Abstract

This paper begins by a detailed description of the nature pronouns and reflexives in Ao, a Tibeto-Burman language spoken in Nagaland. Besides reflexives and pronouns, we will discuss elements such as verbal reciprocal and emphatic reflexives which has no independent reference of its own but rather dependent on an entity within (antecedent) or outside the sentence. It will also examine in brief the binding possibilities following the binding theory (Chomsky 1981).

Keywords: reflexive, anaphor, reciprocal, co-indexed, binding

1. Introduction

Reflexives are used to describe a verb or a construction where the subject and the object refer to the same entity. In government and binding theory, reflexives, together with NP-traces and PRO are classified as a class of NPs (Noun Phrase) known as Anaphors. Languages like English uses a set of reflexive pronouns to express the relationship where subject and object refers to the same person. There are also languages using case, affixes and word order to elaborate such relation between the subject and the object.

2. Reflexives

Like many languages, the most noticeable set of anaphors in Ao are the reflexive pronouns. The reflexive pronouns have no independent reference but refer to some other constituent (antecedent) in the sentence. The reflexives agree in person, number and gender with the antecedent. The reflexive pronoun has the form Possessive pronoun + self + personal pronoun. The table below presents the reflexive pronoun in Ao.
Table1: Reflexive Pronoun in Ao

<table>
<thead>
<tr>
<th>Person</th>
<th>singular</th>
<th>Dual</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>kə-sasa-nil</td>
<td>kəna-sasa- kəna (excl)</td>
<td>asenok-sasa-asenok</td>
</tr>
<tr>
<td></td>
<td></td>
<td>əna-sasa- əna (incl)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>nə-sasa-na</td>
<td>nəna-sasa- nəna</td>
<td>nenok-sasa-nenok</td>
</tr>
<tr>
<td>3</td>
<td>pa-sasa-</td>
<td>təna-sasa- təna</td>
<td>parnok-sasa-parnok</td>
</tr>
<tr>
<td></td>
<td>pa(mas/fem)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>la-sasa-la(fem)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These reflexives can occur in the direct object as well as indirect object position. The anaphor in the direct object position is marked patientive/accusative and indirect position is marked dative. The following examples are illustrative:

1. moaba-i pa-sasa pa aŋu
   moaba-AGT he-self-he saw
   ‘Moaba saw himself.’

2. moaba-i pa-sasa pa daŋifitizəlu
   moaba-AGT he-self-he datleter wrote
   ‘Moaba wrote a letter to himself.’

3. **Emphatic Reflexive**

   Ao has emphatic reflexive; emphatic reflexives are modifiers and they do not occur in NP positions; they simply emphasize their antecedents. Since they do not occur in NP positions they are no case marked.
Table 2: Emphatic Reflexive in Ao

<table>
<thead>
<tr>
<th>Person</th>
<th>singular</th>
<th>Dual</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>kə-sasa</td>
<td>kəna-sasa- (excl)</td>
<td>asenok-sasa</td>
</tr>
<tr>
<td></td>
<td>əna-sasa (incl)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>nə-sasa</td>
<td>nəna-sasa</td>
<td>nenok-sasa</td>
</tr>
<tr>
<td>3</td>
<td>pa-sasa(mas/fem)</td>
<td>təna-sasa</td>
<td>parnok-sasa</td>
</tr>
<tr>
<td></td>
<td>la-sasa(fem)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the sentence below ‘la-sasa’ serves as a emphatic. It cannot occur in an NP position (3). The emphatic can occur with a proper noun without a pronoun (4).

3. narola-i la-sasa sə ʃitok
   narola her-self clothes wash.PST
   ‘Narola herself washed clothes’

4. narola-i sasa sə ʃitok
   narola self clothes wash.PST
   ‘Narola herself washed clothes’

The sentences below show the difference of emphatic and anaphor in Ao. The anaphor occurs as an object of the verb ‘ʃitok’ (5) whereas the emphatic occurs as a modifier of the subject (6).

