Edoid Declension Sets and Gender Sets

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Today we would like to provide you with our assessment of nominal form classes and associated agreement classes, where they exist, in the Edoid group of south-central Nigeria. None of our terms will be new, we are sure.

Nominal form class refers to word forms with identical phonological and/or morphological properties.

Declension set identifies nouns that exhibit identical variation in form and so constitute a pairing of nominal form classes

Agreement class pertains to the set of exponents that serve to designate target items standing in a relation of agreement to a nominal controller.

Gender set pertains to a relation between agreement class and declension set; it is realized by the pairing of agreement classes relative to a declension.

As much as possible we try to avoid the rubric "noun class" to describe what we are analyzing. Not that we have not used the term "noun class' in the past nor that it is not a useful term. We do this in order to maintain some coherence and stability in our analysis of distinct yet similar classificatory systems.

Overall, we find that the member languages of Edoid have the up and down of a seesaw. Some manifest nominal form classes, some exhibit declension sets, a few show agreement classes and a few display gender sets. However, there is an areal character to Edoid.

The mark of nominal form class and declension is a vowel quality, although there are some form classes designated by a vowel quality in combination with a consonant or a vowel-consonant-vowel.

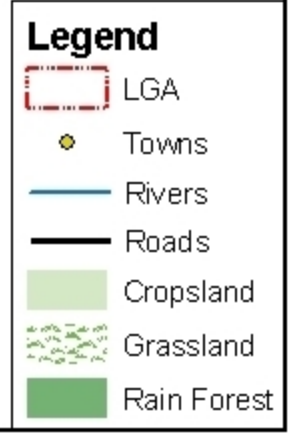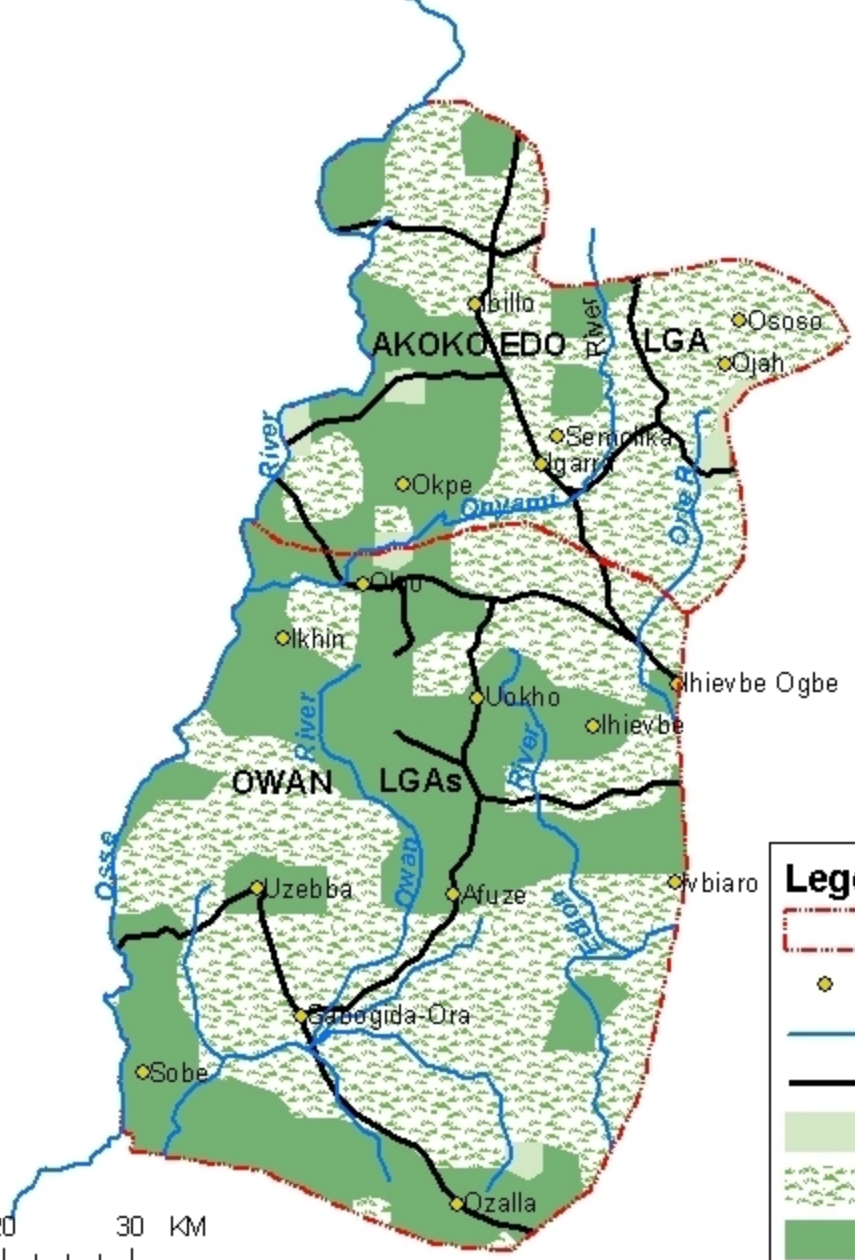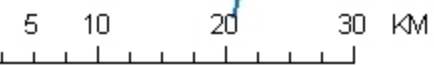Agreement class and gender rely on vowel quality and consonant-vowel.

The animate/inanimate distinction characterizes agreement classes in the north. Human restricts declension set in one language. The south is assumed to have neither declensions nor genders and agreement classes.

Before proceeding farther, we take note of the geographic location of the Edoid group and its internal genetic classification.

