

A Grammatical Description of Personal Pronoun Use in Uda

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### Thanks and Acknowledgements:

The most common Uda translation for the English phrase “good morning” is *alla*, which literally translates to “have you woken up yet?” This greeting could have been well-used in our seminar meetings this semester, which most often took place at 8:30am on Thursdays. Though sometimes sleepy-eyed, the thirteen other Senior Linguistics majors have been a pleasure to work with this year under the guidance of both Professor Pinango and Professor Zanuttini. This project would not have been possible without the help of Professor Pinango in the fall and Professor Zanuttini in the spring, each of whom kept our rowdy crowd of linguistics majors in order, and offered helpful questions and insight into all of our projects.

I owe my deepest gratitude to Professor Storoshenko. First, for designing and teaching an eye-opening cross-linguistic syntax seminar on pronouns and anaphors (called “Pronouns Across Languages”) offered in the Spring of 2012. It was due to our study of logophoricity in this class that I noticed logophoric pronouns “in the wild” during my fieldwork. Professor Storoshenko then graciously agreed to be my advisor for this project, and has sat with me for hours discussing existing data, further questions, and possible explanations for patterns observed.

I would like to extend my thanks also to other members of the faculty with whom I have discussed this project, including Stephen Anderson, Larry Horn and Mark Turin.

Finally, I must thank the team with which the fieldwork supporting this project was conducted; the Uda practicum group at the 2012 Institute for Collaborative Language Research (CoLang) Conference. My fellow team members were Caroline Andrews whose research focused on quantifiers and scalar implicature, Leland Kusmer who focused on serial verb constructions, Amy Brunett who looked at ideophones and discourse analysis, and Imelda Unoh who organized the group project of designing an orthography. All of our research was conducted under the helpful and patient guidance of our instructor Eno-Abasi Urua, and with the help of our two amazing language consultants, Chris Abasi Eyo and Mfon Asanaenyi. To all of the many people whose participation, guidance and understanding have made this project possible, *i soso!* (Thank you.)

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## 1. The CoLang Institute and the Research Team:

The data given in this project was collected during a four week long intensive field work experience at the 2012 Institute for Collaborative Language Research, held this past summer at the University of Kansas in Lawrence, Kansas. The research team I worked on consisted of four other participants, two native speaker consultants and one instructor.

Given that there are no pedagogical materials on Uda, it was impossible for participants to learn the language ahead of time. Given the limited amount of time we had, and the difficulty of attempting monolingual elicitation in an undescribed tonal language, we conducted bilingual elicitation sessions in Uda and English.

This was possible because both native speaker consultants, Chris Abasi Eyo and Mfon Asanaenyi are fluent in English. In addition to speaking English and Uda fluently, Chris and Mfon both speak fluent Ibibio. Compared to the general Uda speech community, Chris and Mfon are both very highly educated. Both Chris and Mfon graduate from university. Prince Chris Abasi Eyo is a member of Uda royalty and an active politician in Mbo Local Government Area. Mfon works as an attorney in Uyo, the largest nearby city. Both consultants speak Uda with their children and family members regularly.

Our sessions generally lasted for two hours in the morning and three hours in the afternoon five days a week. The data collected in sessions, and reproduced in this paper, was collected using pen and paper, audio recording, and video recording.

## 2. The Language in Context:

This project is centered on an endangered Nigerian language called Uda. Uda is spoken in Akwa Ibom, a relatively small state located along the Gulf of Guinea (Atlantic Ocean) coastline, approximately seventy kilometers west of the border with Cameroon. Akwa Ibom is subdivided into thirty-one Local Government Areas, roughly equivalent to American counties. The speech community of Uda is more or less restricted to a dozen villages within Mbo, a single local government area located directly adjacent to the Cross River Delta. Mbo local government area is roughly 365 square kilometers in size with a total population of 104,012 as of the 2006 census.<sup>i</sup> Its population is predominately Christian, and ethnically affiliated with the Oron people.

Five Oron clans live in the Mbo Local Government Area, of which the Uda clan is one. The other clans are known as the Enwang, Ebughu, Efiat, and Udesi. All five of the clans have their own languages, all of which belong to the Obolo language group, part of the larger Cross River language group, a daughter group of the Niger Congo Language Family. A paucity of linguistic description makes phylogenetic relationships between these languages difficult to discern and support. In several cases, the clan languages are functionally mutually intelligible; however, linguistic differentiation combined with geographic separation and cultural differences have led to strong and distinct linguocultural identities among the clans.

The Uda speech community is spread across twelve villages in the western region of Mbo Local Government Area.<sup>1</sup> Commerce in these villages is almost entirely marine-based. Many community members work as fisherman, or in marine transport, though subsistence farming is also common. The speakers admit that there is some linguistic variation among the village dialects of Uda, though variation appears to be largely phonological in nature.

As of 1988, Ethnologue estimated that there were 10,000 speakers of Uda.<sup>ii</sup> Based on the language consultants' estimates, it is believed that the speaker population has remained at roughly this size over the past two decades. While Uda is surrounded by the other Oron languages spoken in nearby villages, the major languages in the region are Ibibio and English. The Ibibio ethnic group has dominated politics in Akwa Ibom state since its formation in 1987. Consequently, nearly all Uda language speakers are also bilingual in Ibibio. Those community members who have access to organized education are also largely competent in English. Uda's success at withstanding the influence of these larger languages is likely linked to its strong association with the private, domestic sphere. Ibibio is the language of commerce and regulation, English, the language of education, yet Uda persists as the language of home and village life. Our native speakers have reported that their children still speak to each other in Uda at home, despite fluency in both English and Ibibio. The greatest apparent threat to Uda's survival as a language is, therefore, not the encroachment of dominant exogenous languages, but the dissolution of the village and family environment. It is increasingly common for Uda speakers to

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<sup>1</sup> Specifically; Eke-Uda, Afi-Uda, Orukim-Uda, Amkprang-Uda, Ukonteghe-Uda, UtitAntai-Uda, UdongEyo-Uda, Udingi Uda, UteUdombo-Uda, IneEkpo-Uda, Mkpangufong-Uda, and, the largest, Ibaka-Uda.

move away from the Uda speech community, to marry speakers of other languages, and to discontinue the transmission of Uda to younger generations.

Having no extant literature and minimal linguistic description, there are very few materials for Uda speakers to access or reference in diaspora. Before the work conducted this summer at the CoLang (Collaborative Language Research) Conference, the only Uda language documentation consisted of a short word list compiled in Uda along with 18 other Lower Cross Languages by Bruce Connell in 1991,<sup>iii</sup> and a very preliminary phonological sketch of the language.<sup>iv</sup> Before the collaboration between our research team and language consultants, there was no orthography for the language. Occasionally, Uda speakers interacted through social media, finding ways to type to one another in Uda using the roman characters on their keyboards. Now that an orthography has been proposed, it is our hope that communication in Uda can continue, even when speakers have migrated away from the original speech community. It is my personal hope that the modest amount of documentation set forth in this project will be the first of many efforts to describe, preserve, and disseminate the language.

### 3. Phonetics:

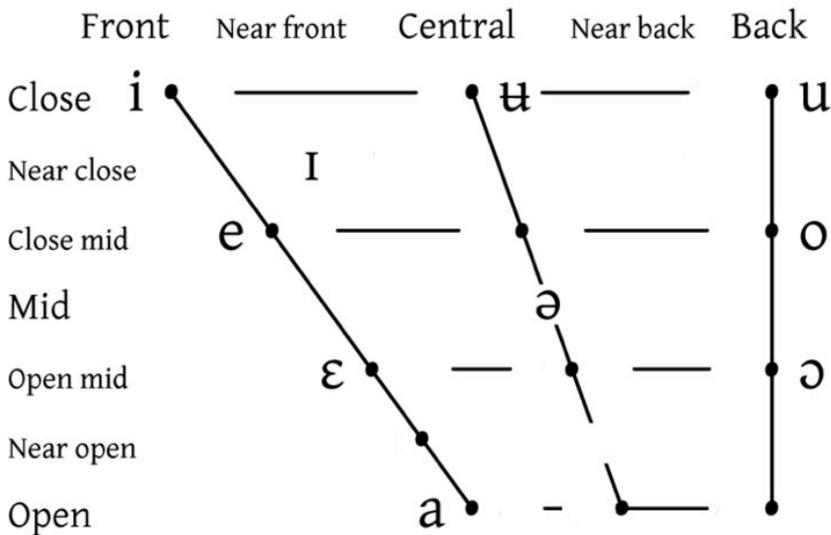
#### 3.1 The Phonetic Inventory:

Uda features the following 24 phonetic consonants and 10 phonetic vowels listed below:

**p b β ṭ ḍ r k ɣ k̠ ɣ̠ m ŋ n ŋ ɲ f v s z dʒ l r w j      i ɪ e ε a ɔ o ə u**

The complete phonetic inventory of Uda is depicted in the graphics below:

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b		ṭ ḍ					k ɣ			
Nasal	m	ɱ		n			ɲ	ŋ			
Trill				r							
Tap or Flap				ɾ							
Fricative	β	f v		s z				ɣ			
Lateral fricative											
Approximant							j				
Lateral approximant				l							
Other	Postalveolar-Affricate		dʒ		Labial-Velar Approximate	w		Labial-Velar Plosive	k̠ ɣ̠		



Uda is a tonal language, meaning that it uses pitch over syllables to make both lexical and grammatical distinctions. Uda has five phonetic tones. Three of the tones are level tones. These include the high tone, low tone and the downstepped high tone. In addition, Uda has two contour tones. These are the falling tone (combination of a high tone then low tone) and a rising tone (combination of a low tone then high tone.) Though tone is not incorporated in the proposed Uda orthography, it can be represented for clarity, and will be represented where significant in this paper, using the orthographic conventions of other Lower Cross languages. The Lower Cross standard written representation of tone is described below.

