Leftward movement and case-checking: evidence from Atayalic languages

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This paper proposes a VP fronting analysis of VOS word order in the Formosan languages Seedig and Atayal which challenges the subject postposing accounts by Chang (1997) and Holmer (1996). In addition to being theoretically more attractive (consistent with the frameworks of Kayne 1994 and Chomsky 1995), this analysis also accounts for a broader range of empirical data and suggests that Atayalic languages are more similar to other Austronesian languages than does a rightward movement analysis.

This paper takes as its point of departure the analysis for Tagalog clause structure developed in Aldridge (1998). According to this analysis, Tagalog VSO word order is generated by moving the verb out of the VP and into T, while the verb's arguments remain in situ. The subject (or absolutive) checks its Case covertly at LF in Spec T.

1. b-in-li ng babae ang libro
   -PAST-buy ERG woman ABS book
   'The woman bought the book.'

2. 
   \[\text{TP} \]
   \[\begin{array}{c}
   \text{T'} \\
   \text{buy₁} \\
   \text{VP} \\
   \text{ERG} \\
   \text{(woman)} \\
   \text{t₁} \\
   \text{VP} \\
   \text{t₁} \]
   \text{ABS} \text{(book)}

This analysis argues directly against Guilfoyle, Hung, and Travis (1992), which requires that the absolutive move overtly into a nominative Case position at the end of the clause.

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In addition to the theoretical disadvantage of requiring rightward movement to a rightward specifier, the GHT account is also empirically inadequate, since it predicts that the absolutive is always in clause-final position. This is not the case, however. For example, in a complex sentence, the matrix absolutive must precede the complement clause, as exemplified in (4) and (5). (4), where the matrix absolutive precedes the complement clause, is grammatical, while (5), where the matrix absolutive appears in clause-final position, after the complement clause, is ungrammatical.

4. Na-himok ko si Pedro [CP na bilhin yung libro]  
PAST-persuade IARCH ABS Pedro COMP buy-PF thatABS book  
'I persuaded Pedro to buy that book.'

5. *Na-himok ko [CP na bilhin yung libro] si Pedro  
PAST-persuade IARCH COMP buy-PF thatABS book ABS Pedro

GHT incorrectly predicts that the unacceptable (5) is grammatical, since the matrix absolutive must move into the clause-final subject position.

The analysis in Aldridge (1998), however, correctly predicts (4) to be the grammatical sentence, since the absolutive does not need to move overly for Case and remains in situ to the left of the complement clause.
The current paper develops an analysis of Atayalic languages similar to the one for Tagalog. While in Tagalog, verb-initial word order is generated by moving the verb to the left of the subject, in Atayalic languages, I propose that it is the entire VP which moves.

1. Previous analyses

As mentioned above, Atayal and Seediq are said to be VOS (or absolutive-final) languages. This generalisation is true for a great number of mono-clausal constructions, as can be seen in (8) and (9) below, both Seediq examples. In (8), an antipassive, the agent is the absolutive and appears in clause-final position. In (9), a mono-transitive clause, the patient is the absolutive and is located at the end of the clause.

8. **gaga** m-eken ido **ka pawan**
    PRES INTR-eat rice ABS Pawan
   ‘Pawan is eating rice.’

9. **wada-na** burig-un ra pawan **ka patis**
    PAST-3sERG buy-TR ERG Pawan ABS book
   ‘Pawan bought the book.’

Recent formal approaches to Atayalic syntax exploit this fact and propose that the absolutive moves overtly into clause-final position. In Chang (1997), the absolutive moves into a rightward Spec IP to receive Case, in similar fashion to the proposal by GHT. One difference, however, is that the patient in a transitive clause is base-generated in Spec VoiceP and not inside the VP. This is because Chang views the transitivity suffix as a lexical head which selects its own argument and assigns Case to the position it governs, i.e. the agent. Since the verb also selects a patient, there must be a null expletive generated in the verbal complement position.
In Holmer (1996), the absolutive moves into a clause-final Spec AgrP in order to check thematic agreement. In the traditional terminology of Austronesian linguistics, 'antipassive' is 'actor focus', and 'transitive' is 'patient focus' or 'locative focus'. 'Focus' is sometimes treated as an agreement relation between the verb and the 'focused' nominal. The nominal in Spec AgrP, according to Holmer, must agree with the 'focus' morphology on the verb. Hence, only an actor can appear in this position when the verb is in 'actor focus', only a patient when the verb is in 'patient focus', and so on. Movement to [Spec AgrP] is not associated with Case, which can be assigned inside the VP, for instance to the agent.

