VSO Word Order in Malagasy Imperatives[*]

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This paper accounts for an unusual VSO word order found in Malagasy imperative clauses to the exclusion of indicative clauses. It proposes that, what appears to be a subject in immediately post-verbal position is not a subject at all; rather, it is a vocative. Semantic and morphological characteristics of Malagasy vocatives support this claim. The paper argues against two alternative analyses: a scrambling analysis that derives VSO order from the canonical VOS via rightward scrambling, and a predicate-internal subject analysis that derives the VSO order by leaving the subject in its base position. I show that both alternatives are empirically and conceptually inferior to the vocative account proposed in the present work.
key words: Malagasy, imperative, vocative, subject

1   Introduction

Malagasy is an Austronesian language spoken by approximately 14 million people on the island of Madagascar. It is typically described as having basic VOS word order, (1a); while, VSO is generally not possible, (1b).[1][2]

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[1] There is some debate over the exact status of the obligatory clause-final noun phrase, which Pearson (2005), following others, neutrally calls the TRIGGER. Under the traditional conception of Malagasy clausal organization, the trigger is the subject of the clause, yielding VOS word order. For ease of presentation, I will follow this line of description in what follows. Pearson (2005) develops an alternative conception of Malagasy word order in which the trigger is a clause-external topic linked to a clause-internal empty category. Under such an analysis, the basic

(1) a. namaky   boky ianao   VOS
     read.PAST book 2SG
     'You read a book.'
   b. *namaky   ianao   boky   *VSO
     read.PAST 2SG   book

In active imperatives, however, both VOS and VSO are freely allowed when there is an overt subject (Dez 1990, Koopman 2006). Compare (2c) with the ungrammatical (1b).

(2) a. mamakia boky!
     read.IMP   book
   b. mamakia boky ianao!   VOS
     read.IMP   book 2SG
   c. mamakia ianao   boky!   VSO
     read.IMP   2SG   book
     'Read a book!'

The goal of this paper is to account for the additional word order option in (2c) by answering the following two, main questions. What is this immediately post-verbal subject position in imperatives? Can it tell us anything about Malagasy clause structure and the derivation of VOS/VSO more generally?

     The paper is organized as follows: first, I consider two derivations for the VSO order in section 2 and show that neither is empirically adequate. In section 3, I argue in favor of a VOCATIVE ANALYSIS in which the immediately post-verbal subject is actually not a subject at all; rather, it is a vocative. In section 4, I conclude that imperatives and indicatives actually do allow the same positional options for the subject and, thus, that imperatives do not differ from indicatives, at least not in this respect. Therefore, they do not tell us anything about Malagasy clause structure or the derivation of VSO/VOS. In the final section, I discuss several issues for further investigation.

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word order is VSO, which can be seen when the trigger does not correspond to the subject (TT stands for the theme topic verb form):

(i)   novakin'   ny mpianatra   ilay boky
     read.TT.PAST the student   that book
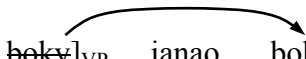   'The student read that book.'
[2] I use the following abbreviations in glossing: 1/2/3-person, DET-determiner, FOC-focus, FUT-future, IMP-imperative, LOC-locative, SG/PL-number, PASS-passive, PRES-present, Q-question, REFL-reflexive, REL-relative, VOC-vocative.

2   Deriving VSO Word Order

The literature contains numerous proposals for deriving VSO word order within the Principles and Parameters framework (McCloskey 1991, 1996; Chung 1998, 2006; papers in Carnie and Guilfoyle 2000; papers in Carnie, Harley, and Dooley 2005; among others). Two routes to VSO word order are SCRAMBLING of S and O with respect to the verb and use of the PREDICATE-INTERNAL SUBJECT POSITION. Sections 2.1 and 2.2, respectively, show that neither of these options can adequately account for the Malagasy VSO imperatives.

2.1   Rightward scrambling

If we assume that the basic word order in Malagasy is VOS, then VSO can be derived by "scrambling" the object rightward across the subject:

(3)   [mamakia   ~~boky~~]$_{VP}$ ianao   boky!
       read.IMP   2SG   book
       'Read a book!'

