More on Word Order in Malagasy Sign Language (TTM¹)

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Introduction

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Introduction

Malagasy Sign Language is the first language of many of the deaf people in Madagascar. Its name in Malagasy is Tenin’ny Tanana Malagasy (literally, Malagasy Hand Language) and it is abbreviated TTM (Minoura 2008).

I have looked into the S, O, and V word order in TTM in Minoura (2008). In this paper I am going to look further into the subtypes of word order of TTM which have not been looked into before. The subtypes are taken from Tsunoda (2009 [1991]:3-30).

1. The data and their representation

The data have been collected in Antananarivo, Madagascar mainly from my deaf consultant Mme Raobelina Nivo Haingo Holy Tiana Eva between August 2004 and September 2011. Some data have been collected from Mme Eva and her husband M Randrianasolo Mbolatiana Richard as a spontaneous conversation. Most of the data used in this paper are from my data collected in August 2011 unless otherwise noted. Mme Eva jotted down sentences on notebooks using written Malagasy words. She was always aware that the sentences should be in TTM of the deaf people but not in written Malagasy. And although the sentences have been written using Malagasy words, most of the sentences are ungrammatical according to the written Malagasy grammar. After writing some pages, Mme Eva would sign the sentences to my video camera, with which I recorded her signing. Later I went over the video recording while looking at the notebooks with Mme Eva’s writings and made corrections. That is to say that I added words, erased words, and/or changed word orders since sometimes Mme Eva did not sign exactly in the
same way as she had written in the notebooks.

The examples copied from my papers will be noted so. The examples taken from other years than 2011 will be noted so too. The examples from Mme Eva and M Mbolatiana’s conversation will be noted (conversation 2011).

In this paper, the data are represented in five lines like in Minoura (2010:184). Instead of trying to transform all of Mme Eva’s writings into the lines of “labels” just like I did in Minoura (2008), I am showing Mme Eva’s writings and labels separately just like I did in Minoura (2010). This way, linguistically untrained Malagasy people, both deaf and hearing, can read the first line and can partially know what is talked about.

(1) h-ankany Behoririka izy ← what Mme Eva has written
AV.FUT-go.there Behoririka (s)he ← the gloss of the written words
MANKANY BEHORIRIKA IX3 ← labels of TTM signs
go.there Behoririka (s)he ← the gloss of the TTM signs
‘(s)he will go to Behoririka’ (Minoura 2010:184)

The line 1 represents what Mme Eva has written (hyphens added in order to show morph boundaries) with the glosses in the line 2. The line 3 represents the labels to the signs and the line 4 being the glosses to the labels. I tried to make one-to-one correspondences between the labels and the signs, but this effort has not been completed, i.e. there are some many-to-one and one-to-many correspondences left. It is inevitable as spoken/written Malagasy and TTM have different categorization in their lexicons and in their grammars. You should have also noticed that the grammatical markings, e.g. AV.FUT, are present in the glosses for Mme Eva’s writings but are lacking in the glosses for the labels of the TTM signs. This means that the grammatical distinctions suggested by written Malagasy words are lacking in TTM. E.g. the AV/UV distinction is not relevant to TTM unless the UV verb in question takes a cliticized quasi-ergative (= genitive) actor marking. When the AV/UV distinction is irrelevant in TTM when Mme Eva has written down a UV form of a verb (e.g. “omena” (give [UV])), I replaced it with an AV form (e.g. MANOME (give [AV])) for the label of the sign (line 3) unless the UV form is predominantly used in written Malagasy for the verb e.g. TIA (like) etc. Tense is irrelevant in TTM verbs. On the other hand, tense is marked in the oblique-case preposition signs: AMIN’NY (non-past), TAMIN’NY (past) (Minoura 2008:66 fn. 2, 2010:184).
2. The nineteen subtypes of word order

The nineteen subtypes of word order below are taken from Tsunoda (2009 [1991]:3-30). Below is a table shown in Tsunoda (2009 [1991]: 25, translation MN):

<table>
<thead>
<tr>
<th>Subtype</th>
<th>Japanese</th>
<th>English</th>
<th>Thai</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] S, O, &amp; V</td>
<td>SOV</td>
<td>SVO</td>
<td>SVO</td>
</tr>
<tr>
<td>[2] ADP + N</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>[3] POSS + N</td>
<td>+</td>
<td>+,-</td>
<td>-</td>
</tr>
<tr>
<td>[4] DEMON + N</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>[5] NUM + N</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>[6] ADJ + N</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>[7] REL + N</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>[8] PROP + ORDN</td>
<td>+</td>
<td>+%,-</td>
<td>-</td>
</tr>
<tr>
<td>[9] comparison</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>[10] AUX + V</td>
<td>+</td>
<td>-</td>
<td>+,-</td>
</tr>
<tr>
<td>[11] ADV + V</td>
<td>before V</td>
<td>various</td>
<td>various</td>
</tr>
<tr>
<td>[12] ADV + ADJ</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>[13] PQ marker</td>
<td>sentence-final</td>
<td>absent</td>
<td>sentence final; right after the focus of PQ</td>
</tr>
<tr>
<td>[14] inversion in PQ</td>
<td>absent</td>
<td>present</td>
<td>absent</td>
</tr>
<tr>
<td>[15] CQ word</td>
<td>as in declarative</td>
<td>sentence-initial</td>
<td>as in declarative</td>
</tr>
<tr>
<td>[16] inversion in CQ</td>
<td>absent</td>
<td>present</td>
<td>absent</td>
</tr>
<tr>
<td>[17] NEG marker</td>
<td>verbal suffix</td>
<td>right after V</td>
<td>right in front of the focus of negation</td>
</tr>
<tr>
<td>[18] COND + MAIN</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>[19] PURP + MAIN</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