There are conceptual as well as empirical problems with analyses like Chang (1997) and Holmer (1996). Leaving aside technical issues such as valence extension and thematic agreement, which may also warrant reconsideration, and concentrating only on word order issues, one disadvantage is the requirement of rightward specifiers and rightward movement, which is disallowed in current syntactic theories proposed by Kayne (1994), Chomsky (1995), and others.

Accounts such as Chang (1997) and Holmer (1996) also force a view of Atayalic syntax which is vastly different from Philippine languages, which are also verb-initial Austronesian languages. The analysis of Tagalog sketched in the introduction presents concrete evidence against the existence of rightward movement of the absolutive to clause-final position. It is therefore worthwhile to take a closer look at Atayalic syntax to determine whether there truly is rightward absolutive
movement or whether another analysis can be found which is more similar to that for Tagalog.

Indeed, a new analysis does seem to be needed, on empirical grounds as well as conceptual. Chang (1997) and Holmer (1996) cannot account for facts such as the following, where the absolutive is not in clause-final position. As seen above for Tagalog, Atayalic absolutes can precede complement clauses.

12. wayan-maku swar-an tali [εmvajik biru tajhoku] (Atayal)
   PAST-1sERG allow-TR Tali.ABS buy book Taipei
   ‘I let Tali buy books in Taipei.’
13. wada-na suluwa-un na awi ka pawan [εpmimah sino] (Seediq)
   PAST-3sERG allow-TR ERG Awi ABS Pawan drinkwine
   ‘Awi allowed Pawan to drink wine.’

Seediq and Atayal agents can also be dislocated to the right of the absolutive and placed in clause-final position.

14. wayan-niya s-kavalai sali laqi-niya tali la (Atayal)
   PAST-3sERG APP-build house child-3sPOSS.ABS Tali EMP
   ‘Tali build his child a house.’
15. b-tari-na tajhoku patis-ni pawan (Seediq)
   PAST-buy-3sERG Taipei book-this.ABS Pawan
   ‘Pawan bought this book in Taipei.’

This section has introduced two recent proposals for the syntax of Atayalic languages. Both proposals generate absolutive-final word order by moving this nominal to a clause-final subject position. There are many problems, however, with this type of analysis. Aside from conceptual issues like requiring rightward movement and rightward specifiers, these analyses also cannot account for the full range of empirical data. In the following section, I introduce an alternative analysis utilising only leftward movement and leftward specifiers which also accounts for all the word order facts.

2. VP movement analysis

In this section, I develop an analysis which shows Atayalic word order to be generated in a manner similar to Tagalog. VSO order in Tagalog is produced by movement of the verb to clause-initial position, as per Aldridge (1998). Absolutive-final word order in Atayalic languages can be viewed as the result of movement of the entire VP to the left of the absolutive.

2.1 Verb and direct object

The most basic case of VP fronting occurs in antipassives, such as (16) and (17). Here, the agent absolutive is in clause-final position, and the verb and object are to its left.
16. wayan [vP m-baji bu?uh] tali la (Atayal)
PAST INTR-buy banana Tali.ABS EMP
'Tali bought bananas.'

17. gaga [vP m-ekan ido] ka pawan (Seediq)
PRES INTR-eat rice ABS Pawan
'Pawan is eating rice.'

This word order can be generated by moving the verb and direct object, i.e. VP, to the left of the agent, targeting the outer specifier of v.

18.

One prediction made by this proposal is that the verb and direct object in an antipassive must be adjacent and the object can never be stranded. This prediction is borne out, as shown in (19). The verb cannot move independently and strand the object.

19. *gaga m-ekan ka pawan ido (Seediq)
PRES INTR-eat ABS Pawan rice
'Pawan is eating rice.'

The reason that antipassives exhibit this typical case of VP movement is most likely due to the fact that the direct object is in a sense demoted. Absolutive case is given to the agent, and the direct object is probably dependent on the verb for some form of inherent case. Another prediction made by this analysis is that the direct object of an antipassive cannot be extracted (VP movement creating an island from which extraction should result in ungrammaticality). This prediction is also borne out.

