



Distribution of Anaphoric Elements in Lutsotso

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Abstract

In Bantu languages, the distribution of anaphoric elements can be influenced by several factors, including grammatical, syntactic, and pragmatic considerations. In addition to addressing issues surrounding the anaphoric event, the study of anaphora involves creating, maintaining, and altering subject continuity, which has an impact on discourse coherence. This paper looks at the strategies used by Lutsotso speakers to disambiguate anaphoric references. The study used data elicited from Lutsotso native speakers and texts written in Lutsotso. Given that the sentence is the linguistic unit of analysis for this study, the researcher purposively selected only sentences with anaphoric elements. The data was analyzed using the content analysis approach, applying Halliday and Matthiessen's Systemic Functional Grammar (SFG) theory. In addition to the SFG theory, Bauer's (2001) and Haspelmath's (2002) theory of inflectional morphology was employed to analyse the morphemics of the Lutsotso anaphor. The study reveals that anaphoric elements must agree with their antecedents in qualities such as noun class and gender. The reciprocal marker (REFL) and the reflexive marker (RECP) are governed by verb transitivity, which means they can only occur in verbs that allow an object within their verb phrase. The object can appear as either the object marker (OM) or a free nominal form, but the two cannot coexist. Generally, context and pragmatics are important factors in shaping the distribution of anaphoric elements in Lutsotso discourse. These findings will advance our understanding of linguistic structures, pragmatic principles, cross-linguistic diversity, and cognitive processes in language use.

Introduction

The study of anaphoric relations, which involve the reference of words or phrases to items in a conversation, is a crucial area of linguistics, as it aids our understanding of how languages convey information (Crystal, 2008). This linguistic phenomenon plays a vital role in maintaining coherence and comprehension in both text and conversation. This paper concentrates on the factors that influence the distribution of anaphoric elements in Lutsotso. Lutsotso is a language within the Oluluhya macro-language, belonging to the Bantu family of the Niger-Congo languages, Masaba (E.32) (Eberhard et al., 2021). It is classified by Eberhard et al. (2020) as pertaining to the HADGA group, sub-group 30, located in Zone E of the Bantu languages. According to Carlson (2003), anaphora in natural language refers to referentially dependent utterances that generate meaning by



recognising another expression and assigning semantic value to it. Fischer (2015) regards anaphora as a term commonly used to describe utterances understood by virtue of anything mentioned earlier in the discourse, known as the 'antecedent.' The distribution of anaphoric elements in Bantu languages can be influenced by various factors, including grammatical, syntactic, and pragmatic considerations (Odera, Barasa & Alati, 2021). Furthermore, this paper explores various strategies employed by the Lutsotso language to disambiguate anaphoric references. When more than one possible antecedent exists, anaphoric ambiguity arises. To resolve these uncertainties, Lutsotso speakers utilise pragmatic cues such as discourse prominence and topicality alongside syntactic indicators like proximity and agreement. To ensure clear communication, disambiguation is essential (Arnold, 1998). Such strategies include reiterating the antecedent, employing specific descriptive terms, and relying on context to clarify the intended referent. These strategies are crucial in both spoken and written discourse to prevent confusion (Gundel, Hedberg & Zacharski, 1993).

Methodology

The study utilised data obtained from native Lutsotso speakers as well as texts written in Lutsotso. The identification of the consultants, who are native speakers of Lutsotso, relied on purposive sampling procedures. Through this method, native speakers of Lutsotso and language domains with the requisite linguistic information were selected. The criteria for selecting the informants were as follows: they had to be native Lutsotso speakers who had spoken the language for the majority of their lives and had lived among the Batsotso. The study opted for native speakers with high levels of language competence, assuming that elderly native speakers have consistently used the language, thus achieving substantial competence in their first language (L1) (Barasa 2017). Adult native speakers aged 35 years and older were included in this sample, as participants aged 35 and above were considered to be the optimal reflection of maturity. Data was collected through informal interviews, observation, and a mixed method of data elicitation that combined the researcher's intuition as a native speaker with insights from Lutsotso consultants. The researcher sought native Lutsotso speakers who had completed their schooling at form four and could translate English sentences into Lutsotso during these informal interviews. This criterion was established to ensure that participants possessed adequate proficiency in both English and Lutsotso for accurate translation. However, this does not imply that individuals beyond this educational level cannot translate Lutsotso forms; instead, it was a method of standardising linguistic competence among respondents.

