Pronouns and Pronominal Alignment in Ateso

David Barasa

Masinde Muliro University of Science and Technology

Abstract. Ateso, an Eastern Nilotic language spoken in both Kenya and Uganda, has pronouns that can be used in place of lexical nouns or noun phrases. Because of overt pronominal subject and object marking on the verb, the independent pronouns play a role primarily at the pragmatic level, e.g. in topicalisation and focusing strategies. This paper seeks to establish the pronoun and pronominal alignment in Ateso. Principally, the nominal and pronominal categories are treated as separate forms in Ateso based on two main reasons: First, pronouns are used in place of nouns, that is, they are separate categories from nouns. They exclude each other in syntactic positions, explicitly; a pronoun cannot be an alternative head to a noun in a noun phrase. Second, pronouns have a separate status from nouns, as they are also expressed through the verb. Moreover, contrary to nouns, pronouns cannot be modified except by way of attitude markers.

Keywords: Pronouns, Pronominal Alignment, Eastern Nilotic, Pragmatics

Languages: Ateso

How to Cite this Article:

Barasa, David. 2022. "Pronouns and Pronominal Alignment in Ateso." *Arusha Working Papers in African Linguistics*, 4(1): 100-114.

1.0 Introduction

Following Koehler's (1955) classification of the Nilotic languages, Ateso belongs to the Teso-Turkana branch of the Eastern Nilotic branch. The Eastern Nilotic branch consist of the Bari and non-Bari groups. Ateso belongs to the non-Bari group which is further divided into Lutoxo-Maa and Teso-Turkana sub-branches. The Teso-Turkana sub-branch forms further divisions of Ateso, Karamojong, Jie, Toposa-Jiye, Nyangatom (Donyiro) and Turkana.

The Iteso currently reside in the Teso sub-region of Uganda, composed of ten districts (Tororo, Amuria, Soroti, Kumi, Katakwi, Kaberamaido, Bukedea, Serere, Pallisa and Ngora) and in parts of Western Kenya. Karp (1996) notes that the great majority of Iteso live in the Soroti District and some of the adjacent areas in the North-Eastern part of Uganda. In Kenya, the Ateso-speaking people occupy parts of the counties of Busia and Bungoma (Barasa 2017).

According to the 2009 Kenyan population census, Ateso has an estimated number of 338,833 (0.009% of the total population) speakers in Kenya (KNBS 2009). The population size of people who are ethnically Iteso in Uganda is estimated at 1.57 million people, which is about 6.1% of the total population. The figures are from the census conducted in Uganda in 2002. The current number of speakers of Ateso in Uganda and Kenya is estimated at 1.909 million people by Lewis et al. (2014).

2.0 Pronominal System in Ateso

Ateso's pronominal system consists of inflectional personal prefixes and independent personal pronouns as will be explained in Section 2.1 and 2.2 below. Both categories make distinctions in person and number. Person/number categories in Ateso are classified into first, second, and third-person singular and plural.

2.1 Inflectional Personal Prefix Pronouns

Agreement is a category that marks the relation between words in a sentence. It consists of features such as person, number and gender. Just like

other Eastern-Nilotic languages (e.g. Turkana and Toposa), Ateso's person/number inflectional marker prefixes attach to the verb stem even when verbs have an overt independent pronoun or noun as a subject (Barasa, 2017). Agreement is mostly triggered by the subject. Though inflectional personal prefixes have clear distinct forms and distributional properties as compared to the independent pronouns, they serve the same referential function as independent pronouns. They are realised as variants of the independent forms in terms of meaning but with a different function.

Ateso verbs are divided into two morphological classes, class 1 and class 2 (Barasa, 2015). The latter have a (petrified causative) prefix **1-/i-**, which fuses with the person-marking prefix, as illustrated below. The actual form of these prefixes further depends on mood. Basically, this paper discusses and uses the indicative mood forms, though in some examples, subjects are preceded by **k-** which is a dependent clause or subordinator.