20. *maanu s-m-n-alu ka pawan? (Seediq)
what -INTR-PAST-make ABS Pawan
'What did pawan make?'

In order to extract the direct object, the clause must be transitivised so that the object becomes the absolutive.
21. maanu s-n-alu na pawan? (Seediq)
   what -PAST-make ERG Pawan
   ‘What did Pawan make?’

   In transitive clauses where the direct object is given absolutive case, the object
does not front together with the verb, but remains inside the VP where it can check
its absolutive case. This is the subject of discussion in the next section.

2.2 Inner absolutive checking

For transitive clauses, which contain both an ergative and absolutive nominal, I
 posit an absolutive checking position below the agent. The absolutive moves from
the VP into this checking position before the remnant VP fronts to the outer Spec v.

22. [v_b-n-ajj] na tali taihoku biru kani (Atayal)
   -PAST-buy ERG Tali Taipei book this.ABS
   ‘Tali bought this book in Taipei.’

23. wada-na [v_burig-un] na pawan ka patis (Seediq)
   PAST-3sERG buy-TR ERG Pawan ABS book
   ‘Pawan bought the book.’

24. \[\text{TP} \rightarrow \text{PAST} \rightarrow \text{vP} \rightarrow \text{vP} \rightarrow \text{Pawan} \rightarrow \text{AgrP} \rightarrow \text{book} \rightarrow \text{Agr'} \rightarrow \text{VP} \rightarrow \text{buy} \rightarrow \text{ti}\]

   At first glance, it appears that only the verb moves in this case and not the
   whole VP. However, there are reasons to believe that this, too, is a case of VP
   movement. One reason is that this verb does not seem to move like a head. First;
   if this were a case of head movement of the verb, we might expect it to left adjoin
   to the auxiliary verb. But this is not what happens. The main verb must appear to
   the right of the auxiliary and cannot appear to its left.

25. *burig-un wada-na na pawan ka patis (Seediq)
   buy-TR PAST-3sERG ERG Pawan ABS book
   ‘Pawan bought the book.’
It is also unlikely that the main verb moves into a head position to the right of the auxiliary, for instance v, since no nominal, including the agent, in the specifier of v, can intervene between the main and auxiliary verbs.

26. *wada-na ra pawan burig-un ka patis (Seediq)
PAST-3sERG ERG Pawan buy-TR ABS book
'Pawan bought the book.'

The idea of an object checking position to the right of the base position of the agent is not novel. Other proposals include Lasnik (1995), Collins & Thrainsson (1996), and Travis (1991). Travis (1991), in particular, gives evidence from the Austronesian language Kalagan, where the absolutive always appears in third position, after the verb and agent. Another Austronesian language exhibiting this type of word order is Toba Batak. In (27) the theme is the absolutive and immediately follows the agent. (28) is the dative shifted version of (27), where the goal has become the absolutive and moves into the position to the immediate right of the agent. This suggests that third position in the clause, after the verb and agent is reserved for absolutives.

27. Dilean si Torus biang i tu si Ria
   -AT.give PM Torus dog the to PM Ria
   'Torus gave the dog to Ria.'
28. Dilean si Torus si Ria biang i
   -AT.give PM Torus PM Ria dog the
   'Torus gave Ria the dog.' (Schachter 1984)

2.3 Ditransitives

In the preceding discussion, I posited that predicate fronting in Seediq and Atayal is always VP fronting. Additional examples below serve to clarify this further. (29) is a ditransitive clause where the goal is the absolutive. This nominal moves into Spec Agr, leaving the theme inside the VP to undergo fronting with the verb. This case clearly shows that the fronted constituent is VP, containing the verb and direct object.

29. wada-na [v, biq-un sapah] na pawan ka awi-ni (Seediq)
PAST-3sERG give-TR house ERG Pawan ABS Awi-this
   'Pawan gave Awi a house.'
30. 

The same can be observed for applicative constructions. (31) and (32) are examples of the benefactive applicative $\varepsilon$-, which licenses a benefactive nominal as absolutive. This nominal moves in Spec Agr, and the remnant VP is fronted.