#### Written Representation of Tone:

Low Tone: Grave Accent [ ` ]

High Tone: Acute Accent [ ´ ]

High-Downstep Tone: Acute Accent + Syllable Final Exclamation Point [ ´ + ! ] or Unmarked

Falling Tone: Circumflex Accent [ ^ ]

Rising Tone: Inverted Circumflex Accent [ ˇ ]

#### 4. Phonology:

##### 4.1 The Phonemic Inventory:

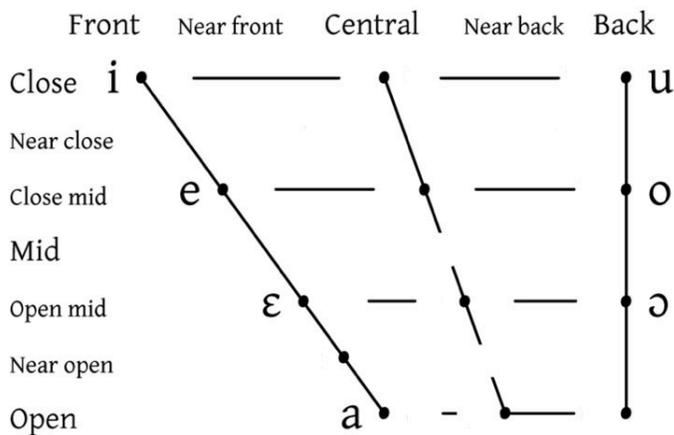
Though Uda has 24 phonetic consonants and 10 phonetic vowels, not all of these phones are contrastive, and therefore they do not all constitute phonemes. The phonemic inventory of Uda, (i.e. the set of sounds that when interchanged cause a difference in meaning) is slightly smaller than the phonetic inventory.

Uda features the following 20 phonemic consonants and 7 phonemic vowels listed below:

**p b t̪ d̪ k y k̠ p̠ g̠ m n ŋ ɲ f v s dʒ l r w j      i e ε a ɔ o u**

The complete phonemic inventory of Uda is depicted in the graphics below:

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b		t̪ d̪					k			
Nasal	m			n			ɲ	ŋ			
Trill				r							
Tap or Flap											
Fricative		f v		s				ʃ			
Lateral fricative											
Approximant							j				
Lateral approximant				l							
Other	Postalveolar-Affricate		dʒ		Labial-Velar Approximate	w		Labial-Velar Plosive	k̠ p̠	g̠	



#### 4.2 Comparative Phonology:

Uda phonology is similar in many respects to the phonology of other Lower Cross Languages. It shares many features common across the language group including tone, word final stop devoicing and intervocalic consonant weakening.<sup>v</sup>

#### 4.3 Consonants:

In word-final, (pre-pausal) position, underlyingly voiced stops (e.g. b, d) are most frequently realized as their voiceless counterparts (e.g. p, t). In this environment, all plosives are typically unreleased (p̚ t̚.)

- (1) /édip/ → [édip̚] 'twenty'  
/óbót/ → [óbót̚] 'hill'  
/sók/ → [sók̚] 'wipe'

Another common phonological process is intervocalic consonant weakening. This is especially observable with the /r/, /d/ and /k/ phonemes. When surrounded by a vowel on each side, these phones will weaken to /r̥/ /r̥/ and /ɣ/ respectively. This is extremely common with the /k/ morpheme, and lead to speculation that /ɣ/ is simply an allophone of /k/. Late in data collection, however a minimal pair was found, proving that while /ɣ/ may often appear as an allophone of an underlying /k/ it is a phoneme in its own right.

- (2) /sóp ílé/ → [sóp̚ílé]  
/sók ílé/ → [sók̚ílé]

Uda has some small but significant phonological differences from other Lower Cross languages with respect to voicing contrasts. In general, Uda has a higher number of phonemically significant voicing contrasts. For example, In Uda the voiceless and voiced bilabial plosives (p and b respectively) are both discrete phonemes, whereas in other Lower Cross languages (most significantly, Ibibio) the voiced and voiceless bilabial plosives function as allophones subject to phonological processes like voicing and devoicing. Additionally, Uda draws a phonemic distinction between the voiced and voiceless labial-velar oral consonants (g̚ and k̚ respectively.) Many other Lower Cross languages have only the voiceless version of this sound. A final feature of the Uda phonemic inventory I will mention here is the unusual presence of an affricate (dʒ.) Affricates are quite rare among the Cross River language group, though they are slightly more common in the Obolo sub-group to which Uda belongs.

- (3) /idon/ 'maggot'                      /paŋa/ 'to plant a tree'  
/iton/ 'glutton'                        /baŋa/ 'to offer sacrifice'

#### 4.4 Vowels:

Connell's cursory classification of Lower Cross languages offered persuasive evidence for a common phonemic vowel inventory among Lower Cross languages. Every one of the 18 languages for which he collected data had /i e a ɔ o u/ as phonemic vowels. These three front vowels and three back vowels constitute a small but symmetrical vocalic inventory. Beyond this common inventory, Uda has one additional contrastive vowel segment, /ɛ/, which exists in other nearby languages as well, specifically those in the Obolo subgroup.

- (4) /èté/ 'sir'  
/été/ 'sixty'

Though nasalization of vowels is common in Uda, it is always due to the environmental influence of other nasalized segments, and there is no evidence for a contrast between nasalized vowels and oral ones.

Finally, there is some evidence of vowel harmony in the language. Verbal inflection, which is often of V- or CV- syllable structure, frequently, but not always, changes its underlying vowel to assimilate to the vowel quality of the verb stem to which it attaches. In the examples below, the underlying agreement prefix is shown along with the verb stem to which it attaches, resulting in the surface representation of the conjugated verbs shown on the right.

- (5) /a/ '3SG' + /ti/ 'hunt' → [ati] 'he hunts'  
/a/ '3SG' + /ku/ 'hear' → [ɔku] 'he hears'

Often two vowels next to each other → becomes a glide. Sometimes there is simply vowel deletion with compensatory lengthening. There is also evidence for at least one diphthong /ei/.

#### 4.5 Syllable Structure:

The following syllable structures are possible in Uda, where N represents a syllabic nasal, V represents a vowel, C represents a consonant, and G represents a glide. (The distinction is made between glides (approximates) and consonants because consonant clusters in Uda are restricted to a combination of one consonant and one glide.)

N-  
V-  
CV  
VCV  
CVC  
CGV  
CGVC

#### 4.6 Trends in Syllabic Structure:

There are a few interesting correlations of syllable structure and grammatical function to note in Uda. For example, nearly all verbs are consonant initial, while all nouns are vowel initial. The minimal structure of an Uda noun, with a few exceptions, is VCV. Though nouns may contain more syllables (of the four bottom structures listed above), they are never of the syllabic structure V or CV. In addition, all verbal inflection morphemes are of syllable structure N-, V-, or CV-.

## 5. Orthography:

Before our research team began work on the language, Uda, like many of the Oron languages had no conventional orthography. Although Uda speakers sometimes used internet social media platforms to correspond in Uda, their spelling was spontaneous and never reached the level of standardization. Based on the language data collected from our two native speaker consultants, our team created a proposed orthography for the language, which is outlined in the table on the following page. It is important to remember that the data supporting this orthography was collected from only two dialects of Uda, and though evidence shows minimal variation among the village dialects, the Uda orthography may need to be modified in order to accurately reflect the sounds of the other speech communities.