According to Tsunoda (2009 [1991]: 24-25), the subtype of word order which is the same as in Japanese is marked with a plus sign (+). The subtype of word order which is the opposite of Japanese is marked with a minus sign (-). Overall, Thai is in mirror image with Japanese while English is not consistent.
I will examine these nineteen subtypes of word order in TTM and then I will compare the results with Japanese and Thai.

3. Examination of TTM data

In this section, I will examine TTM data in light of the 19 subtypes presented in the section 2.

3.1. S, O, & V

When the order of S, O, and V comes into question, TTM presents all the possible six orders. When more about the functional sentence perspective (FSP) of TTM is understood and when the left-end and right-end placements of topicalized constituents and focusized constituents are understood, some of the six possible orders may be eliminated from the “basic word order(s)” of TTM. This has to wait some more time until the FSP of TTM is better understood.

For the present purposes, I will present all the 6 orders:

(2) ankizy valala m-i-sambotra
    child locust AV.PRES-VM-catch
    ANKIZY VALALA MISAMBOTRA (SOV)
    child locust catch
    ‘the child catches a locust’ (Minoura 2008:50)

(3) vato lalana m-an-imba bisikileta
    rock road AV.PRES-VM-break bicycle
    VATO LALANA MANIMBA BISIKILETA (SVO)
    rock road break bicycle
    ‘the rocks on the road broke the bicycle’ (Minoura 2008:51)

(4) m-an-draraka kamiô vato
    AV.PRES-VM-scatter truck rock
    MANDRARAKA KAMIÔ VATO (VSO)
    scatter truck rock
    ‘the truck scattered the rocks’ (Minoura 2008:52)

(5) m-an-asa anao h-i-sakafo izahay
    AV.PRES-VM-invite you AV.FUT-VM-have.meal we (EXCL)
    MANASA IX: MISAKAFO IX1.PLEXCL (VOS)
invite you have.meal we (EXCL)

‘we invite you to have meal (with us)’ (Minoura 2008:53)

(6) mofo m-i-hinana zaza
bread AV.PRES-VM-eat baby
MOFO MIHINANA ZAZA (OVS)
bread eat baby

‘the baby is eating the bread’ (Minoura 2008:54)

(7) tunnel bisy m-an-dalo
tunnel bus AV.PRES-VM-pass
TUNNEL BISY MANDALO (OSV)
tunnel bus pass

‘the bus passes the tunnel’ (Minoura 2008:54-55)

As you can see above, all the six possible orders are found in TTM. This may be related to the FSP of TTM. I do not understand how the FSP works in TTM clearly yet. This will have to wait for future investigation.

3.2. Adposition and noun

As for this category, TTM uses mostly the preposition-plus-noun order. But one also encounters the noun-plus-postposition order sometimes. This also may be related to some functional, syntactic, and/or stylistic/register reasons. I do not know the explanations about this ‘fluctuation’ yet.

(8) tadidi=nao ve t@ 1
remember(UV)= GEN₂ PQ OBL(PST) one
TADIDY=IX₂ VE TAMIN’NY IRAY
remember=you PQ on (PST) one

volana lasa aho vola m-i-sambotra
month pass(UV) I money AV.PRES-VM-borrow
VOLANA LASA IX₁ VOLA MISAMBOTRA
month pass I money borrow
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15000 ariary?

DIMY ARIVO IRAY ALINA ARIARY?

five thousand one ten thousand ariary?

‘do you remember I borrowed 15000 ariary 1 month ago?”

(9) loha-rano m-i-voaka anaty vato

head-water AV.PRES-VM-go.out inside rock

LOHA-RANO MIVOAKA ANATY VATO

head-water go.out inside rock

‘spring water comes out of the interior of the rocks’

Above are the examples of the prepositions preceding nouns. Below is an example of postposition following a noun:

(10) kilalao toetra=ny baoritra anati=ny 6

toy place=IX cardboard inside=IX 3

KILALAO TOETRA BAORITRA ANATY

toy place cardboard inside

‘where toys should be kept is inside the cardboard box’ (2010)

Note that the same adposition ANATY is used as a preposition in (9) and a postposition in (10). The temporal oblique adposition TAMIN’NY is always used as a preposition (8).

3.3. Possessor and noun

In the possessive construction in TTM, the possessor usually follows the possessee, but the opposite direction is also found.