I use the term scrambling in a non-technical sense to describe the placement of a constituent at the right periphery of the clause, to the right of its normal position. Under a SCRAMBLING ANALYSIS of VSO for Malagasy, the VP-internal material scrambles over the subject, which is in its canonical position, as shown above. Such an analysis is a priori plausible as Malagasy independently allows rightward scrambling of various elements in indicative clauses relative to the subject (see Potsdam 2006 and Law 2007, where this phenomenon is called extraposition). (4) shows rightward displacement of a PP adjunct, an NP adverbial, and a CP complement, respectively.

(4) a. hanao izany (noho   izaho) Rasoa   (**noho   izaho**)
         do.FUT that   because 1SG   Rasoa   because 1SG
         'Rasoa will do that because of me.'
    b. namaky   boky (omaly)   ny   mpianatra   (**omaly**)
         read.PAST book yesterday the student   yesterday
         'The student read a book yesterday.'
    c. mihevitra Rabe   **fa   nahita   gidro**
         think.PRES Rabe   that   see.PAST lemur
         'Rabe thinks that he saw a lemur.'

Although I cannot conclusively eliminate the scrambling option to derive imperative VSO, such a solution would require a number of, at present, ad hoc restrictions. First, as we saw in (1b) above and as shown in (5) below, the VSO order is not permitted in indicatives. Such examples are robustly

ungrammatical. In order to exclude (1b) and (5b) but permit (2c), the operation that scrambles NP objects would need to be restricted to imperatives. Although this could be implemented it would not be explanatory.

(5) a. namaky   (ilay) boky   Rabe
        read.PAST   that   book   Rabe
        'Rabe read a/that book.'
    b. *namaky   Rabe   (ilay)   boky
        read.PAST   Rabe   that   book

Second, a further restriction on imperative scrambling is necessary, namely, that it maintain base word orders. To illustrate, the base word order of ditransitives in both imperatives and indicatives is V NP PP (Pearson 2000):

(6)   *imperative clause*
    a. V NP PP
        mametraha   vilia   eo   ambonin'   ny latabatra!
        put.IMP   plate   LOC   on   the table
        'Put a plate on the table!'
    b. *V PP NP
        *mametraha   eo   ambonin'   ny latabatra   vilia!
        put.IMP   LOC   on   the table   plate

(7)   *indicative clause*
    a. V NP PP
        nametraka   vilia   teo   ambonin' ny latabatra   Rabe
        put.PAST   plate   LOC   on   the table   Rabe
        'Rabe put a plate on the table.'
    b. *V PP NP
        *nametraka   teo   ambonin' ny latabatra   vilia   Rabe
        put.PAST   LOC   on   the table   plate   Rabe

The V NP PP order must also be maintained in imperatives with an overt subject, as exemplified in (8) below. (8a) is the baseline example with a clause-final subject. (8b) shows the post-verbal subject of interest. (8c) shows that, as in (6b), it is ungrammatical to have the alternative V PP NP order of the two complements.

(8) a. V NP PP *you*
    mametraha vilia   eo   ambonin' ny latabatra **ianao**!
    put.IMP   plate   LOC on   the table   2SG
    'Put a plate on the table!'

  b. V *you* NP PP
    mametraha **ianao** vilia   eo   ambonin' ny latabatra!
    put.IMP   2SG   plate   LOC on   the table
    'Put a plate on the table!'

  c. *V *you* PP NP
    *mametraha **ianao** eo   ambonin' ny latabatra vilia!
    put.IMP   2SG   LOC on   the table   plate

If scrambling is responsible for (8b), it would have to maintain the pre-scrambled order of the NP and PP. This is a somewhat mysterious restriction that does not uniformly hold of scrambling in other languages.[3]

    Finally, imperative scrambling would need to be semantically vacuous. As far as I have been able to ascertain, any type of object can appear before or after the imperative subject. As is expected, the scrambled object may be definite. The example in (9) illustrates a pronoun, name, and a demonstrative NP object.

(9)   mamangia (ianao) ahy/an-dRabe/ilay havana (ianao)!
          visit.IMP   2SG   me/Rabe/that relative   2SG
          'Visit me/Rabe/that relative!'

