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Typology and Grammatical Alignment of Angkola Language

Elitaria Bestri Agustina Siregar
Universitas Sumatera Utara
lazzaromaha26@gmail.com

Mulyadi
mulyadi.usu@gmail.com

Abstract. The theory of language typology by Comrie (1988) is used in this study. This research on grammatical alliance of Angkola language (AL) aims to understand (1) the basic construction of clause, (2) the construction of complex sentence, (3) the pivot system, and (4) the grammatical alignment system. The method used is participant-observation. Pivot test reveals that Angkola language syntactically treats S equals to A, and gives different treatment to P (S' = A ≠ P). Angkola language grammatically has an S/A pivot. It can be concluded that AL has a tendency as an accusative language.

Keywords. typology, grammatical alignment, Angkola language.

1. Introduction

As part of the study of syntactic typology, there are two reasons why grammatical alignment is very interesting to study. First, grammatical alignment has universal functions. Grammatical alignment analyzes the nature of formal behaviors that are specific to language (Payne, 2002: 129). Second, grammatical alignment is basically examined through the study of typologies of the languages concerned (Dixon, 1994: 72-79).

Researches on grammatical alignment have been conducted by linguists. Several studies that contributed to this study, among others: Mulyadi (2007) examined the Indonesian coordination sentence by expressing the design of syntactic typology; Netra et al (2008) studied the subordinate coreference system in Indonesian, Budiarta (2012) examined grammatical alignment in terms of syntactic typology; and Jufrizal (2004) examined the coordinative construction and subordinate construction in the Minangkabau language.

Angkola Language (AL) is a regional language that is widely used by the Angkola people inhabiting the area south of Tapanuli, North Sumatra. AL has a very important role in the life of Angkola community because AL is a unity that cannot be resolved from the culture of the Angkola community itself. To date, there has been no research on grammatical alignment in Angkola language. Research conducted on AL is expected to be one important step for the development and preservation of AL.

An interesting feature of the Batak Angkola is the prototype of the word order in AL which has a common pattern, namely VOS. Example:
Look for the man

In connection with the phenomenon of grammatical alignment, in AL, if two clauses combine and form a syntactic construction, the subject can be cross-referenced (coreferential) with the agent or patient. The coreference system in AL can be described as follows:

2. Theoretical Concept

2.1 Language Typology and Grammatical Alignment

The typology of languages is characterized by the grouping or identification of languages based on the characteristic features of the language. The grouping is based on the characteristics possessed by the word or sentence structure. Morphosyntactically, there are several things that are the focus of typology studies, namely 1) agent and patient markers, 2) word order, 3) coordination, 4) subordination. Agent and patient marking and word order are two topics related to simple sentences, while coordination is in the form of conjunction reduction and subordination; Relative clauses are interlocked with complex sentences.

Based on typology studies, languages can be grouped into accusative languages and ergative languages. Comrie (1988) and Artawa (2004) state that languages can be categorized into groups, namely ergative and accusative languages, passive, and active and antipassive. Ergative type of language is said if the patient (P) of the transitive verb is treated equally with the subject (S) in the intransitive clause and is different from the agent (A) of the transitive verb. P is treated the same as S in ergative language. Usually both are not marked. The sentence with accusative type is a sentence which has a system where A is the same as S and is treated differently from P. Whereas the active language is a type of language indicating that there is a group of S who behave similarly to P and a group of S who have the same behaviour as A in one language.

Based on the theory of language universal, every language has transitive and intransitive verbs. Intransitive verbs require only one argument, whereas transitive verbs require two or more arguments. According to Comrie (1989) there are a number of argument terms that are required by intransitive and transitive verbs, as follows:

| S (Subject) | the only argument in an intransitive sentence |
| A (Agent) | agent argument in a transitive sentence |
| P (Patient) | patient argument in a transitive sentence |
The typology of language can be done morphologically and syntactically. S is the benchmark in determining the typology of language. What is meant here is that A or P can be treated in the same way as S. Syntactic behaviour of A or P is used as a measuring tool to determine the type of language.

2.2 Subordinating Construction
Subordinate compound sentence refers to the alignment of two or more clauses that have unequal relations (Netra et al, 2008: 142). One clause is part of the other clause. The clauses that oversee the other clauses are called the main clauses, while the clauses that are under the main clause are called subordinate clauses. Consider the following example:

(5) Joshua said that he would pick up his luggage that was left behind.