(11) aho vady Guy Kely any Mahajanga

I spouse Guy Kely IX Mahajanga

IX 3 VADY GUY KELY ANY MAHAJANGA
I spouse Guy Kely IX Mahajanga

n-i-haona any Antsirabe
AV.PST-VM-meet IX Antsirabe
MIHAONA ANY ANTSIRABE
meet IX Antsirabe

‘I saw the wife of Guy Kely from Mahajanga there in Antsirabe’

In this example, the possessee VADY precedes the possessor GUY KELY. In the following example, the possessee TARATASY follows the possessor FANJAKANA.

(12) fanjakana taratasy ataovy tehiriz-o
government paper IMP keep-UV.IMP
FANJAKANA TARATASY ATAOVY MITAHIRY
government paper IMP keep

‘do keep official document from the government well’

In the following example, the possessee TOETRA follows the possessor KILALAO.

(13) kilalao toetra=ny(to) baoritra anati=ny (=10)
toy place=IX,3 cardboard inside=IX,3
KILALAO TOETRA BAORITRA ANATY
toy place cardboard inside
‘where toys should be kept is inside the cardboard box’ (2010)

This example has unusual dependent-head word order in two places (i.e. possessor plus possessee and object plus postposition). This phenomenon may have something to do with the FSP, style, or the register, but the details are not understood yet.

3.4. Demonstrative and noun

Demonstratives used with ordinary nouns follow the nouns while demonstratives used with areal nouns precede the areal nouns.
Below is an example of an ordinary noun followed by a demonstrative:

(14)  boky  io  tia  m-i-vidy  ianao?
book  that  want(UV)  AV.PRES-VM-buy  you?
BOKY  IX  TIA  MIVIDY  IX 2?
book  that  want  buy  you
‘do you want to buy that book?’ (2010)

Here, the demonstrative IO follows the noun BOKY. When Mme Eva tries to sign the definite article *ny* of written Malagasy, the demonstrative corresponding to the article precedes the noun, but it happens quite rarely and it can be seen as a sporadic influence from written Malagasy. Mme Eva also sporadically uses two demonstratives to sandwich a noun (phrase). This can be also seen as an influence from written Malagasy.

Below is an example of an areal noun preceded by a demonstrative:

(15)  m-i-afina  ao  lavaka  voalavo
AV.PRES-VM-hide  there  hole  rat
MIAFINA  IX  LAVAKA  VOALAVO
hide  there  hole  rat
‘the rat hides in the hole’

3.5. Numeral and noun

A numeral usually precedes a noun. Below is an example of a numeral preceding a noun:

(16)  Madagasikara  6  faritany  m-i-zara
Madagascar  six  province  AV.PRES-VM-divide
MADAGASIKARA  ENINA  FARITNY  MIZARA
Madagascar  six  province  divide
‘Madagascar is divided into 6 provinces’

Here the number ENINA (six) precedes the FARITANY (province). But there are examples with a numeral following a noun (phrase). Below is an example with a number
following a noun phrase:

(17) mofo gasy 1 ome-o aho
  bread Malagasy one give(UV)-IMP me
  MOFO GASY IRAY MANOME(INV) IX
  bread Malagasy one give me

‘give me a Malagasy rice cake’

This seems to be an example of a noun phrase followed by a number. But it is also possible to interpret that MOFO GASY is topicalized and placed at the beginning of the sentence and MOFO GASY and IRAY do not syntactically belong to a same phrase. It should be examined in the future.

3.6. Adjective and noun

An attributive adjective usually follows a noun, but it can precede a noun too. Below is an example of an adjective following a noun:

(18) izy vola be m-i-tandra ao
  (s)he money much AV.PRES-VM-carry there
  IX 3 VOLA BE MITONDRA IX
  (s)he money much carry there

‘(s)he carries a lot of money there (in the pocket/in the bag/etc.)’

Below is an example of an adjective preceding a noun:

(19) be.dia.be olona m-an-ao comandy comandy
  many person AV.PRES-VM-do order order
  BE.DIABE OLONA MANAO COMANDY COMANDY
  many person do order order

comandy ve?
order PQ?
COMANDY VE?
order PQ?
‘do many people place a lot of orders?’ (M’me Eva, conversation 2011)

3.7. Relative clause and noun
Relative clauses can precede or follow a head noun in TTM. TTM also has internally-headed relative clause. Below is an example of a relative clause preceding the head noun:

(20) fety m-i-jery olona feno toerana,
festival AV.PRES-VM-watch person full place
FETY MIJERY OLONA FENO TOERANA,
festival watch person full place

m-an-ahirana m-ivoaka ao
AV.PRES-VM-be.trouble AV.PRES-VM-go.out there
MANAHIRANA MIVOAKA IX
be.trouble go.out there
‘the place is full of people watching the festival; it is troublesome going out of that place’ (Minoura 2010:195)

Below is an example of a relative clause following the head noun:

(21) nama=ko m-am-angy matetika tsy misy
friend=GEN1 AV.PRES-VM-visit often not be
NAMANA=IX1 MAMANNGY MATETIKA TSY.MISY
friend=my visit often not.be
‘my friends who visit me often do not exist’ (Minoura 2010:192)

Below is an example of an internally-headed relative clause:

(22) m-an-deha toerana tia=nao aiza?
AV.PRES-VM-go.to place like(UV)=GEN2 where?
MANDEHA TOERANA TIA=IX2 AIZA?
go.to place like=you where?

