Clausal complementation in Malagasy
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1. Introduction

- Research on clausal complementation suggests there is a hierarchal correspondence between the semantics of the selecting verb and the syntax of the embedded clause (Givón 1980, Wurmbrand & Lohninger 2019)
- Malagasy lacks morphological distinctions between tensed and tenseless clauses
    - full CPs headed by *fa*
    - smaller clauses lacking the CP layer (Potsdam & Polinsky 2005, Pearson 2018)
- Proposal: three types of clausal complement to lexical verbs
    - PROPOSITION (CP) (1a)
    - SITUATION (TP) (1b)
    - EVENT (VoiceP) (1c)
- Plus: functional restructuring with *te* 'want' (Cinque 2004) (1d)

(1)   a.   manantena i   Soa [_{CP} fa   hividy   fiara]   **P**ROPOSITION

(1) a. manantena i Soa [CP fa hividy fiara]   PROPOSITION
AT.hope   DET Soa   COMP FUT.AT.buy   car
'Soa hopes to buy a car.'

b. mandà [TP hihira]   i   Soa   SITUATION
AT.refuse   FUT.AT.sing   DET Soa
'Soa refuses to sing.'

c. mankahala [VoiceP mamaky boky]   ny   mpianatra   EVENT
AT.hate   AT.read book   DET student
'The student hates to read books.'

d. te   hihira   ny   mpianatra   FUNCTIONAL
want   FUT.AT.sing   DET student
'The student wants to sing.'

- Outline of talk:
    - Background on Malagasy clause structure
    - Implicational Complementation Hierarchy
    - Diagnostics for clause size
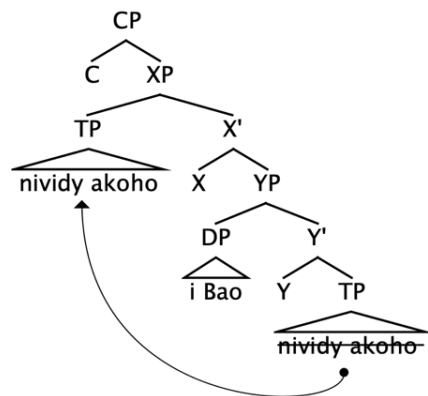   - Analysis
    - Conclusion

2. Background

- Malagasy: VOS spoken in Madagascar

(2)   nividy   akoho   i   Bao.
PST.AT.buy chicken   DET Bao
'Bao bought a chicken.'

- Assumed clause structure: TP fronting over position of subject (Pearson 2001, inter alia)

(3)

- No dedicated infinitives
  - tense marking: ø present, *n-* past, *h-* future
- CP complements extrapose (obligatory if embedded subject/topic/trigger is overt)

(4)   manantena   Rabe [fa   hividy   fiara   <u>Rasoa</u>]
        AT.hope   Rabe COMP   FUT.AT.buy   car   Rasoa
        'Rabe hopes that Rasoa will buy a car.'

- Previous work on clausal complementation:
  I.   <u>Inverse order perception verb complements</u> (Pearson 2018)

(5)   mahita   [ireo ankizy ireo mitomany]   ny   lehilahy.
        AT.see   DEM child DEM AT.cry   DET man
        'The man sees these children crying.'

- Lack position for TP fronting – leads to SVO
  II. <u>Control</u> (Keenan 1976, Randriamasimanana 1986, 2007, Law 1995, Polinsky and Potsdam 2002, 2003, 2005, inter alia)

(6)   a.   nanandrana   namono   ny akoho   Rabe
                PST.AT.try   PST.AT.kill DET chicken   Rabe
                'Rabe tried to kill the chicken.'

        b.   nandraman-   dRabe novonoina ny akoho
                PST.TT.try   Rabe   PST.TT.kill DET chicken
                'Rabe tried to kill the chicken.'