31. tali ga wayan-niya [\text{VP-s-vaji bu?uh}] laqi \hspace{1cm} \text{(Seediq)}
   Tali TOP PAST-3sERG APP-buy banana child.ABS
   ‘Tali build his child a house.’

32. wada-nan [\text{VP-s-bari patis}] pawan ka awi \hspace{1cm} \text{(Atayal)}
   PAST-3sERG APP-buy book Pawan.ERG ABS awi
   ‘Pawan bought Awi a book.’

33.

It should be pointed out at this time that the word order observed above in (29), (31), and (32) cannot be accounted for under the analysis presented in Chang.
(1997). Chang's structure places a non-absolutive theme inside the VP below the agent. The word order for (32), for example, is predicted to be the ungrammatical (34). The absolutive moves into clause-final position, but the non-absolutive theme remains to the right of the agent inside the VP.

34. *wada-na  s-bari  pawan  pats  ka  awi  (Seedic)
   PAST-3sERG  APP-buy  Pawan.ERG  book  ABS awi
   'Pawan bought Awi a book.'

35.  
   IP
   /\  
   /    Aw\i
   PAST  VoiceP
   /\  
   /    Voice'
   bu\yi
   Pawan  VP
   /\  
   /    book
   t\i

Holmer (1996) does predict the correct word order for the mono-clausal examples discussed in this section, because in his structure the VP specifier, where agents are base-generated, is located on the right, with the result that a non-absolutive theme appears between the verb and the agent. However, Holmer has difficulty accounting for other types of structures, in particular, bi-clausal structures, which I discuss in section 2.5.

2.4 Position of the ergative

In the preceding discussion, I introduced a VP movement analysis for Atayalic languages. I showed that the constituent that moves is the VP, typically the verb and direct object. I also showed that the target of this movement is the outer specifier of v, to the immediate left of the base position of the agent. I have further assumed that the agent remains in situ throughout the derivation where it can check ergative or absolutive Case, depending on whether the clause is transitive or intransitive. There is indirect evidence that this nominal remains in situ and does not need to move overtly to check Case. In Atayal, the verb obligatorily shows agreement with the agent whenever this nominal has been displaced. In (36) the agent has been topicalised, and the agreement clitic niya appears after the auxiliary verb. In (37) the agent has been dislocated to the end of the clause. Again, niya is registered on the verb.

36. tali  ga  wayan-niya  big-an  Sayun  kutux  biru
   Tali  TOP  PAST-3sERG  give-TR  Sayun  one  book.ABS
   'Tali gave Sayun a book.'
When the agent remains in situ, no agreement is registered on the verb.

38. b-n-aji na tali taihoku biru kani
    -PAST-buy   ERG Tali Taipei   book this.ABS
    'Tali bought this book in Taipei.'

    From this, it appears that when the agent moves, it first must stop in a position, for instance Spec T, where it checks agreement, before proceeding to its final destination, in the case of topicalization, Spec C.

39. 

       CP
         
         Tali
         
         C'
         
         TOP
         
         TP
         
         niya
         
         T'
         
         PAST
         
         vP
         
         t
         
         v'
         
         VP

This allows us to infer that when no agreement appears on the verb, then the agent has not been moved through Spec T but remains in situ in Spec v.

2.5 Complex clauses

Given the VP movement analysis sketched above, the complex clauses introduced above in (12) and (13) (repeated below as (40) and (41)) in section I now seem to present a problem. The difficulty is in accounting for the fact that the absolutive does not appear in clause-final position. In the simple transitive examples discussed so far, the absolutive moves out of the VP and into a checking position. Then the remnant VP is focused to the outer specifier of v. The resulting word order is absolutive-final. This cannot, however, be the case in (40) and (41), since both the absolutive and the complement clause appear to be stranded.

40. wayan-maku swar-an tali [cw-mavaju biru taihoku]  (Seediq)
    PAST-1sERG allow-TR Tali.ABS buy book Taipei
    'I let Tali buy books in Taipei.'
41. wada-na suluwa-un na awi ka pawan [s-mimah sino] (Atayal) PAST-3sERG allow-TR ERG Awi ABS Pawan drink wine ‘Awi allowed Pawan to drink wine.’

One possibility is that the complement clause, together with its controller (the matrix absolutive) move as a unit to Spec Agr and that absolutive Case-checking is a form of ECM operation. After this movement, the VP remnant can front in the usual way.