‘where is the place that you want to go to?’ (Minoura 2010:185)

In this example, the head noun TOERANA is sandwiched by the rest of relative clause MANDEHA and TIA=IX2.

As for argument head nouns and locative head nouns, relative clauses are quite flexible about where to place the head noun in relation to the relative clause (Mioura 2010). I.e. the head noun can be at the beginning of (or in front of) the relative clause, at the end of (or following) the relative clause, or inside the relative clause. Should this versatility be explained that the relative clauses in TTM are ‘all’ internally-headed relative clauses in which the head noun can be placed quite freely as to the location. I await a better explanation to these phenomena.

3.8. Proper noun and ordinary noun

This section concerns with something like whether you say Hotel Okura or Teikoku Hotel. In Hotel Okura, an ordinary noun Hotel precedes a proper noun Okura. In Teikoku Hotel, an ordinary noun Hotel follows a proper noun Teikoku.

I deeply doubt that there is any name of a thing or a place which is first decided for TTM and later for written Malagasy. Virtually all the examples concerning this section very probably are first decided for written Malagasy and TTM just copies them. So there does not seem to be any “naming” of this kind in TTM totally independent of written Malagasy.

Although all of the relevant examples seem to be copies from written Malagasy, I will give a couple of examples:

(23) mpampianatra asa-n-tanana R^m F
  teacher work-LK-hand M^m F
  MPAMPIANATRA ASA TANANA RAMATOA FIN
  teacher work hand M^m F

  ‘the teacher of hand work was M^m Finstead’

(24) nefa filoha Andry olana olana olana
    but president Andry problem problem problem
but president Andry problem problem problem
‘but President Andry Rajoelina is all problems’

In these examples, the titles RAMATOA (Mme) and FILOHA (President) precede a personal name each.

3.9. Comparison

Comparison is probably not widely used in TTM. I have not collected any sentences with comparison in TTM. Japanese Sign Language (JSL) is not genetically related to TTM, but Kimura and Ichida (1995) also point out that JSL does not use comparison unlike spoken/written Japanese.

3.10. Auxiliary and verb

Minoura (2008:59-63) reports that TTM places auxiliary sentence-initially, sentence-finally, pre-verbally, and post-verbally. Looking at the data again, I now generalize the situation differently. Auxiliary basically comes at the beginning of a clause. But when the auxiliary gets focus, it can come at the end of a sentence.

Here are some examples of sentence-initial auxiliaries:

(25) tia-nao antso-ina ve namana, ahoana?
like(UV)=GEN_2 summon-UV PQ friend how?
TIA=IX_2 MIANTSO VE NAMANA AHOANA?
like=you summon PQ friend how?
‘you want to call the friend over, don’t you?’ (Minoura 2008:60)

(26) efa vita tenin’ny.tanana Japoney m-i-anatra izy
already finish sign.language Japanese AV.PRES-VM-study (s)he
EFA VITA TENIN’NY.TANANA JAPONEY MIANATRA IX_3
already finish sign.language Japanese study (s)he
‘(s)he has already finished studying Japanese Sign Language’ (Minoura 2008:60)

The latter example has two auxiliaries in a row: EFA, VITA. Below are examples of
clause-initial but not sentence-initial AUX. The constituent in front of the auxiliary appears to be topicalized and placed in the beginning of a sentence:

(27)  
izy    vita    m-i-teny    ahy    omaly  
(s)he finish AV.PRES-VM-tell me yesterday  
IX₃    VITA     MITENY    IX₁    OMALY  
(s)he finish tell me yesterday  
‘(s)he had told me yesterday’ (Minoura 2008:61)

(28)  
katôlika sekoly  tia    m-a-hantra    m-an-ampy  
catholic school like(UV) AV.PRES-VM-poor AV.PRES-VM-help  
KATÔLIKA SEKOLY TIA MAHANTRA MANAMAMY  
catholic school like poor help  
‘the catholic schools like to help the afflicted’ (Minoura 2008:62)

Below is an example of focusized sentence-final AUX:

(29)  
lolo    saka    m-i-sambotra    azo  
butterfly cat AV.PRES-VM-catch can(UV)  
LOLO SAKA MISAMBOTRA AZO  
butterfly cat catch can  
‘the cat is capable of catching a butterflies’ (Minoura 2008:60)

Below are some examples of focusized AUX followed by some other constituents at the end of a sentence:

(30)  
ianao    m-i-jery    vehivavy    tia=nao,  
you AV.PRES-VM-watch woman like(UV)=GEN₃,  
IX₂    MIJERY  VEHIVAVY  TIA=IX₂  
you watch woman like=you  

tsara    m-anam+bady  
good AV.PRES-have+spouse
TSARA VADY

good spouse

‘you like watching women. you’d better get married’ (Minoura 2008:61)

