwe		Ukue	kpe(re)

133. Proto-Edoid \*U-kpe A- 'year'

DE:	Degema	ù-kpé	à-	SWE:	Er̩wa	ù-kpé	ì-
	Eg̩eṅe	ú-kpè			Isoko	ù-kpè	ì-
	Epie	ù-kpè			Okpe	ù-kpé	l-
					Urhobo	ù-kpè	l-
					Uvbie	ù-kpè	

NCE:	Edo	ù-kpó	? <sup>1</sup>	NWE:	Oloṃa	u-kpe	
	Aoma	ù-kpè			Emhalhe	ú-kpè	í-
	Auchi	ú-kpè			Ibilo	ú-kpè	
	Avbianwu	ú-kpè			Uhami	(e-zo)	
	Uneme	ú-kpì	?		Ehueun	(e-ro)	
	Ghotuṃ	ú-kpè	í		Ukue	(e-zo)	

<sup>1</sup>(cf. Ghotuṃ u-kpo  
'period of time')

134. Proto-Edoid \*kpeNi 'wash (things)'

DE:	Degema	kpei	SWE:	Er̩wa	(worie)
	Eg̩eṅe	kpei		Isoko	(vɔzɛ)
	Epie	kpēē		Okpe	(ɣwē)?
				Urhobo	-
				Uvbie	(fɔrhɪ)

NCE:	Edo	kpe	NWE:	Oloṃa	kpie
	Aoma	-		Emhalhe	kpeye
	Auchi	kpeghie		Ibilo	kpee
	Avbianwu	-		Uhami	-
	Uneme	kpe		Ehueun	-
	Ghotuṃ	kpie		Ukue	-



135. Proto-Edoid \*E-kpɛN I- 'leopard'

DE:	Degema	è-kpé ì-	SWE:	Eruwa	-
	Egēne	-		Isoko	è-kpè ì-
	Epie	-		Okpe	(ù-bìdò)
				Urhobo	(è-ɟèlè)
				Uvbie	è-kpé-ɾâbò ?
NCE:	Edo	è-kpè	NWE:	Oloṃa	è-kpè
	Aoma	(è-bìrìà)		Emhalhe	à-kpè
	Auchi	è-kpè		Ibilo	à-kpè
	Avbianwu	è-kpè		Uhami	è-kùè [ɛkwè]
	Uneme	è-kpè		Ehueun	è-kùè [ɛkwè]
	Ghotuo	è-kpè		Ukue	è-kùè [ɛ-kwè]

136. Proto-Edoid \*U-kphanɪ A- 'horn'

DE:	Degema	ω-kpán à-	SWE:	Eruwa	(í-gwè)
	Egēne	è-kpàni		Isoko	(ò-gbà ì-)
	Epie	ì-kpàni		Okpe	(ì-ghòɾò)
				Urhobo	(ò-gbà ì-)
				Uvbie	(ì-cò)
NCE:	Edo	(ì-ghò)	NWE:	Oloṃa	ò-kphàni è-
	Aoma	è-khùàmì [èxwàmì]		Emhalhe	ò-kphàni è-
	Auchi	ò-kphàè è-		Ibilo	ò-kphà è-
	Avbianwu	e-kphae		Uhami	è-kpàni
	Uneme	è-kphàni ì-		Ehueun	è-hùàni
	Ghotuo	ò-khùà [òxwà] è-		Ukue	è-kpàni

137. Proto-Edoid \*kphedhi 'beat (drum)'

DE:	Ɖegema	kpor	SWE:	Ɖruwa	kporo
	Ɖgene	(no)		Isoko	kporo
	Epie	(no)		Okpe	kporo
				Urhobo	xuolo
				Uvbie	kperi

NCE:	Ɖdo	kpe	NWE:	Ɖloma	-
	Aoma	xuee		Ɖmhalhe	kpheri
	Auchi	kphee		Ibilo	kpheli
	Avbianwu	kpei		Uhami	kueri
	Uneme	kpheli		Ehueun	kueri
	Ghotuo	xuehe		Ukue	kue

138. Proto-Edoid \*ladho 'lick'

DE:	Ɖegema	(ɓɪar)	SWE:	Ɖruwa	lalo
	Ɖgene	(ɓɪ)la		Isoko	lalo
	Epie	(ɓɪ)la		Okpe	lalo
				Urhobo	lalo
				Uvbie	(ɓɪavbo)

NCE:	Ɖdo	lalo	NWE:	Ɖloma	-
	Aoma	lalo		Ɖmhalhe	-
	Auchi	nano		Ibilo	(kua)
	Avbianwu	nano		Uhami	raro
	Uneme	nano		Ehueun	(phaa) [ɕaa]
	Ghotuo	lalo		Ukue	(nomo) also 'bite'

139. Proto-Edoid \*l<sub>ə</sub> 'creep, flow'

DE:	Ɖęgema	-	SWE:	Ɖrụwa	-
	Ɖgęņę	la 'creep'		Isoko	-
	Epie	-		Okpę	-
				Urhobo	-
				Uvbię	-
NCE:	Ɖdo	la	NWE:	Ɖloma	-
	Aoma	-		Emhalhe	-
	Auchi	na		Ibilo	-
	Avbianwu	na		Uhami	-
	Uneme	no		Ehueun	-
	Ghotuọ	la		Ukue	-

140. Proto-Edoid \*l<sub>ɔ</sub> 'grind'

DE:	Ɖęgema	(gbɛ)	SWE:	Ɖrụwa	(hɔγɔ) ?
	Ɖgęņę	(gbɛ)		Isoko	(vuhu)
	Epie	(gbɛ̃)		Okpę	lɔ
				Urhobo	lɔ
				Uvbię	lɔ
NCE:	Ɖdo	lɔ	NWE:	Ɖloma	-
	Aoma	lɔ		Emhalhe	(hɔ) ?
	Auchi	no		Ibilo	(hɔ) ?
	Avbianwu	(mhe)		Uhami	(hɔ) ?
	Uneme	(hɔ̃) ?		Ehueun	(hɔ) ?
	Ghotuọ	lɔ		Ukue	(hɔ) ?