- Polinsky and Potsdam (2005): control verb selects for a complement lacking the A-bar layer that hosts the subject
→ evidence for complements smaller than CP

3. Implicational Complementation Hierarchy (ICH)

- Wurmbrand and Lohninger (2019)
    - o Complement clauses are not selected (or only in a very limited way)
    - o Restriction: the combination of matrix predicate and complement clause must be interpretable
    - o Motivation: matrix predicate and embedded clause can affect each other

(7)   Proposition >> Situation >> Event

- PROPOSITION: can be assigned a truth value, are temporally unrestricted
    - o *believe*, *forget* (factive), *know* (factive), etc.
- SITUATION: eventualities that are temporally anchored to the matrix (commonly irrealis)
    - o *agree*, *know* (modal), *need*, *refuse*, etc.
- EVENT: time of embedded event must be simultaneous with matrix (often infinitive/tenseless)
    - o *begin*, *forget* (implicative), *try*, etc.

4. Diagnostics

- Building on Scott (2019, 2020)

4.1 Comp

- The complementizer *fa* can appear with PROPOSITION complements (see Potsdam and Polinsky 2007)

(8)   manantena Rabe fa   hianatra   teny   anglisy   PROPOSITION
         AT.hope   Rabe COMP   FUT.AT.study language   English
         'Rabe hopes to study English.'

(9)   milaza i   Koto fa   mihinana   atin-kena   PROPOSITION
         AT.say DET Koto COMP   AT.eat   inside-meat
         'Koto says that he eats liver.'

- Blocked with other verbs, or get meaning shift (12)

(10)   *mandà   i Koto fa   hihinana   atin-kena   SITUATION
         AT.refuse   DET Koto COMP   FUT.AT.eat inside-meat
         'Koto refuses to eat liver.'

(11)   *mankahala   ny mpianatra fa   mamaky boky   EVENT
         AT.hate   DET student   COMP   AT.read book
         'The student hates to read books.'

(12)   a.   nanadino   nividy   akondro   Rasoa   EVENT
                 PST.AT.forget PST.AT.buy banana   Rasoa
                 'Rasoa forgot to buy bananas.' (implicative)

    b.   nanadino   Rasoa fa   efa   nividy   akondro   PROPOSITION
               PST.AT.forget Rasoa COMP   already PST.AT.buy banana
               'Rasoa forgot that she already bought bananas.' (factive)

→ SITUATION and EVENT complements are smaller than CP

- *mba*: 'in order to' - a kind of complementizer (Potsdam and Polinsky 2007)

(13)   mila   [mba   mividy   sira]   ny mpahandro
        AT.need   COMP   AT.buy   salt   DET cook
        'The cooks need to buy salt.'

- *ny*: determiner, possible with most control verbs (see Randriamasimanana 1986, 2007; Ntelitheos 2012, 2013; Potsdam and Polinsky 2015)

(14)   mila   [ny   mividy sira]   ny mpahandro
        AT.need   DET AT.buy salt   DET cook
        'The cooks need to buy salt.'

4.2 Tense
- PROPOSITION complements have free tense

(15)   milaza i   Koto fa   m/h/nihinana   atin-kena   PROPOSITION
        AT.say DET Koto COMP   PRES/FUT/PST.AT.eat   inside-meat
        'Koto says that he eats/will eat/ate liver.'

- SITUATION complements are marked with future/irrealis (dependent tense)

(16)   mandà   *m/h/*nihinana   atin-kena   i   Koto   SITUATION
        AT.refuse   PRES/FUT/PST.AT.eat inside-meat   DET Koto
        'Koto refuses to eat liver.'

- EVENT complements must match in tense with matrix predicate (anaphoric tense)

(17)   mankahala   m/*h/*namaky   boky   ny mpianatra   EVENT
        AT.hate   PRES/FUT/PST.AT.read book   DET student
        'The student hates to read books.'

4.3 Partial control
- PARTIAL CONTROL: when the controllee must include the controller, but is not necessarily identical
- Possible with some control verbs (*prefer*), but not others (*manage*)

(18)   a.   The chair managed to gather the committee at 6.
        b. *   The chair managed to gather at 6.

      c.   The chair preferred to gather at 6. [Landau 2000:5]

- Cross-linguistically, partial control is possible with PROPOSITION and SITUATION complements
- EVENT complements require exhaustive control
- Malagasy diagnostic: *miara* 'together' – creates a complex predicate that requires a plural subject

(19)   a.   miara-miasa   ny mpianatra
              together-AT.work DET student
              'The students work together.'

      b. * miara-miasa   i   Soa
              together-AT.work DET Soa
              'Soa works together.'