The SFG theory aids in identifying anaphoric items by considering their functions within the discourse. Anaphors, such as pronouns and other referring expressions, can be classified based on their roles in maintaining text cohesiveness. By referring back to previously mentioned entities, SFG examines how these anaphoric elements contribute to the flow and coherence of the discourse. Furthermore, the theory of inflectional morphology is utilised in the morphemic analysis of the Lutsotso anaphors. This theory focuses on understanding how grammatical categories are expressed through changes in the forms of words, including suffixes, prefixes, infixes, or modifications within the stem.

Results and Discussion

Agreement

Bantu languages often exhibit extensive agreement marking on nouns, verbs, and pronouns. Anaphoric elements must agree with their antecedents in features such as noun class and gender (Odera & Barasa, 2021). According to Marten (2000), anaphoric agreement occurs when the NP and verb agree in a manner comparable to a pronoun agreeing with a previous NP but not as a reflex of a



structural relation, such as a subject-verb relation. The following data shows how the anaphor and the antecedent agree:

- (1). Lipu:si li-i-xɔmβa-nga (elieene)
 Cat SM-RECP-lick-PROG itself
 'cat is self licking'
 'The cat is licking itself'

- (2). ɔ-la-i-singa ɔmueene
 3SG-FUT-RECP-bath yourself
 'You will bath yourself'

In example 1, the noun *lipu:si* 'cat' must agree with the SM *li-* attached to the verb next to the RECP marker *-i-*. The prefix on the reflexive pronoun depends on the noun class of the subject. Accordingly, *eli-* is attached to the reflexive pronoun *eene* (which has been added for emphasis) and agrees with the RECP marker *i* (which is also the OM) that likewise agrees with the SM *li-* and the noun *lipu:si*. The same principle applies to example 3, where the prefixes attached to *eene*, namely *om-*, agree with the subject *o-* 'you'

- (3). ɔβu-nji βwa aβa-xana βa-shuka ama-swi kaβwe. Anna tawe.
 SM-most of CL2-girls 3PL-plait CL6-hair their. Anna does.not.
 'Most girls want to plait their hair. Anna does not'

Example 3 illustrates agreement in discourse anaphora. The possessive pronoun *kaβwe* 'their' is preceded by the term *aβa-xana*, which means 'girls'. The pronoun *kaβwe* 'their' is morphosyntactically aligned with the noun class *wi* 'hair' (class 6). The possessive pronoun *kaβwe* 'their' shares noun class agreement with *wi* 'hair', demonstrating how Lutsotso employs agreement to connect the pronoun to its antecedent within the same noun class. This agreement aids in maintaining coherence in discourse.

Syntactic Binding

Although this study employs a pragmatic approach, Chomsky's (1993) binding theory is essential for understanding the distribution of anaphoric elements in Lutsotso. According to this theory, anaphors must be bound within their governing categories. In Lutsotso, this implies that reflexive pronouns must have antecedents within the same clause, while pronouns must be free within their governing categories

- (4). ɔmu-a:na ja-βɔla na-je mu mu-liangɔ
 CL1-child 3SG spoke with-3SG at CL18-door
 'The child spoke with him/her at the door.'

In this sentence, 'ɔmua:na' (the child) serves as the antecedent, while 'naje' (him/her) functions as the anaphoric element. According to Binding Theory, the pronoun 'naje' must be free within its governing category, which is fulfilled as it refers to another person distinct from the child, while adhering to binding constraints.



- (5). Aβa-ana βa-i-remile
 CL2-Children 3PL-REFL-cut
 'The children have cut themselves'

Aβa-ana 'the children' serves as the antecedent for the reflexive pronoun. The verb phrase *βa-i-remile* 'have cut themselves' consists of the verb and the reflexive pronoun. The reflexive pronoun *i* in *βa-i-remile* must be bound within its governing category, which in this context is the clause itself. The antecedent of *i* is *Aβa-ana* 'the children', found within the same clause and governing the reflexive pronoun. Chomsky's Binding Theory, specifically Principle A, elucidates why the reflexive pronoun *i* in *βa-i-remile* must be interpreted as referring to *Aβa-ana* 'the children'. The reflexive pronoun must have an antecedent within the same clause to maintain grammatical correctness, as clearly demonstrated in this Lutsotso sentence. Therefore, the sentence adheres to Chomsky's syntactic principles regarding the proper binding of reflexive pronouns within their governing domains.