All other kinds of NPs, including indefinite and non-referential NPs, are allowed as well, however. (10) illustrates a bare noun, a free choice indefinite, a headless relative, a quantified NP, a reflexive, and an idiom chunk alternating on either side of the subject *ianao* 'you'.

(10)a. misotroa (ianao) rano   betsaka (ianao)!
          drink.IMP 2SG   water much   2SG
          'Drink lots of water!'

    b. mandraisa (ianao) na vilia iza   na vilia iza (ianao)!
        take.IMP   2SG   or plate which or plate which 2SG
        'Take any plate!'

    c. mandraisa (ianao) izay   tianao   (ianao)!
        take.IMP   2SG   REL   want.2SG 2SG
        'Take whatever you want!'

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[3] Such a pattern might be accounted for by "Shape Conservation" constraints that require movement-derived structures to maintain base word orders (Müller 2000, Williams 2003, Fox and Pesetsky 2006).

d. mamakia (ianao) ny boky rehetra (ianao)!
   read.IMP 2SG   the book all   2SG
   'Read all the books!'

e. manongoa (ianao) tena (ianao)!
   pinch.IMP 2SG   REFL 2SG
   'Pinch yourself!'

f. makà (ianao) rivotra (ianao)!
   take.IMP 2SG   wind 2SG
   'Take a vacation!'

Such data are unexpected in that scrambling usually has some information structural effect and is often restricted to definite/specific NPs. For example, den Dikken (1992) shows that objects in Dutch imperatives undergo exceptional rightward movement but they must be definite.[4]

    To summarize, scrambling is able to account for the VSO word order in imperatives but the transformation would have to have unique properties that are not well motivated at this stage: (a) application restricted to imperatives, (b) maintenance of base word orders, and (c) semantic vacuity. I take these reasons to be sufficient to set aside the scrambling analysis in favor of the more principled solution in section 3.[5]

2.2 *Predicate-internal subject*

A promising analysis of the imperative VSO order is proposed by Koopman (2006: 148). She capitalizes on the fact that the Predicate-Internal Subject Hypothesis (Kitagawa 1986, Kuroda 1988, Koopman and Sportiche 1991, and others) provides a second subject position that is farther leftward. According to the INTERNAL SUBJECT ANALYSIS of VSO,

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[4] See Saito (1989), Sauerland (1999), and references therein for the claim that Japanese scrambling is semantically vacuous.

[5] There is an alternative instantiation of the scrambling analysis that, I believe, is subject to similar criticisms. The analysis derives the VOS word order from a base SVO word order via fronting of the VO predicate (Rackowski and Travis 2000, Aldridge 2004, Pearson 2005, Cole and Hermon 2008, and references therein). VSO is derived by scrambling the object leftwards out of the predicate, but to a position below the subject. and then fronting the predicate, which consists solely of the verb (Massam 2000, 2001, Chung 2005, and references therein). This leftward movement of the object does seem to be semantically vacuous in the VSO languages that use it, perhaps, because it is obligatory. On the other hand, for the VOS language Malagasy, the leftward movement must still be restricted to imperatives and to maintaining base word orders when there are multiple internal arguments.

the imperative subject can remain in the predicate-internal position, which would be immediately post-verbal, as shown in (11).

(11)　　[mamakia　　ianao　boky]_{VP}　　ø!
　　　　 read.IMP　　 2SG　　 book
　　　　 'Read a book!'

A concrete implementation of this clause structure originates in Guilfoyle, Hung, and Travis (1992) and Paul (2000). The predicate-internal subject position is Spec,vP and the verb raises to the left of the subject into I˚, yielding the VSO order. Under this conception, the structure of imperatives differs from that of other clause types in that the subject need not externalize to the clause-final subject position, which the above researchers take to be a righthand specifier of IP.