The phonetic inventory of Uda is listed below:

**p b β ɽ d̥ r k ɣ kp̥ gb̥ m n ŋ ɲ f v s z dʒ l r w j            i e ε a ɔ o ə u**

The phonemic inventory of Uda is listed below:

**p b ɽ d̥ k ɣ kp̥ gb̥ m n ŋ ɲ f v s dʒ l r w j            i e ε a ɔ o u**

The first goal in designing the orthography was to find a way to accurately represent all of the phonemically distinct sounds of the language. A second major goal was to design an orthography that could interface well with the orthographies of other languages in the area. Since the roman alphabet serves as the base for the writing systems of many nearby and national languages including English, Ibibio, Igo and Yoruba, we adopted the Roman alphabet as the base for the Uda orthography. We also capitalized on some spelling conventions in the nearby languages, especially in the use of digraphs to represent the labial-velar plosives ([kp], [gb]), and the voiced velar fricative ([gh].) Another convention borrowed from orthographical systems of other Nigerian languages is the use of subdot diacritics on vowels. Subdots are added to indicate that the quality of the vowel differs from the quality of the vowel normally ascribed to that grapheme. Though different languages use the diacritics to represent different vowels, they are used in Uda to mark the [ɔ] and [ε] vowels.

While designing the orthography we encountered two sizeable dilemmas. The first was whether or not to represent tone in writing. Though tone is used for both lexical and grammatical distinction in Uda, it was not always easy for our speakers to identify whether a syllable contained a low, high, high downstep, falling or rising tone. As a result, they struggled to write sentences in an orthography that obligatorily included tone. They also objected to the aesthetics of such an orthography, and believed that the making of tone on every syllable made the writing look too cluttered. Since community approval and use of the orthography will be one of the most critical pieces to the continued success of the language, we bent the orthography to comply with the native speakers' wishes. Tone is not regularly marked, but can be written, as it is written in this paper, according

to the written conventions of other Lower-Cross languages, which were described earlier and are reproduced here:

Low Tone: Grave Accent [ ` ]

High Tone: Acute Accent [ ´ ]

High-Downstep Tone: Acute Accent + Syllable Final Exclamation Point [ ´ + ! ] or Unmarked

Falling Tone: Circumflex Accent [ ^ ]

Rising Tone: Inverted Circumflex Accent [ ˇ ]

The second dilemma was how to represent the phonological process of intervocalic consonant weakening that is very powerful in the language. We considered placing intervocalic, weakened consonants in brackets, but this proved difficult to type and aesthetically unappealing. We also considered incorporating apostrophes after weakened consonants to indicate that their pronunciation was abridged. This too, proved unsatisfactory. Ultimately, in cooperation with the native speaker consultants, we decided to always spell out the underlying representation of every intervocalic consonant. In addition to eliminating the need for frequently adding syllables in the middle of words, this convention allows for added clarity and fuller representation.

## 5.2 Proposed Uda Orthography:

The table below illustrates our proposal for a Standard Uda orthography. It lists the phones and allophones that are associated with each particular grapheme. It gives the lower case and Capital case versions of each grapheme. In the fourth column, I give a spelling of an example Uda word containing the target grapheme (in word-initial position when possible) with a phonetic transcription to the left in column three, and a gloss to the right in column five.

Phonetic Sound	Grapheme	Pronunciation	Spelling	Gloss
p	P p	[píré ]	pighe	cut
b	B p	[ε β ε ] [ β àt]	ebe, bat	breast, count
t	T t	[tí]	ti	throw
d, r	D d	[dí]	di	come
k	K k	[kà]	ka	hold
ɣ	Gh gh	[kpíyí]	kpighi	cut
kɸ	Kp kp	[kpá ]	kpa	die
gɸ	Gb gb	[gbɛ]	gibe	suck
m	M m	[mà]	mà	and
n	N n	[nɔ]	nɔ	give
ŋ	N̄ n̄	[diŋɔ]	oionō	know
ɲ	Ny ny	[ɲime]	nyime	squeeze
f	F f	[fɔ]	fo	roast
v	V v	[vɔ]	vo	tie
s	S s	[sàk ]	sak	laugh
dʒ	J j	[dʒí]	ji	wash
l	L l	[léjá ]	leya	eat
r	R r	[ara ]	ara	oil
w	W w	[wàk ]	wak	scratch
j	Y y	[jót ]	yot	turn
i, ɪ	I i	[i β à ]	iba	two
e	E e	[èté ]	ete	sir
ɛ	È ẹ	[ɛtɛ]	etɛ	sixty
a	A a	[akân ]	akan	old
ɔ	O ọ	[ɔpɔdɪvɪ]	opɔdighi	road
o	O o	[opəno]	opono	big
u	U u	[ùló]	ulo	right

## 6 Syntax:

### 6.1 Basic Word Order:

Basic Word Order in Uda, as in nearly all of the Lower Cross languages, is SVO, or Subject-Verb-Object. In a basic sentence the Subject NP usually precedes the VP. There is subject-verb agreement for every combination of person and number. Since much of the burden of identifying the subject can be handled by the agreement morpheme attached to the verb, it is not necessary for every sentence to have an explicit subject. That is to say, Uda is a language that permits pro-drop. Examples below show, first, the appearance of an explicit subject, and second, the equivalent sentence where the subject is elided.

(6) anyi okon̄ ebet  
3SG 3SG- chase deer  
'He chases the deer'

(7) okon̄ ebet  
3SG- chase deer  
'He chases the deer'

### 6.2 Forming Noun Phrases:

Noun phrases are generally head initial with modifiers such as determiners, demonstratives, quantifiers and numerals appearing to the right of the head of the NP. In the example phrase below, the head of the NP, *ebei* 'pears,' is modified on the right by the numeral *iba* 'two' and the demonstrative *ani* 'those.'

(8) ebet alia ebei  
deer 3SG- eat pear  
'The deer eats pears'

(9) ebet ani alia ebei iba ani  
deer that 3SG- eat pear two those  
'That deer eats those two pears'

### 6.3 Adjectives:

In keeping with Connell's typological observations of the Lower Cross language family, there are very few true adjectives in Uda. The role of adjectives in English is largely fulfilled in Uda by stative verbs. Stative verbs represent conditions of being and are conjugated to agree with the subject that they describe.

(10) oƀon̄ ani asagha  
cloth DEM 3SG-be.dirty  
'the cloth is dirty'

There are a small number of tokens in our data of words that seem to function as true adjectives. In the examples of the Uda expressions for ‘man’ and ‘woman,’ it is possible to analyze these phrases as compound nouns made of two separate nouns. However, the phrases could alternately be analyzed as NPs with head noun (‘person’) modified by adjectives (‘female,’ and ‘male.’)

(13) un̄wa on̄wu  
female person  
‘woman’

(14) ini on̄wu  
male person  
‘man’

*Opono* gives good evidence that some pure adjectives exist in the language, and that they occupy a different syntactic position than other modifiers described above. Adjectives appear to the *left* of the NP that they modify. Unlike *asagha* above, *opono* contains no agreement morpheme. Since it does not agree with person or number, it need not be modified and can therefore be elicited in citation form.

(15) opono ebet  
big deer  
‘The big deer’

(16) opono  
big  
‘big’

The syntactic position of this potential adjective lends credence to the analysis of *ini* ‘male’ and *un̄wa* ‘female’ as adjectives.

#### 6.4 Quantifiers and Plurality:

Plurality is not marked on nouns. In other words, nouns are not inflected to indicate plurality. The examples below illustrate that regardless of whether or not a noun is indicated to be plural by the appearance of a quantifier, it does not change form or accept affixation to indicate that it is plural. Like other modifiers quantifiers appear to the right of the NP that they modify.

(17) ali ani alja ebe ani  
deer DEM 3SG- eat pear DEM  
‘the deer eats that pear’

(18) ali ani alja ebe iba ani  
deer DEM 3SG- eat two pear DEM  
‘the deer eats those two pears’

### 6.5 Numerals:

The most common type of quantifiers present in our data are numerals. For documentary purposes and since the numeral *sin* ‘one’ appears in both adverbial and reflexive constructions I will give a brief overview of the numbering system in Uda. Uda has a base five counting system with separate words for ‘one’, ‘two’, ‘three’, ‘four’, ‘five’, ‘ten’, ‘fifteen’, ‘twenty’, ‘forty’, ‘sixty’, ‘eighty’ and ‘one hundred’. All other numerals are formed by stringing together these forms, which serve as building blocks, conjoined by *ma*, meaning ‘and.’ To illustrate this point, numbers ‘one’ through ‘twenty’ are listed below as well as the compound forms for all other multiples of ten between ‘twenty’ and ‘one hundred’.