EDO STATE

AKOKO-EDO
• Igarra

ETSAKO EAST
Agenebode •

OWAN EAST
• Afuze

Owan
West
• Sabongida Ora

ESTAKO WEST
• Auchi

ETSAKO
CENTRAL
Fugar •

ESAN
N. E

ESAN
WEST
Ekpoma •

OVIA NORTH-EAST
• Okada

• Irrua   • Uromi

ESAN
CENTRAL

Ubiaja
•

ESAN
SOUTH-EAST

• Ehor

UHUNMWODE

• Igueben

IGUEBEN

OVIA SOUTH

• Iguobazuwa

EGOR
Uselu •   • Benin City

OREDO

IKPOBA-
OKHA

• Idogbo

ORHIONMWON
• Abudu

20   0   20   40 Miles

N

NIGERIA

AFRICA

Legend

- LGA
- Towns
- Rivers
- Roads
- Cropsland
- Grassland
- Rain Forest

AKOKO-EDO LGA

OWAN LGAs

Ibillo

Ososo

Ojah

Semolika

Igarra

Okpe

Oku

Ikhin

Uokho

Ihievbe Ogbe

Ihievbe

Uzebba

Afuze

Ivbiaro

Sabogida-Ora

Sobe

Ozalla

Onyami River

Osse River

Owan River

Edo River

EDO STATE

Akoko Edo

Owan East

Owan West

NIGERIA

5 10 20 30 KM

N

LANGUAGES IN RELATION TO VILLAGES IN EDOID REGION
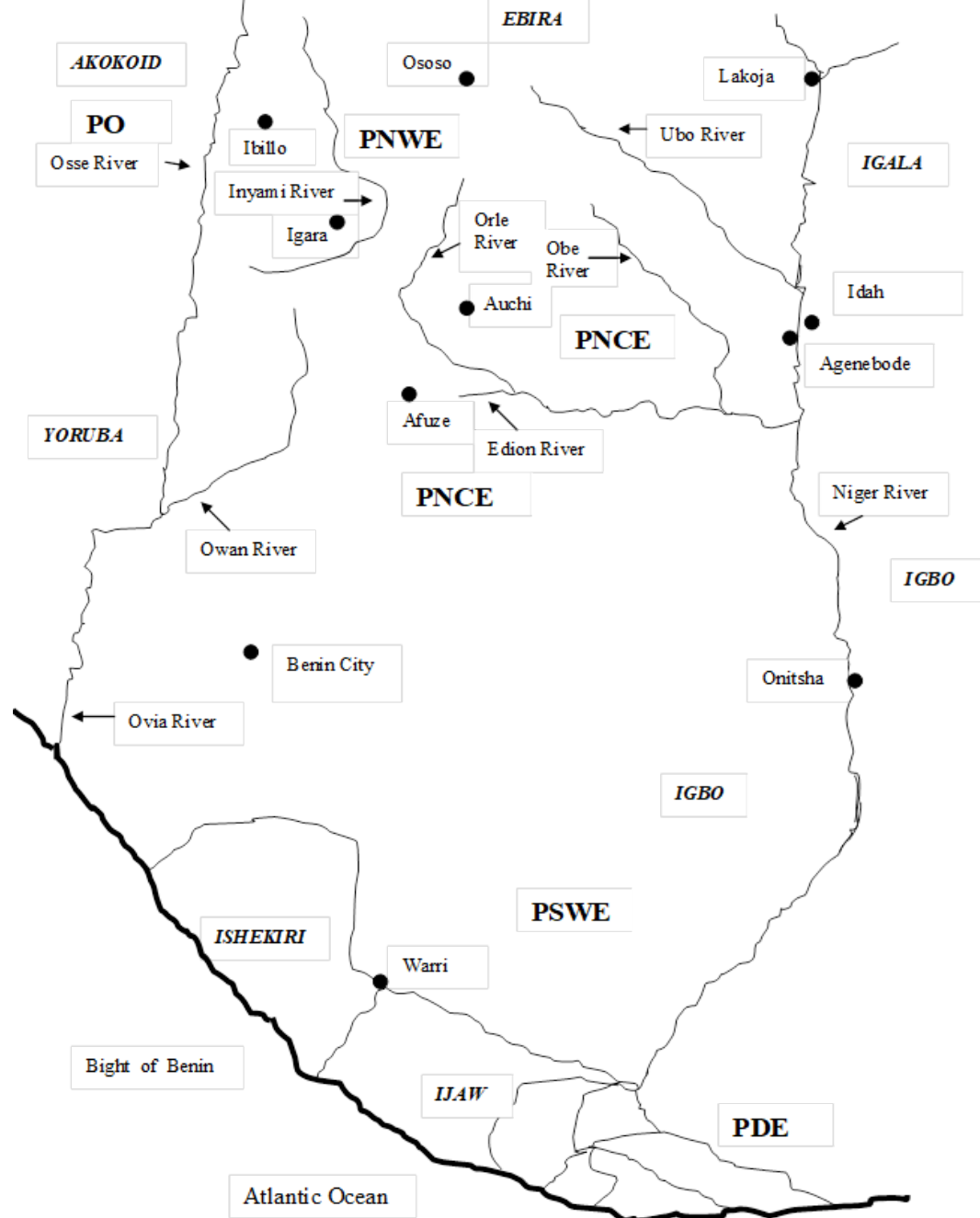
Figure 2. Map Showing Location of Edoid Subgroups and Neighboring Language Groups.

PE

- **PNWE**
  - Ukue
  - Ehueun
  - Uhami
  - Okpamerhi
  - Somorika
  - Oloma
  - Okpe-Akuku-Idesa
- **PNCE**
  - Ghotuo
  - Yekhee
  - Uneme
  - Emai-Ora-Iuleha
  - Esan
  - Edo (Bini)
- **PSWE**
  - Okpe
  - Urhobo
  - Eurho
  - Isoko
  - Eruwa
- **PDE**
  - Epie-Atisa
  - Egene
  - Degema
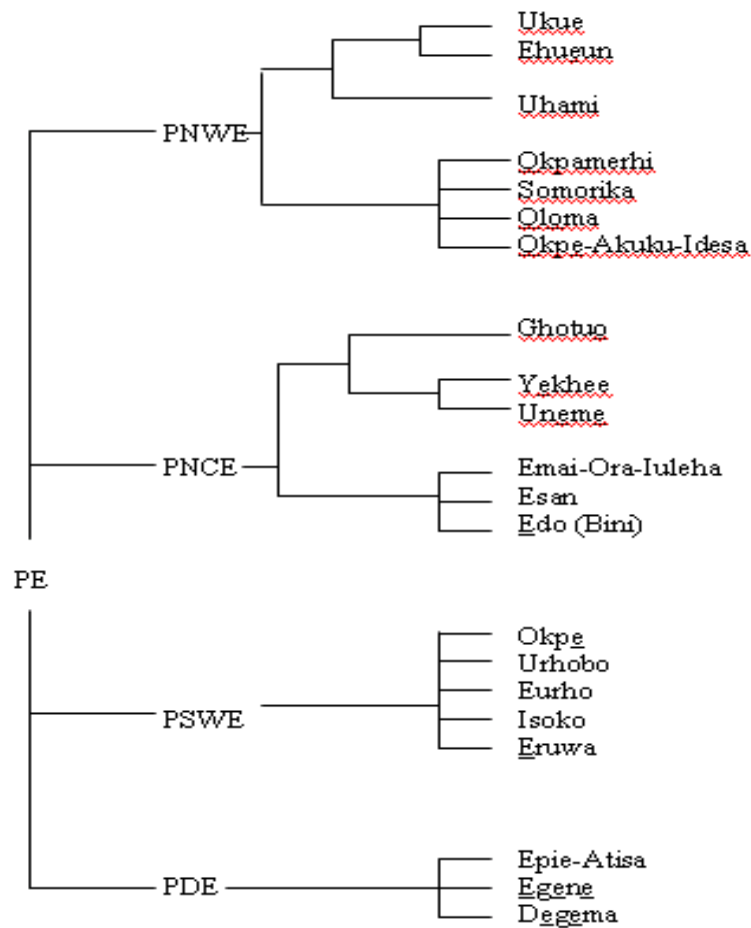
<u>ABBREVIATIONS</u>

PE	Proto Edoid
PDE	Proto Delta Edoid
PSWE	Proto Southwestern Edoid
PNCE	Proto Northcentral Edoid
PNWE	Proto Northwestern Edoid

Figure 1. Family tree for Edoid group according to Elugbe (1989).

Edoid speaking peoples gave rise to the Benin Kingdom in precolonial West Africa's forest zone (Ryder 1969, Bradbury 1973).

Their languages have long been identified (Thomas 1910, Bradbury 1957) but little described (Elugbe 1973, 1983, 1989).

Our understanding of this kingdom derives in part from the highly stylized bronze casting and ivory carving of the 14th through 17th centuries (Crowder and Abdullahi 1979, Ben Amos 1980) and archaeological investigation of its capital, Benin City, where earthen embankments and palace grounds have been uncovered (Connah 1975, Darling 1998).

After considering nominal classification systems in Proto Edoid, we proceed to assess nominal classification phenomena in Degema, Oloma/Ogbe, North Ivie, Ibillo, Bini and Emai.

Table 1 provides an overview of the linguistic mark for nominal form class (NFC), declension set (DS), neutral set (NS), agreement class (AC), and gender set (GS).

	NFC	DS	NS	AC	GS
Proto Edoid	√	√	?	?	?
Degema	√	√	?	Ø	Ø
Oloma/Ogbe	√	√	?	√	√
North Ivie	√	√	?	√	√
Ibillo	√	√	√ ?	√	√
Bini	√	√	?	Ø	Ø
Emai	√	√	√	Ø	Ø

The Edoid group of languages belongs to West Benue Congo stock.

Information on nominal form classes in this group is of more than usual interest, although it is not consistently available.

Group information provides a broader context for assessing nominal classificatory patterns in the Benue Congo family and the Niger-Congo phylum more generally.

As implied, our working assumption is that the various streamlined Edoid nominal classificatory systems derive from Bantu-like systems.

How they have done this is yet to be determined. However, it appears that we need to be mindful of not only general ontological categories like human, animate, inanimate but also categories like count and mass.

Proto Edoid

Elugbe (1973, 1983, 1989) reconstructed declension sets and nominal form class prefixes for Proto Edoid.

Elugbe did not elect to reconstruct a gender system or agreement classes for Proto Edoid.

In large measure this was because class agreement information was available for only a few Northwest Edoid languages at the time.

Consequently, we have little to say about grammatical agreement in Proto Edoid, although we will consider agreement wherever it has been discussed in materials for other languages reviewed in the following.

We follow Elugbe (1983) in our presentation of PE prefixes for nominal form class and their arrangement into declension sets.

PE nominal prefixes are predominantly vowel qualities.

Elugbe reconstructs a vowel system with ten phonemes for PE.

As nominal form class prefixes, these vowels exhibit a vowel harmony system of the West African sort where prefix vowel harmonizes with initial vowel of the nominal stem.

Vowel harmony is based on the values expanded (i, e, u, o, ə) vs non-expanded (ɪ, ɛ, ʊ, ɔ, a).

Vowel qualities standing in a harmony relation in PE prefixes are identified in Table 2.

	front close +ATR:-ATR	front half-close/-open +ATR:-ATR	back close +ATR:-ATR	back half-close/-open +ATR:-ATR	central open +ATR:-ATR
oral vowel	i-:ɪ-	e-:ɛ-	u-:ʊ-	o-:ɔ-	ə:a-

Elugbe posits seven prefixes that code nominal form class.

These are i-:ɪ-, u-:ʊ-, e-:ɛ-, o-:ɔ-, a-:ə, dhi-:ɪ- and ghu-:ʊ-.