For class 1 verbs, the first-person singular is marked by **a-** while **e-** marks the second and third persons. But when it comes to class 2 verbs, we get a different structure: it is the prefix **e-** that marks the first person singular while **i-** marks the second and third persons as a result of the fusion with the high front vowel of the verb. The first-person plural has a unique CV shape; it is marked by **ka-** and **ki-** for class 1 and class 2, respectively. First person plural markers do not occur in inclusive-exclusive forms as is the case with independent pronouns, discussed in section 2.2. All personal prefixes bear a high tone but may be assimilated to the tone structure of the verb stem. A full paradigm of subject/person marking is illustrated in Table (1). The first row (1) gives the morphophonological representation and the second row (2) the actual phonological representation.

Table 1a: Class #1 Inflectional Subjects in the Indicative Mood

	1SG	2SG	3SG	1PL	2PL	3PL
1.	a-	e-/ε-	e-/ε-	ka-	e-/εPL	e/εPL
2.	a-	e-/ε-	e-/ε-	ka-	e-/ε	e-/ε
					te/ta/si/tu	te/ta/si/tu

			v	v		
	1SG	2SG	3SG	1PL	2PL	3PL
1.	а-і/а-і	e-i/ε-1	e-i/ε-1	ka-i/ı	e-i/ε-ιPL	e-i/ε-ιPL
2.	e-/ε-	i-	i-	ki-	ite/ta/si/tu	
						te/ta/si/tu

Table 1b: Class #2 Inflectional Subjects in the Indicative Mood

In Table 1 above, the inflectional forms that are prefixed to the verbs agree in number and person with the subject (cf. Barasa 2015). The underlying forms listed in the first row (numbered 1) of Table 1 yield the surface forms listed in the second row (numbered 2) of Table 1. The phonological forms are subject to vowel harmony rules and can occur either as [+ATR] or [-ATR] following the quality of the verb root (Barasa, 2018). The plural form is marked by the morpheme *-te, -ta, -tu,* and *-si* (occurring in different environments) that can be suffixed to both class 1 and class 2 verbs. The allomorphy of the vowel on the plural morpheme is conditioned by the quality of verb root vowels. Plural marking on the verb is a number agreement morpheme for the plural subjects. All forms referring to the 2nd and third-person singular/plural have the same structural characteristics in each class. The number suffixes are only marked on the second- and third-person plural.

Previous research on the Eastern-Nilotic languages (Toposa and Turkana) reveals similar person agreement morphemes for class 2 (cf. Schroeder 2008: 53; Dimmendaal 1983). However, class 1 Ateso person agreement markers exhibit a slight variation from Toposa and Turkana. Compare the following paradigm of indicative mood subject markers from Toposa and Turkana, adapted from Dimmendaal (1991: 290):

 Table 2a: Class #1 Subject Markers in Toposa and Turkana

	1SG	1PL	2SG/PL	3SG/PL
Toposa	a-	a-/ε-, ki-	i-	a-/ε-
Turkana	a-	ki-/ki-	e-/ε-	e-/ε-

Table 2b: Class #2 Subject Markers in Toposa and Turkana

	1SG	1PL	2SG/PL	3SG/PL
Toposa	e-	ε-/i., ki-	i-	ε-/i-
Turkana	ε-/e-	kı-, ki-	I-, İ-	I-, i-

Based on the results attained from Barasa's (2017) data, the marker **e-** for second person singular and plural in class 1 is a grammatical phenomenon that might be attributed to analogical extension where Ateso speakers reduce the class 2 on second person singular prefixes to the corresponding second person plural as a way of reducing the degree of variation.