- PROPOSITION and SITUATION complements allow partial control, EVENT do not

(20)   a.   manantena hiara-hiasa   Rasoa   PROPOSITION
              AT.hope   FUT.together-FUT.AT.work Rasoa
              'Rasoa hopes to work together.'

      b.   mandà   hiara-hiasa   i   Soa   SITUATION
              AT.refuse FUT.together-work DET Soa
              'Soa refuses to work together.'

      c. * mankahala   miara-miasa i   Soa   EVENT
              AT.hate   together-work DET Soa
              'Soa hates to work together.'

4.4 Adverbs
- Adverbs can appear between SITUATION verbs and their complements, but not between EVENT verbs and their complements

(21)   a.   mandà   **matetika** hihira   i   Soa   SITUATION
              AT.refuse often   FUT.AT.sing DET Soa
              'Soa often refuses to sing.'

      b. * mankahala **foana** mamaky   boky ny   mpianatra   EVENT
              AT.hate   always AT.read   book DET   student
              'The student always hates to read books.'

      c.   mankahala mamaky   boky **foana** ny   mpianatra   EVENT
              AT.hate   AT.read   book   always DET student
              'The student always hates to read books.'

4.5 Summary

		Comp	Free Tense	Partial Control	V1 Adv V2	Extraposition
P	*manantena* 'hope'	yes	yes	yes	yes	yes
S	*mandà* 'refuse'	no	no - fut	yes	yes	yes
E	*mankahala* 'hate'	no	no - match	no	no	yes
	te 'want'	no	no	no	no	no

Table 1: Summary of diagnostics

- PROPOSITION: *milaza* 'say', *mino* 'believe', *manantena* 'hope', *manadino* 'forget (factive)'
- SITUATION: *mandà* 'refuse', *mikasa* 'intend', *manaiky* 'agree', *miezaka* 'make an effort', *milofo* 'persist'
- EVENT: *mankahala* 'hate', *manadino* 'forget (implicative)', *manandrana* 'try', *mila* 'need', *manomboka* 'start', *mitsahatra* 'stop'

5. Analysis
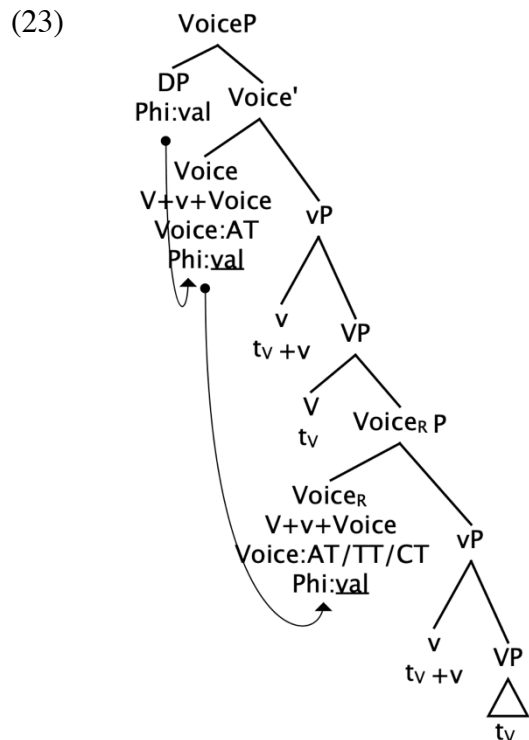
5.1 First pass

- PROPOSITION complements are CP
    - overt C *fa* is possible
    - independent T – no restrictions on tense
    - embedded PRO subject – allows for partial control (Landau 2000)
    - can scramble past adverbs
- SITUATION complements are TP (lack CP layer)
    - no overt C possible (setting aside *mba*)
    - T head must be irrealis, as is common for Situation complements across languages (Wurmbrand & Lohninger 2019)
    - embedded PRO subject – allows for partial control
    - can scramble past adverbs
- EVENT complements are VoiceP
    - no overt C possible (setting aside *mba*)
    - lack TP
        - the time of the embedded event is simultaneous with the time of the matrix event → matching tense marking

(22) a.   Sandy tried to eat liver (*tomorrow).
      b. *   Sandy tried to have eaten liver (yesterday).