Sentence (5) has the pattern S-P-O (object). S is filled by Joshua, P is filled by said, and O is filled by the clause he (s) will pick up (p) his suitcase (o) that was left behind. In other words, O is filled by the subordinate clause of the s-p-o structure. Conjunction that is a marker of a subordinate clause. Thus, a clause that has a subordinate conjunction functions as a subordinative clause and a non-conjunction clause functions as the main clause.

3. Methodology
The location of this research is in Sipirok, South Tapanuli where the majority of the population uses the Angkola language in daily communication. Since the researchers are the native speakers of Angkola language, the method used is participant-observation method. In gathering the data, we used triangulation. Data were gathered from several qualified informants using elicitation techniques. In addition, secondary data were taken from written material in the Angkola language.

4. Findings and Discussion
4.1 Basic Construction of Angkola Language Clause
Like other languages in general, the Angkola language has both verb-predicate clause and non verb-predicated clause. Clauses with nonverbal predicates in AL are predicated by (1) adjective, (2) nouns, (3) prepositional phrases, (4) numeral. Data (1) - (4) are the examples of clauses with a nonverbic predicate.

(1) jeges ia beautiful 3SG
   ‘she is beautiful’

(2) guru aya nia teacher father POSS
   ‘his father is a teacher

(3) tu pasar hami ADV market 1PL
   ‘we go to the market’
Furthermore, verb clauses in AL can also be divided into: (1) intransitive clause and (2) transitive clause. Transitive clause can also be distinguished based on the number of arguments present in the sentence to: (a) monotransitive clause and (b) the ditransitive clause. Intransitive verbs that take the predicate position in AL are present with affixes and some are present without affixes. The following are the examples of an AL intransitive clause whose predicate is a verb that comes with affixes.

(5) ma-dabu au
    fall 1SG
    ‘I fall’

(6) mar-ende ia
    sing 3SG
    ‘he sings’

The above examples show that intransitive verbs that occupy predicate positions come with affixes that function as markers on the subject. In addition to being present with affixes, the intransitive verbs of AL also come without affixes. Consider the following examples.

(7) kehe au
    Go 1sg
    ‘I go’

(8) modom ayaku
    sleep 3SG POSS
    ‘my father is sleeping’

AL monotransitive clauses are formed by the presence of transitive verbs by occupying the position as a predicate. As in the intransitive clause, the monotransitive clause of the verb which occupies the predicate position mostly arises without the presence of an affix and only a small portion is present with the affix. Consider the examples of monotransitive clauses whose presence without affixes follow.

(9) hu baen kue
    1SG make cake
    ‘I make a cake’

(10) hu tampul batang ni unte
    1SG cut trees of orange
    ‘I cut the orange tree’

The following example shows an AL monotransitive clause whose predicate comes with affixes as a marker of the subject.
Examples (11) - (12) show that the AL transitive verbs can be accompanied by a large number of affixes. 

An AL ditransitive is formed by a transitive verb that is a predicate. A ditransitive clause can only be present accompanied by affixes and cannot be present without an affix. Clauses like this are very rarely found in AL. The ditransitive clauses that come with affixes are presented in the following data:

(13) manga-lehen hepeng ia di au
     Give money 3SG to 1SG (OBJ)
     ‘he gives me money’

(14) patida-hon gambar ia tu au
     show picture 3SG to 1SG (OBJ)
     ‘he shows me a picture’

Examples (13) and (14) show that the subject clause ‘he’ is preceded by a predicate filled with the transitive verb mangalehen ‘gives’, patidahon ‘shows’. The non-verb predicate clause can be filled by adjectives, nouns, numeralia, and prepositions. This nonverbic clause has one argument that is located after the predicate. AL verb clauses consist of intransitive and transitive clauses (monotransitive and ditransitive). Verbs that occupy predicate positions in both verb clauses are accompanied by affixes and some without affixes. The same applies to transitive clauses.

4.2 Construction of the Angkola Coordinative Sentences

Coordinative construction is a sentence construction consisting of two or more clauses that are connected equally. This comparison test is carried out using the S / A pivot test framework as in English. Before examining the possibility of combining clauses in BA presented, it helps us see what happens in English (accusative language) with AL (which also shows grammatical characteristics as an accusative language). The basis of comparison used to find the usual / general NP treatment in a clause that is coordinated together in AL is based on the basic framework for pivot discovery proposed by Dixon (1994: 157-160). The following is a basic framework for finding the pivot.

