

## **Pronouns, Reflexives and Binding in Ao**

**Pangersenla Walling, Ph.D.**

=====

### **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.

**Language in India** [www.languageinindia.com](http://www.languageinindia.com) ISSN 1930-2940 16:7 July 2016

Pangersenla Walling, Ph.D.

Pronouns, Reflexives and Binding in Ao

**Table1: Reflexive Pronoun in Ao**

Person	singular	Dual	Plural
1	kə-sasa-ni	kəna-sasa- kəna (excl) əna-sasa- əna (incl)	asenok-sasa-asenok
2	nə-sasa-na	nəna-sasa- nəna	nenok-sasa-nenok
3	pa-sasa- pa(mas/fem) la-sasa-la(fem)	təna-sasa- təna	parnok-sasa-parnok

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 daŋiʃitizəlu  
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**

Person	singular	Dual	Plural
1	kə-sasa	kəna-sasa- (excl) əna-sasa (incl)	asenok-sasa
2	nə-sasa	nəna-sasa	nenok-sasa
3	pa-sasa(mas/fem) la-sasa(fem)	təna-sasa	parnok-sasa

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<sub>i</sub>        pa-sasa -pa<sub>i</sub>        sə        ʃitok  
 3SG-AGT        he- self- he        clothes        wash.PST  
 ‘He wash self clothes.’

6. pa-i<sub>i</sub>            pa-sasa            sə            ʃitok  
       3SG-AGT    him- self        clothes    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 3: Personal Pronouns in Ao**

Person	singular	Dual	Plural
1	ni	kəna (excl) əna (incl)	asenok
2	na	nəna	nenok
3	Pa (mas/fem) La (fem)	təna	parnok

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

7. ni-i            ni            čuŋa    aŋur  
       ISG-AGT    ISG        good    see  
 ‘I see myself good’

8. na-i            na            aṅurna  
 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<sub>i</sub>            ka-i-ka<sub>i</sub>            daŋ    ʃiti    zəlu  
 Narola            and    Moaba            dual-AGT    one-AGT-one    DAT    letter    wrote  
 ‘Narola and Moaba<sub>i</sub> wrote letter to each other<sub>i</sub>’

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

### 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-i<sub>i</sub>      pər      ka      təpsət  
 ISG-AGT      snake one      killed.PST  
 ‘Moa killed a snake.’

13. moaba-i<sub>i</sub>      pa-sasa-pa<sub>i</sub>      aŋu  
 ISG-AGT      he-self-he      see.PST  
 ‘Moa saw himself

**7.Marked**

14. pər      ka      moaba-i<sub>i</sub>      təpsət  
 snake one      ISG-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<sub>i</sub>      moaba-i<sub>i</sub>      aŋu  
 he-self-he      moaba -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. pa-sasa      moaba-i<sub>i</sub>      pa<sub>i/j</sub>      aŋu  
 he-self (emphatic) moaba - AGT      3SG      see.PST  
 ‘Moa himself saw him<sub>i/j</sub>.’

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 Aoscrambling 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.

**Language in India** [www.languageinindia.com](http://www.languageinindia.com) ISSN 1930-2940 16:7 July 2016

Pangarsenla Walling, Ph.D.

Pronouns, Reflexives and Binding in Ao

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 ‘aꞋu’ and the subject/clausal subject Moaba’. The anaphor is bound by the clausal subject; thus obeying the Principle A.

20. moaba-i<sub>i</sub>      pa-sasa-pa<sub>i</sub>      aꞋu  
 ISG-AGT      he-self-he      see.PST  
 ‘Moa saw himself.’

21. [moaba-i<sub>i</sub>      pa-sasa-pa<sub>i</sub>      aꞋu      ta]      imliba-i      bilem  
 moaba-AGT<sub>i</sub>      he-self-he<sub>i</sub>      saw      COMP      Imliba-AGT      think.PST  
 ‘Imliba thought that Moa<sub>i</sub> saw himself<sub>i</sub>.’