141. Proto-Edoid \*ma 'mould, build'

DE:	Degema	(ɖum)	SWE:	Eruwa	ma
	Egēne	ma		Isoko	ma
	Epie	ma		Okpe	ma
				Urhobo	ma
				Uvbie	ma
NCE:	Edo	ma	NWE:	Oloṃa	ma
	Aoma	ma		Emhalhe	ma
	Auchi	ma		Ibilo	ma
	Avbianwu	ma		Uhami	ma
	Uneme	ma		Ehueun	ma
	Ghotuo	ma		Ukue	ma

142. Proto-Edoid \*ma- 'learn'

DE:	Degema	ma(knε)	SWE:	Eruwa	(wōrã)
	Egēne	ma(mone)		Isoko	(vuhɾε)
	Epie	ma(nana)		Okpe	(nono)
				Urhobo	(yono)
				Jvbie	(yōno)
NCE:	Edo	(luε/ɾuε)	NWE:	Oloṃa	-
	Aoma	mama		Emhalhe	mamažε
	Auchi	-		Ibilo	(ɲweʒina)
	Avbianwu	-		Uhami	(kazε)
	Uneme	(ɲwena)		Ehueun	(horhε)
	Ghotuo	mama		Ukue	(korhε)



143. Proto-Edoid \*-mɛmhɛ 'I (independent)'

DE:	Dɛgɛma	ɔ-mɛ	SWE:	ɛɾuwa	mɛvɛ
	ɛgɛɲɛ	mɛ		Isoko	-
	Epie	mɛmɛ		Okpɛ	mɛmɛ
				Urhobo	mɛvɛ̃
				Uvbiɛ	mɛmɛ

NCE:	ɛdo	mɛ	NWE:	ɔlɔma	-
	Aoma	mɛmɛ		ɛmhalhɛ	mɛmhɛ
	Auchi	mɛɛ		Ibilo	mɛmɛ
	Avbianwu	mɛ		Uhami	u-mɛ
	Unɛmɛ	mɛ		Ehuɛun	i-mɛ
	Ghotuɔ	mɛmhɛ		Ukue	mɛ

144. Proto-Edoid \*mi 'wring (clothes)'

DE:	Dɛgɛma	mim	SWE:	ɛɾuwa	mi
	ɛgɛɲɛ	(giri)		Isoko	mi
	Epie	mimi		Okpɛ	mi
				Urhobo	mi
				Uvbiɛ	mi

NCE:	ɛdo	mi	NWE:	ɔlɔma	mi
	Aoma	mi		ɛmhalhɛ	mi 'squeeze (water out of cotton seed)'
	Auchi	mi		Ibilo	mi
	Avbianwu	mi		Uhami	mi(ɛ)
	Unɛmɛ	mi(no)		Ehuɛun	mi(ɛ)
	Ghotuɔ	mi		Ukue	mi(ɛ)

145. Proto-Edoid \*mɪnhɪ 'see'

DE:	Ɖegema	mɔn	SWE:	Ɖruwa	mrĩ
	Ɖgene	mɔnɪ		Isoko	(ɔɔɛ)
	Epie	mɔnɪ		Okpe	mɛɔẽ
				Urhobo	mɪẽ
				Uvbie	mɔẽ

NCE:	Ɖdo	miɛ	NWE:	Ɖloma	miɛ
	Aoma	miɛ		Ɖmhalhe	mɔɛ
	Auchi	miɛ		Ibilo	miɛ
	Avbianwu	miɛ		Uhami	miɛ
	Uneme	mhiɛ		Ehueun	mirẽ
	Ghotuo	mhe		Ukue	miɛ

146. Proto-Edoid \*A-mɪN I- 'water'

DE:	Ɖegema	à-mɪn	SWE:	Ɖruwa	à-mɪ
	Ɖgene	à-mɪnì		Isoko	à-mì
	Epie	à-mɪnì		Okpe	á-mì
				Urhobo	à-mè
				Uvbie	à-mì

NCE:	Ɖdo	à-mè	NWE:	Ɖloma	à-mè
	Aoma	à-mè		Ɖmhalhe	à-mè
	Auchi	à-mè		Ibilo	à-mè
	Avbianwu	à-mè		Uhami	à-mè
	Uneme	à-mè		Ehueun	à-mè
	Ghotuo	à-mè		Ukue	à-mè

147. Proto-Edoid \*mɔ 'bear (fruit)'

DE:	Degema	-	SWE:	Eruwa	-
	Egenu	mɔ		Isoko	-
	Epie	-		Okpe	mɔ
				Urhobo	-
				Uvbie	mɔ
NCE:	Edo	mɔ	NWE:	Oloṃa	-
	Aoma	-		Emhalhe	-
	Auchi	mɔ		Ibilo	-
	Avbianwu	-		Uhami	-
	Uneme	-		Ehuen	-
	Ghotuṃ	mɔ		Ukue	-

148. Proto-Edoid \*O-mɔ 'child'

DE:	Degema	ó-mɔ	í-mɔ (pl.)	SWE:	Eruwa	ò-mó	
	Egenu	ó-mò			Isoko	ó-mó	í-mó
	Epie	ò-mô			Okpe	ò-mó	è-
					Urhobo	ó-mó	é-
					Uvbie	ò-mó	
NCE:	Edo	ò-mó		NWE:	Oloṃa	á-mò	(í-blà (pl.))
	Aoma	(ó-bhì (pl.))	í-bhì		Emhalhe	ó-mò	(í-bia (pl.))
	Auchi	ó-mò	(í-vblàè (pl.))		Ibilo	ó-mò	
	Avbianwu	ó-mò	(í-vblà (pl.))		Uhami	ó-mò	
	Uneme	ó-mò	í-		Ehuen	ò-mò	
	Ghotuṃ	ò-mò	(í-blà (pl.))		Ukue	ó-mò	



149. Proto-Edoid \*mu 'catch, hold (in hand)'

DE:	Degeḡema	(gbol)	SWE:	Ḃruwa	mu
	Egeḡeḡe	(dafa) see 'take'		Isoko	mu
	Epie	mu		Okpe	mu
				Urhobo	mu
				Uvbie	mu

NCE:	Ḃdo	mu	NWE:	Ḃloma	-
	Aoma	mu		Ḃmhalhe	mu
	Auchi	mu		Ibilo	mu
	Avbianwu	mu		Uhami	mu
	Uneme	mu		Ehueun	mu
	Ghotuḡ	mu 'hold, carry'		Ukue	mu

150. Proto-Edoid \*mha 'measure'

DE:	Degeḡema	ma	SWE:	Ḃruwa	-
	Egeḡeḡe	ma		Isoko	-
	Epie	-		Okpe	-
				Urhobo	-
				Uvbie	-

NCE:	Ḃdo	vbā [vā]	NWE:	Ḃloma	-
	Aoma	-		Ḃmhalhe	-
	Auchi	mha		Ibilo	mha
	Avbianwu	-		Uhami	-
	Uneme	-		Ehueun	-
	Ghotuḡ	mha		Ukue	-



151. Proto-Edoid \*-mhanhi 'we (independent)'

DE:	ƉeƉeƉe	(e-ni) ?	SWE:	ƉeƉe	maare
	EƉeƉe	(e-ni) ?		Isoko	-
	Epie	(e-ni) ?		Okpe	a-mr ?
				Urhobo	a-vani
				Uvbie	(s-ni)

NCE:	Ɖe	i-ma/ma	NWE:	Ɖe	-
	Aoma	mama		EƉhalhe	mhamha
	Auchi	mhae		Ibilo	mhamha
	Avbianwu	mhae		Uhami	a-mae (excluding listener)
	Uneme	mhamha		Ehueun	i-marĩ
	Ghotuo	mhamha/mhaa		Ukue	mai

152. Proto-Eaoid \*-mhe 'my, min'

DE:	ƉeƉe	me	SWE:	ƉeƉe	vbe [ve]
	EƉeƉe	me		Isoko	me
	Epie	me		Okpe	-
				Urhobo	me
				Uvbie	me

