THE DISTRIBUTION OF ACCUSATIVE SUBJECTS IN MANCHU: A CORPUS-BASED STUDY

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Hayata (2011) proposed that accusative subject in Manchu arises when an embedded subject is not co-referential with the subject of the main clause in embedded clauses. However, co-referentiality cannot fully explain the distribution of accusative subjects in Manchu (Do 2018). In this paper, we argue that the overtess of the main clause subject is another factor that governs the distribution of case markings on embedded subjects; nominative marking (on the embedded subjects) mostly guarantees the covertness of the main class subjects. We further argue that the interplay between the two factors can explain the distribution of case marking in embedded subjects in Manchu.

Key words: accusative subject, Manchu, differential case marking, embedded subject, exceptional case marking, cover subjects.

1. Introduction: The Corpus

This study examines the distribution of accusative-marked embedded subjects (accusative subjects, henceforth) in Manchu based on the Manchu written corpus constructed by the historical linguistics lab in the Department of Linguistics at Seoul National University. The corpus is a collection of twenty sets of Manchu texts, composed of 1,550,000 words in total. For this study, we have collected our data mainly from Man Wen Lao Dang 滿文老檔 (Lao), as it contains genuine Manchu texts from the early years of the Qing dynasty (17th and 18th centuries).¹

¹ Lao consists of 81 volumes of Tianming 天命, 61 volumes of Tiancong 天聰, and 38 volumes Chongde 崇德. The total word count is 394,287 words. For the sake of simplicity, in this study we will refer to Tianming as Ming, Tiancong as Cong and Chongde as Chong.
2. Previous Analyses

2.1. Canonical Case Marking in Manchu

Manchu is generally considered a nominative-accusative language (Gorelova 2002: 166). Generally, be is regarded as the accusative case marker while the nominative case marker is morphologically characterised by ø-expression (Gerbillion and Couplet 1682, Gabelentz 1832, Adam 1873, Harlez 1884, Haenisch 1961, Gorelova 2002). As shown in (1a), subjects of transitive sentences are marked by ø-expression, while objects of transitive sentences are marked by be. Subjects of intransitive sentences show the same case morphology as transitive subjects, as shown in (1b) and (1c). Case markers in ditransitives also follow the nominative-accusative pattern, as in (1d).

(1) Manchu

a. si-ø ere tasha be sa-rkū,3
   2.SG.NOM this tiger ACC know-NPST.PTCP.NEG
   ‘You don’t know this tiger.’ (Jin Ping Mei 1:25a)

b. emu minggan cooha-ø gene-he.
   one thousand soldier.NOM go-PST.PTCP
   ‘A thousand soldiers went.’ (Ming 25:18a)

c. emgeri gidala-ra jakade liofu-ø
   once wield-a-spear-NPST.PTCP because-of liofu.NOM
   buce-he.
   die-PST.PTCP
   ‘Liofu died with one thrust of spear.’ (Sanguozhi 10:52b)

d. yūn ge-ø šoro be na de sinda-fi,
   yūn ge.NOM basket ACC earth DAT put-ANT.CVB
   ‘Yūn Ge put the basket on the ground.’ (Jin Ping Mei 4:13b)

2.2. Non-canonical Distribution of be

While be is typically considered the accusative case marker, subjects of embedded clauses can also be marked by be, regardless of whether the embedded clause appears with tense morphology, as in (2a), or without one, as in (2b).

(2) Manchu

a. si ø bere tasha be sa-rkū,3
   2.SG.NOM this tiger ACC know-NPST.PTCP.NEG
   ‘You don’t know this tiger.’ (Jin Ping Mei 1:25a)

b. emu minggan cooha-ø gene-he.
   one thousand soldier.NOM go-PST.PTCP
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   once wield-a-spear-NPST.PTCP because-of liofu.NOM
   buce-he.
   die-PST.PTCP
   ‘Liofu died with one thrust of spear.’ (Sanguozhi 10:52b)

d. yūn ge-ø šoro be na de sinda-fi,
   yūn ge.NOM basket ACC earth DAT put-ANT.CVB
   ‘Yūn Ge put the basket on the ground.’ (Jin Ping Mei 4:13b)

All examples provided in this paper will be Manchu, unless otherwise specified. The glosses/annotations in this paper were added by the authors. Generally, glossing abbreviations follow Leipzig Glossing Rules by Max Planck Institute (http://www.eva.mpg.de/lingua/resources/glossing-rules.php). Glossing abbreviations not listed in Leipzig Glossing Rules are from Gorelova (2002). The list of abbreviations is to be found at the end of the paper.