From the nominal form classes, Elugbe posits nine declension sets expressing grammatical number, i.e. singular/plural.

He also identifies three nominal form classes that are neutral with regard to the variation that established the declension system. Neutral forms do not have a prefix-stem structure. They exhibit no morphological variation for expressing number.

Three distinct prefixes are assigned to the neutral form classes.

Table 3 below provides a snapshot of the PE prefixes according to their declension and neutral status. Throughout this presentation, we will refer to declension and gender classes with alphabetic letters that are capitalized. The only exception will be the Proto Edoid comparison to Proto Benue Congo and Proto Bantu.

	A	B	C	D	E	F	G	H	I		J	K	L
sg	o-:ɔ-	e-:ɛ-	a-:ə-	u-:ʊ-	o-:ɔ-	u-:ʊ-	dhi-:ɪ-	i-:ɪ-	ghu-:ʊ-		u-:ʊ-	a-:ə-	i-:ɪ-
pl	i-:ɪ-	i-:ɪ-	i-:ɪ-	i-:ɪ-	a-:ə-	a-:ə-	a-:ə-	a-:ə-	a-:ə-				

Table 4 presents the twelve PE declension class prefixes and English equivalents for the noun stems assigned to each declension.

CL	PE	English equivalents for associated PE nouns
A	o-:ɔ-/i-:ɪ-	child, father, man, hunter, king/priest, chicken, cock, cotton
B	e-:ɛ-/i-:ɪ-	animal/meat, antelope, elephant, goat, leopard, monkey, tortoise, fish, body, river, bag
C	a-:ə-/i-:ɪ-	he-goat, mouth, breast, penis, housefly, louse, rain, water, saliva, oil, wind, iron, axe, market, earth/soil, night, bird, dog
D	u-:ʊ-/i-:ɪ-	back, bone, navel, skin, hair, grey hair, moon, song, boat/canoe, mortar, cloth, leaf, stone, tree
E	o-:ɔ-/a-:ə-	corpse, traditional doctor, person/woman, thief
F	u-:ʊ-/a-:ə-	blood, head, horn, liver/heart, vein, tail, tongue, marriage/husband, oil palm, rope, house, earth, year
G	dhi-:ɪ-/a-:ə-	belly, intestine, eye, tooth, egg, name, war
H	i-:ɪ-/a-:ə-	cloth, navel, neck, nose
I	ghu-:ʊ-/a-:ə-	arm/hand, ear, leg/foot, hat/cap
J	u-:ʊ-	fear, sleep
K	a-:ə-	drink, sunshine, saliva (mass nouns)
L	i-:ɪ-	faeces, ashes

Elugbe (1983) makes the case for a direct line of descent from Bantu through Benue Congo to Edoid.

He aligns declension sets and neutral form classes in Proto Edoid with those from Proto Bantu and Proto Benue Congo.

He also identifies English equivalents for noun stems assigned to each declension class and neutral. Table 5 outlines this arrangement.

Declension set prefixes and neutral form class vowel marks for Proto Bantu (PB), Proto Benue Congo (PBC) and Proto Edoid (PE) from Elugbe (1983).

CL	PB	PBC	PE
1/2	*mu-/ba-	*ù-/ba-	*o-:ɔ-/a-:ə-
3/4	*mu-/mi-	*bu-/í-, *ú-/ti-	*u-:ʊ-/i-:ɪ-
3/4	*mu-/mi-	*bu-/í-, *ù-/ti-	*o-:ɔ-/i-:ɪ-
5/6	*mi-/ma-	*li-/a	*dhi-:ɪ-/a-:ə-
5/6	*mi-/ma-	*li-/a-	*i-:ɪ-/a-:ə-
7/8	*ki-/bi-		
9/10	*N-/N-	*ì/ í	*e-:ɛ-/i-:ɪ-
12/5	*ka-/mi-	?	*a-:ə-/i-:ɪ-
15/6	*ku-/ma-	*ku-/a-	*ghu-:ʊ-/a-:ə-
15/6	*ku-/ma-	*ku-/ma-, *a-	*u-:ʊ-/a-:ə-
14	*bu-	*bu-, *bi-	*u-:ʊ-
6	*ma-	*ma-, *a-	*a-:ə-
?			*i-:ɪ-
16	*pa-		
17	*ku-		
18	*mu-		
19	*pi-		
20	*mu-		

Declension set prefixes and neutral form class marks for Proto Bantu (PB), Proto Benue Congo (PBC) and Proto Edoid (PE) along with English equivalents for associated nouns from Elugbe (1983).

CL	PB	PBC	PE	English equivalents for noun stems
1/2	*mu-/ba-	*ù-/ba-	*o-:ɔ-/a-:ə-	corpse, traditional doctor, person/woman, thief
3/4	*mu-/mi-	*bu-/í-, *ú-/ti-	*u-:ʊ-/i-:ɪ-	back, bone, navel, skin, hair, grey hair, moon, song, boat/canoe, mortar, cloth, leaf, stone, tree
3/4	*mu-/mi-	*bu-/í-, *ù-/ti-	*o-:ɔ-/i-:ɪ-	child, father, man, hunter, king/priest, chicken, cock, cotton
5/6	*mi-/ma-	*li-/a	*dhi-:ɪ-/a-:ə-	belly, intestine, eye, tooth, egg, name, war
5/6	*mi-/ma-	*li-/a-	*i-:ɪ-/a-:ə-	cloth, navel, neck, nose
7/8	*ki-/bi-			
9/10	*N-/N-	*ì/ í	*e-:ɛ-/i-:ɪ-	animal/meat, antelope, elephant, goat, leopard, monkey, tortoise, fish, body, river, bag
12/5	*ka-/mi-	?	*a-:ə-/i-:ɪ-	he-goat, mouth, breast, penis, housefly, louse, rain, water, saliva, oil, wind, iron, axe, market, earth/soil, night, bird, dog
15/6	*ku-/ma-	*ku-/a-	*ghu-:ʊ-/a-:ə-	arm/hand, ear, leg/foot, hat/cap
15/6	*ku-/ma-	*ku-/ma-, *a-	*u-:ʊ-/a-:ə-	blood, head, horn, liver/heart, vein, tail, tongue, marriage/husband, oil palm, rope, house, earth, year
14	*bu-	*bu-, *bi-	*u-:ʊ-	fear, sleep
6	*ma-	*ma-, *a-	*a-:ə-	ashes, drink, sunshine, saliva (mass nouns)
?			*i-:ɪ-	faeces, ashes
16	*pa-			locative
17	*ku-			locative
18	*mu-			locative
19	*pi-			diminutives
20	*mu-			

Degema

Degema is an Edoid language of the Niger Delta on Degema Island.

Its nominal classes were first described in Elugbe (1976); they were placed in the context of Degema grammatical structure by Kari (2004).

These different studies clarify that although Degema exhibits nominal declension sets, it fails to manifest agreement based on class within the noun phrase, the subject verb relation or the relation between pronominal anaphors and their antecedents.

We follow Elugbe (1976) in our presentation of nominal form classes and declension classes. He posits a nine vowel system governed by vowel harmony of the West African sort, i.e. expanded (i, e, u, o) vs non-expanded (ɪ, ɛ, ʊ, ɔ, a).

Of note is that Degema has only a single open vowel.

Degema vowel quality forms related via harmony are identified in Table 7.

	front close +ATR:-ATR	front half-close/open +ATR: -ATR	back close +ATR:-ATR	back half-close/open +ATR: -ATR	central open
oral vowel	i-:ɪ-	e-:ɛ-	u-:ʊ-	o-:ɔ-	a-

Elugbe posits five nominal form class prefixes. These are i-:ɪ-, u-:ʊ-, e-:ɛ-, o-:ɔ-, a-.

They participate in eight declensions and five neutral form classes.

Eight nominal declensions show prefixes paired according to singular vs plural.

Five neutral form classes are designated by a vowel quality mark that does not alternate to express number. A distinct vowel is assigned to each neutral form class.

Table 8 outlines the declension sets and neutral form classes in Degema from Elugbe (1976).

	A	B	C	D	E	F	G	H		I	J	K	L	M
sg	o-:ɔ-	o-:ɔ-	u-:ʊ-	e-:ɛ-	u-:ʊ-	i-:ɪ-	a-	e-:ɛ-		i-:ɪ-	e-:ɛ-	u-:ʊ-	a-	o-:ɔ-
pl	e-:ɛ-	i-:ɪ-	a-	i-:ɪ-	i-:ɪ-	a-	i-:ɪ-	a-						

Below are declension set and neutral nominal form class prefixes in Degema with the English meanings of their associated nouns.