NCE:	Ɖe	vbe [ve]	NWE:	Ɖe	me ?
	Aoma	me		EƉhalhe	me
	Auchi	mhe		Ibilo	hme [me]
	Avbianwu	mhe		Uhami	me
	Uneme	mhe		Ehueun	-
	Ghotuo	mhe		Ukue	me

153. Proto-Edoid \*-mhinhi 'thing, something'

DE:	Dẹgẹma	l-núm l-	SWE:	Ẹrụwa	(ò-vbá-kò)
	Ẹgẹṅẹ	l-nùmù		Isoko	(ò-wà-rì)
	Epie	(l-sínl)		Okpẹ	èmǎú
				Urhobo	(o-na-vbò)
				Uvbie	(o-rhɔ-mɔ)

NCE:	Edo	è-vbí	NWE:	Ọlọma	-
	Aoma	é-mì		Ẹmhalhẹ	ē-nùmhù
	Auchi	é-mì		Ibilo	é-mhi
	Avbianwu	é-mì		Uhami	(í-ma)
	Unẹmẹ	é-mhìnì		Ehueun	(è-bhǎ([emǎ]))
	Ghotuọ	mhosó (rare: (e)mhi(oso); pl. è-mà)		Ukue	(è-bhǎ)

154. Proto-Edoid \*A-mhuNə 'ashes'

DE:	Dẹgẹma	(a-mafu) ?	SWE:	Ẹrụwa	í-mò
	Ẹgẹṅẹ	è-mò (fòmò)		Isoko	é-ṅwò í-
	Epie	ù-wò, (bùtǎǎbàlá) ?		Okpẹ	-
				Urhobo	l-wù(rhìè)
				Uvbie	-

NCE:	Edo	è-mùè	NWE:	Ọlọma	-
	Aoma	è-mùè		Ẹmhalhẹ	wè-mò
	Auchi	è-mùèè [èṅwèè]		Ibilo	è-mò
	Avbianwu	è-mùè		Uhami	è-mò
	Unẹmẹ	è-mhò		Ehueun	è-mò
	Ghotuọ	ghè-mò		Ukue	è-mò

155. Proto-Edoid \*na 'give'

DE:	Ɖegema	(kɪɛ)	SWE:	Ɖruwa	(kɛ)
	Ɖgene	(kɪɛ)		Isoko	(kɛ)
	Epie	(kɪɛ)		Okpe	(yɛ)
				Urhobo	(kɛ)
				Uvbie	(kɛ)

NCE:	Ɖdo	nɛ	NWE:	Ɖloma	na
	Aoma	ni		Ɖmhalhe	na
	Auchi	na		Ibilo	na
	Avbianwu	-		Uhami	-
	Uneme	-		Ehueun	rã ?
	Ghotuo	na		Ukue	na

156. Proto-Edoid \*nəN(u) 'defecate'

DE:	Ɖegema	neũ (with difficulty)	SWE:	Ɖruwa	ne (cf. í-nèŋ <sup>wũ</sup> 'faeces')
	Ɖgene	-		Isoko	ne
	Epie	-		Okpe	ne
				Urhobo	ne
				Uvbie	ne

NCE:	Ɖdo	nɛ	NWE:	Ɖloma	nɛ
	Aoma	nɛ		Ɖmhalhe	nɛ
	Auchi	nɛ		Ibilo	nɛ
	Avbianwu	nɛ		Uhami	nɛ
	Uneme	(fe a)		Ehueun	nɛ
	Ghotuo	nɛ 'fart'		Ukue	nɛ

157. Proto-Edoid \*dhI-ni A- 'name'

DE:	Degema	ì-ní à-	SWE:	Er̄uwa	(ə-varā)
	Eḡene	ì-nl̄		Isoko	(à-dè)
	Epie	ì-nl̄		Okpe	(à-dé)
				Urhobo	(ò-dè è-)
				Uvbię	(ò-r̄úǎ)

NCE:	Edo	è-nf̄	NWE:	Ołoma	l̄é-ni í-
	Aoma	é-lr̄i		Emhalhe	r̄é-ni í-
	Auchi	é-nl̄l̄l̄		Ibilo	í-n̄n̄è
	Avbianwu	é-nl̄l̄l̄		Uhami	(ó-và)
	Uneme	é-n̄n̄i		Ehueun	(ó-và)
	Ghotuọ	(ē-và)		Ukue	(ó-và)

158. Proto-Edoid \*E-ni I- 'elephant'

DE:	Degema	è-ní ì-	SWE:	Er̄uwa	(ó-dò isìghì)
	Eḡene	(ó-dógbò)		Isoko	è-ni ì-
	Epie	-		Okpe	è-ní ì-
				Urhobo	è-ni ì-
				Uvbię	è-ni ì-
NCE:	Edo	è-ní	NWE:	Ołoma	é-ni í-
	Aoma	í-ni		Emhalhe	(à-làzà è-)
	Auchi	ĩ-ni		Ibilo	(á-l̄adzà é-)
	Avbianwu	í-ni		Uhami	è-ni
	Uneme	í-ni		Ehueun	(ē-r̄i) (cf. Yoruba: erin)
	Ghotuọ	ĩ-ní		Ukue	(ē-r̄i) (cf. Yoruba: erin)



159.	Proto-Edoid		*E-nuə	I-	'mouth'
DE:	Degema	l-ní	SWE:	Eruwa	è-nú
	Egēne	í-níl		Isoko	ù-nù ì-
	Epie	l-níl		Okpe	ù-nú ì-
				Urhobo	èé-nè-nù
				Uvbie	è-nì
NCE:	Edo	è-né	NWE:	Oloṃa	èé-nì
	Aoma	èé-nè		Emhalhe	èé-nè
	Auchi	é-diè ?		Ibilo	èé-nè
	Avbianwu	è-diè ?		Uhami	é-nè
	Uneme	èé-né		Ehueun	èē-nì
	Ghotuo	èē-nè		Ukue	è-níì

160.	Proto-Edoid		*U-niə/-nhia	A-	'vein'	
DE:	Degema	ú-ỹā	á-	SWE:	Eruwa	-
	Egēne	-			Isoko	-
	Epie	-			Okpe	-
					Urhobo	-
					Uvbie	-
NCE:	Edo	í-níá		NWE:	Oloṃa	-
	Aoma	-			Emhalhe	-
	Auchi	ú-ḷlà			Ibilo	-
	Avbianwu	ú-ḷlà			Uhami	-
	Uneme	í-nìò			Ehueun	-
	Ghotuo	ū-ná	ī-		Ukue	-

161. Proto-Edoid \*O-ninhø 'cold' (n.)

DE:	Degema	ú-nínlín	SWE:	Eruwa	-
	Egene	-		Isoko	-
	Epie	-		Okpe	-
				Urhobo	-
				Uvbie	-
NCE:	Edo	ó-ní	NWE:	Oloṃa	-
	Aoma	-		Emhalhe	-
	Auchi	-		Ibilo	ì-ṛínà
	Avbianwu	-		Uhami	ú-nínì
	Uneme	-		Ehueun	-
	Ghotuo	ò-ṛínì		Ukue	-