Uda numeral	Gloss
<i>sin</i>	one
<i>iba</i>	two
<i>ite</i>	three
<i>inyan̄</i>	four
<i>itin̄</i>	five
<i>itin̄ ma sin</i>	six
<i>itin̄ ma iba</i>	seven
<i>itin̄ ma ite</i>	eight
<i>itin̄ ma inyan̄</i>	nine
<i>lughu</i>	ten
<i>lughu sin</i>	eleven
<i>lughu iba</i>	twelve
<i>lughu ite</i>	thirteen
<i>lughu inyan̄</i>	fourteen
<i>ɛfu</i>	fifteen
<i>ɛfu ma sin</i>	sixteen
<i>ɛfu ma iba</i>	seventeen
<i>ɛfu ma ite</i>	eighteen
<i>ɛfu ma inyan̄</i>	nineteen
<i>edep</i>	twenty
<i>edep ma lughu</i>	thirty
<i>aba</i>	forty
<i>aba ma lughu</i>	fifty
<i>ete</i>	sixty
<i>ete ma lughu</i>	seventy
<i>anyan</i>	eighty
<i>anyan ma lughu</i>	ninety
<i>ike</i>	one hundred

## 7. Verbs:

As previously mentioned, all verbs in Uda are consonant initial words. Verbs accept affixes to mark person, number, and tense. Uda makes a three-way distinction in person (1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> person) and a two-way distinction in number (singular and plural). The inflectional morphemes that mark agreement in person and number are universally prefixes. The prefixes that correspond to each combination of person and number are listed below for the present tense. All prefixes listed in this section indicate inflection for the affirmative case. Negation will be discussed later in this section, after considering tense and aspect.

Person / Number	Present Affirmative Agreement Morpheme
1SG	ñ-
2SG	à-
3SG	á-
1PL	í-
2PL	í-
3PL	é-

As previously discussed in the section on phonology, the morphemes listed above commonly change their surface representation due to certain phonological processes. While an exhaustive study of phonological processes in Uda has not been conducted, there is good evidence to suggest that part of what drives the change in form for these inflectional morphemes relates to assimilation in backness, as evidenced in the examples below, the underlying form /a-/ assimilates to become the back vowel [ɔ] when it attaches to a verb stem whose first vowel is a back vowel.

- (19) /a/ '3SG' + /ti/ 'hunt' → [ati] 'he hunts'  
/a/ '3SG' + /ku/ 'hear' → [ɔku] 'he hears'

- (20) /a/ '3SG' + /kim/ 'dig' → [akim] 'he digs'  
/a/ '3SG' + /fiṣṣā/ 'rub' → [ɔfiṣṣā]

Due to this assimilation and other understudied phonological processes, there is wide variation in the appearance of these present, affirmative verbal agreement morphemes. The second person singular agreement morpheme, for example, is frequently realized as a null morpheme, while the first person singular agreement morpheme shows some assimilation to place of articulation, alternating between [n] [m] and [ŋ] depending on the properties of the initial consonant of the verb to which it attaches. For evidence supporting the underlying representations listed in the table above, please see table 1 in the appendix.

## 7.1 Tense and Aspect:

### 7.1.1 Ambiguity Between Present and Perfect Tense:

As outlined in the previous section, the present tense is formed by adding the previously mentioned affirmative, present inflectional morphology to a given verb stem. This tense also has an unmarked, alternative meaning of the perfect tense. The difference between the perfect tense and the present tense must therefore be inferred from context.

(21) n- lè  
3SG- sleep  
'I sleep'

(22) n- lè  
3SG- sleep  
'I have slept'

### 7.1.2 The Past Tense

The past tense is marked in Uda by the bound morpheme /-kí-/. Similar to the present affirmative agreement morphemes, /-kí-/ is very prone to undergoing phonological processes, two of which include vowel assimilation and intervocalic partial consonant voicing. In different environments the high front vowel /i-/ is realized as the low front vowel [a-], as the upper-mid back vowel [o], or as the low back vowel [ɔ-]. For data justifying my assertion that /-kí-/ is the underlying form of the past morpheme, please see table 2 in the appendix.

In contrast to the present tense, the past tense does not appear to be a fully grammaticalized tense morpheme. Instead, it seems to consist of something similar to an auxiliary. The primary evidence for this assertion is that agreement morphology is doubly marked in past tense constructions. A morphological breakdown of a past verb construction is given below:

(23) n- ki- n- dan̄  
1SG- pst- 1SG- lie  
'I lied'

The double marking of present agreement morphology is especially clear with examples conjugated in the first person (like the one given above.) This is because the first person agreement morpheme is a syllabic nasal and (in accordance with principles of Uda syllable structure outlined previously) can appear directly next to a vowel. Present affirmative agreement morphology for all other persons and numbers are vowels. This means that agreement marking for these persons and numbers is clearly visible on the consonant initial /-kí-/. However, the second agreement marking for these persons and numbers is more difficult to detect. This is due to the fact that the underlying form of such constructions necessarily requires a sequence of two vowels:

$$(24) \quad /i/+ /ki/+ /i/+ /k^w\grave{o}/ \rightarrow [i-] [k-] [i-] [k^w\grave{o}] \rightarrow [i-k-i-k^w\grave{o}]$$

2PL PST 2PL sing                      2PL PST 2PL sing                      2PL-PST-2PL-sing  
 ‘You all sang’                              ‘You all sang’                              ‘You all sang’

Since Uda syllable structure disallows VV combinations, a phonological process intervenes to resolve the VV sequence. This process appears to be deletion, but definitely invites further examination. As data in table 2 of the appendix demonstrates, the vowels surrounding the letter *k* tend to be identical. While it is possible that the first vowel represents the person and number agreement morpheme and the second represents the /i/ vowel of the /-ki-/ morpheme that has undergone assimilation, the identity of both vowels suggests that both remaining vowels should be glossed as agreement morphemes, the second of which attaches to a /-ki-/ morpheme that has undergone vowel deletion, and appears in the surface representation as [-k].

### 7.1.3 The Future Tense:

Unlike the past tense, marking the future tense in Uda does not require double agreement. The future tense is marked by a fully grammaticalized tense morpheme. Data supporting my conclusions about the underlying forms of the future agreement morphemes can be found in table 3 of the appendix.

Person / Number	Future Agreement Morpheme
1SG	mán-
2SG	má -
3SG	má -
1PL	mí-
2PL	mí-
3PL	mé-

Very frequently, the future agreement morphemes are realized with complex tones, most frequently, the falling tone [ˆ]. Despite the fact that [mân], [mâ] and [mî] are the most common surface forms of the future agreement morphemes for first person singular, second and third person singular, and first and second person plural, respectively, there is strong evidence to show that complex tones do not appear in the underlying form of single morphemes in Uda. Rather, complex tones emerge from phonological interactions of a morpheme in its environment. The frequency of complex tones in future agreement morphemes may be explained partly by the fact that they are underlyingly a combination of the general future morpheme /má/ and the present agreement morphemes for each person and number / ñ-, à-, á-, í-, í-, and é- /. An alternate, but most likely complementary explanation is that this morpheme is more responsive to properties of tone in the verb stem, and undergoes phonological change to adapt or assimilate, resulting in a higher incidence of complex tones.

#### 7.1.4 The Immediate Future Tense:

The properties of this tense have not been explored enough to completely explain its morphological intricacies. There is strong evidence, however, for the existence of this distinct future tense, which points to events or conditions in the immediate future. This tense is marked with the morpheme /-di-/ that appears after the person and number agreement morpheme but before the verb stem. A morphological breakdown of an immediate future construction is provided below:

- (25) ñ- dí- lé!  
 1SG- IMM- sleep  
 ‘I will sleep’

This morpheme is especially interesting because unlike the regular future morpheme, the immediate future morpheme appears *after* the regular agreement morpheme.

- (26) \*dí- ñ- lé!  
 IMM- 1SG- sleep  
 ‘I will sleep’

- (27) \*ñ- dí- ñ- lé!  
 1SG- IMM-1SG- sleep  
 ‘I will sleep’

Also unlike the past morpheme, the immediate future morpheme does not require, and, in fact, cannot accept double agreement. The exact nature and function of this morpheme would be an important subject for further research, especially as this morpheme appears to be critically important to negation. (See section 7.2)

#### 7.2 Negation:

Negation is marked in Uda through the use of verbal inflection. Much like the marking of the future tense, and the marking of affirmative agreement, each combination of person and number has a negative agreement morpheme that attaches to the verb stem as a prefix. Present-tense (or perfect aspect) negation is marked using the agreement morphemes listed in the table below:

Person / Number	Negative Agreement Morpheme
1SG	án-
2SG	ú-
3SG	é-
1PL	í-
2PL	í-
3PL	é-

Negation morphology interacts somewhat predictably with the marking of the past tense. As detailed in section 7.1.2, the past tense requires the double-marking of agreement

morphology before and after the past tense morpheme. In the case of the negative past, the negative agreement morpheme simply replaces the regular, affirmative agreement morpheme, and appears twice in the past construction.