5. pa-i pə-sasa -pa_i sə ʃitok
   3SG-AGT he- self- he clothes wash.PST
   ‘He wash self clothes.’
6. \(\text{pa-}i\) \(\text{pa-sasa}\) \(sə\) \(ʃitok\)
   \[3SG-AGT\] \(\text{him- self}\) \(\text{clothes}\) \(\text{wash.PST}\)

   ‘He himself washed clothes’

In colloquial speech the final ‘pa’ is often dropped. This depends on the context of the utterance; if the listener and the hearer can tell apart between reflexive and an emphatic. Otherwise, it will be ambiguous between reflexive and an emphatic.

4. Pronouns as Reflexive

The personal pronouns in Ao can occur as anaphor. The anaphor ‘pa’ occurs in almost all the object positions in a sentence. Thus, the pronominal can occur as an anaphor in the direct and indirect object positions, in locative phrase, and in the experience position. The complex anaphor ‘pa-sasa-pa’ can occur only in the direct and indirect object position as anaphor. The table below represents the personal pronouns in Ao which are anaphoric:

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ni</td>
<td>kəna (excl)</td>
<td>asenok</td>
</tr>
<tr>
<td></td>
<td></td>
<td>əna (incl)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>na</td>
<td>nəna</td>
<td>nenok</td>
</tr>
<tr>
<td>3</td>
<td>Pa (mas/fem)</td>
<td>təna</td>
<td>parnok</td>
</tr>
<tr>
<td></td>
<td>La (fem)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The following examples illustrate pronouns used as anaphor. The subject and the object refer to the same entity:

7. \(\text{ni-}i\) \(\text{ni}\) \(čuŋa\) \(aŋur\)
   \[ISG-AGT\] \[ISG\] \(\text{good}\) \(\text{see}\)

   ‘I see myself good’
8. na-i na aŋurna
   2SG-AGT 2SG see Q
   ‘can you see yourself?’

9. pa-i pa asaŋ
   3SG-AGT 3SG praise
   ‘He praise himself.’

5. Nominal Reciprocal

   There are two types of reciprocal expressions in Ao: a verbal reciprocal and a nominal reciprocal. The verbal is marked by ‘təp’ inflected in verb and hence, not an anaphor since anaphor must contain a nominal expression. The nominal reciprocal like reflexive is used to describe a construction where the subject and the object refer to the same entity. The nominal reciprocal is marked dative as illustrated in the sentences below:

   10. narola aser moaba na-i ka-i-ka daŋ jiti zəlu
       Narola and Moaba dual-AGT one-AGT-one DAT letter wrote
       ‘Narola and Moaba i wrote letter to each other,’

   11. narola aser moabana-i ka-i-ka miemer
       Narola and Moaba dual-AGT one-AGT-one love
       ‘Narola and Moaba i love each other,’

6. Word Order of Antecedent – Anaphor

   Ao has an unmarked word order of SOV; the marked order is OSV. The following examples are illustrative:
12. moaba-\textit{i} {pər \ ka \ təpsət}  
\textit{ISG-AGT} \ snake \ one \ killed.PST 

‘Moa killed a snake.’

13. moaba-\textit{i} {pa-sasa-pa\textit{i} \ aŋu}  
\textit{ISG-AGT} \ he-self-he \ see.PST 

‘Moa saw himself’

7. Marked

14. \textit{pər \ ka \ moaba-\textit{i} \ təpsət}  
\textit{snake \ one} \ ISG-\textit{AGT} \ killed.PST 

‘Moa killed a snake.’

However, the anaphor in the object position cannot be scrambled. The word order is rigid in an antecedent-anaphor sentence.

15. *{pa-sasa-pa\textit{i} \ moaba-\textit{i} \ aŋu}  
\textit{he-self-he} \ moaba-\textit{AGT} \ see.PST 

‘Moa saw himself’

If the elements in the sentence are to be scrambled, the only possibility is to identify the complex anaphor as two separate words with different functions: ‘pa-sasa’ as emphatic and ‘pa’ as anaphor.

16. \textit{pa-sasa \ moaba-\textit{i} \ pa\textit{i/j} \ aŋu}  
\textit{he-self (emphatic)} \ moaba-\textit{AGT} \ 3SG \ see.PST 

‘Moa himself saw him\textit{i/j}.’