Clause Structure

The structure of clauses in Lutsotso also affects the placement of anaphoric elements. In subordinate clauses, anaphors can sometimes refer to antecedents in the main clause, provided there is no ambiguity. This cross-clausal reference is more limited for reflexives than for non-reflexive pronouns, reflecting their stricter syntactic binding requirements (Zeller, 2015).

- (6). ɔmu-xasi ja-lɔma lilɔβa liβi, nixwɔ ɔmu-saxulu ja-mulexa
 CL1-woman 3SG-talked talk bad, so CL1-man 3SG-left
 'The woman said a bad word, so the man left her.'

In this complex sentence, *ɔmuxasi* 'the woman' and *ɔmusaxulu* (the man) are in different clauses. The pronoun *jamulexa* 'left her' refers back to *ɔmuxasi* across clauses. This cross-clausal reference is possible because the context makes it clear and avoids ambiguity.

Transitivity

The type of verb also influences the distribution of anaphoric elements in Lutsotso. Both the REFL and the RECP are licensed by verb transitivity, meaning that they only occur in verbs that permit an object within their VP. The object may present as the OM or as a free nominal form; however, the OM and the nominal form cannot cooccur.

- (7). βa-xup-a Mama
 SM-beat-FV Mother
 'They beat mother'
- (8). a. βa-xup-an-a
 SM-beat-RECP-FV
 'They beat each other'
- b. βa-xup-an-a mama
 SM-beat-RECP-FV mother
 'They beat each other mother'



The transitive verb *xupa* 'beat' (7) requires an object, which in this instance is represented by *mama* 'mother'. Consequently, as illustrated in (8a), the verb can take a RECP since the object is permitted within the VP. However, both the object and the RECP cannot coexist in the same structure, leading to the ungrammaticality of (8b).

The REFL is licensed by verb transitivity. Transitivity refers to the relationship between a verb and its direct object, whether they are distinct or merged. The prevailing view is that if a verb can accept an overt object or an OM, it will also accommodate the REFL; in this case, there cannot be an OM on the verb in question (Sikuku, 2011). Consequently, both the OM and the REFL are in complementary distribution.

- (9). a. ja-janz-a Tara
 SM-love-FV Tara
 'He/she loves Tara'
- b. ja-mu-janz-a
 SM-REFL-love-FV
 'He/she loves him/her'
- c. ja-e-i-anz-a
 SM-TNS-REFL-love-FV
 'He/she loves himself/herself'

The verb is transitive in examples (9 a, b, and c) above, as it can take either an overt object or an OM. A complementary distribution between OM and REFL is seen in (9b), where the OM also serves as the RECP. This also makes the addition of the REFL possible, as example (9c) illustrates.

Context

Context and pragmatics play essential roles in determining the distribution of anaphoric items in discourse (Levinson, 1987). The distribution of anaphoric elements may be influenced by the surrounding context and pragmatic considerations, which encompass the speaker's communicative intents as well as the shared information among conversation participants. The broader discourse context significantly impacts the distribution of anaphoric elements in Lutsotso. Pronouns and other anaphors depend on previously established referents in the discourse. The salience of these referents, determined by factors such as topicality and focus, influences how easily anaphoric elements can refer back to them (Givón, 1983). Context and pragmatics can affect the distribution of anaphoric elements in the following ways:

Prominence

The concept of prominence, as proposed for grammar (Himmelman & Primus, 2015), plays a crucial role in organising information in speech. The notion of prominence has been loosely employed in the literature and frequently substituted for concepts such as salience, accessibility, activation, familiarity, or centring. The selection of anaphoric elements depends on the accessibility and salience of the referent within the discourse (Himmelman & Primus, 2015). An entity that is more prominent or recently mentioned is often more accessible and likely to be referred to using a pronoun or another anaphoric expression. Example 10 illustrates:



- (10). Maheelo jalinfi netsin'ombe tsinjinfi. Jali nijachuma.
Maheelo he/she had cows many. He/she had reared them.
'Maheelo had many cows. He had reared them.'