(28) / à / + / kí / + / à / + / k<sup>w</sup>ɔ̃ / → [ɔ̃ - k- ɔ̃ - k<sup>w</sup>ɔ̃] → [ɔ̃kɔ̃k<sup>w</sup>ɔ̃]  
 2SG- PST- 2SG- sing      2SG- PST- 2SG- sing      ‘You sang’  
 ‘You sang’      ‘You sang’

(29) / ù / + / kí / + / ù / + / k<sup>w</sup>ɔ̃ / → [ ù- g- ù- k<sup>w</sup>ɔ̃ ] → [ùgùk<sup>w</sup>ɔ̃]  
 2SG.NEG- PST- 2SG.NEG- sing      2SG.NEG- PST- 2SG.NEG- sing      ‘You did not sing’  
 ‘You did not sing’      ‘You did not sing’

The negative past is another construction where the phonological and morphological interactions have not been adequately explained. There is once again evidence of intervocalic voicing and partial voicing (as evidenced by the change from /k/ to [g]), evidence of tone interaction, and evidence of vowel assimilation. More study is needed to explain exactly what morphological and phonological principles govern these processes.

Lastly, negation of the future tense defies some logical predictions. Instead of, as we might expect, using some combination of the future morpheme and the negative agreement morpheme, the negative future in Uda requires the use of the immediate future morpheme. This means that the simple future morpheme *má* is not involved in the formation of the negative future. The negative future is instead formed by combining the present negative agreement morpheme and the immediate future morpheme *dí* in the same order predicted by the affirmative immediate future construction (described in section 7.1.4.)

(30) \*má- án- k<sup>w</sup>ɔ̃  
 1SG.NEG- FUT- sing  
 ‘I will not sing’

(31) án-dí-k<sup>w</sup>ɔ̃  
 1SG.NEG- IMM- sing  
 ‘I will not sing’

As has been attested with other morphemes, the vowel in the immediate future morpheme /-dí-/ is subject to the phonological process of assimilation. Similarly, the plosive is prone to weakening and is often realized as the alveolar tap [ɾ]. It remains to further study to conclude what parameters govern the possible allomorphs of /-dí-, but it is attested in the data with the following surface representations [rí], [rú], and [dí].

### 7.2.1 The O Particle

Negation may also be emphasized, or doubly marked by adding the word (or possibly just a particle) *o* to the end of the phrase, clause, or sentence over which negation has scope. This is especially useful in cases where the verbal inflection is ambiguous between affirmative and negative morphology.

## 8 Personal Pronouns

As previously mentioned, Uda verbal agreement morphology draws a three-way distinction in person (1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> person) and a two way distinction in number (singular and plural.) Each of these combinations of person and number has a distinct pro-form that can replace an explicit subject of corresponding person and number. The inventory of these independent pronouns, sometimes referred to as subject pronouns, is listed in the table below:

Person / Number	Independent Pronoun
1SG	àmì
2SG	àfì
3SG	ànyì
1PL	ànyìn
2PL	m̀fì
3PL	̀m̀m̀

There is evidence in other West African languages of additional types of distinctions in pronouns, including distinctions based on inclusivity/exclusivity, animacy, and humanness vs non-humanness. Though they were targeted in elicitation, none of these distinctions have been shown to exist in Uda.

Subject pronouns, like explicit subjects in general, do not need to be present to form a grammatical sentence in Uda. Since there is subject-verb agreement for every combination of person and number, much of the burden of identifying the subject can be handled by the agreement morpheme attached to the verb. As previously discussed, due to this robust system of verb agreement, Uda permits pro-drop. Examples reproduced below show, first, the appearance of an explicit subject pronoun, and second, the equivalent sentence where the subject pronoun has been dropped.

(32) anyi okon̄ ebet  
3SG 3SG-chase deer  
'he chases the deer'

(33) okon̄ ebet  
3SG-chase deer  
'he chases the deer'

The verbal morphology that facilitates the subject identification is reproduced in the tables on the following page.

Person / Number	Present Affirmative Agreement Morpheme
1SG	ñ-
2SG	à-
3SG	á-
1PL	í-
2PL	í-
3PL	é-

Person / Number	Future Agreement Morpheme
1SG	mán-
2SG	má -
3SG	má -
1PL	mí-
2PL	mí-
3PL	mé-

Person / Number	Negative Agreement Morpheme
1SG	án-
2SG	ú-
3SG	é-
1PL	í-
2PL	í-
3PL	é-

Though these agreement morphemes often vary in their surface representation and are subject to change in tone, vowels and consonants, the tables above show that the underlying forms of some of these morphemes are homophonous. Due to sound changes it is possible that there might be even greater overlap in surface representation. In cases where the verbal morphology is ambiguous (i.e. could correspond to more than one designation of person and number) it is more likely that the corresponding subject pronoun would appear to disambiguate, and to make the identity of the subject clear. Examples of potentially ambiguous verbal morphology include:

- (34) /i/ (1PL affirmative , 2PL affirmative , 1PL negative, 2PL negative)  
 /má/ (2SG future, 3SG future)  
 /mí/ (1PL future, 2PL future)

To reiterate, the potential ambiguity created by these homophonous morphemes does not disallow pro-drop. It is possible that the intended subject of the conjugated verb would be clear from context, in which case pro-drop would be perfectly grammatical. The possibility for ambiguity simply makes it more likely that the independent pronoun would be brought in for clarity.

Beyond disambiguating the intended subject of a clause, independent pronouns can also be used to add emphasis to the subject. An example of using subject pronouns for emphasis is shown below:

(35) anyi okwọ?  
3SG 3SG-sing  
'SHE sings?'

(36) sañā, àmì ñkwọ.  
NEG, 1SG 1SG-sing  
'No, I sing.'

### 8.1 Nominative and Accusative Forms:

In many languages, subject pronouns, or pronouns that have nominative case, take a different form than object pronouns, or pronouns that have accusative case. In Uda however, subject pronouns and object pronouns take the same form. The sentences below show that the form of the pronoun remains the same when it functions as the subject as when it functions as the object.

(37) àmì m̀me ànyì  
1SG 1SG-love 3SG  
'I love him'

(38) ànyì áme àmì  
3SG 3SG-love 1SG  
'he loves me'

The identical forms of nominative and accusative pronouns for all combinations of person and number are reproduced in the tables below.

Person / Number	Pronoun- Nominative Form
1SG	àmì
2SG	àfì
3SG	ànyì
1PL	ànyìn
2PL	mfi
3PL	ímọ

Person / Number	Pronoun- Accusative Form
1SG	àmì
2SG	àfì
3SG	ànyì
1PL	ànyìn
2PL	mfi

3PL	ńmọ
-----	-----

These same forms of pronouns are also used to replace indirect objects. Examples of both direct object and indirect object pronoun replacement are given below. Note that they show the same forms as the nominative and accusative forms listed in the tables above.

- (39) Mfon okoto Chris → Mfon okoto **anyi**  
Mfon 3SG-PST-hit Chris Mfon 3SG-PST-hit 3sg  
‘Mfon hit Chris’ ‘Mfon hit him’
- (40) Mfon ọkọnọ Chris isip → Mfon ọkọnọ **anyi** isip  
Mfon 3SG-PST-give Chris coconut Mfon 3SG-PST-give 3SG coconut  
‘Mfon gave Chris the coconut’ ‘Mfon gave him the coconut’

## 8.2 Possessives:

Possessive pronouns in Uda appear to the right of the noun that they possess. They take the same syntactic position as other modifiers in the language, but not the same position as I posited for pure adjectives. (See section 6.3).

The Uda phrases and English translations below show the possessive pronouns for all combinations of person and number in Uda.

- (41) ísíp àmì - ‘my coconut’  
ísíp àfì- ‘your coconut’  
ísíp ísìghí- ‘his/her coconut’
- ísíp ànyìn- ‘our coconut’  
ísíp m̀fì- ‘your coconut’  
ísíp ńmọ- ‘their coconut’

As this list shows, Uda makes use of the same pronominal forms for possessive pronouns as it does for subject pronouns and object pronouns. The one exception to this is the third person singular possessive pronoun, which has a unique form, *isighi*. This special possessive pronoun is the only acceptable way to mark possession for the third person singular, i.e. it is not possible to substitute the pronominal form used for the third person singular nominative and accusative pronouns.