The constituent as an emphatic can be scrambled but as a complex anaphor it cannot be scrambled to any position. In many South Asian Languages, scrambling of anaphors does not
affect the antecedent-anaphor relations; however, in Ao scrambling of anaphor is not permitted all together.

8. Complex and Simplex Anaphor

Anaphors are distinguished between morpho-syntactically complex and simplex anaphors (Pica, 1987, Cole, Hermon and Sung 1990, Reinhart & Reuland 1993). A simplex anaphor contains a single morpheme ‘self’ and complex anaphor contains two or more morpheme where one is ‘self’ and other a pronominal indication person, number, gender. In Ao the morpho-syntactically complex anaphor is the form pronoun + reflexive+ (Table 1) and the simplex anaphors are pronouns (Table 2).

9. Binding Possibilities

The goal of the Binding Theory (Chomsky 1981) is to identify the syntactic relationship between reflexives-anaphors, pronominals and its antecedent. For instance, in the sentences below there are three NPs distinguished (i) Proper names Mary, John (ii) pronouns her, he (iii) reflexives himself, herself.

17. Mary admires her
18. Mary saw herself
19. He said that John saw himself

The proper nouns indicate that there is an entity which is identifiable in the universe of discourse. Pronouns do not select a referent from the universe of discourse; we can conclude that a pronoun like ‘him’ is [+male, +singular] but we cannot freely choose an entity which is the referent of ‘he’; ‘he’ cannot be use for John in (19). In case of reflexives, interpretation of “herself” in (18) must be dependent on ‘Mary’. Hence, there are three principles in Binding theory (Chomsky 1986) to capture this:

Principle A: An anaphor must be bound in its local domain
Principle B: A pronoun is free within its local domain
Principle C: An R-expression must be free.
A local domain is a syntactic unit that is clause-like. Reflexive and nominal reciprocal pronouns have their antecedent within a binding domain that is local. The anaphors in Ao are bound in its local domain. The antecedents and the anaphors are co-indexed within the governing category (co-referred within the clause). This is illustrated in (20) and (21); the sentence contains the complex anaphor ‘pa-sasa-pa’in object position, a transitive verb ‘aŋu’ and the subject/clausal subject Moaba’. The anaphor is bound by the clausal subject; thus obeying the Principle A.

20. moaba-i, pa-sasa-pa; aŋu
   ISG-AGT he-self-he see.PST
   ‘Moab saw himself.’

21. [moaba-i, pa-sasa-pa; aŋu ta] imliba-i bilem
   moaba-AGT; he-self-he; saw COMP Imliba-AGT think.PST
   ‘Imliba thought that Moab saw himself.’

The complex anaphors usually have a local antecedent and the simplex anaphor may have both local and non-local antecedent. However, there are also languages like Hmar (Subbarrao 2000), Marathi (Wali 1991) and Oyiya (Ray 1987) where complex anaphor can have a long distance anaphor.

10. Long Distance Binding

The complex anaphor in Ao is bound by a sentence internal antecedent; in other words they are bound within the clause. However, there are reflexives which by bound by antecedents in a higher clause or outside the clause. Long distance binding (LDA) has been observed in languages. Some of the properties of long distance anaphor (LDA) (Koster and Reuland 1981, Yang 1984, Pica1985, 1987) are:

(i) LDA allows antecedent outside the governing category
(ii) LDA are restricted to reflexives. Reciprocals cannot be a LDA
(iii) LDA are morphologically simplex. Complex anaphors are locally bound

The complex anaphor and the nominal reciprocals in Ao does not permit long distance binding.