(i) Both intransitive clauses
   (a) S1 = S2
   (ii) The first clause is intransitive, second is transitive
        (b) S1 = P2
        (c) S1 = A2

(iii) The first clause is transitive, the second is intransitive
(d) P1 = S2
(e) A1 = S2

(iv) Both transitive clauses, one common / common NP
(f) P1 = P2
(g) A1 = A2
(h) P1 = A2
(i) A1 = P2

(v) Second transitive clause, two normal / common NP
(j) P1 = P2 and A1 = A2
(k) P1 = A2 and A1 = P2

Based on eleven possible syntactic mergings of two clauses to determine the pivot above, Dixon (1994: 158 - 159) says that English is said to be a language that has a weak S / A pivot. According to Dixon, the application of pivot conditions to NP absorption in English can be illustrated by the example made for each of these possibilities (a - k). Guided by the English S / A pivot illustration (Dixon 1994: 158), AL pivot testing through the following examples is directed at direct release, namely (a), (c), (e), (g), and (j). Consider the following examples of AL coordinative sentences.

a. S1=S2 (both intransitive clauses)
   1. ro ia tuson baru kehe muse
      come 3SG here then go again
      ‘he comes here and then go away’

(c) S1=A2 (the first clause is transitive, the second is intransitive)
   2. ro ia tuson dungi mangaligi si Maria ia
      come 3SG here then see DET Maria 3SG
      ‘Martha comes here and sees Maria’

Based on the examples (1-2) above, it can be observed that the process of coordinating the two clauses in a coordinated AL based on the possibilities (a) and (c) shows that there is no need for a syntactic derivative structure. That is, the merging of two clauses, with the release of NP in one of the clauses is done directly without changing the syntactic structure in one or both of the merged clauses. Example (1) the two clauses are intransitive, S1 = S2. Example (2) S of the first clause is a cross reference with A in the second clause (Martha). Here let us also examine how the grammatical behavior of AL when viewed based on the merger (b) and (d). Consider the following examples.

(b) S1=P2 (the first clause is transitive, the second is intransitive)
   3. ro si Martha dungi diligi si Maria
      come DET Martha and seen DET Maria
      ‘Martha comes and seen by Maria’

(d) P1=S2 (the first clause is intransitive, the second is transitive)
   4. diligi si Maria si Martha dungi senyum ia
      seen DET Maria DET Martha and laugh 3SG
Based on the examples (3-4) presented above, it shows that if FN usually occupies the P function in one of the clauses, the clause must be passive so that the NP permeation can be grammatically acceptable. In other words, the release of NP in one of the clauses occupying the P function is not direct; required reduction in syntactic construction. The syntactic derivation needed to release the NP occupying the P function is grammatically permissible as passivation. In this case the NP released to the topic from the pioneering construction.

Observing the grammatical behavior of BA based on combining two clauses in a coordinated way to find this language pivot, AL is a language that has an S / A pivot.

4.3 Construction of Subordinative Sentences in Angkola Language
The process of testing the possibility by combining two clauses to determine AL pivot as presented above, is carried out again for subordinative construction which has a purposive and adverbial clause. In subordinative construction of AL, it is found that possible merging of (a) and (c) are direct, and possible merging of (b) and (d) are not direct. The following are the examples of subordinative construction with a purposive clause.

(a) $S_1=S_2$ (both transitive)
   5. ro ia tuson aso bisa maradian
      come 3SG here in order that can rest
      ‘he comes here in order that he can rest’

(c) $S_1=A_2$ (first clause intransitive, second transitive)
   6. ro ia tuson aso bisa mangaligi au
      come 3SG here in order that can see me
      ‘he comes here in order that he can see me’

The example clauses (5-6) above show that the NP permeation in the purposive clause with the possibility of combining (a) and (c) is direct; impregnation of NP in its purposive clause does not cause any syntactic derivation. This fact reinforces the previous conclusion that AL is a language that works with S / A pivots.

The testing process for combining subordinative clauses with purposive clauses based on the possibilities (b) and (d) is presented by displaying the following examples.