In example 10 above, '*ja*' refers to 'he/she' and denotes the pronoun that refers back to the most recently mentioned and salient antecedent, *Maheelo*.

Given vs. New Information

Another important consideration is the relationship between various anaphoric expressions and the types of referents they can retrieve (Bonifazi et al., 2016). Anaphoric elements are often employed to track given (previously mentioned) and new (unmentioned) information in discourse. In early pragmatic theories, anaphoric pronouns were thought to convey "given" information, while the subsequent predication contained the sentence's 'new' information. When a full noun phrase or name is used instead of a pronoun, it typically introduces new information into the conversation. Consequently, the form of the referential statement is related to its status as either given or new (Bonifazi et al., 2016). In some instances, speakers may opt to repeat a noun phrase to emphasise or introduce new information, whereas in other cases, they may choose a pronoun to refer back to familiar or given information. Example 11 illustrates this in the Lutsotso language

- (11). Ne omuleli owa Simbi jeenda ewaβwe jalangwa mβu Wandayi.
Jalimurechelefu xandi omuhulili wa malakɔ.
Xo Wandayi fijeekomβa mβu omuana ojo afwe tawe.
'And nurse that Simbi he/she brought their home he/she was called Wandayi.

He/she was careful and a listener to instructions. So Wandayi did not wish that child that die not.

And the nurse that Simbi brought from their home was called Wandayi.

He/she was careful and a good listener to instructions. So Wandayi did not wish that that child dies.'

In example 11 above, the initial reference to 'Wandayi' provides the 'given' information, while the pronoun *ja* 'he/she' used later signifies that the speaker is referring to the previously mentioned item and simultaneously introduces new information about it. The subsequent reference to 'Wandayi' adds further new information to the discourse.

Shared Knowledge

Anaphoric reference often relies on shared knowledge between the participants in a conversation (Cotte 2011). Speakers presume that their audience possesses common ground and can utilise this shared knowledge to interpret anaphoric expressions accurately. Interpretability may therefore be the most crucial semantic condition that a document must fulfil. The semantic interactions linking the elements of a text may be fundamentally based on shared knowledge, implication, or inference, as the study of pragmatics has shown (Cotte, 2011). Example 12 illustrates

- (12). Olwa Lushinga jachelesia tsing'ombe jeemβa finga olwa
jeemβanga βuli lwosi, ne fihazulilaxwɔ Lung'oli nakalusiamwɔ tawe.
'When Lushinga returned the cows, he sang as he used to sing
always but he did not hear Lung'oli reply'



In example (12) above, how Lushinga sang upon returning from grazing the cattle relies on shared knowledge between the speaker and the listener about the specific song that was sung.

Speakers strategically use anaphoric expressions to convey their intended meaning and maintain communication coherence. The dynamic interplay of context, pragmatics, and shared knowledge, rather than just grammatical rules, heavily influences the distribution of anaphoric elements in discourse. These factors interact in complex ways in the Lutsotso language, impacting the distribution and use of anaphoric elements within sentences.

Focus and Topic

In Lutsotso, the topicality and focus of a sentence or discourse segment dictate the use of anaphoric elements. Elements that are in focus or have been topicalized are more likely to be referred to by pronouns or other anaphoric means. This pragmatic consideration ensures coherence and helps track referents throughout the discourse (Schwarzschild, 1999).

- (13). $\mathfrak{O}mu$ -a:na ja-kasana mana na-chenda
 CL1-child 3SG-persist then 3SG-walked
 ‘The baby persisted and then walked’

In example 13, $\mathfrak{O}mua:na$ ‘the child’ is the topic of the sentence. The pronoun ja-(kasana) (he/she walked) refers back to $\mathfrak{O}mua:na$. Because $\mathfrak{O}mua:na$ ‘the child’ is the focus, the anaphoric element clearly links back to this subject.

Anaphoric Ambiguity

Anaphoric ambiguity arises when a pronoun or other referring phrase (an anaphor) refers to more than one possible antecedent within a discourse, creating uncertainty about which entity is being referred to (Hyman, 2003). This type of ambiguity can pose significant challenges in both natural language processing and human language comprehension. Bantu languages, such as Lutsotso, are characterised by their complex noun class systems and agreement processes (Odera and Osore, 2023). In these languages, nouns are categorised into several classes, each marked by a specific prefix, and these classes influence agreement patterns with verbs, adjectives, and pronouns (Marten, 2000). This intricate mechanism can both assist and complicate the resolution of anaphoric ambiguity.