The appearance of person/number inflectional markers in constructions is illustrated in the following examples, where (1a-d) are Class 1 verbs while (1e-h) are Class 2 verbs:

1.	a. á-kér-í	b. ká-kér-í-té	c. é-kér-í
	1SG-run-IPFV	1-run-IPFV-PL	2SG-run-IPFV
	'I am running.'	'we are running'	'you are running
	d. é-kér-í-té	e. é-líp-í	f. kí-líp-í-té
	3-run-IPFV-PL	1SG-pray-IPFV	1-pray-IPFV-PL
	'they are running'	'I am praying'	'we are praying'
	g. í-líp-í	h. í-líp-í-té	
	3SG-pray-IPFV	3-pray-IPFV-PL	
	'you are praying'	'they are praying'	

The subject/person marker is prefixed to the verb root: the marker is determined by the morphological class to which the verb belongs. For class 1 verbs, the first-person singular is marked by **a-** while **ka-** marks the first-person plural, as with (1a) and (1b), respectively. The prefix **e-** marks all the other persons, as in (1c) and (1d), where it marks the second and third person. But when it comes to class 2 verbs, it is the prefix **e-** that marks the first person singular, while **ki-** marks the first-person plural, as in (1e) and (1f). The prefix **i-** marks the second and third persons as evidenced in (1g) and (1h), respectively.

Second and third person singular/plural are distinguished by number suffixes (for the plural, **-te**, **-ta**, **-si** and **-tu** etc.). The plural suffixes are illustrated in the examples in (2) below. They apply to plural verb forms in stative or habitual constructions.

```
    2. a. é-pèm-ènèn-è-tè
    b. é-bòljà-tà
    3-eat-HAB-IPFV-PL
    'they were eating (habitually)'
    'they played'
```

c. é-nàmàkì-sì d. é-ànù-tù
3-escort:PAST-PL
'they escorted'
'they saw'

Whenever the meaning of the inflected verb clause is not understood within the context of an utterance, independent personal pronouns (presented in section 2.2) may be used either as subjects or objects. Overt pronouns have pragmatic functions, as will be illustrated later in this paper. Both the subject and the object pronouns or nouns follow the verb in a clause.

Inflectional personal pronoun prefixes also participate in vowel harmony structuring with the verb stem vowel qualities. According to Barasa (2018), all the personal pronouns are [-ATR] underlyingly and when they are attached to verbs consisting of syllables with [+ATR] vowels, they change the [-ATR] to [+ATR] in regressive assimilation.¹

Inflectional personal prefixes, though interrelated in meaning, are phonologically and morphologically dissimilar to independent pronouns as should become clear in the next section. Independent pronouns are presented in section 2.2 below.

2.2 Independent Personal Pronouns

They are mainly in pragmatic functions overtly for emphasis, in marked constructions and in replying to questions. They are generally omitted because they can be retrieved from context in most Ateso syntactic structures (see e.g. 3a for illustration). Generativists (e.g. Chomsky 1995) refer to languages that have an underlying realisation of the subject as an empty category of pro as pro-drop languages or as languages with null-subject parameter. However, Schroeder (2009: 201) disputes this claim and demonstrates (using data from Toposa) that the pronoun in pro-drop languages is an incorporated subject. Ateso's inflectional person prefixes augments Schroeder's claim. Even though the referential context is not clear, and pronouns should be used, nouns are preferred in place of the independent personal pronouns, as in (3b) where ékítàbò ('book') is used to explicitly indicate the item that 'fell'. Mostly independent pronouns are 'dis-

105

¹ This also applies to the first-person singular prefix *a*- 'I'; however, this latter variant [ä] always occurs in predictable environments and hence does not have phonemic status.

preferred' in cases where referents are out of context of a speech situation, as exemplified in (3c).

3. a. á-kèr-ìt

1SG-run.PAST-PFV

'I ran'

b. é-dàcàrà ékítàbò3SG-fall.PAST book.NOM

'the book fell'

c. í-rùk-ìt ákwên 3SG-sing.PAST-PFV bird.NOM

'the bird sang'

In example (3a), the speaker is the subject as indicated by an inflectional personal prefix. No independent pronoun is needed to identify the addresser as meaning is also retrieved from context. By using a noun in the subject position, a position that can be occupied by an independent personal pronoun, (3b) leaves no doubt that it is 'a book' that 'fell' and not anything else as would be the case if independent pronouns occurred in that position. The 'birds' that 'sang' in (3c) are not visible to the speaker and hearer and it would be difficult to know the real participant if no NP occurred. The independent personal pronouns established in Ateso are shown in Table (3) in two sets. One set is absolute, and the other set encodes nominative forms. They can also occur in other cases and are marked morphologically (cf. Barasa, 2017).