162. Proto-Edoid \*nɔ 'ask, question'

DE:	Degema	(brigen)	SWE:	Eruwa	see 'ask (for something)'
	Egene	see 'ask (for something)'		Isoko	nɔ
	Epie	(pulu)		Okpe	nɔ
				Urhobo	nɔ
				Uvbie	nɔ
NCE:	Edo	nɔ	NWE:	Oloṃa	-
	Aoma	nɔ		Emhalhe	see 'ask (for something)'
	Auchi	nɔ		Ibilo	" "
	Avbianwu	nɔ		Uhami	lɔsɛ
	Uneme	see 'ask (for something)'		Ehueun	see 'ask (for something)'
	Ghotuo	nɔnɔ 'ask repeatedly; nag; etc.'		Ukue	see 'ask (for something)'

163. Proto-Edoid \*E-nuə I- 'mouth'

DE:	Degema	è-nú ì-	SWE:	Erɔwa	è-nú
	Egɛɛ	è-nù 'entrance'		Isoko	ù-nù ì-
	Epie	ù-kúnúñū		Okpɛ	ù-nú ì-
				Urhobo	ù-nù
				Uvbiɛ	è-nù ì-
NCE:	Edo	ù-nú	NWE:	Oɔoma	ú-nù í-
	Aoma	ú-nù		Emhalhɛ	ú-nù í-
	Auchi	ú-nò í-		Ibilo	ú-nù
	Avbianwu	ú-nù		Uhami	ú-nù
	Unɛmɛ	ú-nù		Ehueun	ú-nu
	Ghotuɔ	ū-nù		Ukue	ú-nù

164. Proto-Edoid \*E-nhamɪ I- 'animal, meat'

DE:	Degema	è-nám ì-	SWE:	Erɔwa	à-rǎvbó [àǎǎǎ]ì-
	Egɛɛ	à-nàmò		Isoko	à-ɾàò
	Epie	à-nàmò		Okpɛ	à-ɾámó è-
				Urhobo	è-nàvbè
				Uvbiɛ	ì-nàmò
NCE:	Edo	à-ɾǎvbè [àǎǎǎ]	NWE:	Oɔoma	é-nàmhì
	Aoma	é-àmì		Emhalhɛ	ā-nàmhì è-
	Auchi	é-làmhì		Ibilo	à-nà
	Avbianwu	é-làmhì		Uhami	é-námì
	Unɛmɛ	é-nàmhì		Ehueun	ē-nàù
	Ghotuɔ	ē-nà ē-		Ukue	é-nàmì

165. Proto-Edoid \*nhiche/\*nhiəche 'know'

DE:	Degema	-	SWE:	Eruwa	rĩē [ĩyē]
10	Egēne	(nomu)?		Isoko	ɾiē
	Epie	-		Okpe	rhe ?
				Urhobo	niē
				Uvbie	yērē
NCE:	Edo	ɹē [ĩē]	NWE:	Oloṃa	-
	Aoma	ē		Emhalhe	niēʒe
	Auchi	l̥e		Ibilo	ne
	Avbianwu	l̥e		Uhami	nese
	Uneme	ne		Ehueun	nirhē
	Ghotuo	nehè		Ukue	nirhē

166. Proto-Edoid \*-nhiNanhi 'eight'

DE:	Degema	(i-nómán)	SWE:	Eruwa	è-rĩàrē
	Egēne	(e-nomanɪ)		Isoko	íi-ɾé
	Epie	(i-vèṃòṃòìgbèè)		Okpe	è-néni
				Urhobo	é-néne
				Uvbie	e-nenɪ
NCE:	Edo	è-ɹēɹē	NWE:	Oloṃa	è-néni
	Aoma	è-éē		Emhalhe	è-níéni
	Auchi	è-léè		Ibilo	è-níé
	Avbianwu	è-léi		Uhami	ì-níéní
	Uneme	è-néni		Ehueun	ì-nĩrì
	Ghotuo	è-nīē		Ukue	ì-yéni



167. Proto-Edoid \*pi 'throw'

DE:	Degema	(svəkɛ)	SWE:	Erɔwa	fi
	Egɛɛ	(tɔvɔ)		Isoko	fi
	Epie	-		Okpɛ	fi
				Urhobo	(kpaɭɔ)ɸi
				Uvbiɛ	(sɔ)
NCE:	Edo	fi	NWE:	Oɭoma	fi 'shoot at'
	Aoma	fi		Emhalhɛ	fie 'shoot at'
	Auchi	fi		Ibilo	(dzɔ)
	Avbianwu	pi		Uhami	(zuɔ)
	Unɛmɛ	fi		Ehuɛun	(zɔ)
	Ghotuɔ	fi		Ukue	(dhɔ)

168. Proto-Edoid A- pɪ- I- 'bird'

DE:	Degema	è-fɛɲ ì-	SWE:	Erɔwa	(ímí)-fè
	Egɛɛ	à-fɛ (náàzì) (à-zì = 'bush')		Isoko	[óurǎ] ?
	Epie	à-fìèn		Okpɛ	à-fé
				Urhobo	[ɔɸlǎ]
				Uvbiɛ	(ómó)-fè ?
NCE:	Edo	á-hlàybè [áhyàũè]	NWE:	Oɭoma	ghá-fìzà é-
	Aoma	ó-fáámì		Emhalhɛ	wá-ǎè ró-
	Auchi	á-flámhì í-		Ibilo	á-fèzà é-
	Avbianwu	á-plámhì í-		Uhami	à-fì
	Unɛmɛ	á-flámhì í-		Ehuɛun	à-phī [àɸí]
	Ghotuɔ	ghā-fé īō- [yāfé]		Ukue	à-fí

169. Proto-Edoid \*U-pɪN 'fear' (n.)

DE:	Degema	-	SWE:	Erɔwa	ò-fí
	Egɛnɛ	(ò-dòèṛ)		Isoko	([ò-ʒò])
	Epie			Okpɛ	ó-fè
				Urhobo	(ò-ʃò)
				Uvbiɛ	(ò-rhò)
NCE:	Ėdo	ò-há ?	NWE:	Ọlọma	-
	Aoma	ò-fé		Emhalhe	ù-vâ
	Auchi	ó-fè		Ibilo	(ó-ʒóvá)
	Avbianwu	ó-pè		Uhami	(è-gíkíkì)
	Uneme	ó-fè		Ehueun	ò-ḡè(rì)
	Ghotuɔ	ò-hì ?		Ukue	ò-fì(rì)

170. Proto-Edoid \*po 'be finished; end'

DE:	Degema	(vrese)	SWE:	Erɔwa	fo (fo?)
	Egɛnɛ	(vu)		Isoko	(re)
	Epie	(vele)		Okpɛ	(hĩ)
				Urhobo	(ɪule)
				Uvbiɛ	(gwɾe)
NCE:	Ėdo	fo	NWE:	Ọlọma	-
	Aoma	fo		Emhalhe	fo
	Auchi	fo		Ibilo	fo
	Avbianwu	po		Uhami	(diho)
	Uneme	fo		Ehueun	(wari)
	Ghotuɔ	fo		Ukue	(duae)