(12)
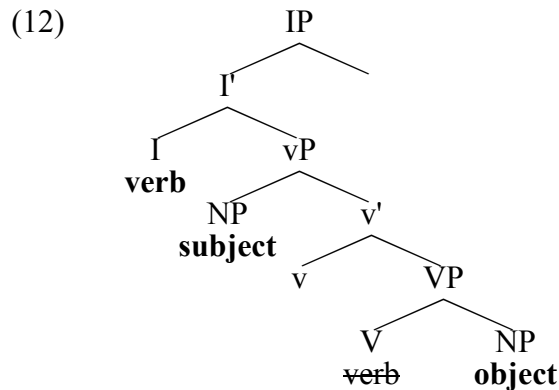
Such an analysis is not unprecedented. Henry (1995) argues for a predicate-internal subject in some Belfast English imperatives in which the subject appears immediately after the verb.
　　　　Two empirical arguments against the internal subject analysis follow. The first comes from word order possibilities for ditransitive imperatives. As we saw above, the subject in such examples can appear immediately after the verb or clause-finally, (13a,b). In addition, the imperative subject can appear between the internal arguments, (13c).

(13)a. mandidia **ianao** ilay mofo
　　　cut.IMP　　2SG　　that　　bread
　　　amin' ity　antsy ity　foana!
　　　with　this　knife　this　always
　　b. mandidia ilay　mofo
　　　cut.IMP　that　bread
　　　amin' ity　antsy ity　foana　**ianao**!
　　　with　this　knife　this　always　2SG
　　c. mandidia ilay mofo　**ianao**
　　　cut.IMP　that bread　2SG
　　　amin' ity　antsy ity　foana!
　　　with　this　knife　this　always
　　　'Always cut that bread with this knife!'

This intermediate position in (13c) is not a position equatable to Spec,vP or Spec,IP, as seen in the structure in (14).

(14)
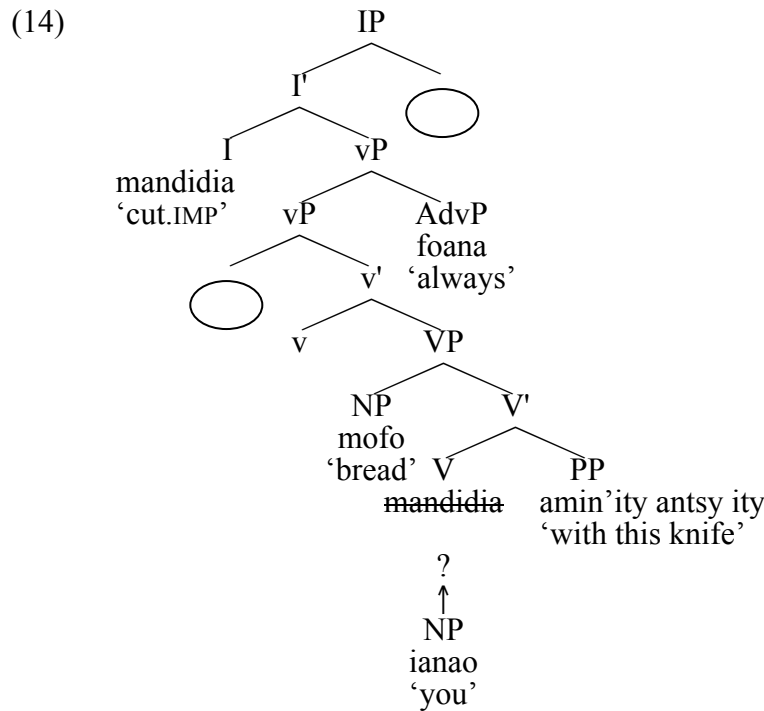
I use the VP-adverb *foana* 'always' in these examples to mark the right edge of the vP (Keenan 1995, Potsdam 2006). The position of this adverb ensures that the internal arguments have not scrambled over the subject to a position outside of the verb phrase. The structure in (14) shows that all complements should follow Spec,vP. Likewise, they should all precede Spec,IP. There is no structural position for the subject between the two

complements. Not surprisingly, this position between internal arguments is not available to subjects in indicative clauses, (15a). Only the clause-final position is allowed, (15b).

(15)a. *nandidy ilay mofo **Rabe**
     cut.PAST   that bread Rabe
     tamin' ity   antsy ity   foana
     with   this knife this always
   b. nandidy   ilay mofo tamin' ity   antsy ity
     cut.PAST   that bread with   this knife this
     foana   **Rabe**
     always   Rabe
     'Rabe always cut that bread with this knife.'