(31) m-i-karakara fitafiana m-a-hay izy
AV.PRES-VM-take.care.of clothing AV.PRES-VM-can (s)he
MIKARAKARA FITAFIANA MAHAY IX3
take.care.of clothing can (s)he

‘(s)he is capable of taking care of the clothings’ (Minoura 2008:62)

(32) izy m-amp-i-anatra vita anay
(s)he AV.PRES-CAUS-VM-study finish us (EXCL)
IX3 MAMPIANATRA VITA IX1.PL.EXCL
(s)he teach finish us (EXCL)

taloha
long.time.ago
TALOHA
long.time.ago

‘(s)he has taught us long time ago’ (Minoura 2008:62)

The =IX2 in (30) is treated as an enclitic, while IX3 in (31) is treated as a separate pronoun, having the description greatly influenced by the written Malagasy grammar. But there may be little if any reason to treat them separately as an encliticized pronoun and a free pronoun in TTM. I will look into this in the future with the fact in mind that encliticized pronouns can have their characteristics like copying of the handshape of the preceding host sign (Minoura 2008:56).

In (32), the auxiliary VITA is followed by two signs, i.e. IX1.PL.EXCL and TALOHA. Probably it is not appropriate to treat them as enclitics. They probably are afterthought topics following the focusized VITA.

3.11. Adverb and verb

Adverbs are placed at various places within sentences in relation to the verbs.
(33) oh:  tia  m-am-angy  m-am-angy
if  like(UV)  AV.PRES-VM-visit  AV.PRES-VM-visit
OHATRA  TIA  MAMANGY  MAMANGY
if  like  visit  visit
m-am-angy  a-taov-y  sms  aloha
AV.PRES-VM-visit  UV-do-IMP  sms  beforehand
MAMANGY  ATAOVY  SMS  ALOHA
visit  IMP  sms  beforehand
‘if you want to visit for a while, send SMS over beforehand’

Here, an adverb ALOHA is placed at the end of the sentence.

(34) tampoka  tsy.mety  m-an-jary  olana
suddenly  not.possible  AV.PRES-VM-change  problem
TAMPOKA  TSY.METY  MANJARY  OLANA
suddenly  not.possible  change  problem
‘If suddenly it becomes impossible, it will be a problem’

Here, an adverb TAMPOKA is placed at the beginning of the sentence.

(35) vita  vola  izy  ome-na  ahy,
finish  money  (s)he  give-UV  me
VITA  VOLA  IX₁  MANOME  IX₁,
finish  money  (s)he  give  me
aho  faingana  banky  m-iditra
I  in.a.hurry  bank  AV.PRES-enter
IX₁  FAINGANA  BANKY  MIDITRA
I  in.a.hurry  bank  enter
‘(s)he gave me money and I deposited the money in the bank in a hurry’
Here, an adverb FAINGANA is placed in the middle of the sentence. It is before the verb, but not right in front of it.

3.12. Adverb and adjective

There are adverbs placed before adjectives and adverbs placed after adjectives. Below is an example of the former case:

(36) io tena sarotra
    that very difficult
    IX TENA SAROTRA
    ‘that is very difficult’

Below is a case where the adverb follow the adjective.

(37) be loatra lamba m-an-asa
    much too cloth AV.PRES-VM-wash
    BE LOATRA LAMBA MANASA
    ‘(I) wash too many clothes’

3.13. Polar question marker

The polar question (PQ) marker VE is placed right after the focus of PQ but the location may not be very strict. In spontaneous conversation, the VE is less used. Probably non-manual markers take on the responsibility of marking the PQ instead of the VE. Below is an example of VE right after the focus of PQ:

(38) vola m-isy ve?
    money AV.PRES-be PQ?
    VOLA MISY VE?
    money be PQ?
    ‘is there money?’
But the example below seems to have the VE in the Wackernagel's position (P2), i.e. right after the first constituent of the sentence and the word (= the first constituent) does not seem to be the focus of PQ:

(39) ianao ve vita m-i-haona namana
    you PQ finish AV.PRES-VM-meet friend

IX2 VE VITA MIHAONA NAMANA
you PQ finish meet friend

taloha m-i-ara+m-i-anatra
long.time.ago AV.PRES-VM-be.together+ AV.PRES-VM-study
TALOHA MIARAKA MIANATRA
long.time.ago be.together study
‘did you see the friend you studied together with a long time ago?’

Below is taken from spontaneous conversation between Mme Eva and M Mbolatiana. Overall, Mme Eva is the interviewer and she poses questions. She sometimes uses VE, but sometimes not. The sentence below has no VE, but probably the interrogativity is marked by non-manual markers:

(40) m-isy olona m-an-ampy (CL?) ianao?
    AV.PRES-be person AV.PRES-VM-help you?