Table 3: Independent Personal Pronouns

	Absolute		Nominative	
	Singular	Plural	Singular	Plural
1 st Person	éòŋ 'I'	sjô 'we' (excl.) ôní 'we' (incl.)	èòŋ	sjò 'we' (excl.)
second-person	íjò 'you'	ósì	ìjò	òsì
third-person	nésì '(s)he'	késì	nèsì	kèsì

Plurality of independent personal pronouns is always accomplished through a partial or total shift to a new word which has no inflectional relationship to the singular. Apart from the third person singular and plural forms which occur with near similar shape (reflecting the ancient Nilo-Saharan alternation for singular or plural; (see Greenberg 1963), first and second person singular pronouns in this category have distinct shape that is different from their corresponding plural forms. Singular and plural forms are either monosyllabic as in **sjô** '1PL (excl.)' or disyllabic, e.g. **nésì** '3SG' in structure. In essence, there is no equivalent personal pronoun for the inanimate 'it' in Ateso; instead, a demonstrative is used in its place.

There is an exclusive/inclusive distinction in 1^{st} person plural that is uniquely marked by independent pronouns. This distinction is not marked on the verb by inflections. The form $\mathbf{sj\hat{o}}$ '1PL (excl.)' is used exclusively to distance the addressee from the group referred to. On the other hand, the inclusive form $\mathbf{\hat{j}n\hat{i}}$ '1PL (incl.)' takes the hearer as part of the referents.

```
4. a. á-pòtò
                     sjô
      3SG-beat
                     1PL:EXCL/ABS
      '(s)he has beaten us (but not the addressee)'
    b. á-pòtò
                     înć
                     1PL:INCL/ABS
      3SG-beat
      '(s)he has beaten us (including the addressee)'
    c. mámờ
                     á-bùljà
                                      kà-siô
      NEG
                     INF-play
                                      PREP-1PL:EXCL
      'Don't play with us' [lit. no playing with us]
```

In a situation where there is trouble brewing between the participants and the hearer, the third clause (4c), which is an idiom, semantically implies that the participants, excluding the hearer are very tough or bad people whom the addressee should be careful in dealing with. The prepositional phrase in the same clause consists of the preposition ka- prefixed to the 1PL:EXCL. A negative particle occurs pre-verbally, and is/can be followed by a fronted subject that is only overtly expressed in the verb as shown in example (4c) but could be expressed for emphatic purposes, as in:

```
5. mámò ìjò á-bùljà kà-sjô, ká-bùlìà kà késì
NEG 2SG/NOM INF-play PREP-1PL FOC-play
'Don't play with us, play with them!'
```

The negation marker preceding the subject is a verb (lit. meaning 'lack or not exist') hence the subject has nominative tone pattern. Though the inflectional prefixes for (4a) and (4b) are similar, distinctions of exclusive and inclusive meaning can only be expressed by overt pronouns.

2.3 Functions of Independent Personal Pronouns

Independent personal pronouns are used as syntactic subjects or objects. They are used for referential maintenance: with shifting reference to the speaker, to addressee, or to a third attendant in discourse. There are structural changes or distinctions for pronominal forms depending on whether they occur as subjects or as objects. Subjects following the verb have nominative marking while the object always occurs post-verbally in absolute case. On the other hand, pronominal subjects in non-verbal (predicative) constructions occur in the absolute case as illustrated in example (6). Also, pronominal objects take absolute case regardless of their position relative to the verb, which shows that the absolute case forms constitute the unmarked forms in the language (cf. Barasa, 2017).