These are presented in Table 9 and Table 10.

cl	pf	English equivalents for Degema noun stems
A	o- /e-	corpse, elder, thief, kola nut
	ɔ- /ɛ-	chief, master, native doctor, stranger, witch/wizard
B	ɔ- /i-	child
	ɔ- /ɪ-	father, girl, servant, youth, bat, crab, fowl, hare, giant rat, rat/mouse, spider, vulture, roof apex, bracelet, dirt, farm, shirt, soap, heaven/sky, rain, wind, boil, elbow, shoulder, thigh
	o- /i-	chameleon, crocodile, hippopotamus, parrot, fence, gun, hut, money, moon, noon, cassava, dust, hole
C	u- /a-	clan, in-law, vein, head, tail, basket, drink/palm wine, cap, dress, pestle, road, string, well, fruit, thorn, death, story, sun, work, year
	ʊ- /ə	friend, marriage, horn, ear, body, eye, rope, needle, exam, canoe, bow, leaf/book, drum, arrow, branch, root, earth/soil, parrot
D	e- /i-	elephant, fish, he-goat, kite, monkey, axe, bed, door, iron/metal, oil, mouth, waiste/hip, anthill, hill, market, oil palm
	ɛ- /ɪ-	animal, frog, goat, iguana, leopard, lion, hoe, knife, knot, mortar, rubbish heap, anus, lip, voice, idol/fetish, spirit, fever, language, mud, twin
E	u- /i-	bone, flea, fly, lizard, louse, grass, seed, egg
	ʊ- /ɪ-	hair, grey hair, muscle/flesh, foot sole, ant, mosquito, snail, termite, wasp, worm, sheep, calabash, orange, seed, sugar cane, tree, abscess, fountain/spring, spear, start, thickness
F	i- /a-	breast, buttocks, forehead, neck, nose, cloth, lake, name
	ɪ- /ə-	belly, testicle, vagina, stem
G	a- /ɪ-	chair, cotton, dog, evening, hawk, hook, horse, leg, night, outside, pot, water
H	e- /a-	brain

Table 10. Neutral nominal form class prefixes in Degema with meanings of associated nouns in English from Elugbe (1976).

cl	pf	English equivalents for Degema noun stems
I	i-	illness, strength, case, dream, bee, squirrel
	ɪ-	beads, beard, blood, faeces, food, sand, armpit, chin, sore
J	ɛ-	bag, bush, curse, fan, laziness, sacrifice
K	u-	salt
	ʊ-	beauty, correctness
L	a-	ashes, groundnuts, field, liver, pus, dawn/morning
M	o-	sweat

Oloma / Ogbe

Oloma is one name for a settlement in the foothills and sharp outcroppings of the Igara Formation, which dominates the northern edge of contemporary Edo State.

In their linguistic assessment of Oloma, Elugbe and Schubert (1976) locate its speakers near the hilltop settlement of Somorika.

Today, this aligns with the village Ogbe. It lies in a valley immediately west of Somorika and a few miles west of the Ebira speaking village of Igara and the Edoid villages of Enwan and Akuku.

Oloma declension and gender sets are described in Elugbe and Schubert.

We rely on their presentation to identify nominal form class prefixes and related agreement class prefixes. Oloma has vowel and consonant-vowel prefixes.

Elugbe and Schubert posit a seven vowel phonemic system for Oloma. Prefix vowels are not affected by vowel harmony.

Table 11 identifies Oloma vowel qualities.

	close front	half-close front	half-open front	close back	half-close back	half-open back	central open
oral vowels	i	e	ε	u	o	ɔ	a

.

These vowels and any accompanying consonants are restricted in their attachment to nominal stems.

Elugbe posits seventeen nominal form class prefixes.

These are *i-*, *u-*, *e-*, *ɛ-*, *o-*, *ɔ-*, *a-*, *ghi-*, *ghu-*, *ghe-*, *ghɛ-*, *ghɔ-*, *gha-*, *lu-*, *le-*, *lɛ-* and *lɔ-*.

According to Elugbe and Schubert, O̱lo̱ma exhibits twenty five nominal declension sets where singular and plural prefixes are paired.

As well, there are six neutral form class marks that do not express number. These are *ghɛ-*, *lɛ-*, *ghi-*, *i-*, *ɛ-*, and e-.

Table 12.	Declension set prefixes for <u>Ol̥o</u>ma posited by Elugbe and Schubert (1976).

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
sg	u-	ghu-	o-	e-	le-	ghe-	ghi-	ɔ-	a-	gha-	lɛ-	ghe	ghu-	ghɔ-	lɛ-
pl	i-	i-	i-	i-	i-	i-	i-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	a-	a-

	P	Q	R	S	T	U	V	W	X	Y
sg	le-	a-	ghɔ-	gha-	ghu-	ghi-	ghe-	ghu-	ghɔ-	e-
pl	e-	lɔ-	lɔ-	lɔ-	lu-	lu-	lu-	ghi-	ghɛ-	lu-

Oloma exhibits a relatively restricted number of agreement class prefixes according to Elugbe and Schubert.

There are seven prefix forms that indicate agreement: *ghɔ, ghɛ, lɔ, lɛ, ɔ, ɛ, a*.

Under conditions of number agreement,
five of these are assigned to the singular (*ghɔ, lɔ, ɔ, ɛ, a*)
and six are assigned to the plural (*ghɛ, lɔ, lɛ, ɔ, ɛ, a*).

According to Elugbe and Shubert, Oloma agreement class prefixes can be arranged according to thirty one sets.

Each set consists of an agreement class pair contrasting in grammatical number. Agreement class marks appear on adnominals or verb stems that serve as agreement targets for a nominal controller.

And each set relates to a declension set.

Following Elugbe and Schubert, Table 13 arranges the agreement class prefixes of O̲lo̲ma into thirty one sets. We label them using the declension labels.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	?
sg	a-	ɔ-	ghɔ-	a-	ɔ-	ɔ-	lɔ-	lɔ-	gha-	ghɔ-	a-	ɔ-	a-	ɔ-	gha-	lɔ-
pl	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	lɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	a-	a-	ɛ-

	P	Q	R	S	T	U	V	W	X	Y	?	?	?	?	?
sg	ghɔ-	ghɔ-	ghɔ-	lɔ-	lɔ-	lɔ-	a-	ghɔ-	gha-	ghɔ-	ghɔ-	gha-	ghɔ-	ghɔ-	a-
pl	ɛ-	ɛ-	a-	ɛ-	a-	ɔ-	lɛ-	lɔ-	lɛ-	lɛ-	lɛ-	lɛ-	ghɛ-	ghɛ-	lɛ-

.

Table 13 reveals thirty-one agreement class prefix pairs, gender sets.

One might expect that there would be thirty-one nominal declension sets, if gender sets and declension sets stood in an isomorphic (1-1) relationship.

Recall however, that Elugbe and Schubert proposed twenty-five declension sets in Table 12.

To reconcile this discrepancy, we took another look at the Oloma facts.

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The data reveal that in six instances, two agreement class prefix pairs were assigned to a single declension set.

Each of these six declension sets were proposed solely on the basis of nominal prefix alternation, as one would expect.

Agreement facts were not considered in determining "noun classes."

This appears to reflect a confusion between declension and gender that occurs when the term "noun class" is employed for both gender set and declension set (Guldemann and Fiedler 2017).

Each of the original six instances where two agreement prefix pairs were assigned to a single declension set actually reflects six additional gender sets for Ol̲o̲ma.

Assuming the correctness of this analysis, Ol̲o̲ma has thirty one gender sets that relate to twenty five nominal declension sets.