- (42) ísíp ísìghí  
coconut 3SG.POSS  
‘his/her coconut’

- (43) \* ísíp ànyì  
 coconut 3SG  
 ‘his/her coconut’

The paradigm for possessive pronouns in Uda is, therefore, as follows:

Person / Number	Pronoun- Nominative Form
1SG	àmì
2SG	àfì
3SG	ísìghí
1PL	ànyìn
2PL	m̄fì
3PL	m̄mọ

### 8.3 Reflexive Constructions

There are two basic methods for indicating reflexivity in Uda. Both of these involve the usage of reflexively marked pronouns as the direct object of the reflexive verb. The first of these strategies makes use of a self particle *uno*.

- (44) Mfon adjì uno  
 Mfon 3SG- wash self  
 ‘Mfon washes herself’

The second method for indicating reflexivity involves the use of the lexical noun *ile*, meaning ‘body.’ It is likely that this lexical noun has undergone or is undergoing a process of grammaticalization resulting in its frequent use as a reflexive marker.

- (45) Mfon adjì ile  
 Mfon 3SG- wash body  
 ‘Mfon washes herself’

In general, the native speaker consultants insisted that these strategies are interchangeable and available in all of the same contexts. However there is evidence that these strategies do pattern slightly differently. For example, trends in the data suggest that *uno* strongly prefers to have a singular antecedent. In cases where the antecedent was plural, consultants would always revert to using *ile*. It is perhaps due to some underlying specification for number that *uno* can be emphatically modified by *sin*, while *ile* cannot. *Sin* is the Uda numeral for ‘one’ but also shows morphological productivity suggestive of grammaticalization. The examples below show the combination of *sin* with both of the reflexive strategies discussed so far.

- (46) nse            ile  
 1SG-watch body  
 ‘I watch myself’

(47) \*nse        ilesin  
1sg-watch body-one  
'I watch myself'

(48) nse        uno  
1SG- watch self  
'I watch myself'

(49) nse        unosin  
1SG- watch self-one  
'I watch myself'

When *sin* attaches to the self morpheme *uno* it appears to function as somewhat of an emphatic pronoun, potentially indicating that the reflexive direct object is the only recipient of the reflexive action. This interpretation would give example (49) the loose meaning of 'I washed only myself.' However, data concerning semantic distinctions among the different strategies for representing reflexivity was impossible to collect remotely. The exact differences in meaning engendered from manipulations in reflexive constructions will be an important area for further research.

In addition to the ability to accept *sin*, *uno* patterns differently than *ile* in its ability to be possessed. *Ile* can readily be modified by possessive pronouns but *uno* cannot be possessed. The possessive pronouns used in reflexive constructions of this type are, as shown below, the same pronominal forms given in the possessive pronouns paradigm in section 8.2.

(50) Efrete amai    ile isighi  
Efrete 3SG-hit body 3SG.POSS  
'Efrete hit himself'

(51) \*Efrete amai    uno isighi  
Efrete 3SG-hit self 3SG.POSS  
'Efrete hit himself'

Again, the semantic distinction, if any, that results from adding possessive pronouns has not been ascertained, but would be an important question for further research on reflexivity in the language.

A final difference between *uno* and *ile* is their ability to combine to form a compound direct object of a reflexive verb. Both of these reflexive pronouns can appear in the same clause but they are crucially ordered.

(52) Efrete amai    uno ile  
Efrete 3SG- hit self body  
'Efrete hit himself'

- (53) \*Efrete amai ile uno  
 Efrete 3SG- hit body self  
 ‘Efrete hit himself’

The reason that *uno* and *ile* must appear in this order when combined is similarly a suggested topic for further research.

#### 8.4 Reciprocal Constructions

Reciprocal constructions in Uda are formed identically to reflexive constructions. Because of the fact that the antecedents for reciprocal actions are plural, the consultants once again showed a preference for using *ile* over *uno*, though they still maintained that both strategies were available.

- (54) Mmo emai ile  
 3PL 3PL- hit body  
 ‘They hit each other’

Since reciprocal and reflexive events are denoted using the same construction, it is impossible to disambiguate whether a given construction is intended to denote a reflexive event or a reciprocal event with out additional information from context.

- (55) Mmo emai ile  
 3PL 3PL-hit body  
 ‘They hit each other’

Mmo emai ile  
 3PL 3PL- hit body  
 ‘They hit themselves’

- (56) Edak ma Efretei igikit **ile mmɔ** ki pati  
 Edak and Efretei 3SG-PST-see body 3PL.POSS LOC party  
 ‘Edak and Efretei saw **each other** at the party’

- (57) Edak ma Efretei igikit **ile mmɔ** kindise  
 Edak and Efretei 3SG-PST-see body 3PL.POSS LOC-picture  
 ‘Edak and Efretei saw **themselves** in the picture’

### 9 Logophors:

#### 9.1 An Introduction to Logophors

“Logophor” is a term that was first introduced to linguistics in 1974 by a linguist named Hagège. Hagège observed a different form of pronoun in a West African Language, Ewe, that was differentiated from other pronouns in both morphological form and distribution. He gave this class of pronouns the name of “logophors.”<sup>vi</sup> Logophors have since been

attested as a common feature in many West African languages. Generally, logophors exist to resolve potential ambiguities in identifying antecedents, specifically within the contexts of reported speech, thoughts, or experiences. Clements, another early scholar of logophoricty writes, “the antecedent of the logophoric pronoun must be the one whose speech, thoughts, feelings, or general consciousness are reported.”<sup>vii</sup> In slightly plainer terms, the use of a logophoric pronoun signals that the referent to which that pronoun corresponds is coindexed with the reporter, thinker or experiencer of the event in which the logophor appears. Frequently, the reporter, thinker or experiencer appears as the subject of a higher clause, or a matrix clause.

English does not have a separate form for logophoric pronouns. This means that, when antecedents are replaced with pronouns in some contexts of reported speech, an ambiguity arises. Specifically, it is impossible to tell whether the pronoun in a reported, embedded clause is coindexed or conraindexed with the subject of the matrix clause. The example below shows two sentences, the first with conraindexed 3SG participants, and the second with coindexed 3SG participants. Both sentences can be converted, through pronoun replacement, to the ambiguous English sentence: *Chris said he left*.

(58) Chris said Mfon left		Chris said he left
Chris say-PST Mfon leave-PST	→	3SG say-PST 3SG leave-PST
‘Chris <sub>i</sub> said Mfon <sub>j</sub> left’		‘Chris <sub>i</sub> said he <sub>j</sub> left’ OR ‘Chris <sub>i</sub> said he <sub>i</sub> left’

(59) Chris said Chris left		Chris said he left
Chris say-PST Chris leave-PST	→	3SG say-PST 3SG leave-PST
‘Chris <sub>i</sub> said Chris <sub>i</sub> left’		‘Chris <sub>i</sub> said he <sub>i</sub> left’ OR ‘Chris <sub>i</sub> said he <sub>j</sub> left’

Languages that have separate logophoric pronouns sidestep the potential for this type of ambiguity. This is because, in the case where the pronoun representing the reporter, thinker or experiencer of the event is shares its identity with a pronoun appearing *in* the reported event, the use of the logophoric pronoun is necessitated (and appears in the embedded clause.)

The following example from Uda illustrates the function of logophoric pronouns in this disambiguation. The regular third person singular pronoun is marked in bold above, with the third person singular logophor marked in bold below.

(60) Chris oko Mfon akalagha		Chris oko <b>anyi</b> akalagha
Chris 3SG- say Mfon 3SG-PST-3SG-leave	→	Chris 3SG- say 3SG 3SG-PST-3SG-leave
‘Chris <sub>i</sub> said Mfon <sub>j</sub> left’		‘Chris <sub>i</sub> said he <sub>j</sub> left’

(61) Chris oko Chris ikilagha		Chris oko <b>imo</b> ikilagha
Chris 3SG-say Chris LOG-PST-LOG-leave	→	3SG say-PST 3SG.LOG LOG-PST- LOG-leave
‘Chris <sub>i</sub> said Chris <sub>i</sub> left’		‘Chris <sub>i</sub> said he <sub>i</sub> left’

## 9.2 Logophors in Uda:

Examples (60) and (61) provide an introductory example of how logophoric pronouns function in Uda. Uda has separate logophoric pronouns for the third person singular and the third person plural. These forms contrast with the non-logophoric subject pronouns for these forms and are outlined in the table below.

	Non-Logophoric Pronoun	Logophoric Pronoun
3SG	ànyì	ìmò
3PL	ńmọ	mmọ

As shown above, the third person singular logophoric pronoun is an entirely separate form from its non-logophoric analogue. In contrast, the third person plural logophoric form is only distinguished by a tonal contrast from its non-logophoric analogue.