Resolving Ambiguity

Anaphoric ambiguity arises when multiple potential antecedents are present. Lutsotso speakers resolve these ambiguities using syntactic cues, such as proximity and agreement, and pragmatic cues, like topicality and discourse prominence. Disambiguation is essential for maintaining clarity in communication (Arnold, 1998).

Strategies for Resolving Anaphoric Ambiguities

Lutsotso employs various strategies to disambiguate anaphoric references. These strategies include reiterating the antecedent, using specific descriptive terms, and relying on context to clarify the intended referent. Such strategies are essential in both spoken and written discourse to avoid confusion (Gundel, Hedberg, & Zacharski, 1993).

To resolve anaphoric ambiguities and achieve disambiguation in Bantu languages such as Lutsotso, a variety of strategies can be employed.



Use of Agreement Markers

Bantu languages, including Lutsotso, often employ agreement markers that correspond to the noun class of the antecedent (Odera & Osore, 2023). This facilitates the identification of the referent of a pronoun or anaphoric expression (Creissels, 2009).

- (14). ɔmu-a:na jali ejɔ, je ja-xɔla emi-rimɔ
 CL1-child was there, he/she 3SG-did CL21-work
 ‘The child was there, he/she did the work.’

In the above example, *ɔmua:na* is the antecedent (child, class 1) and the pronoun is *je* (he/she). In this example, the pronoun *je* agrees with *ɔmua:na* in class 1, helping to resolve the ambiguity.

Contextual Clues

It is crucial to utilize the discourse's context to infer the antecedent of an anaphoric expression. This involves understanding the roles of different participants in the discourse.

- (15). Anna nende Musa βa-li mu-mu-kunda. Anna jaja tsi-fwa.
 Anna nende Musa 3PL-were in-CL1-garden. Anna picked CL16-vegetables.
 ‘Anna and Musa were in the garden. Anna picked vegetables’

Musa ja-ka ɔmu-kunda.
Musa 3SG-weeded CL1-garden
‘Musa weeded the garden.’

Ja-βɔɔla kalaha.
3SG-spoke softly.
‘He/she spoke softly.’

Here, the context suggests that *Ja-βɔɔla kalaha* ‘spoke’ likely refers to Musa since the previous sentence ends with his action.

Topic Continuity

Maintaining topic continuity aids in tracking the referent of anaphors. When the topic of discourse remains consistent, an anaphor is generally interpreted as referring to that ongoing topic. Topic continuity is a crucial strategy for ensuring coherence and resolving anaphoric ambiguities in discourse. This strategy guarantees that the subject or topic of discourse remains clear and identifiable throughout a text or conversation. In Bantu languages such as Lutsotso, the maintenance of topic continuity is supported by various linguistic devices including noun class markers, subject markers, and the syntactic structure of sentences (Nurse, Derek & Philippson, Gérard, 2003).

Noun Class Markers and Subject Markers

In Bantu languages, nouns are organised into classes, each with specific markers. These markers remain consistent for a noun throughout a discourse, aiding in the maintenance of topic continuity. Verbs in Bantu languages frequently agree with the subject regarding noun class (Marten 2021). This agreement assists in tracking the subject across sentences, ensuring continuity.



- (16). ɔmu-satsa ja-lima efi-kuri. Ja-tsirira oxu-xola emi-rimo
 CL1-man 3SG-till CL7-field. 3SG-continue to-workCL4-work
 ‘The man tilled the field. He continued working’

The subject marker *je-* in the follow-up sentence agrees with *omu-satsa* ‘the man’, maintaining the topic continuity. The listener or reader understands that *ja* refers to the man mentioned earlier.

- (17). ɔmu-a:na ja-ɲwa ama-βele. Neβutswa ja-sikala ni-je-xale
 CL1-child 3SG-drank CL6-milk. But 3SG-remain 3SG-TNS-seat
 ‘The child drank milk. But he/she remained seated.’