éòŋ è-múrwò-n(i)
 1SG:ABS M-doctor-SG/ABS
 'I am a doctor (lit. traditional healer)'

Number is marked in both the subject and the object; the 1SG $\acute{e}\acute{o}\eta$ occurs with a noun \grave{e} - $m\acute{u}rw\grave{o}$ -n(i) that is in singular form. On the other hand, gender is only marked on the noun and not on pronouns. In conversations and narratives, independent pronouns are used in place of nominal subjects and objects that can be retrieved from context or those that are known by participants.

2.3.1 Subjects

Subject positions in the Ateso sentence are typically occupied by a noun or pronoun (Barasa, 2012). Independent personal pronouns are optional units but when they occur as subjects following the verb in a construction, they take nominative case. In some instances, where the subjects are topicalised,

independent subject pronouns occur pre-verbally, in which case they are absolute. All constructions consisting of the verb and independent pronouns must occur with inflectional personal prefixes as discussed above. Subject prefixes of the verb in the resulting structure refer to the nominative subject. Occurrence of independent personal pronouns as subjects of the verb is illustrated as follows:

7. a. á-jótór-í èòŋ

1SG-sleep-IPFV 1SG/NOM

'I am sleeping'

b. á-kèrì-tè *ɔ̀nì*

1-run:PAST-PL 1PL:INCL/NOM

'we ran'

c. í-gìràk-ì nèsì

3SG-write:IPFV 3SG/NOM

'(s)he was writing'

d. kí-bìl-ì-tè sjò

1-break:PAST-IPFV-PL 1PL:EXCL/NOM

'we(excl.) were breaking'

The inflectional marking on the verb agree in number and person with the pronominal forms in the above structures. NP referents for third person may be known or unknown to the speaker. Pronouns in predicate nominal structures (such as the ones in example (6) and (8)) also function as subjects. In these constructions, they precede predicate nominals without a copula.

8. éòŋ èpènòk 1SG/ABS visitor/ABS

'I am a visitor'

Both the predicate pronoun and the subject noun have absolute case. Consequently, the two components of the clause are unmarked, since according to Koenig (2006), categories in such constructions often correlate to functional unmarkedness.

2.3.1 Objects

Independent pronouns are also used as objects in a clause. They follow the subject (either a noun or a pronoun) in a clause when they (objects) occur post-verbally (VAO/VS). Object pronouns, all occurring post-verbally and following the subject, are illustrated in example (9).

```
9. a. έ-míná-sí késì
3-love-PL 3SG/ABS
'they love them'
```

'I made you laugh'

```
b. é-Jùkàrì í-dwè nésì
3-send:PAST N/PL-child/NOM him/ABS
'the children sent him/her'
```

```
c. á-kwên-ìt èòŋ ósì
1SG-laugh-PFV 1SG/NOM 2PL:INCL/ABS
```

Pronouns serving as objects can occur after the verb, as with $k\acute{e}s\grave{i}$ in (9a) or after the subject, as with $n\acute{e}s\grave{i}$ and $\acute{o}s\grave{i}$ in (9b) and (9c), respectively. Taking (9c) for further illustration, the first person singular, $\grave{e}\grave{o}\eta$, functions as the subject of the clause and has nominative case while the second person plural $\acute{o}s\grave{i}$ is the object (marked absolute). Object pronouns may also occur pre-verbally, for example when the object is topicalised.

Object pronouns are unmarked in the two positions, i.e. after the verb (as illustrated above) and before the verb, as with $\mathbf{\hat{o}n\hat{I}}$ in (10). Fronting of the object is structurally a marked position but it takes the unmarked absolute case. The inflectional agreement markers in both cases relate to the subject (whether overtly marked or not) and not the object pronouns.

In summary, independent personal pronouns are mostly used for clarification and emphasis. They are generally omitted, and their meaning recovered from inflectional personal markers attached to the verb. When overtly present, they follow the verb in a finite construction. On the other hand, object pronouns are necessary because the object does not have an inflectional counterpart in the verb.