171. Proto-Edoid \*pɔchi 'be cold, wet'

DE:	Degema	fɔsɛ	SWE:	Erɔwa	(vɔavɔ 'wet')
	Egɛnɛ	(bɔɔ)		Isoko	(vɔavɔ 'wet')
	Epie	-		Okpɛ	fɔ
				Urhobo	(kpɔkpɔ)
				Uvbiɛ	(kpɔkpɔ)

NCE:	Edo	-	NWE:	Olɔma	fɔʒɛ
	Aoma	fɔ		Emhalhɛ	-
	Auchi	fɔ		Ibilo	-
	Avbianwu	pɔ		Uhami	fɔɔ
	Unɛmɛ	fɔ		Ehuɛun	fɔ
	Ghotuɔ	fɔhɛ		Ukue	fɔ

172. Proto-Edoid \*puN 'extinguish'

DE:	Degema	-	SWE:	Erɔwa	(voro)
	Egɛnɛ	(ɔimesɛ)		Isoko	fu(rie)
	Epie	(ɔumesɛ)		Okpɛ	fu(rhie)
				Urhobo	fũ
				Uvbiɛ	fũ

NCE:	Edo	(dɔ)	NWE:	Olɔma	-
	Aoma	fũ		Emhalhɛ	fu(ʒe)
	Auchi	fu(no)		Ibilo	fu
	Avbianwu	pu(nua)		Uhami	fu(se)
	Unɛmɛ	fue		Ehuɛun	fu
	Ghotuɔ	fu		Ukue	(fe)

173.	Proto-Edoid	*pəNa	'be white'		
DE:	Degema	fə	SWE:	Erwa	foafo
	Egēne	fəfə		Isoko	foafo
	Epie	(gbāā)		Okpe	foafo
				Urhobo	fuafu
				Uvbie	fōfō
NCE:	Edo	fuɔfua	NWE:	Oloma	vu(mu)
	Aoma	fā		Emhalhe	vɔ(mhi)
	Auchi	fua		Ibilo	(i-vóla) 'whiteness'?
	Avbianwu	pua		Uhami	fufu
	Uneme	fua		Ehueun	ɸũɸũ
	Ghotuɔ	hɔ(mhi)/ɔ(mhi)		Ukue	(lele)

174.	Proto-Edoid	pha	'be new'		
DE:	Degema	(yi)faĩ (yi be, stay)	SWE:	Erwa	va
	Egēne	fa		Isoko	(kpəkpə)
	Epie	faa		Okpe	ɔ-vá 'guest, stranger'
				Urhobo	(kpəkpɔ)
				Uvbie	(kpəkpɔ)
NCE:	Edo	(ɔ-gbɔ̃)	NWE:	Oloma	-
	Aoma	(ɔ-gbɔ̃)		Emhalhe	(ɔ-lɔ-)fa 'the new one'
	Auchi	(ɔ-gbɔ̃mhi)		Ibilo	fafa
	Avbianwu	(ɔ-gbɔ̃mhi)		Uhami	ɔ-fà 'stranger; new'
	Uneme	(ɔ-nɔ-gbɔ̃)		Ehueun	(ɔ-β̃rh̃i)
	Ghotuɔ	(ɔmɔ)fa 'new baby'		Ukue	(gbɔgbɔ)



175. Proto-Edoid \*dhI<sub>1</sub>-phaN<sub>1</sub> A- 'belly, intestine'

DE:	Degema	è-fáí à-	SWE:	Erɔwa	ì-vá
	Egɛɛ	é-fàì		Isoko	ì-hvà [ì-và]
	Epie	ì-fàà		Okpɛ	è-phá [èǎá]
				Urhobo	(è-vù)
				Uvbiɛ	(è-vù)
NCE:	Edo	(è-kó)	NWE:	Ọloma	ó-fà é- 'intestine'
	Aoma	è-há 'intestine'		Emhalhɛ	-
	Auchi	é-fàì		Ibilo	(ù-gù)
	Avbianwu	é-fà 'intestine'		Uhami	è-fã
	Unɛmɛ	(é-kéì)		Ehuɛun	e-fã
	Ghotuɔ	ē-fà 'intestine' (pl.)		Ukuɛ	é-fã

176. Proto-Edoid \*phɛN<sub>1</sub> 'urinate'

DE:	Degema	fɛĩ	SWE:	Erɔwa	vɪ (always with á-kà 'urine')
	Egɛɛ	fɛɪ		Isoko	[vɛ]
	Epie	fɛɛ		Okpɛ	ɸɛ
				Urhobo	ɸɛ
				Uvbiɛ	ɸɛ
NCE:	Edo	(hiɔ)	NWE:	Ọloma	(ʒɛɛ)
	Aoma	(hɔ)		Emhalhɛ	(ʒɛɛ)
	Auchi	(fɛ(na))		Ibilo	([ɛɛ])
	Avbianwu	pɛ(na)		Uhami	(sierɛ)
	Unɛmɛ	fhe		Ehuɛun	fɛ
	Ghotuɔ	fɛ		Ukuɛ	fɛ

177.	Proto-Edoid	*A-phēNɪ	'urine'
DE:	Degema	à-féí	SWE: Eɽɽwa (á-kà)
	Egēnē	à-fèì	Isoko ɪ-hvè [ɪvè]
	Epie	à-fèè	Okpē (é-kà)
			Urhobo è-phè [èpè]
			Uvbiē (á-kà)
NCE:	Èdo	à-hís	NWE: Qloma -
	Aoma	(a-okhã)	Èmhalhē -
	Auchi	á-flè (í-)	Ibilo (á-ʒìlè)
	Avbianwu	á-flè	Uhami (é-ʃérì)
	Unēmē	é-fhàmè (a-mè 'water')	Ehuēun ē-fè
	Ghotuq	ē-fāmè (à-mè 'water')	Ukue é-fè

178.	Proto-Edoid	*U-phɪNa	I- 'skin'
DE:	Degema	(à-ŋwó)	SWE: Eɽɽwa (ó-hòrò)
	Egēnē	é-fì	Isoko ò-ǎíé
	Epie	ò-féǎē	Okpē ò-φίέ 'leather'
			Urhobo (ò-hóìómá)
			Uvbiē (o-kòrɔ)
NCE:	Èdo	(í-kpàkpá)	NWE: Qloma -
	Aoma	ó-hiã	Èmhalhē (wé-sì rú-)
	Auchi	ó-flà é-	Ibilo (è-hàà)
	Avbianwu	ó-flà é-	Uhami (ì-sì)
	Unēmē	ó-fhià é-	Ehuēun (ì-rhì)
	Ghotuq	ghō-fíá ē-	Ukue (ì-rhì)

179. Proto-Edoid \*phupho 'blow (with mouth)'

DE:	Dẹgẹma	fofo	SWE:	Ẹrụwa	vovo
	Ẹgẹnẹ	fufu		Isoko	võvo
	Epie	fofo		Okpẹ	φoφo
				Urhobo	φoφo
				Uvbiẹ	υυυυ ?
NCE:	Ẹdo	hoho	NWE:	Ọlọma	-
	Aoma	hoho		Ẹmhalhẹ	(fie)
	Auchi	fofo		Ibilo	(fie)
	Avbianwu	fofo		Uhami	(fiero)
	Unẹmẹ	(fefe) ?		Ehueun	(φioro)
	Ghotuọ	hoho		Ukue	(fie)