The subject marker *ja-* in the follow-up sentence agrees with *omua:na* (the child), maintaining the topic continuity. The use of *neβutswa* ‘but’ introduces a contrast, yet the subject remains clear due to the consistent use of markers.

Thematic Roles

Consistent use of thematic roles (such as agent, patient, etc.) by participants in the discourse helps maintain topic continuity. When the same participant maintains the same role, it is easier for listeners or readers to follow the discourse.

- (18). a. ɔmu-xasi ja-rema ɔmu-sa:la.
 CL1-woman 3SG-cut CL1-tree
 ‘The woman cut down the tree.’
 b. ɔmu-xasi ja-xɔla emi-rimɔ mu mu-kunda kwe
 CL1-woman SG-did CL4-work in CL18-garden her
 ‘The woman worked on her farm’

In both sentences, *ɔmu-xasi* ‘the woman’ consistently functions as the agent (the one performing the action). This consistency in thematic roles aids in maintaining topic continuity, clarifying that the man is the central participant in both actions.

- (19). ɔmu-a:na ja-soma efi-taβu. ɔmu-a:na ja ja-nza efi-ali mu-ʒitaβu
 CL1-child 3SG-read CL7-book. CL1-childSG 3SG-love what-was CL18-book
 ‘The child read the book. The child loved what was in the book.’

In both sentences, *ɔmua:na* (the child) is consistently the agent. This consistent thematic role helps the listener or reader track the discourse easily, as it is clear that the child is the primary participant performing the actions in both sentences. Further, repeating the noun, like in the example below, ensures topic continuity.

- (20). ɔmu-limi ja-raka tsi-fwa. ɔmu-limi ja-linda i-fula
 CL1-farmer 3SG-plant CL10-vegetables. CL1-farmer 3SG-waited CL9-rain
 ‘The farmer planted vegetables. The farmer waited for the rain.’



Repeating the noun *ɔmulimi* 'the farmer' ensures that the topic remains clear. While this may be viewed as explicit repetition, it also helps to maintain topic continuity by eliminating any ambiguity regarding who is performing the action. Conversely, pronouns are often employed instead of repeated nouns to prevent redundancy. However, their usage depends significantly on the established topic for clear reference.

- (21). *ɔmu-limi ja-raka tsi-fwa, je ja-linda i-fula.*
CL1-farmer 3SG-plant CL10-vegetables 3SG 3SG/PST-wait CL9-rain
'The farmer planted vegetables, he/she waited for the rain.'

The pronoun *je* is understood to refer to *ɔmulimi* (the farmer) due to topic continuity.

Other Syntactic Strategies for Disambiguation

Lutsotso employs various strategies to disambiguate anaphoric references. These strategies include reiterating the antecedent, using specific descriptive terms, and relying on the context to clarify the intended referent. Such methods are essential in both spoken and written discourse to avoid confusion (Gundel, Hedberg & Zacharski, 1993).

Explicit Repetition

Repeating the antecedent noun instead of using a pronoun can help avoid ambiguity, especially in complex sentences.

Example 22 a and b below illustrates the ambiguous sentence and disambiguated sentences respectively.

- (22). a. *ɔmu-xana ja-laka ɔmu-ana, je ja-li na mandazi.*
CL1-girl 3SG-promise CL1-child, 3SG 3SG-was with mandazi
'The girl promised the child, he/she had mandazi.'
- b. *ɔmu-xana ja-laka ɔmu-a:na, ɔmu-xana jali na mandazi*
CL1-girl 3SG-promise CL1-child, CL1-girl 3SG-was with mandazi
'The girl showed the child, the girl had manda:zi.'

In the Example (22 a) is the ambiguous sentence, the pronoun *je* could refer to either *ɔmu-xana* 'the girl' or *ɔmua:na* 'the child'. By repeating the antecedent *ɔmu-xana* in the disambiguated sentence in (22 b), it becomes clear that it is the man who had bread

- (23). a. *Anna nende Musa βa-li mu-jikɔni, je ja-tɔla ama-tuma*
Anna nende Musa 3SG-were CL18-kitchen, 3SG 3SG-pick CL6-maize
'Anna and Musa were in the kitchen, he/she picked the maize.'