11. *[narola-i₃j  pa-sasa-paᵢ  asaŋ  ta]  moaba-iᵢ  ajf
   Narola-AGT  3SG-self  praise  COMP  moaba-AGT  said
   ‘Moabaᵢ said that Narola₃j praised him/herself;’

12. *[narola  aser  moaba  na-iⱾj  ka-i-kaᵢ  daŋ  azak  ta]
    Narola  and  MoabaⱾj  dual-AGT  one-AGT –oneᵢ  dat  beat  COMP
tanura  ser  tantsɔrla  na-iᵢ  ajf
child  and  old lady  dualᵢ-AGT  said
   ‘The child and the old ladyᵢ said that Narola and MoabaⱾj beat each other;’

The simplex anaphor ‘pa’ can occur as a long distance anaphor. In long distance binding
the antecedent of the anaphor occurs outside the clause. In the sentence below, the anaphor ‘pa’
has three antecedents: ‘narola’ within its governing category, ‘moaba’ outside the governing
category and a discourse antecedent. Since ‘pa’ can have an antecedent outside its governing
category it is treated as a long distance anaphor.

13. [narola-iⱾj  paᵢⱾj/k  asaŋ  ta]  moaba-iᵢ  ajf
    Narola-AGT  3SG-self  praise  COMP  moaba-AGT  said
    ‘Moabaᵢ said that NarolaⱾj praised him/herselfᵢⱾj/k’

14. narola-iᵢ  moabaⱾj  daŋ  paᵢⱾj/k  atema  suŋo  yanglu-asf  ta  ajf
    Narola-AGT  Moaba  DAT  3SG  BEN  tea  make-IMP  COMP  said
    Narola asked Moaba to make tea for her/him’
When the marker ‘ča’ occurs with the embedded verb, it blocks the co-reference of ‘pa’ with the clausal subject. It cannot be co-indexed with the clausal subject. Hence, the simplex anaphor ‘pa’ is co-indexed either with the subject of the matrix clause. A question that can arise is whether pa can have a discourse antecedent.

15. narola-i, moaba-j daŋ pa*i/j/k atema suŋo yanglu- ča- aŋ ta əʃi
Narola-AGT Moaba DAT 3SG BEN tea make-IMPOB COMP said
Narola asked Moaba to make tea for her/him’

16. narola-i, moaba-j daŋ pa*i/j/k atema suŋo yanglu- tsə-oño ta əʃi
Narola-AGT Moaba DAT 3SG BEN tea make-IMP OB COMP said
Narola asked Moaba to make tea for her/him’

Note, that the pronouns in this language can occur as anaphors. Hence ‘pa’ has a pronominal interpretation when it is interpreted as a simple pronoun. As a simple pronoun it can have a discourse antecedent. Hence, the pronoun in Ao obeys both Principle A and Principle B of binding theory. The marker ‘ča’ along with ‘tsə’ marks the other benefactive; an activity or event done for the beneficiary of someone else. The entity that carries the activity is not the beneficiary. However, there is a syntactically they are in complementary distribution; ‘ča’ always occurs with the imperative mood and ‘tsə’ with other aspects and tense but not with imperative mood.

11 Conclusion

To sum, we have examined the nouns that have no independent reference but refer to some other constituent (antecedent) in the sentence. Ao has complex and simplex anaphor. The complex anaphor has antecedent within its clause. The pronouns behave like a simplex; it permits long distance binding. However, the presence of other benefactive (OB) marker blocks the co-reference with the subject within its clause. Hence, pronouns in this language obeys booth
Principle A and Principle B of Binding theory. Though Ao permits scrambling of the subject and object, scrambling of the anaphors is not allowed.

ABBREVIATIONS USED:

AGT : AGENTIVE
COMP : COMPLEMENTIZER
DAT : DATIVE
3 : THIRD PERSON
PAT : PATIENTIVE
PERF : PERFECTIVE
PROG : PROGRESSIVE
PRS : PRESENT
PROG : PROGRESSIVE
PST : PAST
SG/S : SINGULAR
VREC : VERBAL RECIPROCAL

References

Language in India www.languageinindia.com ISSN 1930-2940 16:7 July 2016
Pangersenla Walling, Ph.D.
Pronouns, Reflexives and Binding in Ao


Pangersenla Walling, Ph.D.
Assistant Professor
Department of Linguistics
Nagaland University, Kohima Campus
Merima
Kohima 797001
Nagaland
India
wallingasen@gmail.com