

Robert Pensalfini

Massachusetts Institute of Technology

Some of the ramifications of Kayne's (1994) Antisymmetry proposal and Linear Correspondence Axiom (henceforth LCA) pose interesting problems for the analysis of Topic-final languages such as Malagasy. The aspects of Kayne's analysis that will be of interest here are specifically the following: all languages have underlying VP-structure in which the subject occurs in the specifier of the VP and the object as sister to V; Within any XP, the specifier occurs to the left of X' and the complement to the right of X; there is no structural distinction between specifiers and adjuncts, and any given XP may contain one and only one specifier (adjunct); movement is always to the left; hierarchy determines linear ordering so that if element Y occurs to the right of element Z then Y is lower than Z.

Assuming the LCA and Antisymmetry proposals to hold, I will attempt to account for the word order facts of Malagasy. First I claim that Malagasy is a bona fide topic-final language, and not simply a subject-final language like Gilbertese. I will then consider several previous analyses of Malagasy before proceeding to discuss two proposals within the Antisymmetry framework. The conclusion is a negative one; that the word order facts, including placement of adjuncts, cannot be adequately accounted for within Kayne's framework.

## 1. Malagasy

Malagasy has traditionally been called a VOS language. However, I will claim that it is actually VSO with an obligatorily-filled final topic position. Consider the sentences in (1).

1. a) Mividy ny vary ho an'ny ankizy ny lehilahy  
*ATop-buy the rice for the children the man*  
"The man buys the rice for the children."
- b) Vidin' ny lehilahy ho an'ny ankizy ny vary  
*TTop-buy the man for the children the rice*
- c) Ividianan' ny lehilahy ny vary ny ankizy  
*XTop-buy the man the rice the children*

(Keenan 1976)

2. a) e ware-ka te boki te ataei  
3s read-3s the book the child  
"The child read the book."

b) e ware-ka-ki te boki (iroun te ataei)  
 3s read-3s-PASS the book by the child  
 "The book was read (by the child)."

Evidence that the phrase-final NP in Malagasy clauses is a topic rather than the grammatical subject comes from reflexive binding. Only the logical subject (not the topic) can bind a reflexive, irrespective of which argument is the clause-final one. This is seen in (3).

3. a) Mamono tena; hoan'ny zanaka [ny ray aman-dreny rehetra];  
kill-ATop self for the children the parents all  
“All parents kill themselves for (their) children.”

b) Amonoaŋ' [ny ray aman-dreny rehetra]j tenaj ny zanaka  
*kill-XTop the parents all self the children*  
 "All parents kill themselves for (their) children."

c)\*\*Amonoan' ny ray aman-dreny rehetra tena [ny zanaka]<sub>i</sub>  
*kill-XTop the parents all self the children*  
 (Keenan 1993)

A further interesting fact of Malagasy is that only the clause-final topic can be extracted by *wh*-movement, irrespective of its

grammatical role (as seen in (4) through (6)). Appealing to the accessibility hierarchy (Keenan and Comrie, 1977) does not explain this, but only re-states the question. A theory of Malagasy phrase-structure should explain this extraction asymmetry.

4.
  - a) \*Iza no mividy ny vary ny lehilahy?  
*who COMP S<sub>Top</sub>-buy the rice the man*
  - b) \*Iza no vidin' ny lehilahy ny vary?  
*who COMP T<sub>Top</sub>-buy the man the rice*
  - c) Iza no ividianan' ny lehilahy ny vary?  
*who COMP X<sub>Top</sub>-buy the man the rice*  
"Who was bought rice (for) by the man?"

(Guilfoyle, Hung and Travis 1992)

5.
  - a) \*Inona no mividy ho an'ny ankizy ny lehilahy?  
*what COMP S<sub>Top</sub>-buy for the children the man*
  - b) Inona no vidin' ny lehilahy ho an'ny ankizy?  
*what COMP T<sub>Top</sub>-buy the man for the children*  
"What did the man buy for the children?"
  - c) \*Inona no ividianan' ny lehilahy ny ankizy?  
*what COMP X<sub>Top</sub>-buy the man the children*
6.
  - a) Iza no mividy ny vary ho an'ny ankizy?  
*who COMP S<sub>Top</sub>-buy the rice for the children*  
"Who bought the rice for the children?"
  - b) \*Iza no vidina ho an'ny ankizy ny vary?  
*who COMP T<sub>Top</sub>-buy for the children the rice*
  - c) \*Iza no ividianana ny vary ny ankizy?  
*who COMP X<sub>Top</sub>-buy the rice the children*

(MacLaughlin 1995)

Finally to the ordering of adjuncts in Malagasy. Adverbs and most adjuncts precede the final NP (which I am calling a Topic), as opposed to Gilbertese where adjuncts generally follow the clause-final subject. However, causal and (some) temporal obliques follow the final NP.

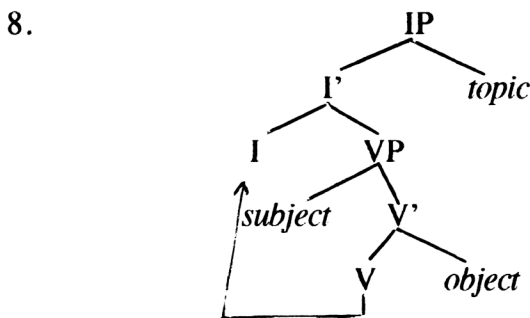
7. a) Nodakan' i Paoly [tamin' ny lohany] [ho ao amin' ny but] ny baolina  
*Top D Paul with the his-head into the goal the ball*  
 "The ball, Paul kicked into the goal with his head."
- b) \*Nodakan' i Paoly ny baolina [tamin' ny lohany] [ho ao amin' ny but]  
 \*Nodakan' i Paoly [tamin' ny lohany] ny baolina [ho ao amin' ny but]
- c) Tsy lasa [niaraka tamin' i Jaona] i Paoly [noho i Jeanne]  
*Neg gone with D John D Paul because-of D Jeanne*  
 "Paul did not leave with John because of Jeanne."
- d) \*Tsy lasa i Paoly [noho i Jeanne] [niaraka tamin' i Jaona]

(Randriamasimanana 1986)

## 2. Previous Analyses

### A. Guilfoyle, Hung and Travis (1992)

Guilfoyle et al. suggest that Malagasy's topic position is [Spec, IP] but that this Specifier position is to the right of its sister, whilst specifiers in the language are otherwise to the left of their sisters, as in (8). Whichever argument is the topic raises to [Spec, IP] where it receives NOM case. If the subject is not the topic it remains in [Spec, VP] and receives case there. The Verb raises to I overtly, and this gives rise to the basic word order facts of Malagasy.



This analysis is clearly incompatible with any theory which requires specifiers within a given language to occur uniformly to one side or the other of their sister X'. It departs from standard