In Table 14 we amend the original set of twenty five "noun classes" proposed by Elugbe and Schubert through the use of subscripts for declension sets A, C, E, H, I and O. We thus arrive at thirty-one gender sets for O̲lo̲ma. They relate to twenty five declension sets.

dcc	A_i	A_{ii}	B	C_i	C_{ii}	D	E_i	E_{ii}	F	G	H_i	H_{ii}	I_i	I_{ii}	J	K	L
sg	u-	u-	ghu-	o-	o-	e-	le-	le-	ghe-	ghi-	ɔ-	ɔ-	a-	a-	gha-	lɛ-	ghɛ-
pl	i-	i-	i-	i-	i-	i-	i-	i-	i-	i-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-
gen																	
sg	a-	ɔ-	ghɔ-	a-	ɔ-	ɔ-	lɔ-	lɔ-	gha-	ghɔ-	a-	ɔ-	a-	ɔ-	gha-	lɔ-	ghɔ-
pl	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	lɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-

dcc	M	N	O_i	O_{ii}	P	Q	R	S	T	U	V	W	X	Y
sg	ghu-	ghɔ-	lɛ-	lɛ-	le-	a-	ghɔ-	gha-	ghu-	ghi-	ghe-	ghu-	ghɔ-	e-
pl	ɛ-	a-	a-	a-	e-	lɔ-	lɔ-	lɔ-	lu-	lu-	lu-	ghi-	ghɛ-	lu-
gen														
sg	ghɔ-	ghɔ-	lɔ-	lɔ-	lɔ-	a-	ghɔ-	gha-	ghɔ-	ghɔ-	gha-	ghɔ-	ghɔ-	a-
pl	ɛ-	a-	ɛ-	a-	ɔ-	lɛ-	lɔ-	lɛ-	lɛ-	lɛ-	lɛ-	ghɛ-	ghɛ-	lɛ-

Table 15 aligns <u>Ọlọ</u>ma prefix forms for declension sets and gender sets with stem meanings (in English).

dcc	gen	English equivalents for Oloma noun stems
o$_i$-/i-	a-/ɛ-	corpse, king, slave, thief, wizard
o$_{ii}$-/i-	ɔ-/ɛ-	beard, chameleon, cotton, dust, fence, fowl, heel, parrot, river, rubbish heap, shin, vulture, waist, yam
u$_i$-/i-	a-/ɛ-	daughter
u$_{ii}$-/i-	ɔ-/ɛ-	axe, bone, bed, buttocks, calabash, cloth, coal, door, finger, fruit, grave, he-goat, knife, medicine, monkey, mouth, needle, nose, penis, pestle, ram, snail, sore, spear, tail, thorn, toe, vein, well, work, worm, year
ghu-/i-	ghɔ-/ɛ-	rubbish, louse, rope
e-/i-	ɔ-/ɛ-	cat, elephant, monkey
le$_i$-/i-	lɔ-/lɛ-	breast
le$_{ii}$-/i-	lɔ-/ɛ-	name
ghe-/i-	gha-/ɛ-	ant, bush, fly
ghi-/i-	ghɔ-/ɛ	goat
ɔ$_i$-/ɛ-	ɔ-/ɛ	anus, arrow, beans, cutlass, farm, fear, hill, hook, horn, hut, intestine, lip, lizard, orange, rat, soap, spider, tongue, tree
ɔ$_{ii}$-/ɛ-	a-/ɛ	hunter, lazy man
a$_i$-/ɛ-	ɔ-/ɛ	animal, antelope, chair, crocodile, fan, fever, gun, kite, mat, shirt, squirrel, vagina
a$_{ii}$-/ɛ-	a-/ɛ	basket, doctor, elder, friend, in-law, man, stranger, wife, woman
lɛ-/ɛ-	lɔ-/ɛ	frog, nail
ghu-/ɛ-	ghɔ-/ɛ	ear, grey hair, hair, leaf/book
ghɛ-/ɛ-	ghɔ-/ɛ	stone
gha-/ɛ-	gha-/ɛ	butterfly, elbow, fish, mortar, termite
ghɔ-/a-	ghɔ-/a-	arm, leg
lɛ$_i$-/a-	lɔ-/ɛ-	case, egg, hole, thigh
lɛ$_{ii}$-/a-	lɔ-/a-	tooth
a-/lɔ-	a-/lɛ-	blood, house, water
gha-/lɔ-	gha-/lɛ-	dog, pot
ghɔ-/lɔ-	ghɔ-/lɔ-	canoe, cough
ghu-/lu-	ghɔ-/lɛ-	moon, salt
ghi-/lu-	ghɔ-/lɛ-	python
e-/lu-	a-/lɛ-	oil
ghe-/lu-	gha-/lɛ-	bag, cap, fire, neck, pepper, scorpion, skin, stomach
ghu-/ghi-	ghɔ-/ghɛ-	bow, oil palm
ghɔ-/ghɛ-	ghɔ-/ghɛ-	laughter
le-/e-	lɔ-/ɔ	darkness

North Ivie

North Ivie is the name for a cluster of four villages.

They are located in the northeastern sector of the Igara Formation as it stretches toward the River Niger.

The principal village of this cluster is Okpekpe.

It is east of villages associated with the Okpella clan and north of the Obe River. It is also about 30 kilometers north of Auchi, the largest village of Edoid's Yekhee cluster of clans.

Masagbor (1989) analyzed the nominal classificatory system of North Ivie.

We follow Masagbor in our assessment of North Ivie declension set and gender set marking.

As with other Edoid languages, vowels are central to form class and agreement class prefixes in North Ivie.

Masagbor posits a seven vowel system with little hint of vowel harmony of the West African sort.

The vowel qualities of North Ivie are shown in Table 16.

	front close	front half-close	front half-open	back close	back half-close	back half-open	central open
oral	i	e	ɛ	u	o	ɔ	a

.

Masagbor identifies nominal form class and agreement class prefixes.

He proposes seven nominal form class prefixes, one for each vowel.

These prefixes either pair to express number and class or they do not pair.

Masagbor proposes eleven declension sets, singular/plural pairs.

He also proposes five neutral form classes; two attach to verb stems.

Table 17 presents the prefixes for the eleven nominal declension sets of North Ivie.

cl	A	B	C	D	E	F	G	H	I	J	K
sg	ɔ-	o-	u -	ɛ-	a-	ɔ-	o-	ɛ-	a-	o-	ɛ-
pl	i-	i-	i-	i-	i-	e-	e-	e-	e-	a-	a-

.

Table 18 illustrates the eleven declension sets of North Ivie.

class	pf	noun exemplars
A	ɔ-/i-	*òkpòtsò, ìkpòtsò* 'woman'
B	o-/i-	*ògùmà, ìgùmà* 'slave'
C	u-/i-	*ùgùgú, ìgùgú* 'shell'
D	ɛ-/i-	*èghè, ighè* 'buffalo, cape buffalo'
E	a-/i-	*àwóshí, ìwóshí* 'dog'
F	ɔ-/e-	*ómòsè, émòsè* 'man'
G	o-/e-	*órhè, érhè* 'tree'
H	ɛ-/e-	*èná, èná* 'cow'
I	a-/e-	*àwè, èwè* 'partridge'
J	o-/a-	*óbò, ábò* 'hand/arm'
K	ɛ-/a-	*èkùè, àkò* 'tooth'

Table 19 presents declension sets (dcc) and neutral form classes in North Ivie with English translation of associated nouns from Masagbor (1989).

CL	sg/pl pf	English equivalents for noun stems
A	ɔ-/i-	woman, girl, lazy person, hyena
B	o-/i-	slave, sheep, spear, trousers, plucking stick
C	u-/i-	shell, shellfish spoon, cooking pot, male goat
D	ɛ-/i-	grass cutter, buffalo, kolanut, gift, coral beads
E	a-/i-	horse, dog, mosquito, cassava, lamp
F	ɔ-/e-	man, native doctor, enemy, witch, inlaw, cock
G	o-/e-	tree, yam, cloth, house, road
H	ɛ-/e-	cow, animal, stone, shoe
I	a-/e-	partridge
J	o-/a-	foot, hand, buttock
K	ɛ-/a- •	tooth, eye
L	e-	potato, bean, sound, smoke, grey hair, elder, ash
M	i-	farm, rubbish heap,
N	a-	water, burial ground, quarry
O	o-	sitting
P	i-	destiny, thinking, strength, running, loving

Masaghor maintains that agreement in North Ivie is anchored to the animate/inanimate distinction in the singular but not in the plural.

Masagbor considers stem adnominals for the definite article, the proximal demonstrative and numerals. Each stem where it occurs is consonant initial.

No mention is made of adjectives, genitives or other adnominal forms such as relative clause.

Agreement class prefixes, all with a vowel quality attach to adnominal stems.

There are two agreement class prefixes for the singular, o- and o-, and one for the plural e-.

In the singular, adnominal form class prefixes correlate with the animate or inanimate status of their head nominal. _ó_- is assigned to animates and _ó_- to inanimates.

In the plural, _e_- is assigned to both animates and inanimates.

These general principles apply to the definite article and demonstratives.

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1 a. *ó-ní   ó-sùmà*   *é-ní   í-sùmà*
   SG-DA SG-sheep   PL-DA   PL-sheep
   'the sheep'   'the sheep plural'

 b. *ó-ní   ó-rhè̱*   *é-ní   é-rhè̱*
   SG-DA SG-tree   PL-DA   PL-tree
   'the tree'   'the trees'

 c. *ó-ní   à-wóshí*   *é-ní   ì-wóshí*
   SG-DA SG-dog   PL-DA   PL-dog
   'the dog'   'the dogs'

 d. *ó-ní   à-wóshí ò-nà*   *é-ní   ì-wóshí   è-nà*
   SG-DA SG-dog SG-PDEM   PL-DA   PL-dog   PL-PDEM
    'this dog'   'these dogs'

 e. *ó-ní   ó-rhé̱   ò-nà*   *é-ní   é-rhé̱   è-nà*
   SG-DA SG-tree sg-PDEM   PL-DA   PL-tree   PL-PDEM
    'this tree'   'these trees'

Numeral behavior differs from other adnominals in North Ivie.