MISY OLONA MANAMPY 3CL:VOLA(DIR)2 you?
be person help 3CL:money(DIR)2 you?
‘are there people who help you by giving you guys money?’
(Mme Eva, conversation 2011)

3.14. Inversion in polar question

Inversion in polar question like in English is absent in TTM.

3.15. The placement of content question word
The content question sign seems to be placed at various places in a sentence, i.e. sentence-initially, sentence-finally, sentence-medially. I am not sure if the reason of the selection of the position is the same as in declarative sentences though. There may be some functional reasons behind the selection. But the evaluation needs to wait for future investigation. Below is an example with the content question (CQ) sign placed sentence-initially:

(41) iza m-an-apa+kevitra zao?
who AV.PRES-VM-cut+thought now?
IZA MANAPA HEVITRA ZAO?
who cut thought now?
‘who has made the decision now?’

Below is an example with the CQ sign placed sentence-finally:

(42) n-an-galatra voasary iza?
AV.PST-VM-steal orange who?
MANGALATRA VOASARY WHO?
steal orange who?
‘who stole the orange(s)?’

Below is an example with the CQ sign placed sentence-medially:

(43) m-i-tsakotsako inona ianao?
AV.PRES-VM-chew what you?
MITSAKOTSAKO INONA IX?
chew what you?
‘what are you chewing?’

3.16. Inversion in content question

Inversion in content question like in English is absent in TTM.

3.17. Negative marker
Negative marker is placed right in front of the focus of negation. But when negation needs to be emphasized, a negative maker can come at the end of a sentence. Below is a sentence with the negative maker TSY placed right in front of the focus of negation:

\[(44)\]
\[
\text{e! kivy tsy m-a-hita zanak=ao}
\]
\[
\text{oh! discouraged NEG AV.PRES-VM-see child=your}
\]
\[
\text{E! KIVY TSY MAHITA ZANAKA=GEN_2}
\]
\[
\text{oh! discouraged NEG see child=your}
\]

'oh, I am dismayed not seeing your child'

Below is a sentence with the negative marker TSIA, which is manually different from TSY, placed at the end of the sentence:

\[(45)\]
\[
\text{m-am-ora\textit{na} fotsiny tena tsia}
\]
\[
\text{AV.PRES-VM-invent always self no}
\]
\[
\text{mamorona FOTSINY TENA TSIA}
\]
\[
\text{invent always self no}
\]

'thinking up always by yourself is a no-no'

3.18. Conditional clause and main clause

Conditional clause can come before or after the predicate in the main clause. And the conditional clause can be marked by a grammaticalized sign OHATRA or not overtly marked by a sign. First we will look at examples with the sign OHATRA. Below is an example with the conditional clause before the predicate in the main clause, but it is still preceded by a constituent of the main clause:

\[(46)\]
\[
\text{io oh: m-anam+bola afaka m-an-ao}
\]
\[
\text{that if AV.PRES-have+money free AV.PRES-VM-make}
\]
\[
\text{IX OHATRA MANANA VOLA AFAKA MANAO}
\]
\[
\text{that if have money free make}
\]
\[
\text{trano be}
\]
house big
TRANO BE
house big
‘that person, if (s)he has money, (s)he can build a big house’ (Minoura 2010:206)

Below is an example with the conditional clause preceding the main clause:

(47) oh: zavatra tsy hay, tsara m-an-ontany,
if thing not understand good AV.PRES-VM-ask
OHATRA ZAVATRA TSY HAY, TSARA MANONTANY
if thing not understand good ask
aza m-enatra
NEG.IMP AV.PRES-ashamed
AZA MENATRA
NEG.IMP ashamed
‘if there are things you do not understand, it is better to ask; do not feel ashamed’
(Minoura 2010:206-207)

Below is an example with the conditional clause following the main clause:

(48) m-i-tady hevitra zavatra iri-na h-anan-ana
AV.PRES-VM-seek idea thing desire-UV FUT-have-UV
MITADY HEVITRA ZAVATRA MANIRY MANANA
seek idea thing desire have

oh: trano tsy.misy
if house not.be
OHATRA TRANO TSY.MISY
if house not.be
‘look for ideas as to things desirable to have e.g. if you do not have a house’
(Minoura 2010:206)
Now, we will take a look at examples of conditional clauses without the marker OHATRA. Below is an example with the conditional clause preceding the main clause:

(49) sai=nao reraka fanatanjahan.tena m-ila
mind=GEN tired sport AV.PRES-need
SAINA=IX2 RERAKA FANATANJAHAN.TENA MILA
mind=your tired sport need
m-an-ao
AV.PRES-VM-do
MANAO
do
‘if/when your head is tired, you need to engage in some sports’ (Minoura 2010:207)

Below is an example with the conditional clause following the main clause:

(50) diso be hevitra ray aman+dreny
wrong big thought father with+mother
DISO BE HEVITRA RAY RENY
wrong big thought father mother
fanirian+janaka tsy m-ana-tanteraka
wish+child not AV.PRES-VM-be.accomplished
FANIRIANA ZANAKA TSY MANATANTERAKA
wish child not be.accomplished
‘father and mother will be greatly disappointed if their child’s wish will not be accomplished’ (Minoura 2010:208)