3.0 Pronominal Alignment

Ateso has a special way of treating the two core elements, i.e. the object and the subject in a clause. The relationship between the two core elements is known as case marking. Pronominal alignment concerns whether a pronominal intransitive subject is treated the same as the pronominal transitive subject, or the same as the transitive object, whether all three are distinct, or whether all three are the same (Dixon 1994).

Since Ateso pronouns are morphologically complex, constructions can exist with both pronominal subject and object. There are two possibilities with regard to Ateso's pronominal alignment. The language exhibits marked-nominative alignment on (independent) pronouns and hierarchical order. The alignment systems are organised around the syntactic units S, A and O, labels adopted from Dixon (1994). The S marks the argument of an intransitive clause; A denotes the most agentive argument of a transitive construction while O is the other core (typically most patientive) argument in a transitive clause.

3.1 Marked-Nominative Alignment

Ateso is a marked-nominative language with VS/VO word order. The pronominal agreement is such that the inflectional pronoun prefixed to the verb agrees with the S of the intransitive and the A of the transitive clause. Schroeder (2015: 65) observes that this kind of marking is typical of nominative-accusative systems but is also found in the marked-nominative systems of Toposa. This can be illustrated in example (11); (11a) is an intransitive clause while (11b) and (11c) are transitive clauses.

11. a. é-món-í è-kìljòkìt

3SG-cry-IPFV M/SG-man/NOM

'the man is crying'

b. é-sùkùnà è-kìljòkìt à-bérờ

3SG-push:PAST M/SG-man/NOM F/SG-woman/ABS

'the man pushed the woman'

c. é-sùkùnà à-bèrò è-kíljòkít 3SG-push:PAST F/SG-woman/NOM M/SG-man/ABS

'the woman pushed the man'

The 3SG inflectional person pronoun on the verb refers to the S of the intransitive clause in (11a). The 3PL refers to the A of the transitive clause in (11b). The 'man' in the S of the intransitive clause has the tone marking LLLL which is the same as the tone of 'man' in the A position of the transitive clause. In (11c) 'man' occurs in the object position, and has the tone marking LHLH. The different tone marking on 'man' in (11) gives an impression of a nominative-accusative system. But 'man' in isolation will be è-kíljòkít with the LHLH tone marking; the same as that of 'man' in the object position.

Since 'man' in the object position has the same tone as the tone of 'man' in isolation, it can be concluded that the object position is the unmarked position. On the other hand, the S of the intransitive clause and the A of the transitive clause are marked, an indication that Ateso has a marked nominative system. Further evidence that Ateso is a marked nominative and not an ergative-absolutive or a nominative-accusative language is provided by Barasa (2017). But as illustrated next, complications occur whenever the object is occupied by a first person singular or plural pronoun.

3.2 The Hierarchical System of Person-Marking

Ateso has a hierarchical system of person marking: where, the treatment of the A and P is dependent on their relative ranking on the referential hierarchies. Whenever a third person singular or plural fills the subject position (i.e. occupies the A-role) and the object position is occupied by a first or second person singular, morphological complications occur. In such constructions, there is no pronominal subject prefix for the third person. Instead, only a prefix referring to the object occurs. Consider the following

examples where the ki- and the ka- are object prefix rather as they do not refer to the 3SG in (12a) or the 'boy' in (12b):

```
12. a. kí-pòs-ì éòŋ
3>1-beat-IPFV 1SG/ABS
'(s)he beat me'
b. ká-ìn-àkìn-ìt è-sàpàt éòŋ
3>1-give-DAT-PFV M-boy/NOM 1SG/ABS
'The boy gave it to me'
```

The same system (which may be referred to as a prominence hierarchy) is found in Eastern Nilotic languages like Toposa, Turkana or the more distantly related Maa language. In this system, the participant higher on the hierarchy is marked on the verb, whether S or O. In both examples in (12) above, the 1SG and the third person are involved. The 1SG fills the person index slot based on the relative position of the two arguments on both the person hierarchy 1/2 > 3 and the grammatical roles hierarchy A > P.