- no PRO, therefore exhaustive control
- cannot scramble

5.2 More on EVENT complements

- Exhaustive control:
  - Defective embedded VoiceP, lacks agent phi features (Wurmbrand and Shimamura 2017)
  - Phi features inherited from matrix Voice head → exhaustive control

(23)

- But Voice features are <u>not</u> defective: the voice of the embedded verb is mostly free (subject to semantic/pragmatic compatibility)

(24)   a.   mila   anasana   lamba ity   savony   ity
              AT.need   CT.wash   cloth DEM soap   DEM
              'This soap needs to be used to wash clothes.'

       b.   mila   sasan- dRasoa ilay zaza.
              AT.need   TT.wash Rasoa DEF child
              'The child needs to be washed by Rasoa.'

       c.   nanomboka najaina   ny   lalana
              PST.AT.start PST.TT.respect   DET law
              'The law started to be respected.'

- Issue: are EVENT predicates all raising predicates? No:

(25) a.   mankahala sasana   ilay zaza.
             AT.hate   TT.wash   DEF child
             'The child hates to be washed.'

      b.   mankahala dokafana   ilay mpampianatra
             AT.hate   TT.praise   DEF teacher
             'The teacher hates to be flattered.'

- But *manandrana* 'try' requires voice matching – left as a puzzle

(26) a. *   manandrana   sasana   ilay zaza.
             AT.try   TT.wash   DEF child
             'The child tries to be washed.'

      b. *   manandrana   dokafana   ilay mpampianatra
             AT.try   TT.praise   DEF teacher
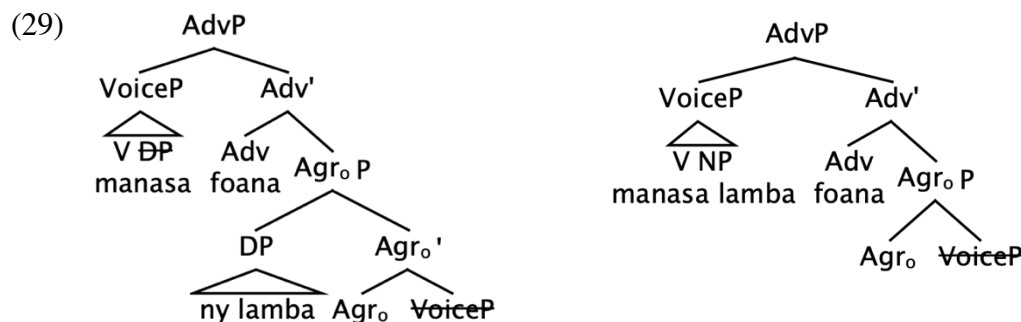   'The teacher tries to be flattered.'

- What about the lack of shift?

(27) mankahala (***foana**) mamaky   boky (**foana**) ny mpianatra
      AT.hate   always   AT.read   book always   DET student
      'The student always hates to read books.'

- VP-level adverbs can appear to the right or left of (definite) complements (Rackowski 1998, Rackowski and Travis 2000)

(28) a.   manasa (**foana**) ny   lamba (**foana**) Rakoto
             AT.wash always DET   cloth   always Rakoto
             'Rakoto always does the laundry.'

      b.   manasa (***foana**) lamba (**foana**) Rakoto.
             AT.wash always   cloth   always Rakoto
             'Rakoto always does laundry.'

- Definite objects can undergo object shift; indefinites cannot

(29)

- Hypothesis: EVENT complements are like indefinite objects and cannot shift

6. Conclusion

- Malagasy provides evidence in favour of the Implicational Complementation Hierarchy (ICH) (Wurmbrand and Lohninger 2019), despite lacking morphological cues for finiteness.
- Malagasy also has a distinct class of functional predicates (e.g. *te* 'want')
    - ICH effects are independent of the lexical-functional distinction
    - EVENT complements pattern (mostly) with functional restructuring, but the matrix verb is lexical
- Remaining issues:
    - Status of *mba* and *ny* as embedding elements
    - Voice dependencies
    - Properties of functional restructuring

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