180. Proto-Edoid \*ta 'say, tell'

DE:	Dẹgẹma	(kœε)	SWE:	Ẹrụwa	(za)
	Ẹgẹnẹ	(wei)		Isoko	ta
	Epie	(gba) 'tell'		Okpẹ	ta
				Urhobo	ta
				Uvbiẹ	ta
NCE:	Ẹdo	ta	NWE:	Ọlọma	-
	Aoma	ta		Ẹmhalhẹ	-
	Auchi	ta		Ibilo	-
	Avbianwu	-		Uhami	-
	Unẹmẹ	(ye)		Ehueun	-
	Ghotuọ	ta (only in idiomatic expressions)		Ukue	-

181. Proto-Edoid \*U-tɔ A- 'ground'

DE:	Ɖegema	à-tɔ à-	SWE:	Ɖruwa	ó-ròrì ?
	Ɖgene	ò-tò (also 'earth, soil')		Isoko	ó-tò
	Epie	ò-tò		Okpe	ó-tòrì
				Urhobo	ó-tò é-
				Uvbie	ó-rhò ?

NCE:	Ɖdo	ò-tò	NWE:	Ɖloma	-
	Aoma	ò-tò		Ɖmhalhe	see 'earth (soil)'
	Auchi	ò-tòò è-		Ibilo	" "
	Avbianwu	ò-tò		Uhami	" "
	Uneme	ò-tò		Ehueun	" "
	Ghotuo	ò-tò (only in specialized usage and in personal names)		Ukue	" "

182. Proto-Edoid \*tɔN 'dig'

DE:	Ɖegema	(bul)	SWE:	Ɖruwa	tɔ(ɣrɔ)
	Ɖgene	(vie)		Isoko	-
	Epie	(gu)		Okpe	tɔ
				Urhobo	tɔ
				Uvbie	tɔ

NCE:	Ɖdo	tɔ also 'bury'	NWE:	Ɖloma	(khɔ)
	Aoma	tɔnɔ		Ɖmhalhe	(kɔɛ)
	Auchi	(gua)		Ibilo	hɔ
	Avbianwu	(gua)		Uhami	huo ?
	Uneme	(gua)		Ehueun	so ?
	Ghotuo	tɔ		Ukue	to ?



183.	Proto-Edoid		*tɔN		'roast'
DE:	Ɖegema	tɔ	SWE:	Ɖruwa	tɔ
	Ɖgene	tɔ		Isoko	tɔ
	Epie	-		Okpe	tɔ̃
				Urhobo	tɔ̃
				Uvbie	tɔ̃
NCE:	Ɖdo	tɔ̃	NWE:	Ɖloma	hɔ̃ɔ ? cf. hu 'burn'
	Aoma	tɔ̃		Emhalhe	-
	Auchi	tɔ		Ibilo	hɔ̃ɔ ? cf. hɔ 'burn'
	Avbianwu	tɔ		Uhami	huɔ ? cf. husea 'burn'
	Uneme	tɔ		Ehueun	sɔ̃
	Ghotuɔ	tɔ		Ukue	tɔ̃

184.	Proto-Edoid		*tu		'scatter, pour'
DE:	Ɖegema	-	SWE:	Ɖruwa	-
	Ɖgene	tu(va)		Isoko	-
	Epie	-		Okpe	-
				Urhobo	see 'pour'
				Uvbie	-
NCE:	Ɖdo	tu	NWE:	Ɖloma	(zɔghɔ kua)
	Aoma	see 'pour'		Emhalhe	-
	Auchi	" "		Ibilo	see 'pour'
	Avbianwu	" "		Uhami	tu
	Uneme	-		Ehueun	tu
	Ghotuɔ	tu		Ukue	tu

185. Proto-Edoid \*tɔchɪ 'burn'

DE:	Dẹgẹma	tɔ	'be hot'	NWE:	Ẹrụwa	tɔatɔ	'be hot'
	Ẹgẹnẹ	(kese)			Isoko	tɔ	
	Epie	tɔ			Okpẹ	torhɛ	
					Urhobo	torhɛ	
					Uvbiẹ	tɔ(mɔ)	

NCE:	Ẹdo	-		NWE:	Ọlọma	hu	
	Aoma	to			Ẹmhalhẹ	hɔɛʒɛ	
	Auchi	to(na)			Ibilo	hɔ	
	Avbianwu	to(na)			Uhami	huse	
	Unẹmẹ	to			Ehueun	(sɔ̄)	see 'roast'
	Ghotuọ	to			Ukue	(tɔ̄)	see 'roast'

186. Proto-Edoid \*U-tɔN I- 'hair'

DE:	Dẹgẹma	à-tó	ì-	SWE:	Ẹrụwa	ì-tó	(pl.)
	Ẹgẹnẹ	è-tò			Isoko	ì-tò	(pl.)
	Epie	-			Okpẹ	è-tó	
					Urhobo	è-tò	
					Uvbiẹ	è-tò	

NCE:	Ẹdo (Bini)	è-tó		NWE:	Ọlọma	ghó-hù	é-
	Aoma	é-tò			Ẹmhalhẹ	wɛ-hò	
	Auchi	é-tò			Ibilo	é-hò	
	Avbianwu	é-tò			Uhami	è-hù	
	Unẹmẹ	é-tò			Ehueun	é-sū	
	Ghotuọ	ghò-tò	ɛ-		Ukue	é-tù	



187. Proto-Edoid \*thaNɪ 'untie'

DE:	Degema	(kpɔkpɔ)	SWE:	Erɔwa	(kpɔkpɔ)
	Egene	taɪ		Isoko	-
	Epie	(kpɔɣa)		Okpe	rhā
				Urhobo	rhā
				Uvbie	(rhē)rhā
NCE:	Edo	rhā	NWE:	Oloṃa	-
	Aoma	(koo)		Emhalhe	(gɛɲɛ)
	Auchi	(tighie)		Ibilo	(zue)
	Avbianwu	(tinia)		Uhami	(tuasɛ)
	Uneme	ta(ɲua)		Ehueun	(fiɛ)
	Ghotuɔ	ta(ɔ)		Ukue	(tu)

188. Proto-Edoid \*U-thaNɪ I- 'tree'

DE:	Degema	ó-tāĩ í-	SWE:	Erɔwa	ó-ràrè í-
	Egene	é-tàì		Isoko	ú-ré í-?
	Epie	ì-tāã		Okpe	ò-rhǎ [òrǎ]
				Urhobo	ú-rhé [úrɛ] í-?
				Uvbie	ò-rá ì-
NCE:	Edo	è-rhǎ [èrǎ]	NWE:	Oloṃa	ó-ɲà é-
	Aoma	ó-rà		Emhalhe	ó-ɲà
	Auchi	ó-ràì é-		Ibilo	ú-ɲà < ú-slà
	Avbianwu	ó-rà é-		Uhami	ó-ɲà < ó-slà
	Uneme	ó-rhà [órà]é-		Ehueun	è-ɲà < è-rhǎ
	Ghotuɔ	ò-tà ɛ-		Ukue	ò-ɲà < è-rhǎ