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 (Subbarao 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 are 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, Pica 1985, 1987) are:

- (i) LDA allows antecedent outside the governing category

- (ii) LDA are restricted to reflexives. Reciprocal 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-i<sub>j</sub> pa-sasa-pa<sub>i</sub> asaŋ ta] moaba-i<sub>i</sub> aŋi  
 Narola-AGT 3SG-self praise COMP moaba-AGT said  
 ‘Moaba<sub>i</sub> said thatNarola<sub>j</sub> praised him/herself<sub>i</sub>’

12. \*[narola aser moaba na-i<sub>j</sub> ka-i-ka<sub>i</sub> daŋ azək ta]  
 Narola and Moaba<sub>j</sub> dual-AGT one-AGT –one<sub>i</sub> dat beat COMP  
 tanura ser tantsərɬa na-i<sub>i</sub> aŋi  
 child and old lady dual<sub>i</sub>-AGT said  
 ‘The child and the old lady<sub>i</sub> said that Narola and Moaba<sub>j</sub> beat each other<sub>i</sub>’

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-i<sub>j</sub> pa<sub>i/j/k</sub> asaŋ ta] moaba-i<sub>i</sub> aŋi  
 Narola-AGT 3SG-self praise COMP moaba-AGT said  
 ‘Moaba<sub>i</sub> said thatNarola<sub>j</sub> praised him/herself<sub>i/j/k</sub>’

14. narola-i<sub>i</sub> moaba<sub>j</sub> daŋ pa<sub>i/j/k</sub> atema suŋo yanglu-aŋ ta aŋi  
 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<sub>i</sub>        moaba\*<sub>j</sub>        daŋ    pa<sub>i</sub>\*<sub>j/k</sub>    atema    suŋo    yanglu- ča- aŋ    ta        aŋi  
 Narola-AGT        Moaba        DAT    3SG    BEN    tea        make-IMPOB    COMP    said  
 Narola asked Moaba to make tea for her/him’

16. narola-i<sub>i</sub>moaba\*<sub>j</sub>        daŋ    pa<sub>i</sub>\*<sub>j/k</sub>    atema    suŋo    yanglu- tsə- ogo        ta        aŋi  
 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 both

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**

- Chomsky, N. 1981. Lectures on Government and Binding. Dordrecht: Foris.
- Chomsky, N. 1986. Barriers. Cambridge, Massachusetts: MIT Press.
- Cole, P. G. Hermon and L.M. Sung. 1990. Principles and parameters of long distance reflexives. *Linguistics Inquiry* 21:22.
- Murthy, B.L. and Subbarao. 2000. Lexical anaphors and pronouns in Mizo. In *Lexical and Pronouns in Selected South Asian Languages* (eds.) J.W. Gair, B. Lust, K. Wali and K.V. Subbarao. Berlin: Mouton de Gruyter
- Pica, P. 1987. On the nature of reflexivization cycle. *North Eastern Linguistics society Vol* 2:483-499.

**Language in India** [www.languageinindia.com](http://www.languageinindia.com) ISSN 1930-2940 16:7 July 2016

Pangarsenla Walling, Ph.D.

Pronouns, Reflexives and Binding in Ao

- Ray, T. 1997. Lexical Anaphors in Oriya. In *Lexical and Pronouns in Selected South Asian Languages* (eds.) J.W. Gair, B. Lust, K. Wali and K.V. Subbarao. Berlin: Mouton de Gruyter.
- Reinhart, Tanya. 1983. Coreference and bound anaphora: A restatement of the anaphora questions. *Linguistics and Philosophy* 6, 47-88.
- Reinhart, Tanya & Eric Reuland. 1993. Reflexivity. *Linguistic Inquiry* 24. 657-7,
- Reuland, E.2001. Primitives of Binding. *Linguistics Inquiry* 32:439-492.
- Subbarao, K.V. 2000. Syntactic Typology and South Asian Languages. *The Yearbook of South Asian Languages and Linguistics*. (ed.) R. Singh. Sage: Delhi.
- Wali, K. and K.V. Subbarao. 1991, On the pronominal Classification: Evidence from Marathi and Telugu. *Linguistics* 29: 1093-1110.
- 

Pangersenla Walling, Ph.D.  
Assistant Professor  
Department of Linguistics  
Nagaland University, Kohima Campus  
Merima  
Kohima 797001  
Nagaland  
India  
[wallingasen@gmail.com](mailto:wallingasen@gmail.com)