## 9.2 Semantic Contexts for Logophor Use in Uda:

Languages that have logophors differ in the semantic contexts that can trigger or necessitate logophor use. In some languages, logophors can appear in a wide variety of semantic contexts. Examples of semantic contexts that can trigger logophor use in other languages include reported speech, reported thought, reported sensation, and reported emotion. In Uda, logophors are narrowly restricted to the context of reported speech. Logophors are used in Uda only when the reporter of the speech is coindexed with a participant in the reported speech event.

## 9.4 Logophors in Embedded Clauses:

Just as, in all non-logophoric contexts, the same pronominal form is used for the subject pronoun, the direct object pronoun, the indirect object pronoun and (with the exception of the third person singular) the possessive pronoun, the logophoric pronoun form is used within embedded clauses when the logophor functions as the subject, the direct object, the indirect object and also the possessive pronoun. Examples of the logophoric pronoun in each of these contexts are given below.

Subject:

- (62) Anyi oko **imo** ikilagha  
3SG say 3SG.LOG LOG-PST- LOG-leave  
'he<sub>i</sub> said **he<sub>i</sub>** left'

Direct Object:

- (63) Anyi oko moto ani okoto **imo**  
3SG 3SG- say car DEM 3SG-PST-3SG-hit log  
'He said the car hit **him**'

Indirect Object:

- (64) Anyi oko ani Mfon okono **imo** isip  
3SG 3SG-say COMP Mfon 3SG-PST-3SG-give LOG coconut  
'He said Mfon gave him the coconut'

Possessive:

- (65) Anyi oko ki akeni ani **imo** isip  
 3SG 3SG- say COMP DEM 3SG-COP LOG coconut  
 ‘He said this is his coconut’

### 9.5 Logophoric Verbal Morphology

As examples (60) and (61) (reproduced below) illustrate, clauses with a logophoric pronoun for a subject also differ from clauses with non-logophoric subjects in their verbal inflection.

- |  |   |   |
|--|---|---|
| <p>(60) Chris oko Mfon akalagha<br/>         Chris 3SG-say Mfon 3SG-PST-3SG-leave<br/>         ‘Chris<sub>i</sub> said Mfon<sub>j</sub> left’</p>    | → | <p>Chris oko anyi <b>akalagha</b><br/>         Chris 3SG-say 3SG 3SG-PST-3SG-leave<br/>         ‘Chris<sub>i</sub> said he<sub>j</sub> left’</p>  |
| <p>(61) Chris oko Chris ikilagha<br/>         Chris 3SG-say Chris 3SG.LOG-PST-leave<br/>         ‘Chris<sub>i</sub> said Chris<sub>i</sub> left’</p> | → | <p>Chris oko imo <b>ikilagha</b><br/>         3SG say-PST 3SG.LOG 3SG.LOG-PST-leave<br/>         ‘Chris<sub>i</sub> said he<sub>i</sub> left’</p> |

Logophors in Uda, like non-logophoric pronouns for each combination of person and number, have a distinct agreement morpheme. The agreement morphemes for the third person singular logophor and the third person plural logophor are identical, and contrast with the corresponding non-logophoric verbal morphology, as shown in the table below.

	Non-Logophoric Agreement Morpheme	Logophoric Agreement Morpheme
3SG	á-	ì-
3PL	é	ì-

This agreement morpheme combines predictably with other verbal morphology like the past, future, immediate future, and negative agreement morphemes. However, the specific phonological and morphological properties that govern the surface representations of these combinations will need to be examined with much more supporting data. With the limited data set that exists, there is some evidence to show that the logophoric agreement morphemes are less susceptible to undergoing phonological processes like assimilation. This may be evidence that the logophoric agreement morpheme is morphologically more powerful than other inflection, or that its underlying representation must be preserved for clarity. However, other inflectional morphemes that are high front vowels (1pl [í] and 2pl [i] for example) also show a lower incidence of phonological changes.

### 9.6 Questions for further Research

Logophoric verbal morphology appears whenever the third person subject of a matrix clause that reports speech is coindexed with a subject in the embedded clause, or the reported speech event.

- (66) Anyi oko **imo** ikilagha  
 3SG say 3SG.LOG LOG-PST- LOG-leave  
 ‘he<sub>i</sub> said **he**<sub>i</sub> left’
- (67) Mmo eko **mmo** ikilagha  
 3PL 3PL-say 3PL.LOG LOG-PST- LOG-leave  
 ‘they<sub>i</sub> said **they**<sub>i</sub> left’

An interesting case in Uda arises when a logophoric subject is coordinated with a non-logophoric subject. The examples listed below show complex subjects in the embedded clause that are coordinations of logophoric and non-logophoric subjects.

- (68) Efretei oko imo **ikilagha**  
 Efretei 3SG-say 3SG.LOG LOG-PST-LOG-leave  
 ‘Efretei said he left’
- (69) Efretei oko imo ma mparawa ani **ikilagha**  
 Efretei 3SG-say 3SG.LOG CONJ boys DEM LOG-PST-LOG-leave  
 ‘Efretei said he and the other boys left’
- (70) Efretei oko imo ma avi **ikilagha**  
 Efretei 3SG-say 3SG.LOG CONJ 2SG LOG-PST-LOG-leave  
 ‘Efretei said he and you left’
- (71) Efretei oko imo ma ami **ikilagha**  
 Efretei 3SG-say 3SG.LOG CONJ 1SG LOG-PST-LOG-leave  
 ‘Efretei said he and I left’

This data above shows that the logophoric verbal inflection appears anytime the logophor is the subject of the embedded clause, and anytime the logophor is *part* of the subject of the embedded clause. In coordinations such as *he and the other boys*, it is clear that the logophoric morphology is present, and visibly different in form than the expected third person plural agreement [é-]. In other instances of coordination, the difference between the logophoric agreement that appears and the non-logophoric verbal agreement that we might expect, is less salient. This is because the non-logophoric agreement morphemes for the first and second persons plural [í-] is only differentiated from the logophoric agreement morpheme by a tonal contrast. (The logophoric verbal agreement is [i].)

One possible explanation for this pattern is that the agreement morphology is sensitive to ordering in the coordinated subject, and since, in all of the examples above, the logophor is the first part of the complex subject, the verb is checking to agree with its features. However, this hypothesis does not stand, as recently collected data shows that the order of coordination does not matter.

- (72) Efretei oko mparawa ani ma imo **ikilagha**  
 Efretei 3SG-say boys DEM CONJ 3SG.LOG LOG-PST-LOG-leave

Efreti said the other boys and he left

(73) Efretei oko     avi ma imo     **ikilagha**  
Efretei 3SG-say 2SG CONJ 3SG.LOG LOG-PST-LOG-leave  
Efreti said you and he left

(74) Efretei oko     ami ma imo     **ikilagha**  
Efretei 3SG-say 1SG CONJ 3SG.LOG LOG-PST-LOG-leave  
Efreti said me and him left

In all of the examples above, the logophoric morphology appears on the downstairs verb, despite the fact that the non-logophoric subject is put first in coordination of the complex subject.

Further possible explanations for the apparent power of the logophoric verbal morphology to override non-logophoric verbal morphology are explored here. One explanation is that regardless of ordering, logophoric subjects are somehow ranked, or categorized as more important in coordination. This would suggest a covert hierarchy in coordination in the language, and posit that the verb inflects to agree with the coordinated subject participant that is higher up in the hierarchy.

I believe that the exact nature of the logophoric verbal inflection and its somewhat surprising distribution in the language will be the most interesting and important areas for further research.

## 10. Conclusion

It is my hope that the skeleton of a grammatical sketch and the introductory phonological and morphological analysis advanced in this paper will provide a helpful starting ground for work on a future sketch grammar or reference grammar in the Uda language. Through the focus on personal pronouns, logophors, and logophoric verbal inflection, I attempt to raise an interesting topic for important further linguistic research. With further data, the distribution of logophoric verbal morphology in Uda could prove to be very syntactically, typologically, and even morphologically unique, due to early evidence of some of its properties explored in section 9.5. There is much left to be explored in Uda, and the number of unanswered questions serves as a testament to the richness of knowledge embedded in even the smallest of endangered languages. Until further study is conducted on the language, copies of this thesis will be sent back to the language community, representing the first printed text in Uda, and hopefully augmenting the cultural prestige ascribed to the language, and fostering interest in continued linguistic research. *I soston!*

Appendix:



Figure 1 A political map of Nigeria. Akwa Ibom State, where the Uda language is spoken is highlighted in gold. <http://46.38.182.253/annualreport/2009/images/map-akwa.gif>



Figure 2 This map indicates the smaller region within Akwa Ibom State where Uda is used.