- b. Anna nende Musa bali mu-jikoni. Musa ja-tɔla ama-tuma.
 Anna nende Musa 3SG-were CL18-kitchen, Musa 3SG-pick CL6-maize
 'Anna and Musa were in the kitchen; Musa picked the maize.'

Example (23 a) presents an ambiguous sentence; "je" could refer to either Anna or Musa. By explicitly repeating Musa in example (23 b), the disambiguated sentence clarifies that Musa is the one who picked the maize. This strategy entails repeating the antecedent noun rather than using a pronoun. It eliminates ambiguity by directly specifying the referent, thus removing any potential confusion. The primary advantage of this strategy is that it offers straightforward and explicit reference, reducing the cognitive load on the listener or reader to infer the referent. Conversely, it might make the sentence seem repetitious or less natural, particularly in longer texts.

Reordering Sentences

Changing the order of sentences can clarify the referent of pronouns by positioning the antecedent closer to the anaphor

- (24). a. ɔmu-sjani ja-laka ɔmu-a:na, je jali na mandazi
 CL1-boy 3SG-promise CL1-child, 3SG/he 3SG-had with mandazi
 'The boy promised the child, he/she had mandazi'
- b. ɔmu-sjani ja-li na mandazi. Ja-laka ɔmu-a:na.
 CL1-boy 3SG-was with mandazi. 3SG-promise CL1-child.
 'The boy had mandazi. He promised the child.'

In the ambiguous sentence, for example (24 a), "je" could refer to either "ɔmu-sjani", meaning 'the boy' or "ɔmua:na", meaning 'the child'. By reordering the sentences so that the clause about having *mandazi* comes first, followed by the action of showing the child, it becomes clearer that the boy is the one who had the *mandazi*.

- (25). a. ɔmu-a:na ja-xupa ɔmu-pira. ja-lira
 CL1-child 3SG-hit CL1-1. 3SG-cried
 'The child hit the ball. he/she cried.'
- b. ɔmu-a:na ja-lira. Ja-xupa ɔmu-pira.
 CL1-child 3SG-cry. 3SG-hit CL1-ball.
 'The child cried. He/she hit the ball.'

Example (25a) presents an ambiguous sentence where "ja" could refer to either the child or another implied participant. By reordering the sentences as shown in (25b), it becomes evident that the child cried first and then hit the ball, thereby resolving any ambiguity regarding who cried. This strategy involves altering the order of clauses or sentences to place the antecedent nearer to the anaphor. It facilitates the inference of the correct referent based on the immediate context. Furthermore, it preserves the natural flow of language while clarifying the referent, making the sentence easier to follow; however, it may not always be feasible or natural to reorder sentences without affecting the intended meaning or emphasis.



Use of Demonstratives

Employing demonstrative pronouns can help specify the referent by pointing directly to the antecedent.

- (26). a. ɔmu-sjani ja-laka ɔmu-a:na. Ja-li na mandazi
 CL1-boy 3SG-promise CL1-child. 3SG-had and mandazi
 ‘The boy promised the child. he/she had mandazi’

In example (26 a) it is unclear whether *ja* ‘he/she’ refers to the ‘boy’ *ɔmu-sjani* or the child *ɔmu-a:na*.

- b. ɔmu-sjani ja-laka ɔmu-a:na, ɔmu-sjani ɔɔ ja-li na mandazi
 3SG-boy 3SG-promise CL1-child, CL1-boy that 3SG-had mandazi
 ‘The boy showed the child, that boy had mandazi.’

By adding *ɔɔ* ‘that’, in example (26 b) it becomes clear that the ‘boy’ *ɔmu-sjani* is the one who had the *mandazi*, not the child. This use of a demonstrative pronoun effectively eliminates the ambiguity.

Conclusion

The study concludes that a combination of grammatical, syntactic, and pragmatic factors influences the distribution of anaphoric elements in Lutsotso. Understanding these factors provides insights into the linguistic structure and application patterns of Lutsotso, contributing to broader theories of anaphora in language. Further, by implementing disambiguation strategies, speakers and writers of Lutsotso can effectively manage anaphoric ambiguities and ensure clear communication. This paper explores the factors that influence the distribution of anaphoric elements in Lutsotso and strategies used to disambiguate anaphoric references.