Numerals are not confined to the agreement prefixes *ǫ́* and *ó-* in the singular and *è-* in the plural.

They also employ agreement prefixes *à-* in the singular and *ì-* in the plural.

à- is aligned with animates and *ì-* with inanimates.

Agreement class varies according to numeral subtype.

The agreement class prefixes _ó_- animate and _ó_- inanimate affect only numeral stem -_gùò_ 'one.'

Agreement for numerals between two and nine differ according to numeral value.

Numerals from two to four require agreement prefix _à_- with animate nominals and prefix _è_- with inanimate nominals.

Numerals from five to nine require agreement prefix _ó_- in construction with animate nominals and prefix _i_- with inanimate nominals.

Numerals are the only adnominal type that varies its prefix form according to animacy not only in the singular but also in the plural.

2 a. *ó-mòsé* *ó-gùò*   *á-khè* *ó-gùò*
       cl-man   cl-one   cl-pot cl-one
       'one man'   'one pot'

   b. *é-mòsé* *à-vá*   / *á-sè*   / *á-nè*
       man   ANI-two ANI-three ANI-four
       'two /three / four men'

       í-khè   *è-vá*   / *é-sè*   / *é-nè*
       cl-pot   INA-two   INA-three   INA-four
       'two /three / four pots'

   c. *é-mòsé* *ó-shè*   / *ò-tílì*   *í-khè*   *í-shè*   / *ì-tílì*
       man   ANI-five ANI-nine   cl-pot   INA-five   INA-nine
       'five / nine men'   'five / nine pots'

Agreement relations in North Ivie also affect the subject-verb relation.

The agreement class prefixes (or clitics) are ọ̀, ò and è.

When a lexical subject is animate and singular, the subject agreement form is ɔ-.

When a lexical subject is inanimate and singular, subject agreement has the form o-.

When the lexical subject is plural, regardless of animacy, the agreement form is e-.

There are two gender sets that characterize the subject-verb relation.

These are *ó*/*é* and *ó* /*é*.

3 a. *ú-kpókyá mè   ò   á   bàlè*
    SG-friend my   3sg C   come
    'My friend is coming.'

  b. *ó-ní   ó-rhè   ò   á   tùà*
    SG-DA SG-tree 3sg C burn
    'The wood is burning.'

  c. *é-ní   í-vìè   è   á   bàlè*
    PL-DA PL-child   3pl C coming
    'The children are coming.'

Agreement in North Ivie also obtains between antecedent noun phrase and pronominal anaphor.

The agreement class prefixes attached to the pronominal anaphor respect both grammatical number and animacy of the nominal antecedent.

When an animate noun in the singular is relativized, the anaphor is ɔ-.

When an inanimate noun in the singular is relativized, the anaphor is o-.

.

When an animate or inanimate antecedent is plural, the anaphor is *e-*.

4 a. *ó-rhé   ná ó   dé*   *é-rhé   ná é   dé*
    SG-tree R   3sg fall   PL-tree R   3pl fall
    'the tree that fell'   'the trees that fell'

 b. *à-wóshí ná <u>ó</u>   dé*   *ì-wóshí ná é dé*
    SG-dog R   3sg fall   PL-dog R 3pl fall
    'the dog that fell'   'the dogs that fell'

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Ibillo

Ibillo is the name of a village within the Okpamheri cluster of Northern Edoid. It is one among twenty or so in its cluster.

Ibillo is located in the far northwestern sector of the Igara Formation, fairly near the Onyami River and northwest of Igara, a non-Edoid speaking community of the Ebira group.

In its cluster, Ibillo is often considered the principal village. It is surrounded by other villages belonging to the Okpamheri cluster.

The nominal and agreement form classes of Ibillo are analyzed in Ashofor (1984).

We rely on his data in our assessment of Ibillo class marking.

Table 20 illustrates the declension sets and neutral form classes with a lexical exemplar of each in Ibillo.

There are eleven declension sets.

class	v-alt pf	noun exemplar
A	o-/i-	ó-tònò, í- tònò 'albino'
B	e-/i-	é-nwènà, í-nwènà 'fish'
C	u-/i-	ú-kpè, í-kpè 'year'
D	ɔ-/ɛ-	ọ́-họ̀zì, ẹ́-họ̀zì 'man'
E	i-/ɛ-	í-làtẹ̀, ẹ́-làtẹ̀ 'bed'
F	u-/ɛ-	ú-zàmẹ̀, ẹ́-zàmẹ̀ 'sheep'
G	a-/ɛ-	á-va, ẹ́-va 'hawk'
H	o-/e-	ó-gì, é-gì 'thief'
I	u-/a-	ú-bọ̀, á-bọ̀ 'hand, arm'
J	ila-/ɛ-	ílà-sìá, ẹ́-sìá 'stone'
K	ile-/i-	ílè-mhè, í-mhè 'breast'
L	vᵢ-/vᵢ-	ẹ́gbẹ̀ 'body,' ókù 'game,' únù 'mouth, íkàmà 'head,' ékù 'age grade'

•

Vowels predominate as nominal form class prefixes in Ibillo.

Ashofor posits a seven vowel system for Ibillo with little hint of vowel harmony of the West African sort.

Table 21 presents the vowel quality forms of Ibillo.

	front close	front half-close	front half-open	back close	back half-close	back half-open	central open
oral vowels	i	e	ɛ	u	o	ɔ	a

.

Ashofor identifies vowels that constitute nominal form class prefixes.

He also identifies two form class prefixes that consist of a vowel-consonant-vowel triad.

He does not evaluate prefixes attached to verb stems.

From the nominal form class prefixes, Ashofor posits eleven declension sets and one neutral form class. The declension prefixes alternate according to grammatical number and class.

The neutral class according to Ashofor refers to mass or aggregate meanings.

Apparently, no count nouns participate in this neutral class.

Whether this is true or not cannot be determined from the data. It will require further inquiry into the Ibillo classificatory system.

Table 22 presents declension set prefixes and neutral form class prefixes in Ibillo from Ashofor (1984).

cl	A	B	C	D	E	F	G	H	I	J	K		L
sg	o-	e-	u -	ɔ-	i-	u-	a-	o-	u-	ila-	ile-		vᵢ-
pl	i-	i-	i-	ɛ-	ɛ-	ɛ-	ɛ-	e-	a-	ɛ-	i-		vᵢ-

Table 23 presents declension set and neutral class prefixes along with English equivalents for nominal stems in Ibillo from Ashofor (1984).

cl	dcc pf	English equivalents for noun stems
A	o-/i-	albino, pig, vulture, fowl, chimp, yam beetle, bed bug, wasp, knee, basket
B	e-/i-	fish, ant, housefly, throat, pot, skewer, echo, cap, pipe, metal gong
C	u-/i-	girl, male goat, worm, nose, feather, sacrifice, root, house, year, navel
D	ɔ-/ɛ-	woman, man, mother, human being, co-wife, witch, elder, native doctor, termite, epilepsy
E	i-/ɛ-	duck, jaw, bed,
F	u-/ɛ-	slave, sheep, ear, leg, fingernail, shin, toe, debt, story, leaf
G	a-/ɛ-	dog, bird, hawk, bee, meat, elbow, shed, pot cover, hoe, cloth
H	o-/e- •	thief
I	u-/a-	hand
J	ila-/ɛ-	frog, thigh, egg, store, palace, processional ground, stone
K	ile-/i-	fist, liver, breast
L	vᵢ-/vᵢ-	body, age grade, game, mouth, head

Ashofor undertakes an initial assessment of agreement class and gender sets in Ibillo.

Agreement patterns affect adnominal forms within the noun phrase and subject-verb relations within a sentence.

There is no discussion of pronominal agreement in Ashofor.

Most adnominal forms permit agreement form class prefixes.

The principal exceptions are numerals greater than one. They show erosion of form class marking.

Subject verb relations exhibit a less robust system of agreement form class prefixes.

This is particularly so in the plural.

Agreement in Ibillo manifests some signs of erosion, as indicated above.

In selected subdomains, it has devolved into a non-agreement system.

Ibillo treats adnominal agreement in one way and subject-verb agreement in another.

In both, agreement is required for grammatical number and nominal class.

Ibillo does exhibit a gender system.

Initially we take up adnominals and follow with the subject verb relation.

Table 24 presents Ibillo agreement class prefixes attached to adnominal stems.

They pertain to demonstrative and possessive stems as well as the numeral for one.