189. Proto-Edoid \*U-thiəmi A- 'tail'

DE:	Degema	ù-túm à-	SWE:	Erɔwa	ú-tùvù f-
	Egɛɛ	ù-tùmù		Isoko	(ù-vèl)
	Epie	(ò-kpásá)		Okpɛ	ù-rhúrhòmù
				Urhobo	ù-rhòvù í-
				Uvbie	ú-rhùmù
NCE:	Edo	è-rhúrhù	NWE:	Oɔoma	ù-thùmhù í-
	Aoma	ù-rùmù		Emhalhɛ	(ù-yà í-) ?
	Auchi	(ù-yàè) ?		Ibilo	ù-žù í-
	Avbianwu	(ù-wàè) ?		Uhami	ù-sùmù
	Unɛmɛ	(ù-ghlámhì) ?		Ehueun	ó-rhùmù (ùgĩ)
	Ghotuɔ	(ù-yà í-) ?		Ukue	(ù-rhùmì)

190. Proto-Edoid \*U-thu A- 'cap, hat'

DE:	Degema	ù-tú à-	SWE:	Erɔwa	è-tú í-
	Egɛɛ	ù-tù		Isoko	è-tù í-
	Epie	(è-wéè)		Okpɛ	è-rhú
				Urhobo	è-rhù í-
				Uvbie	è-tù
NCE:	Edo	è-rhú	NWE:	Oɔoma	ghé-hù rú-
	Aoma	é-rù		Emhalhɛ	wè-hù rù-
	Auchi	á-rù í-		Ibilo	è-hù í-
	Avbianwu	á-rù í-		Uhami	(èr-)è-sù
	Unɛmɛ	á-rhù í-		Ehueun	(à-kē)
	Ghotuɔ	ghō-rù í-		Ukue	é-rhù(à)



191. Proto-Edoid \*E-thuəNi I- 'antelope, duiker, cow'

DE:	Degema	é-túéí '(bush) cow'	SWE:	Eruwa	è-rúé	ì- 'cow'
	Egene	-		Isoko	è-rúé	ì-
	Epie	ò-túéí		Okpe	è-rhúé	
				Urhobo	è-rhúé	
				Uvbie	è-rhúé	
NCE:	Edo	è-rhùè	NWE:	Oloma	-	
	Aoma	-		Emhalhe	-	
	Auchi	-		Ibilo	-	
	Avbianwu	-		Uhami	-	
	Uneme	-		Ehueun	è-rhùè	'cow'
	Ghotuọ	ē-rhùè ē- 'duiker'		Ukue	é-tùè	'cow'

192. Proto-Edoid \*va 'butcher, break, split'

DE:	Degema	-	SWE:	Eruwa	-
	Egene	-		Isoko	-
	Epie	-		Okpe	va
				Urhobo	va 'break shells (e.g. of melon)'
				Uvbie	-
NCE:	Edo	va 'split'	NWE:	Oloma	-
	Aoma	valo 'split'		Emhalhe	-
	Auchi	va also 'skin (flay)'		Ibilo	va
	Avbianwu	-		Uhami	-
	Uneme	-		Ehueun	-
	Ghotuọ	va 'butcher (animal), split (wood)'		Ukue	-

193. Proto-Edoid \*vaN 'shout, be loud'

DE:	Deḡema	(kou)	SWE:	Ḥruwa	-
	Ḥeḡeḡe	-		Isoko	-
	Epie	-		Okpe	vã
				Urhobo	vã
				Uvbie	-
NCE:	Ḥdo	vã	NWE:	Ḥloma	-
	Aoma	-		Ḥmhalhe	-
	Auchi	-		Ibilo	-
	Avbianwu	-		Uhami	-
	Uneme	-		Ehueun	-
	Ghotuḡ	va		Ukue	-

194. Proto-Edoid \*i-və 'two'

DE:	Deḡema	i-və	SWE:	Ḥruwa	î-vè
	Ḥeḡeḡe	í-vè		Isoko	ĩ-vè
	Epie	í-vè		Okpe	é-và
				Urhobo	í-vè
				Uvbie	í-vè
NCE:	Ḥdo	è-vá	NWE:	Ḥloma	é-wá ?
	Aoma	è-vá		Ḥmhalhe	è-vâ
	Auchi	è-vá		Ibilo	è-vá
	Avbianwu	è-vá		Uhami	è-vá
	Uneme	è-vá		Ehueun	è-vā
	Ghotuḡ	è-vā		Ukue	è-vâ

195. Proto-Edoid \*O-vie I- 'king'

DE:	Degema	(ò-nónáné'kè'ì)	SWE:	Erüwa	ò-víé i-
	Egēṅe	(ò-kí'ldmák- ì'è'ì)		Isoko	ò-viè i-
	Epie	(ò-βīnākī'ī)		Okpe	(ò-ḡó)-ḡè)
				Urhobo	ò-viè i-
				Uvbię	ò-viè
NCE:	Edo	(ò-glè)	NWE:	Ọloma	(ò-kpl'sá i-)
	Aoma	(ò-glè)		Emhalhe	(ò-kpáà'zì)
	Auchi	(ò-glè)		Ibilo	(ò-kpá'zì)
	Avbianwu	(ò-giè)		Uhami	ò-viè
	Uneme	(ò-ghìè)		Ehueun	ò-viè
	Ghotuo	ò-viè i- also 'priest'		Ukue	ò-viè

196. Proto-Edoid \*vie 'cry, weep'

DE:	Degema	vie	SWE:	Erüwa	vie
	Egēṅe	vie		Isoko	vie
	Epie	vie		Okpe	vie
				Urhobo	vie
				Uvbię	vie
NCE:	Edo	vie	NWE:	Ọloma	vie
	Aoma	vie		Emhalhe	vie
	Auchi	vie		Ibilo	vie
	Avbianwu	vie		Uhami	vie
	Uneme	vie		Ehueun	vie
	Ghotuo	vie		Ukue	vie

197. Proto-Edoid \*vo 'fetch, draw (water)'

DE:	Ḑẹgẹma	(zu)vo	SWE:	Ẹrụwa	-
	Ẹgẹṅẹ	-		Isoko	-
	Ẹpie	-		Okpẹ	-
				Urhobo	vo
				Uvbie	-

NCE:	Ẹdo	-	NWE:	Ọlọma	-
	Aoma	-		Ẹmhalhẹ	-
	Auchi	vo		Ibilo	vo
	Avbianwu	vo		Uhami	-
	Unẹmẹ	-		Ehueun	-
	Ghotuọ	vo		Ukue	-

198. Proto-Edoid \*voNo 'be full'

DE:	Ḑẹgẹma	voɔ	SWE:	Ẹrụwa	vo(zɔ)
	Ẹgẹṅẹ	vo		Isoko	vo
	Ẹpie	vōvō		Okpẹ	vōvō
				Urhobo	vo
				Uvbie	vō