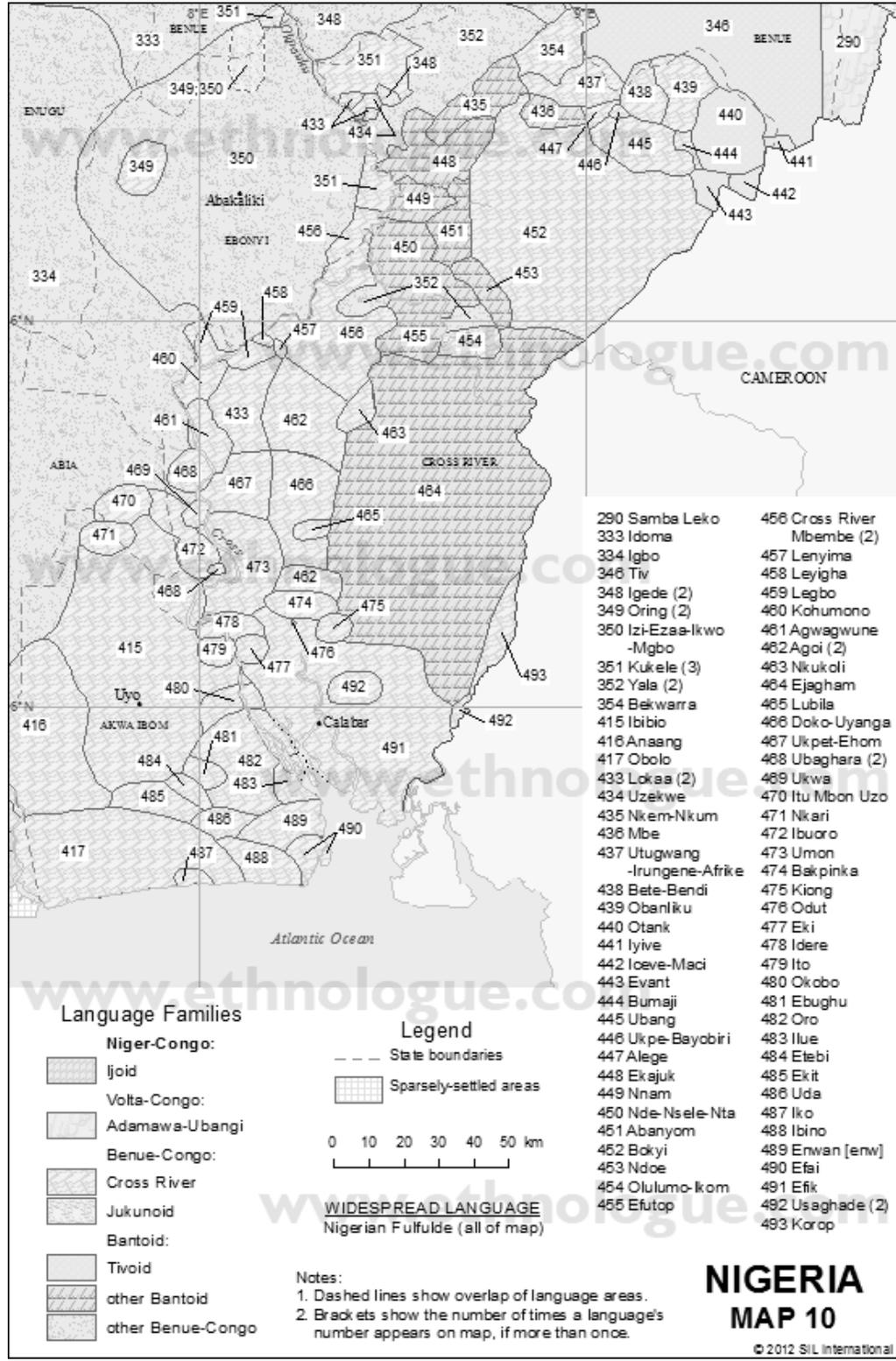


Figure 3 A Linguistic Map of The Cross River regions, which shows the geographic size and location of Uda’s linguistic sphere in relation to other nearby languages.

Table 1: PRESENT

Verbs	k <sup>w</sup> ɔ́	wɔ́k <sup>ɔ́</sup>	dù	dàŋ	sáyá	sàŋà	tí	kím	kù	dòt	fjónó	tìŋí
1SG	n	ŋ	n	ń	n	n	n	ŋ	ŋ		m	n
2SG	ø	ø	o	ø	a	ø	à	ø	o	ø	ɔ	â
3SG	o	ø	o	á	a	á	à	á	ó	o	ɔ	a
1PL	í	ì	í	í	í	í	ì	í	í	i	i	i
2PL	í	í	í	í	í	ì	í		í	ì	í	i
3PL	ɔ	e	é	é	é	è	é	e	é	e	é	é

Table 2: FUTURE

Verbs	k <sup>w</sup> ɔ́	wɔ́k <sup>ɔ́</sup>	dù	dàŋ	sáyá	sàŋà	tí	kím	kù	dòt	fjónó	tìŋí
1SG	man	man	mân	mâ	man	mân	mân	máŋ	máŋ	mân	mán	mân
2SG	má	má	mâ	má	má	má	mâ	mâ	mâ	mâ	mâ	mâ
3SG	má	má	mâ	mâ	má	mâ	mâ	mâ	mâ	mâ	mâ	mâ
1PL	mǐ	mî	mî	mî	mí	mí	mî	mî	mî	mî	mǐ	mî
2PL	mì	mî	mî	mî	mí	mí	mî	mî	mî	mî	mî	mî
3PL	me	me	mé	mé	mé	mé	mé	mê	mé	mé	mé	mé

Table 3: PAST

Verbs	k <sup>w</sup> ɔ́	wɔ́k <sup>ɔ́</sup>	dù	dàŋ	sáyá	sàŋà
1SG	n-kí-ŋ	ŋ-kí-ŋ	n-ki-n	ń-kí-n	n-ki-n	n-ki-n
2SG	ɔ-kɔ	ɔ'-kɔ'	ó-kó	á-ká	a-ka	a-ka
3SG	ɔ'-kɔ'	ɔ'-kɔ'	ó-kó	á-ká	a-ka	á-ká
1PL	i-ki	í-kí	í-kí	i-ki	í-kí	í-kí
2PL	i-gi	í-kí	í-kí	i-ki	í-kí	í-kí
3PL	e-ke	e-ke	é-ké	é-ké	é-ké	é-ké

PAST (Continued)

Verbs	tí	kím	kù	dòt	fjónó	tìŋí
1SG	ŋ'-gì-n	ŋ'-kí-ŋ	m-kí-ŋ	n-ki-n	m-gi-n	ń-gí-n
2SG	á-gí	a-gé	ò-gó	ɔ-kɔ	ɔ'-gɔ'	á-gé
3SG	à-gí	á-gé	ò-gó	ɔ-kɔ	ɔ'-gɔ'	á-gé
1PL	ì-gí'	i-ki	í-gí	í-gí	í-gí	i-gí
2PL	í-gí'	i-ki	í-gí	í-gí	í-gí	i-gí
3PL	e-gí'	é-ké	é-gé	é-gé	é-gé	é-gé

Table 4: NEGATIVE PRESENT

Verbs								
	k <sup>w</sup> ɔ̄	k <sup>w</sup> ɔ̄	kù	kù	sàŋà	sàŋà	fjónó	fjónó
	present	past	present	past	present	past	present	past
1SG	áŋ	áŋ	aŋ	aŋ	-	-	ɔn	án
2SG	u	u	ú	ú	-	ú	ù	ù
3SG	è	e	è	è	è	è	è	è
1PL	î	í	ÿ	í	í	i	í	í
2PL	î	í	ÿ	í	í	í	í	í
3PL	è	è	è	è	è	e	è	è

## Endnotes

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- <sup>i</sup> "MBO Local Government Area." *MBO Local Government Area*. N.p., n.d. Web. 07 Apr. 2013.
- <sup>ii</sup> "Uda." *Welcome*. N.p., n.d. Web. 07 Apr. 2013. <<http://www.ethnologue.com/language/UDA>>.
- <sup>iii</sup> Connell, Bruce Wordlists. Department of Linguistics and Nigerian Languages, University of Uyo.
- <sup>iv</sup> Urua (2011) University of Uyo.
- <sup>v</sup> Connell, Bruce. "The Lower Cross Languages: A Prolegomena to the Classification of the Cross River Languages." *Journal of West African Languages* XXIV.1 (1994): 3-14. Web.
- <sup>vi</sup> Sells, Peter. "Aspects of Logophoricity." *Linguistic Inquiry* 18.3 (1987): 445-79. Print.
- <sup>vii</sup> Clements, G. N. (1975). "The Logophoric Pronoun in Ewe: Its Role in Discourse," *Journal of West African Languages* 2, 141-177.