The second argument against a vP-internal subject comes from non-active imperatives. If the internal subject analysis is correct, it can be paraphrased as saying that externalization of some element to Spec,IP is not required in imperatives and Spec,IP can remain empty (see the structure in (12)).[6] This general claim is incorrect, as we can see by looking at passive imperatives. Malagasy freely allows imperatives with the verb in the passive, or theme topic, form, (16). Such examples are quite usual and often preferred to active imperatives, as they are judged to be less direct.

(16)   vakio   ilay boky!
     read.PASS.IMP   that book
     lit. "That book be read!"
     'Read that book!'

In passive imperatives, the theme must be moved out of the vP to fill the subject position, Spec,IP. The passive imperatives in (17) and (18) illustrate this clearly because the theme must appear to the right of, and, thus, external to, vP-internal elements such as an oblique PP complement, (17), and the VP-adverb *foana* 'always', (18).

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[6] This characterization is neutral between treating the clause-final NP as a subject, as I do here, or as a topic, as in Pearson (2005) and note 1. The VSO word order indicates that this external position (subject or topic) is not occupied.

(17)a. didio   amin' ity   antsy ity]_{vP} ilay mofo!

(17)a. didio   amin' ity   antsy ity]$_{vP}$ ilay mofo!
        cut.PASS.IMP with   this   knife this   that bread
        lit. "That bread be cut with this knife!"
        'Cut that bread with this knife!'

    b. *didio   ilay mofo amin' ity   antsy ity!
        cut.PASS.IMP that bread with   this knife this

(18)a. ataovy   foana]$_{vP}$ ny   enti-mody!
        do.PASS.IMP   always   the   homework
        lit. "The homework always be done!"
        'Always do the homework!'

    b. *ataovy   ny   enti-mody   foana!
        do.PASS.IMP   the   homework   always

Furthermore, Malagasy has a well-known formal requirement on its subjects, that they be morphosyntactically definite/specific (Keenan 1976, Law 2006, and others). Therefore, the subject must be a name, pronoun , or NP preceded by a determiner such as *ny* 'the' or *ilay* 'that', as in (19).

(19)   mamaky   boky   i Bao/izy/ny zaza/ilay zaza
         read.PRES   book   DET Bao/3SG/the child/that child
         'Bao/(s)he/the child/that child is reading a book.'

Bare noun phrases without an overt determiner are ungrammatical as subjects, (20). As seen in (19), objects are not so restricted and need not have an overt determiner.

(20)   *mamaky   boky   olona/zaza
         read.PRES   book   person/child
         ('A person/child is reading a book.')

This restriction on subjects holds of the clause-final NP in passive imperatives, (21), confirming that it is indeed the externalized subject and that such externalization must therefore be obligatory.

(21)   vakio   *(ny) boky
         read.PASS.IMP   the   book
         'Read the book!'

I conclude that the internal subject analysis fails to account for the imperative word order facts and must be rejected. The imperative subject in VSO is not in its base position.

2.3   Intermediate summary

Thus far, I have rejected two derivational accounts for the VOS/VSO alternation in (22). Both scrambling and internal subject analyses of VSO proved to be empirically deficient.

(22)a. mamakia boky   ianao!   VOS
         read.IMP book   2SG
     b. mamakia ianao   boky!   VSO
         read.IMP 2SG   book
         'Read a book!'

An important observation from the latter analysis however is worth highlighting: the word order variation is restricted to an unusual positioning of the agent in active imperatives. It does not affect the theme in passive imperatives. A passive imperative subject must appear in the canonical position. This suggests that the behavior is unique to agents or the imperative addressee. In the next section, I capitalize on this observation and offer an alternative analysis.

3   A Vocative Analysis

In this section, I propose that the post-verbal NP[7] in VSO imperatives is not a subject at all; rather, it is a vocative. By vocative, I mean a non-argument NP whose referent is precisely the person or persons being addressed. Vocatives and subjects may be referentially identical but they are not the same. As we know from English and other languages, a sentence may easily have both: *Sandy, did you/Bill wash the dishes?*

    For a number of reasons, it is often difficult to identify a vocative in an imperative and distinguish it from a subject. Nevertheless, there are useful criteria. The following are taken from Downing (1969) and Jensen (2003) and indicate that a variety of grammatical cues can be relied on to distinguish a vocative from a subject in a given case. One can use phonological, morphological, syntactic and/or semantic information.