It is adnominal numerals greater than one that do not exhibit agreement.

In addition, there is no discussion in Ashofor of agreement patterns for adjectives or pronominals.

Agreement form classes vary not only in their assignment to declension classes but also in their realization for adnominal types.

Agreement class forms combine in a limited number of gender sets.

Overall, agreement form class prefixes are ɔ-, *a*-, *u*-, and ɛ-.

They appear selectively to mark grammatical number and more discriminately to mark gender.

The singular agreement classes are ɔ-, *a*- and *u*-.

The plural agreement classes are ɛ- and *a*-.

The gender sets that pair a singular and plural agreement class and align with declension sets are ɔ-/ɛ-, *a*-/ɛ- and *u*-/ ɛ- as well as ɔ-/*a*-, *a*-/*a*- and *u*-/*a*-.

Table 24 presents the gender sets composed of agreement form classes for proximal demonstratives (PD), possessives (P) and numerals relative to corresponding nominal declension sets (ncs) for Ibillo from Ashofor (1984).

ncs	A	B	C	D	E	F	G	H	I	J	K	L
nfc sg	o-	e-	u -	ɔ-	i-	u-	a-	o-	u-	ila-	ile-	vᵢ-
nfc pl	i-	i-	i-	ɛ-	ɛ-	ɛ-	ɛ-	e-	a-	ɛ-	i-	vᵢ-
PD sg	ɔ-	a-	u-	ɔ-	a-/ɔ-	u-	a-	ɔ-	u-	a-	a-	
PD pl	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	
1PP sg	ɔ-	a-	u-	ɔ-	a-	u-	a-	ɔ-	u-	a-	a-	
1PP pl	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	
2PP sg	ɔ-	a-	u-/ɔ-	ɔ-	a-	u-	a-	ɔ-	u-	a-	a-	
2PP pl	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	ɛ-	
3PP sg	ɔ-	a-	u-	ɔ-	a-	u- ·	a-	ɔ-	u-	a-	a-	
3PP pl	a-	a-	a-	a-	a-	a-	a-	a-	a-	a-	a-	
one	ɔ-	a-	u-	ɔ-	a-	u-	a-	ɔ-	u-	a-	a-	

These gender sets vary according to adnominal category.

Depending on declension set, the proximal demonstrative shows gender sets ɔ-/ɛ-, *a*-/ɛ- or *u*-/ ɛ-;

the first and second person possessive is manifested by gender sets ɔ-/ɛ-, *a*-/ɛ- or *u*-/ ɛ-;

The third person possessive relies on gender sets ɔ-/*a*-, *a*-/*a*- and *u*-/*a*-.

Agreement with numerals in Ibillo presents a special case.

The stem for 'one' relies on the agreement class prefixes ɔ-, *a*- and *u*-; they apply only to the singular. Depending on nominal head declension class, 'one' appears as *ú-kpà*, *ó-kpà* or *á-kpà*.

For numerals between two and ten, inclusive, there is no evidence of prefix variation according to nominal head declension class. These numerals exhibit a constant lexical form

A point of note however is that prefix vowel for numerals between two and ten is not uniform.

Two different but constant vowel shapes are evident, either _e_ or _i_.

It is _e_ that appears on numerals 'two, three, four, six, eight,' most representing even numbers.

It is _i_ on numerals 'five, seven, nine, ten,' most representing odd numbers.

Both _e_ and _i_ also appear as members of plural declension sets; only _e_ appears as a plural agreement class mark.

évà   'two'   _íshìé_   'five

ésà   'three'   _íshònùá_ 'seven'

énè   'four'   _ísìé_   'nine

ésàsà 'six'   _ígbè_   'ten'

énìè   'eight'

.

The preceding examples from Ibillo are all of a particular type.

The examples employed nominal stems for count nouns that attracted a declension set prefix expressing number and class.

Each noun was overtly determined for grammatical number.

The Ibillo lexicon also has count nouns underdetermined for grammatical number.

These lexically underdetermined nouns participate in the Ibillo agreement system however. They are sometimes referred to locally as neutral nouns.

Maintaining agreement when number is lexically underdetermined presents a challenge. How does a speaker know to which agreement class a given noun should be assigned? Apparently, part of the answer may lie in vowel harmony.

Principles governing agreement under a condition of underdetermination for grammatical number seem similar to those governing S-V relation.

In terms of the controller-target relation underlying all forms of agreement, we note the following.

The controller for lexically underdetermined nouns is not the class of the initial vowel of the noun stem. Rather, the controller is the initial vowel of the lexical noun.

Each adnominal expresses both singular and plural number.

Since agreement class forms in the plural differ less than those in the singular, we profile singular class forms.

A singular prefix for an adnominal stem is the agreement target.

The controller of agreement is the initial vowel of the underdetermined head noun.

More than likely, this vowel was the erstwhile form class prefix of the underdetermined noun.

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Table 25 presents conditional relations that apply to controller (C) and target (T) vowels for underdetermined count nouns. It makes reference to the initial vowel of the controller noun and the initial vowel of agreement for the adnominal.

AGREEMENT RELATION		
noun C vowel	➤	adnominal T vowel
o-		ɔ-
e-		a-
ɛ-		ɛ-
i-		ɛ-
u-		u-

.

Gender agreement as it pertains to the subject verb relation in Ibillo is outlined below.

For each nominal declension set (dcs), Table 26 presents the corresponding gender set.

dcs	A	B	C	D	E	F	G	H	I	J	K
dcc sg	o-	e-	u-	ɔ-	i-	u-	a-	o-	u-	ila-	ile-
dcc pl	i-	i-	i-	ɛ-	ɛ-	ɛ-	ɛ-	e-	a-	ɛ-	i-
SV sg	ɔ-:o-	a-:e-	u-	ɔ-:o-	a-:e-	u-	a-:e-	ɔ-:o-	u-	a-:e-	a-:e-
SV pl	i-	i-	i-	i-	i-	i-	i-	i-	i-	i-	i-

In Ibillo, a gender prefix for the subject-verb relation varies according to declension set in the singular but not in the plural.

In the plural the agreement prefix is consistently *i-*.

In the singular there are three agreement form class prefixes. These are *ɔ-:o-*, *a-:e-* and *u-*.

Two reflect vowel harmony of a partial sort limited to non-close vowels.

Overall, it appears that vowel harmony is controlled by the initial vowel of the verb stem.

When initial vowel is +ATR (as with -*keke*), the agreement prefix is *o*- or *e*- rather than *ɔ*- or *a*-.

When initial vowel of the verb stem is -ATR (as with -*kɔhi*), the agreement prefix is *ɔ*- or *a*- rather than *o*- or *e*-.

As initial vowel in a verb stem, neither *u* nor *i* prompts ATR harmony in Ibillo.

Subject verb agreement in Ibillo is not only controlled by subject nouns that are overtly determined for grammatical number.

SV agreement is also controlled by count nouns underdetermined for number.

Underdetermined count nouns affect the agreement mark on the verb relation just as they did the agreement mark on adnominal modifiers.

Conditioned relations between controller (C) vowel and target (T) vowel for underdetermined count nouns presented earlier in Table 27 are repeated here for reference to the SV relation.

AGREEMENT RELATION		
noun C vowel	➤	adnominal T vowel
o-		ɔ-
e-		a-
ɛ-		ɛ-
i-		ɛ-
u-		u-

As with adnominal relations, the controller of subject-verb agreement for a subject that is an underdetermined count noun is its initial vowel.

The target is the subject clitic vowel attached to the verb stem.

Recall that the subject-verb agreement relation is recognizable at the level of form only in the singular, where several agreement form classes are available. In the plural, the subject clitic is a constant i-.

Bini

Bini (also known as <u>E</u>do) is the name of the language spoken by inhabitants of Benin City and its environs.

In the pre-colonial era, Benin City was the capital and cultural center of the Benin Kingdom, known for its bronze and ivory artistry (Crowder and Abdullahi 1979).

Today, it is the political capital of Edo State. Bini has more speakers than any other Edoid language.

Despite its major cultural significance, Bini has received minimal descriptive attention from linguists.

There are two dictionaries available, one by Melzian (1937) and another by Agheyisi (1986).

An initial grammatical statement based on main clause phenomena is available in a typescript report by Agheyisi (1990). Further aspects of grammatical structure are found in Wescott (1962).

Information pertaining to nominal classification and agreement in Bini are found in Omoruyi (1986) and Amayo (1975), respectively. We first take up nominal classification and then agreement.

Nominal form class prefixes of Bini are identified in Omoruyi (1986).

We rely primarily on his analysis for our assessment of Bini nominal classification.

Vowels are central to nominal form classes in Bini.

Omoruyi assumes a system of seven oral vowels and five nasal vowels.