4.0 Conclusion

In this presentation emphasis is laid on the form and function of pronouns found in Ateso. The different sections on pronouns examine both independent personal pronouns and bound pronouns. Independent pronouns are free standing forms which occur as subjects or objects. They have semantic distinctions of person and number. Bound inflectional personal pronouns occur more frequently and are prefixed to the verb stem for person and number marking. Mostly, they carry the syntactic values of the subjects, though sometimes they relate to objects.

Principally, the Ateso verbs are divided into two morphological classes, class 1 and class 2. For class 1 verbs, the first-person singular is marked by **a-** while **e-** marks the second and third persons. The prefix **e-** marks the first person singular while **i-** marks the second and third persons as a result of the fusion with the high front vowel of the class 2 verb. This is similar to the class 2 inflectional pronouns in Toposa and Turkana. The similarity of the shapes of class 2 inflectional pronouns in Ateso to that of Toposa and Turkana suggest that at one time there was a similar set in class

1 markers for languages in the Eastern-Nilotic group. Minor changes are observed in Ateso, where for instance, the 1PL in class 1 is ka- as opposed to the e-/ ε - that represents the personal inflectional pronouns in Toposa and Turkana. Since the internal reconstruction and historical comparison of this marker is beyond the scope of this paper, further research on other Nilotic languages should help clarify whether this is an innovation or an attested form that applies to some languages in the Eastern-Nilotic group.

References

- Barasa, David. 2015. Inflectional Forms of Tense and Aspect in Ateso. *The University of Nairobi Journal of Language and Linguistics*, 4: 82-102.
- ——. 2017. "Ateso Grammar: A Descriptive Account of an Eastern Nilotic Language." Ph.D. dissertation. University of Cape Town, 2017.
- ——. 2018. "ATR Vowel Harmony in Ateso". *Stellenbosch Papers in Linguistics Plus*, 54: 61-69.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, MA: MIT University Press. Dimmendaal, Gerrit. 1983. *The Turkana Language*. Foris Publications. Dordrecht, NL.
- ——. 1991. "The Geometry of Verb Paradigms in Teso-Turkana." In F. Plank (ed.), *Paradigms: The Economy of Inflection*, pp. 275-306.
- Dixon, R.M.W. 1994. Ergativity. Cambridge: Cambridge University Press.
- Greenberg, Joseph. 1963. Languages of Africa. The Hague: Mouton.
- Karp, Ivan. 1996. "Iteso." Encyclopedia of World Cultures. Available at https://www.encyclopedia.com/humanities/encyclopedias-almanacs-transcripts-and-maps/iteso.
- Koehler, Oswin. 1955. Geschichte der Enforschung der Nilotischen Sprachen. Berlin, DE: Reimer Verlag.
- Koenig, Christa. 2016. "Marked Nominative in Africa." Studies in Language. International Journal sponsored by the Foundation "Foundations of Language", 30(4): 655-732.
- Lewis, M. Paul, Gary F. Simons and Charles D. Fenning (eds.). 2014. *Ethnologue: Languages of the World (17th ed)*. Dallas, TX: SIL International.
- Republic of Kenya. 2009. *Kenya 2009 Population and Housing Census Highlights*. Nairobi, Kenya. Kenya National Bureau of Statistics.
- Schroeder, Helga. 2008. "Word Order in Toposa: An Aspect of Multiple Feature-Checking." Arlington, TX: SIL International.
- 2009. "Incorporated Subject Pronouns in Word Order Typology." In Brenzinger M. and A. M. Fehn (eds.) Proceedings of the 6th World Congress of African Linguistics, pp. 201-213. Köln, DE.
- ——. 2015. "Alignment Systems and Passive-Antipassive Distribution in Nilotic Languages." *The University of Nairobi Journal of Language and Linguistics*. 4:42-48.