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[7] By "post-verbal", I mean all non-clause-final positions following the verb: the immediately post-verbal position but also the positions between internal arguments. Post-verbal excludes the clause-final position.

(23)a. phonology: special pronunciation of NP
   b. prosody: special intonation contour, using/including a prosodic break
   c. morphology: special vocative case or other morphological marking
   d. syntax: cannot trigger 3rd person agreement, even when the vocative is 3rd person
   e. phrase structure: occupy a clause-external position
   f. semantics: reference exactly to the addressee

For Malagasy, (23c, f), the morphology and semantics of a vocative, will be particularly helpful. What we will see in the next two sections is that these two criteria unambiguously indicate that the post-verbal NP in the putative VSO imperatives is a vocative.

3.1   Morphology

Malagasy has specific morphology that identifies some vocative forms (Rahajarizafy 1960, Rajemisa-Raolison 1969, Dez 1990). Second person pronouns do not differentiate between vocative and non-vocative forms: *ianao* 'you.2SG' and *ianareo* '2PL' are both subjects and vocatives. With non-pronominals, however, the vocative determiner *ry* is used:

(24)a. ianao   'you (sg)'   vocative or non-vocative
   b. *ry ianao   --

(25)a. i Soa   'Soa'   non-vocative only
   b. ry Soa   'Soa!'   vocative only

(26)a. ny mpianatra   'the students'   non-vocative only
   b. ry mpianatra   'students!'   vocative only

The use of *ry* in a sentence is illustrated in (27).

(27)   ry/*i   Soa,   nividy   mofo ve   ianao?
       VOC/DET Soa   PAST.buy   bread Q   2SG
       'Soa, did you buy bread?'

In addition, some nouns have suppletive vocative forms, (28). Instead of using the vocative determiner *ry*, the suppletive bare noun is used.

(28)a. ny zanaka/ankizy   'the child'   non-vocative only
   b. *ry zanaka/ankizy   --
   c. anaka/rankizy   'child!'   vocative only

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The vocative analysis correctly predicts that only the vocative forms of these noun phrases can appear in the VSO word order variant:

(29)a. mividiana   **ry   Soa**   mofo!
     buy.IMP   **VOC** Soa   bread
     'Buy bread, Soa!'
  b. *mividiana (i)   Soa   mofo!
     buy.IMP   DET   Soa   bread

(30)a. manaova   **anaka/rankizy**   enti-mody!
     do.IMP   child.**VOC**   homework
     'Do the homework, children!'
  b. *manaova   (ny)   zanaka/ankizy   enti-mody!
     do.IMP   the   child   homework

The data in (29) and (30) suggests that the post-verbal position is at least a vocative position. However, it could be the case that the post-verbal position is ambiguous between a vocative and a subject position and (29b) and (30b) are ungrammatical for an independent reason. Specifically, they might be ruled out because third person imperative subjects are ungrammatical in Malagasy. Some languages have restrictions on imperative subjects and limit them to second person pronouns. In fact, this scenario seems to be largely correct: such third person NPs are not allowed in the uncontroversial clause-final imperative subject position either, (31).[8] This leaves open the option that the post-verbal position might be a position for subjects *and* vocatives.

(31)a. *mividiana mofo   i   Soa!
     buy.IMP   bread   DET   Soa
     ('Soa buy bread!')
  b. *manaova   enti-mody   ny   zanaka/ankizy!
     do.IMP   homework   the   child
     ('Children do the homework!')

We can make headway on this issue by avoiding third person NPs and making the subjects second person pronouns. Simple second person

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[8] Dez (1990: 21) gives a counterexample, which, as he indicates, can be used to avoid being too direct, (i). See also (37).

(i) avia   i   Koto!
    come.IMP   DET   Koto
    'Koto come!'
    "Que Koto vienne (c'est à dire: viens, Koto)"

pronouns do not distinguish between subject and vocative forms but modified pronouns do. *Ianareo ankizy* 'you children' is the non-vocative form and *ianareo rankizy* 'you children.VOC' is unambiguously the vocative form. The modifier will allow us to determine whether the pronoun is functioning as a vocative or not. (32) shows that such modified pronouns are possible imperative subjects in the clause-final position.