In Bini, there is no vowel harmony of the West African sort.

The vowel qualities employed in Bini are shown in Table 28.

	front close	front half-close	front half-open	back close	back half-close	back half-open	central open
oral	i	e	ɛ	u	o	ɔ	a

Omoruyi identifies four nominal form classes for Bini.

The exponents of these form classes are the vowel prefixes ɔ-, o-, e-, i-.

These prefixes for nominal class pair to express grammatical number and declension sets.

The nominal stems to which these prefixes attach all determine grammatical number;

They are count nouns.

Bini also has count nouns that are underdetermined for grammatical number. They do not exhibit prefixes that alternate according to grammatical number.

None of these underdetermined noun forms are addressed in Omoruyi.

Table 29 presents the four declension sets proposed by Omoruyi.

cl	A	B	C	D
sg	ɔ-	o-	e-	ɔ-
pl	i-	i-	i-	e-

Table 30 presents declension set prefixes and associated nominal stems in English translation. All stems are human.

There are no class based agreement forms in Bini. As well there are not gender sets.

cl	pf	English equivalents for Bini noun stems
A	ɔ- /i-	trader, royal sword bearer, rubber tapper, malefactor, social conformist
B	o- /i-	man, woman, king, soldier, poor person, child of same mother
C	ɔ- /e-	chief, village head, family relation, person, slave, child, traveler, doctor, servant
D	e- /i-	young man

Emai

Emai is a North Central Edoid language.

It is spoken in ten villages across roughly 250 square kilometers on the plateau between the Edion and Owan rivers of present-day Edo State.

By road, Emai villages are approximately 120 kilometers north of Benin City and about 40 kilometers southwest of Auchi.

Emai has both oral and nasal vowel qualities that contrast phonemically. Neither quality type participates in vowel harmony of the West African sort.

For nominal inflection, Emai employs only oral vowels. Nasal vowels do not serve inflection.

Table 31 identifies seven vowel quality forms and their nasal counterparts in Emai.

	front close	front half-close	front half-open	back close	back half-close	back half-open	central open
oral	i	e	ɛ	u	o	ɔ	a
nasal	ĩ		ɛ̃	ũ		ɔ̃	ã

These seven vowel quality forms are employed to identify nominal form classes.

Nine nominal form classes inflect with a vowel mark and correspond to another nominal form class with a vowel mark.

These classes express grammatical number and identify declension sets.

These are Emai's inflected nouns.

There are nominal form classes with a vowel mark that do not correspond to another form class to reflect number.

These are Emai's uninflected or neutral nouns.

The vast majority of Emai nouns are uninflected; they do not have prefix-stem morphology.

All nouns in Emai, whether count or mass, manifest a vowel mark and so belong to a nominal form class.

Secondary nouns, those derived from verb stems through nominalization or compounding processes, also exhibit a vowel mark.

Table 32 displays Emai's eleven nominal declension sets and their prefixes.

	A	B	C	D	E	F	G	H	I	J	K
sg	ɔ-	o-	a-	ɛ-	u-	ɔ-	o-	ɛ-	a-	o-	ɔ-
pl	i-	i-	i-	i-	i-	e-	e-	e-	e-	a-	ɛ-

A relatively small group of nominal stems inflect to determine grammatical number.

There are approximately 100 of these. Not included are secondary nouns derived from verbs or compounds.

As the distribution of low and high tone across declension sets indicates, tone is not significant in this domain.

Table 33 displays Emai declension sets, their paired prefixes and lexical exemplars.

class	dcs		exemplars of Emai noun classes
A	ɔ-/i-		*ómọ̀hè, ímọ̀hè* 'man'
B	o-/i-		*òkpòsò, ìkpòsò* 'woman, female'
C	a- / i-		*àdègbè, ìdègbè* 'harlot, prostitute'
D	ɛ-/i-		*émẹ̀lá, ímẹ̀lá* 'cow'
E	u-/i-		*ùgín, ìgín* 'basket, palm frond tray'
F	ɔ- / e-		*ọ́hà, éhà* 'wife'
G	o-/e-		*ófè, éfè* 'rodent, rat'
H	ɛ-/e-		*ẹ́wè, éwè* 'goat'
I	a-/e-		*ákhè, ékhè* 'ceramic pot'
J	o-/a-		*óbọ̀, ábọ̀* 'hand/arm'
K	ɔ-/ɛ-		*ọ̀sẹ̀n, èsẹ̀n* 'goodness, good'

All vowel qualities employed in declension sets also appear as initial vowel of uninflected nouns, regardless of the latter's countability status.

Table 34 displays uninflected count nouns with their initial vowels.

v-mark	exemplar	
ɔ-	*ɔ̀bó*	'sour sop fruit'
o-	*ódègbé*	'chicken hawk'
u-	*ùbɔ̀sùn*	'yam skewer'
a-	*àdùdú*	'covered basket of raffia'
e-	*èbèsún*	'giant African snail'
ɛ-	*ɛ̀khùè*	'mouse'
i-	*ìbè*	'drum'

Table 35 displays uninflected mass nouns with their initial vowels.

v-mark		
ɔ-	*ògà*	'tetanus'
o-	*óbì*	'poison, venom'
u-	*ùdẹ́n*	'palm oil from palm kernels'
a-	*àdà*	'witches cove'
e-	*ègòò*	'tartar, tooth plaque'
ɛ-	*ẹ̀bì*	'bile'
i-	*íbẹ̀mí*	'crumbled yam stew'

Emai declension sets do not relate to agreement classes and gender sets.

There is no segmental morphology that pertains to nominal class and its relation to adnominal, subject-verb or pronominal agreement.

Agreement, when expressed segmentally is limited to the singular/plural distinction.

However, it is the case that agreement is tonally marked for nominal-adnominal and subject-verb relations.

In noun phrases, lexical melodies of head nouns like /LL/ *ìwè* 'house' and /HL/ *é-wè* [sg-goat] 'goat' undergo a change of tonal replacement when followed by a controller adnominal.

demonstrative *nà*   *íwé nà* 'this house'

adjective   *kéré*   *éwé lì kéré* 'small goat'

relative clause   *éwé lí ójé shén-ì* 'goat that Oje sold'

possessor   *éwé ísì òjè* 'goat of Oje's'

For the subject verb relation, a subject clitic tone, whether overt or covert, prompts agreement on the lexical melody of the subject.

When the subject clitic is /L/, there is no overlay on subject lexical tone. That is, the lexical tone of the subject nominal remains right edge low and agrees with the right edge low of the subject clitic. Lexically, the noun *òjè* is LL.

5 *òjè* *ò* *ó* *è* *émà*
  Oje SC CONT eat yam
  'Oje is eating yam.'

When the subject clitic is /H/, it prompts a {H} overlay on lexical tone of a nominal subject, e.g. lexical LL tone of *òjè* 'Oje' is replaced by HH.

6 *ójé* *ó* *ò* *è* *émà*
  Oje SC HAB eat yam
  'Oje eats yam.'

Similar phenomena affect perfect aspect and prospective aspect, where the subject clitic is covert.

Emai also exhibits anti-agreement conditioned by subjunctive mood

The principle tonosyntactic indicator of anti-agreement is an obligatory mismatch between lexical melody of a subject nominal and tone of a subject clitic.

Standard negation is marked by low tone *ì*. It immediately follows a subject clitic manifesting a high tone, for example /H/ *í*, and a subject nominal with lexical tone, e.g. /LL/ *òjè*. A mismatch is required between subject clitic tone and lexical melody of the subject noun phrase.

7 *òjè   í   ì   è   émà*
   Oje   SC   NEG   eat   yam
   'Oje did not eat yam.'

Conclusions pertaining to areas north and south of Benin City:

Northern-most Edoid languages:

      Declension sets

      Gender sets

      Leveling of prefix form more prevalent in pl than sg

Animate/inanimate relevant for gender sets in Ibillo and North Ivie

Numerals often special case for adnominal agreement

Human only is relevant for declension sets in Bini; no gender

Tonal agreement in Emai

Southern-most Edoid languages

      Declension sets for some like Degema

      No gender sets

Neutral set nouns, those that do not inflect, need to be examined more carefully for form class and agreement behavior in Edoid. These include uninflected count and mass nouns as well as nouns derived from verbs.

Vowel quality is the prime determinant of form class and agreement class, although CV- and VCV- also determine form class. How do these relate to the larger Benue-Congo context?

Agreement for all adnominal types requires careful scrutiny.

Tonal inflection across the group needs to be examined for agreement between nominals and adnominals and the subject-verb relation.

Lastly, several of the smallest languages in the north, most of which are single village languages, need to be investigated for their declension and gender systems.

Thanks.

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