(b) $S_1=P_2$ (first clause intransitive, second transitive)
   7. ro ia tuson aso bisa ditolong aya
      come 3SG here in order that can helped father
      ‘he comes here in order that he can be helped by father’

(d) $P_1=S_2$ (first clause transitive, second intransitive)
   8. dielek uma anggiku aso kehe tu sikola cepat-cepat
      ask mother my sister in order that go PREP school earlier
      ‘Mother asks my sister in order that she should go to school earlier’

Examples (7) and (8) show that if S is cross-referenced with P, there is a synthetic decrease (derivation), ie passivation, (example marked a), one of the clauses, or promulgation (example
marked b). Based on this fact syntactically AL does not treat S the same as P. Thus AL works in an S / A pivot.
The next step is to look at the grammatical behaviour of AL with regard to the absorption of NP in the determination of the adverbial clause pivots. The following examples are expected to provide a picture of the adverbial clause.

(a) S1=S2 (both intransitive)
9. modom ia dompak so kehe
   rest 3SG before go
   ‘he rested before he left’

(c) S1=A2 (first clause intransitive, second transitive)
10. senyum si Martha dompak mangaligi si Maria
    smile DET Martha when see DET Maria
    ‘Martha smiles when she sees Maria’

The example clauses (9-10) show that cross-referencing between A and S or A1 and A2 allow direct release without syntactic derivation. Absorption of NP in one of the clauses is not permitted without a syntactic decline (through passivation) if A is cross-referenced with P. This situation indicates that AL does not work with S / P pivots. The examples below are expected to show this situation.

(b) S1=P2 (first clause intransitive, second transitive)
11. madung mate si Simon dompak dijalaki halai
    PAST die DET Simon when search for 3PL
    ‘Simon had died when he was being searched by them’

(d) P1=S2 (first clause transitive, second intransitive)
12. disiari umak ni si Irma ia dompak marsiajar
    angry mother of DET Irma 3SG(OBJ) when study
    ‘Irma’s mother rebukes her when she is studying’

Based on the process of the clause merging test that have been carried out and supported by data shown previously, it can be concluded that AL syntactically works with S / A pivot.

4.4 Typology and the Grammatical Alignment of Angkola Language
The study of grammatical alignments revolves around the classification of languages into which types of Angkola language are more likely to be classified, whether Angkola is more inclined to languages that are of the accusative, ergative, or S-split type in accordance with the grammatical patterns possessed by the language.
Typologically, the Angkola language has a verb-patient-agent (VPA) canonical sequence with alternating patient-verb agents. Consider the example presented below.

13. mambaca buku au
    Read book 1sg
    ‘I read the book’

14. hu balbal si Dini
    (AVP)
The data shows that AL is more likely to be classified as an accusative language because of the SUBJ conformity with the verb. The only S argument in the intransitive clause, both unaccusative (Sp) and unergative (Sa) and actor arguments on transitive verbs get the same markers on verbs. Meanwhile, P doesn't get a mark on the verb. The following example shows S (a / p) is the same as A and is different from P.

15. mangan ia
   eat       3SG
   ‘he eats’

16. modom ia
   sleep     3SG
   ‘he sleeps’

17. mambalbal si Doni ia
    kick      DET Doni 3SG
    ‘he kicks Doni’

Based on the data presented above it can be stated that the intransitive verb marking does not distinguish the semantic property of its S argument (the S argument has the same shape) as it does the marking on the verb as a pivot (head marking). The same thing can also be used to mark the subject (agent) in transitive verbs. Through the data that has been presented, it can be described the AL grammatical alignment system. In the grammatical alignment system AL, the argument S is the same as A and differs from P when it is described as shown below.

\[
\begin{array}{ccc}
S & A & P \\
\hline
\end{array}
\]

Based on the grammatical alignment system presented in the chart above it can be concluded that AL has a tendency as an accusative language.

5. Conclusion
Based on the problems examined in the study, it can be concluded as follows.
1. The basic construction of the Angkola language clause consists of intransitive clauses and transitive clauses. The BA intransitive clause consists of clauses that are predicated by verbs and non verbs. Furthermore, the Angkola transitive clauses are divided into monotransitive clauses and ditransitive clauses.
2. Angkola language has a verb-patient-agent (VPA) canonical sequence with alternating patient-verb agents.
3. Pivot test reveals that Angkola language syntactically treats S equals to A, and gives different treatment to P (S' = 'A' ≠ P). Angkola language grammatically has an S/A pivot.
It can be concluded that AL has a tendency as an accusative language. Thus, it can be concluded that AL has a tendency as an accusative language.

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