> (32) manaova enti-mody **ianareo zanaka/ankizy**!
>   do.IMP   homework   2PL   child
>   'Children (as opposed to others) do the homework!'
>   picks out the group of children from the larger set of
>   addressees

The non-vocative form of modified pronouns is not possible in the post-verbal position, (33), confirming that the post-verbal position is not a subject position.

> (33) *manaova **ianareo zanaka/ankizy**   enti-mody!
>   do.IMP   2PL   child   homework
>   ('Children do the homework!')

Instead, the modifying noun in the post-verbal position must take a vocative form:

> (34)a. manaova **ianareo** **anaka/rankizy**   enti-mody!
>   do.IMP   2PL   child.**VOC**   homework
>   b. manaova enti-mody **ianareo** **anaka/rankizy**!
>   do.IMP   homework   2PL   child.VOC
>   'Do the homework, you children!'

Thus the first piece of evidence for the vocative analysis is that the post-verbal NP must take vocative morphology if it can. When the morphology allows us to differentiate subjects from vocatives, the post-verbal NP is unambiguously a vocative.

3.2   Semantics

The unique semantics of vocatives also allows us to identify the post-verbal NP as a vocative. By definition, vocatives are restricted to referring uniquely to the addressee. We will see that NPs that are unsuitable as vocatives because of their semantics are excluded from the post-verbal position even though they are acceptable as imperative subjects.

Some languages do not allow universally quantified vocatives such as *everybody* because they do not pick out a particular addressee. Greek is

one language that does not, although English does, as witnessed by the acceptable translation in (35).

(35)　*Kathenas,　ela　　　　edho!　　　GREEK
　　　 everybody　come.IMP.2SG　here
　　　 ('Everybody, come here!')

Malagasy is like Greek in not allowing universally quantified vocatives. *Ry rehetra* 'everybody.VOC' is not a possible vocative, regardless of its position:

(36)a.　***ry　rehetra**　misotroa　rano　betsaka!
　　　　VOC　all　　　drink.IMP　water　much
　　 b.　*misotroa　rano　betsaka **ry　rehetra**!
　　　　drink.IMP　water　much　VOC　all
　　　　('Everybody, drink lots of water!')

As in English, however, *ny rehetra* 'everybody' is a possible imperative subject, (37). It can appear in the clause-final position with the non-vocative determiner *ny*.

(37)　misotroa　rano　betsaka　**ny rehetra**!
　　　 drink.IMP water　much　　the all
　　　 'Everybody drink lots of water!'

When we turn to the post-verbal position, we see that neither *ry rehetra* 'everybody.VOC' nor *ny rehetra* 'everybody' is possible:

(38)a.　*misotroa　**ry　rehetra**　rano　betsaka!
　　　　drink.IMP　VOC　all　　　water　much
　　 b.　*misotroa　**ny rehetra**　rano　betsaka!
　　　　drink.IMP　the all　　　water　much
　　　　('Everybody(,) drink lots of water!')

The ungrammaticality of (38a) is expected because *ry rehetra* 'everybody.VOC' is just not a possible vocative regardless of its position. The ungrammaticality of (38b) can be accounted for if we assume that the post-verbal position is simply not a subject position.

　　　Observe that it is not the meaning of (38) that is the problem. A general audience vocative can be expressed using *ry vahoaka* 'people.VOC'. This can appear in post-verbal position but only as a vocative:

(39)a. misotroa **ry** **vahoaka** rano betsaka!
　　　 drink.IMP VOC people water much
　　　 'People, drink lots of water!'
　　b. *misotroa **ny** **vahoaka** rano betsaka!
　　　 drink.IMP the people water much
　　　 ('You people drink lots of water!')

Thus, the second piece of evidence in favor of the vocative analysis comes from semantic restrictions on vocatives. Impossible vocatives are excluded from the post-verbal position but allowed in clause-final position. In summary, an NP in post-verbal position obligatorily has vocative morphology and obeys semantic restrictions specific to vocatives.