NCE:	Ẹdo	vūvō	NWE:	Ọlọma	vo
	Aoma	vūvō		Ẹmhalhẹ	vo
	Auchi	vo		Ibilo	mɔ
	Avbianwu	vo		Uhami	vo
	Unẹmẹ	vuvō		Ehueun	vō
	Ghotuọ	vo		Ukue	vō



199. Proto-Edoid \*vuN 'uproot: harvest (root crop)'

DE:	Degema	-	SWE:	Eruwa	-
	Egene	-		Isoko	-
	Epie	-		Okpe	vũ
				Urhobo	vu
				Uvbie	-
NCE:	Edo	vu	NWE:	Oloṃa	-
	Aoma	-		Emhalhe	-
	Auchi	vu		Ibilo	-
	Avbianwu	-		Uhami	vũ
	Uneme	-		Ehueun	-
	Ghotuo	vu		Ukue	-

200. Proto-Edoid \*U-vuNə 'sunshine'

DE:	Degema	ù-vúó à-	SWE:	Eruwa	ù-vó
		'sun'		Isoko	ù-vò
	Egene	ù-vò		Okpe	ú-vò
	Epie	ù-vò 'sun'		Urhobo	ù-vò
				Uvbie	ù-vò
NCE:	Edo	ò-vè	NWE:	Oloṃa	ò-vò 'sun'
	Aoma	ò-vũ		Emhalhe	ò-vò
	Auchi	ò-vò		Ibilo	ò-vò
	Avbianwu	ò-vò		Uhami	ò-vò
	Uneme	ò-vòṅl		Ehueun	ò-vò
	Ghotuo	ò-vò		Ukue	ò-vò

201.	Proto-Edoid		*vɔaNɪ	'stink'	
DE:	Ɖɛgɛma	(vrene)	SWE:	Ɖrɔwa	-
	Ɖgɛnɛ	vɔɛɪ 'be rotten'		Isoko	-
	Ɖpie	vɔɛ 'be rotten'		Okpɛ	(gbɔ̃)
				Urhobo	(gbɔ̃)
				Uvbiɛ	vɔ̃
NCE:	Ɖdo	(wia)	NWE:	Ɖlɔma	-
	Aoma	(βia)		Ɖmhalhɛ	(tueɲa)
	Auchi	(ya)		Ibilo	vɔ
	Avbianwu	(mata)		Uhami	vɔ
	Unɛmɛ	(ya)		Ehuɛun	vɔ̃
	Ghotuɔ	vɔ		Ukue	vɔ̃

202.	Proto-Edoid		wɔGi	'say (to someone)'	
DE:	Ɖɛgɛma	-	SWE:	Ɖrɔwa	-
	Ɖgɛnɛ	wei		Isoko	-
	Ɖpie	-		Okpɛ	-
				Urhobo	-
				Uvbiɛ	-
NCE:	Ɖdo	-	NWE:	Ɖlɔma	-
	Aoma	ɛ		Ɖmhalhɛ	wɛ
	Auchi	ɛ		Ibilo	wɛ
	Avbianwu	-		Uhami	wɛ
	Unɛmɛ	yhɛ		Ehuɛun	wɛ
	Ghotuɔ	ɛ		Ukue	wɛ

203. Proto-Edoid \*wə 'be ripe, strong, hard'

DE:	Degema	(bii)	SWE:	Eruwa	(kaka)
	Egene	wə		Isoko	(gaga)
	Epie	(kpə)		Okpe	-
				Urhobo	(gã)
				Uvbie	(gəa) ?
NCE:	Edo	wo	NWE:	Oloṃa	(toto)
	Aoma	(toto)		Emhalhe	wə 'be strong, hard'
	Auchi	yo		Ibilo	(ipəkpa) 'be strong'
	Avbianwu	(toto)		Uhami	huasi
	Uneme	(toto)		Ehunen	(le)
	Ghotuo	wo		Ukue	(warhi) 'be strong'

204. Proto-Edoid \*yə̃nhi 'live, dwell (in a place)'

DE:	Degema	nin	SWE:	Eruwa	(re)
	Egene	yeni		Isoko	-
	Epie	(ze)?		Okpe	(rhirhiε [riryε])
				Urhobo	(dia)
				Uvbie	(ɟa)
NCE:	Edo	yĩĩ [nĩĩ]	NWE:	Oloṃa	-
	Aoma	(dea)		Emhalhe	(ɜε)?
	Auchi	yele		Ibilo	(ʃε) ?
	Avbianwu	ye		Uhami	hieni [hyeni]
	Uneme	yeni		Ehunen	(du)
	Ghotuo	hi		Ukue	heni

205. Proto-Edoid \*A-yəN 'drink (alcoholic)'

DE:	Degema	(ù-ɑí à-)	SWE:	Eṛuwa	è-yũ(vũ)
		see 'oil palm'		Isoko	ù-dì
	Egēṇe	(ù-ɑì) see		Okpẹ	è-ṅó
		'oil palm'		Urhobo	(ù-dì) see 'oil
	Epie	(ú-ɑí)			palm'
				Uvbiẹ	(ù-dĩ)
NCE:	Eḍo	à-yṵ	NWE:	Ọlọma	é-ṅò
	Aoma	é-yṵ		Ẹmhalḥe	é-ṅò 'palm wine'
	Auchi	á-ṅò		Ibilo	é-ṅò
	Avbianwu	á-ṅò		Uhami	é-ṅò
	Uneme	á-ṅò í-		Ehueun	ē-yṵ
	Ghotuọ	ā-ṅò		Ukue	e-yṵ

206. Proto-Edoid \*I-yodho 'song'

DE:	Degema	(í-vĩ)	SWE:	Eṛuwa	(u-vie)
	Egēṇe	(í-vièl)		Isoko	(ò-lè ì-)
	Epie	(í-viē)		Okpẹ	ì-3óṛò
				Urhobo	(ù-viè)
				Uvbiẹ	(i-nù)
NCE:	Eḍo	(i-hũā)	NWE:	Ọlọma	-
	Aoma	í-òò		Ẹmhalḥe	(ù-viè)
	Auchi	í-yòlò		Ibilo	(ù-viè)
	Avbianwu	(okhanapi)		Uhami	(ù-viè)
	Uneme	ì-yòlò		Ehueun	(ù-viè)
	Ghotuọ	í-yòò		Ukue	(ù-vi)



207. Proto-Edoid \*yɔNɔ 'drink (water)'

DE: Dɛgɛma yɔɔ̃  
 Eɛɛɛ ỹɔ  
 Epie yɔ̃

SWE: Eruwa -  
 Isoko (da)  
 Okpɛ (da)  
 Urhobo (da) same as  
 'drink (alcohol)'  
 Uvbiɛ (da) " "

NCE: Edo wɔ̃ also of  
 alcohol  
 Aoma hɔ̃  
 Auchɪ yɔ  
 Avbianwu wɔ  
 Unɛmɛ hɔ̃ also of  
 alcohol  
 Ghotuɔ ɲwɔ̃ also of  
 alcohol

NWE: Olooma ɲwɔ  
 Emhalɛ ɲwɔ  
 Ibilo ɲwɔ  
 Uhami ỹɔ  
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