References

- Arnold, J. E. (1998). *Reference form and discourse patterns* (Doctoral dissertation). University of California, Berkeley.
- Barasa, D. (2017). *Ateso grammar: A descriptive account of an Eastern Nilotic language* (Doctoral dissertation). University of Cape Town. <http://hdl.handle.net/11427/25182>
- Bauer, L. (2001). *Morphological productivity*. Cambridge University Press.
- Bonifazi, A. (2016). Particles as cues to structuring in South Slavic and early Greek epic. In C. Pagán Cánovas & M. Antović (Eds.), *Oral poetics and cognitive science* (pp. 125-147). De Gruyter. <https://doi.org/10.1515/9783110348538-008>
- Bresnan, J., & Mchombo, S. A. (1990). The lexical integrity principle: Evidence from Bantu. *Natural Language & Linguistic Theory*, 8(2), 209-244. <https://doi.org/10.1007/BF00992782>
- Carlson, G. (2003). Anaphora. In *Encyclopedia of Cognitive Science*. Nature Publishing.
- Chomsky, N. (1993). *Lectures on government and binding: The Pisa lectures*. Foris Publications. <https://doi.org/10.1515/9783110884166>
- Comrie, B. (1989). *Language universals and linguistic typology: Syntax and morphology* (2nd ed.). University of Chicago Press.
- Cotte, P. (2011). On anaphora. *Études Anglaises*, 64, 357-368. <https://doi.org/10.3917/etan.643.0357>
- Creissels, D. (2009). Agreement in Bantu languages: A challenge for the typological perspective. In G. Authier, M. Gardano, & L. Noguier-Voisin (Eds.), *Morphology and language typology* (pp. 151-176). Oxford University Press. <https://doi.org/10.1093/acprof/9780199238380.003.0010>



- Crystal, D. (2008). *A dictionary of linguistics and phonetics* (6th ed.). Blackwell. <https://doi.org/10.1002/9781444302776>
- Demuth, K., & Harford, C. (1999). Verb raising and subject inversion in Bantu relatives. *Journal of African Languages and Linguistics*, 20(1), 41-61. <https://doi.org/10.1515/jall.1999.20.1.41>
- Fischer, S. (2015). Pronominal anaphora. In T. Kiss & A. Alexiadou (Eds.), *Syntax – Theory and analysis* (Vol. 1, pp. 446-477). De Gruyter Mouton. <https://doi.org/10.1515/9783110377408.446>
- Givón, T. (1983). *Topic continuity in discourse: A quantitative cross-language study*. John Benjamins Publishing. <https://doi.org/10.1075/tsl.3>
- Gundel, J. K., Hedberg, N., & Zacharski, R. (1993). Cognitive status and the form of referring expressions in discourse. *Language*, 69(2), 274-307. <https://doi.org/10.2307/416535>
- Haspelmath, M. (2002). *Understanding morphology*. Oxford University Press. <https://doi.org/10.4324/9780203776506>
- Himmelman, N. P., & Primus, B. (2015). *African languages and linguistics: An interdisciplinary approach*. De Gruyter Mouton.
- Hyman, L. M. (2003). Bantu noun classes and agreement systems. In G. Nurse & D. Philippson (Eds.), *The Bantu languages* (pp. 99-119). Routledge.
- Levinson, S. C. (1987). Pragmatics and the grammar of anaphora: A partial pragmatic reduction of binding and control phenomena. *Journal of Linguistics*, 23(2), 379-434. <https://doi.org/10.1017/S0022226700011324>
- Marten, Lutz, M. (2000). Agreement with conjoined noun phrases. *Swahili Forum*, 7, 75-76.
- Marten, L. (2021). Noun classes and plurality in Bantu languages. In P. Cabredo Hofherr & J. Doetjes (Eds.), *The Oxford handbook of grammatical number* (pp. 539-557). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780198795858.013.26>
- Odera, H. & Osore, E. (2023). Noun Classes and Agreement in Lutsotso. *Journal of Linguistics, Literary, and Communication Studies*, 2(1), 17-27.
- Odera, H., & Barasa, D. (2021). Aspectual forms in Lutsotso. *Research Journal in Modern Languages and Literatures*, 2(2), 7-19.
- Odera, H., Barasa, D., & Alati, A. (2021). Inflectional Forms of Tense in Lutsotso. *International Journal of Linguistics, Literature and Translation*, 4(1), 17-28.