4　Conclusion

I conclude that the clause-internal agent NP that shows up in imperatives is really a vocative, not a subject.[9] Subjects in imperatives appear clause-finally, the canonical subject position in Malagasy, and clause-initially. The post-verbal position that would yield the VSO order is not available for subjects. Consequently, the position of subjects in imperatives is the same as the position of subjects in indicative clauses:

(40)　*subject distribution in imperatives and indicatives*
　　a. initial[10]
　　b. *post-verbal
　　c. final

(41)　*imperative*
　　(ny rehetra) mividiana (*ny rehetra) mofo
　　the all buy.IMP the all bread
　　(ny rehetra)!
　　the all
　　'Everybody buy bread!'

---

[9] Winifred Bauer (personal communication) indicates that the same is true of Maori imperatives.

[10] SVO word order is allowed in indicative clauses under restricted circumstances when the subject is contrastive (Keenan 1976: 270-271, Paul 2001: 138, Pearson 2001: 214). I have not investigated clause-initial subjects thoroughly but I suspect that they are also possible in imperatives under similar circumstances.

(42) *indicative*
(i Soa)   nividy   (*i Soa)   mofo   (i Soa)
DET Soa   buy.PAST   DET Soa   bread   DET Soa
'Soa bought bread.'

The conclusion reached in the present article is in line with work on imperative syntax in other languages, such as English and Dutch. Potsdam (1998) and Koopman (2007), respectively, argue that imperative clause structure should differ from that of other clauses only in principled ways. Contrary to some earlier work, imperatives should not be taken as peripheral constructions in the grammar allowing ad hoc rules.

In contrast to subjects, vocatives in imperatives can appear clause-initially, post-verbally, or clause-finally:

(43) *vocative distribution in imperatives*
  a. initial
  b. post-verbal
  c. final

(44) (ianao/ry Soa)   mividiana   (ianao/ry Soa)   mofo
2SG/VOC Soa   buy.IMP   2SG/VOC Soa   bread
(ianao/ry Soa)!
2SG/VOC Soa
'You/Soa, buy bread!'

The analysis of the original imperative paradigm from (2) is shown in (45). The clause-final position in imperatives is possible for vocatives or subjects. However, the post-verbal, clause-internal position is reserved for vocatives only.

(45)a. mamakia   boky   ianao!   **V O S/vocative**
        read.IMP   book   2SG.**VOC/SUBJECT**
    b. mamakia   ianao   boky!   **V vocative O**
        read.IMP   2SG.**VOC/*SUBJECT**   book
        'Read a book!'

I conclude with a challenge that sets up the agenda for future work. Given the above paradigms, a clear expectation is that the positioning of vocatives in indicative clauses will be the same as in imperative clauses: vocatives in indicatives should appear in clause-initial, post-verbal, and clause-final positions. My initial investigations suggest that this is not correct. Vocatives have a more restricted distribution in indicatives and, specifically, the post-verbal vocative position seen in imperatives is not available. This is the case for declaratives, yes/no questions, and wh-questions:

(46)a. (ry Soa)   efa   nividy   (*ry Soa) mofo
       VOC Soa already buy.PAST VOC Soa   bread
       aho   (ry Soa)
       1SG   VOC Soa
       'Soa, I already bought bread.'

    b. (ry Soa)   nividy   (*ry Soa)   mofo   ve
       VOC Soa buy.PAST VOC Soa   bread   Q
       ianao/Rabe (ry Soa)?
       2SG/Rabe   VOC Soa
       'Soa, did you/Rabe buy bread?'

    c. (ry Soa)   iza   no   (*ry Soa) nividy
       VOC Soa who FOC VOC Soa   buy.PAST
       (*ry Soa)   mofo (ry Soa)?
       VOC Soa   bread VOC Soa
       'Soa, who bought bread?'

The indicative pattern is, in some sense, the expected pattern, as vocatives canonically appear in peripheral positions (Zwicky 1974, Lambrecht 1996, Leech 1999, Jensen 2003, Moro 2003). It is the post-verbal position of vocatives in imperatives that is somewhat unexpected and in need of an explanation. I leave the following questions for future work. What is the structure of imperatives, how should the post-verbal vocative position be analyzed, and why is this position only available in imperatives?

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