3.19. Purposive clause and main clause

Purposive clause always follows the main clause. It can be marked by a grammaticalized marker HO or not. Tsunoda (2009 [1991]:24) has examples where a totally different subject is
used in the purposive clause from any arguments in the main clause. I do not have such examples in my data. First we will look at an example with the marker HO:

(51) patalo ha io a-vadi-badih-o ho maina
trouser that UV-turn.over(REDUP)-IMP so.that dry
PATALOHA IO MAMADIKA(REDUP) HO MAINA
trouser that turn.over so.that dry
‘turn the trouser over and over so that it gets dry’ (Minoura 2010:215)

Now we will look at an example without the marker HO:

(52) m-i-vidy manga manta a-tao lasary
AV.PRES-VM-buy mango unripe UV-make condiment
MIVIDY MANGA MANTA MANAO LASARY
buy mango unripe make condiment
‘buy unripe mango so as to make lasary’ (Minoura 2010:215)

The following example may be an example with a totally new subject in the purposive clause. But you probably can interpret the clause as a reason clause although it has the marker HO. HO can mark future tense in certain circumstances. It is very difficult to say anything decisive on this matter. In any case, let us take a look at the example:

(53) asa asa m-i-karakara ho avy vahiny
work work AV.PRES-VM-take.care.of so.that come guest
ASA ASA MIKARAKARA HO AVY VAHINY
work work take.care.of so.that come guest
‘(I am) taking care of a lot of works so that the guests can come’

If you interpret the clause as a reason, the translation will be: “(I am) taking care of a lot of works because the guests are coming.”
Conclusion

I took the table 1, replaced English with TTM and made the table 2.

Table 2. Word order in Japanese, TTM, and Thai

<table>
<thead>
<tr>
<th></th>
<th>Japanese</th>
<th>TTM</th>
<th>Thai</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1] S, O, &amp; V</td>
<td>SOV</td>
<td>all 6 orders</td>
<td>SVO</td>
</tr>
<tr>
<td>[2] ADP + N</td>
<td>+</td>
<td>- (+)</td>
<td>-</td>
</tr>
<tr>
<td>[3] POSS + N</td>
<td>+</td>
<td>- (+)</td>
<td>-</td>
</tr>
<tr>
<td>[4] DEMON + N</td>
<td>+</td>
<td>+, -, (+&amp;-)</td>
<td>-</td>
</tr>
<tr>
<td>[5] NUM + N</td>
<td>+</td>
<td>+ (-)</td>
<td>-</td>
</tr>
<tr>
<td>[6] ADJ + N</td>
<td>+</td>
<td>- (+)</td>
<td>-</td>
</tr>
<tr>
<td>[7] REL + N</td>
<td>+</td>
<td>various</td>
<td>-</td>
</tr>
<tr>
<td>[8] PROPN + ORDN</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>[9] comparison</td>
<td>+</td>
<td>n/a</td>
<td>-</td>
</tr>
<tr>
<td>[10] AUX + V</td>
<td>+</td>
<td>-, sentence-final</td>
<td>+, -</td>
</tr>
<tr>
<td>[11] ADV + V</td>
<td>before V</td>
<td>various</td>
<td>various</td>
</tr>
<tr>
<td>[12] ADV + ADJ</td>
<td>+</td>
<td>+, -</td>
<td>-</td>
</tr>
<tr>
<td>[13] PQ marker</td>
<td>sentence-final</td>
<td>right after the focus of PQ, P2</td>
<td>sentence-final; right after the focus of PQ</td>
</tr>
<tr>
<td>[14] inversion in PQ</td>
<td>absent</td>
<td>absent</td>
<td>absent</td>
</tr>
<tr>
<td>[15] CQ word</td>
<td>as in declarative</td>
<td>various</td>
<td>as in declarative</td>
</tr>
<tr>
<td>[16] inversion in CQ</td>
<td>absent</td>
<td>absent</td>
<td>absent</td>
</tr>
<tr>
<td>[17] NEG marker</td>
<td>verbal suffix</td>
<td>right in front of the focus of negation; sentence-final</td>
<td>right in front of the focus of negation</td>
</tr>
<tr>
<td>[18] COND + MAIN</td>
<td>+</td>
<td>+, -</td>
<td>+</td>
</tr>
<tr>
<td>[19] PURP + MAIN</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

noun, [10] auxiliary plus verb, [11] adverb plus verb, [12] adverb plus adjective, [13] polar question marker, [15] content question word, and [17] negation marker fluctuate as to the word order in TTM. It may have something to do with the fact that TTM is in contact with written/spoken Malagasy on daily basis. Otherwise, the fluctuation may be caused by the reasons that TTM points to a direction on its own independent of written/spoken Malagasy. Moreover, my data may contain several styles and/or several registers. And of course, the fluctuation may be caused by functional (FSP) reasons. The fluctuation may also have something to do with the visual-gestual modality of TTM as linearity (= unidimensionality) of the signifiant of the signed languages may not be as strict as that of spoken languages.