One indication that this is indeed the correct analysis comes from the fact that the complement clause seems to form a constituent with its subject. This can be seen, for instance, when the matrix clause is antipassivized and the agent of that clause becomes the absolutive. Then the entire complement clause behaves like a demoted object and fronts with the VP.

43. wada [s-muluwa pawan mimah sino] ka awi (Seediq) PAST -INTR-allow Pawan drink wine ABS Awi ‘Awi allowed Pawan to drink wine.’
If the subject of the complement clause were actually the matrix object, then we might expect just this nominal to front with the verb, stranding the clause as in (40) and (41). But this is not what happens. Seediq and Atayal may be like English in that ‘allow’ object control verbs form a special type in which their ‘controllers’ check their case through ECM and do not function as matrix objects (Larson 1991).

It should be pointed out that (40), (41), and (43) present a challenge to Holmer (1996), whether we regard *Tali and ka *Pawan in (40) and (41) as matrix patients or as being contained in the complement clauses. If *Tali and ka *Pawan are matrix patients, then Holmer (1996) has difficulty accounting for the fact that they do not appear in clause-final position, as I pointed out initially in section 1. If these nominals are inside the complement clauses, then Holmer cannot explain why they appear before the embedded verbs. The word order predicted for (43) is the ungrammatical (45), because under Holmer’s analysis, agents are base-generated on the right and not on the left.

45. *wada [s-m-ulawa mimah sino pawan] ka Awi
   PAST -INTR-allow drink wine Pawan ABS Awi
   ‘Awi allowed Pawan to drink wine.’

46. TP
    PAST AgrP
    Agr Awi
    allow VP
    VP
    V Pawan
    drink wine
2.6 Beyond VP movement

The final point I will address before concluding this paper is generating ergative-final word order. As mentioned above, ergative nominals can appear in situ, clause-initial position, or clause-final position. In (47) and (48) ((14) and (15) from section 1), the agent appears in clause-final position. An agreement clitic appears on the verb, indicating that movement takes place.

47. wayan-niya s-kavalai sali laqi-niya tali la (Atayal) PAST-3sERG APP-buildhouse child.ABS-3sPOSS Tali EMP ‘Tali build his child a house.’

48. b-n-uri-na taihoku pasi-ni pawan (Seediq) -PAST-buy-3sERG Taipei book-thisABS Pawan ‘Pawan bought this book in Taipei.’

Throughout this paper, I have emphasized that predicate fronting in Atayalic languages is movement of the nuclear VP, not the entire clause. What (47) and (48) suggest is that the VP first fronts to the outer specifier of VP, in the usual way. Then the agent is topicalized, first checking agreement in Spec T. Finally, the TP is moved around the agent into the outer specifier of C.

49. 

If this derivation is correct, then Atayalic languages also appear optionally to allow fronting of larger constituents than VP. It should be pointed out, however, that the original VP movement analysis must still be maintained, even in cases like (47) and (48). In other words, we still must posit VP fronting before agent topicalization and TP fronting, because the verb and non-absolutive object appear
together before the absolutive, indicating that they have moved there as a unit. This is clearest in (47), repeated below as (50).

50. wayan-niya [vp-s-kavalai sali] laki-niya tali la
   PAST-3sERG APP-build house child.ABS-3sPOSS Tali EMP
   ‘Tali build his child a house.’

If just TP were fronted, then VP would be in the wrong position, to the right of the absolutive.

51. *wayan-niya laki-niya [vp-s-kavalai sali] tali la
   PAST-3sERG child.ABS-3sPOSS APP-build house Tali EMP
   ‘Tali build his child a house.’

3. Conclusion

This paper has developed an account of Atayalic clause structure which generates absolutive-final word order through VP fronting. This analysis makes exclusive use of leftward movement and leftward specifiers and is therefore theoretically superior to the earlier approaches of Chang (1997) and Holmer (1996), which propose rightward movement of the absolutive to clause-final position. This analysis is also empirically more accurate in that it accounts for a broader range of data. Additionally, the analysis developed in this paper shows Atayalic syntax to be similar to that of the Philippine language Tagalog. Tagalog verb-initial word order is generated by movement of the verb to the left of its arguments. Atayalic languages differ only in that they move not just the verb but VP as a whole.

References


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