With the findings and the ideas in the previous sections in mind, we need to add written/spoken Malagasy and Norwegian Sign Language (NTS) into the above table in the future. Written/spoken Malagasy is the language TTM is in contact with on the daily basis. On the other hand, some TTM signs originate in NTS because several Norwegian teachers taught at the first deaf school in Madagascar established in 1960 (Federasionan’ny Marenina Eto Madagasikara [Federation of the Deaf in Madagascar] p.c.). Some Norwegian deaf people told me that they can pick up and understand some signs in TTM here and there without prior knowledge of TTM (Irene Gurdjieff p.c. and Rune Anda p.c.). I myself have compared TTM signs with NTS signs and the cognacy rate is not as high as expected. (The comparative study of NTS and TTM will be one of my future tasks.) I wonder if some syntactic features of NTS are transferred to and preserved in TTM. Syntactic comparison of TTM with both written/spoken Malagasy and NTS needs to be done in the future.

Notes
1) The abbreviation used in this paper are: ADJ (adjective), ADP (adposition), ADV (adverb), ASL (American Sign Language), AUX (auxiliary), AV (actor voice), CL (classifier), COND (conditional clause), CQ (content question), DEMON (demonstrative), DIR (direct), EXCL (exclusive), FSP (functional sentence perspective), FUT (future), GEN (genitive), IMP (imperative), INV (inverse), IX (indexing), LK (linker), MAIN (main clause), N (noun), NEG (negative), NTS (norsk tegnspråk, Norwegian Sign Language), NUM (numeral), O (object), OBL (oblique), ORDN (ordinary noun), P2 (second position), PL (plural), POSS (possessor), PRES (present), PQ (polar question), PROPN (proper noun), PST (past), PURP (purposive clause), REDUP (reduplication), REL (relative clause), S (subject), STS (svenskt teckenspråk, Swedish Sign Language), TTM (Tenin’ny Tanana Malagasy: Malagasy Sign Language), UV (undergoer voice), V (verb), VM (valence marker).
2) Many written Malagasy words were then mouthed when Mme Eva later signed. Mouthing means moving the mouth as if one is pronouncing the words orally, but it does not necessarily accompany audible and understandable speech sounds. But I did not make efforts to clearly mark which signs accompanied Malagasy mouthing and which signs did not do so. Of the five lines in the examples, the top two lines are Mme
Eva's efforts to write down TTM signs using written Malagasy words and their translation. They may not be too relevant to TTM except for some cases where e.g. tense marking which is totally lacking in TTM verbs is mouthed.

3) The labels of signs are written in all capitals.

4) The third-person pronominal enclitic =ny is not echoed in the manual expression. Therefore the label for the sign in the third line is ANATY without the =IX3.

5) The third-person pronominal enclitic =ny is not echoed in the manual expression. Therefore the label for the sign in the third line is TOETRA without the =IX3.

6) On the other hand, name signs (Supalla 1997) are widely used among deaf people in Madagascar. The signs usually have nothing to do with the person's name in written Malagasy. TTM does not employ many "arbitrary name signs (Supalla ibid.)" unlike American Sign Language, where the initial of the person's name in written language manifests itself as the handshape, taken from fingerspelling of the name.

7) The classifier signs (CL) (some people prefer to call them classifier construction) do not simply correspond to a written Malagasy word. This example is taken from a spontaneous conversation so the signs came first and the translation into written Malagasy labels has been done by me with the help from Mme Eva. But she hesitated to give a written Malagasy label to the classifier sign. The classifier sign :CL:VOLA(DIR):2 literally means "they give you guys money." It has so much information packed into one sign. It can possibly be called polysynthetic as Wallin (1996) did so for Swedish Sign Language (STS). A couple of decades prior to Wallin, Stokoe (1976) remarked that classifier signs in American Sign Language (ASL) are more than just one word in spoken languages. Stokoe also said, in his keynote speech at the symposium commemorating his 80th birthday at the Gallaudet University in 1998, "the handshape is the noun and the movement is the verb." This was said not only about classifier signs but all the signs. This may be oversimplified, but the implication which follows it is abundant.

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続・マダガスカル手話の語順

箕浦 信勝

マダガスカル手話（TTM）は、純粋な日本語タイプ（OVタイプ）にも、タイ語タイプ（VOタイプ）にも見えない。TTMの語順はタイ語タイプ（VOタイプ）に傾きつつ、揺れを見せる。

下位類型


本稿のデータと考察を踏まえて、同様の観察を、書記・音声マダガスカル語とノルウェー手話（NTS）について、今後進める必要がある。書記・音声マダガスカル語は、TTMが恒常的に接触している言語であり、NTSからは、1960年代、マダガスカルで初めてのろう学校が建てられたときに、ノルウェー人教師によってNTSの手話単語が持ち込まれた。TTMとNTSの同系（cognate）率はそれ程高くなさそうであるが、NTSの統語的特徴がTTMに残存しているかは、今後精査が待たれる。