3 Two kinds of punctuation marks appear in Manchu; ‘.’ and ‘...’. Throughout this paper, following a common practice in Manchu literature (among others, Kawachi and Kiyose 2002, Tsumagari 2002, Hayata 2011), we have replaced one point ‘.’ with comma ‘,’; and two points ‘...’ with a period ‘.’.
(2) be marking subject of embedded clauses

a. te ere weile be yabu-ha de niyalma-ø
   now this work ACC do-PST.PTCP DAT person.NOM
   [mimbe amba baili be onggo-ho] seme
   1.SG.ACC(Subj) big mercy ACC forget-PST.PTCP COMP
   hendu-mbi.
   speak-NPST
   ‘If (I) do this now, people will say that I have forgotten the great grace.’
   (Sanguozhi 8:114b-115a)

b. amaga jalan i niyalma [tsootsoo be
   later generation GEN person tsootsoo(Subj) ACC
   sain niyalma] seme makta-habi.
   good person COMP praise-PST
   ‘People in later generations praised Tsootsoo is a good person.’
   (Sanguozhi 16:118a)

It has been previously observed that subjects of embedded clauses in quotations can also be marked by accusative, as shown in (3) (Uehara 1960, Gorëlova 2002, Kawachi and Kiyose 2002, Tsumagari 2002). Uehara (1960) and Tsumagari (2002), in their works on Manju i yargiyan kooli (Manzhou shilu 滿洲實錄, hereafter MYK), further reported that (4) is the only exception to the generalisation, and regarded it as an anomaly.

(3) Subjects of embedded clauses in quotations

a. tereci tulergi urs-e ø gemu [tere be
   after_that outside person.NOM all that(Subj) ACC
   yabun ehe] seme gisure-cibe, šui šusai-ø
   behaviour bad COMP speak-CONC.CVb šui šusai.NOM
   dici yargiyan i buhi de
   from_the_beginning real GEN knee DAT
   te-he seme facuhūra-rakū niyalma,
   sit-PST.PTCP COMP be_in_disorder-NPST.PTCP.NEG person
   ‘After that, although everyone outside said that he was bad, šui šusai is not a disorderly person who would sit on (his) knees.’ (Jin Ping Mei 56:19b)

b. pan gin liyan-ø [si men king be ji-he]
   pan gin liyan.NOM si men king(Subj) ACC come-PST.PTCP
   seme donji-fi,
   COMP listen-ANT.CVb
   ‘Pan gin liyan hearing that Si men king came, …’ (Jin Ping Mei 8:11a)
(4) \textit{manggi} in MYK 6:54b-55a (Adapted from Imanishi 1938: 240)\textsuperscript{4}

\begin{verbatim}
[tere elcin be isina-ha] manggi, that emissary(Subj) ACC reach-PST.PTCP after
\end{verbatim}

‘After the arrival of the emissary,’

However, Hayata (2011) argued that (4) is not an anomaly. Focusing on embedded clauses combined with postposition \textit{manggi} (\textit{manggi} clauses, henceforth), he observed that there were at least 11 additional examples of accusative subjects that were not quotations. He presented eight cases from \textit{Lao} and three cases from \textit{Ilan gurun i bithe} (1650, hereafter \textit{Ilan}), some of which are given in (5). Based on the observation that none of the accusative subjects he found are co-referential with the subject of the main clause, he proposed that the accusative subjects in Manchu arise when an embedded subject is not co-referential with the subject of the main clause.

(5) Accusative subjects with \textit{manggi} (Hayata 2011)

\begin{enumerate}
\item[a.] \begin{verbatim}
[simbe bedere-me ji-he] manggi, 2.SG.ACC(Subj) return-SIM.CVB come-PST.PTCP after
gebu bu-ki se-he name give-OPT say-PST.PTCP
\end{verbatim}
‘(I) said that (I) would give you a name after you came back.’
\end{enumerate}

\begin{verbatim}
(Chong 28:19a)
\end{verbatim}

\begin{enumerate}
\item[b.] \begin{verbatim}
[meni eyun non be 1.PL.ACC(EXCL) elder_sister younger_sister(Subj) ACC
jobo-hoi buce-he] manggi, ecike si suffer-DUR.CVB die-PST.PTCP after uncle 2.SG.NOM
wesihun o-fi banji-ki se-re-ngge superior become-ANT.CVB live-OPT say-NPST.PTCP-NMLZ
waka=\text{Q}
\end{verbatim}
‘After our elder and younger sisters died in distress, that uncle, you, are trying to be a high man and live is not right.’
\end{enumerate}

\begin{verbatim}
(Ilan 6:17a-17b)
\end{verbatim}

Do (2018) expands Hayata’s generalisation to embedded clauses headed by the predicative complementiser \textit{seme} ‘that’ (\textit{seme} clauses, henceforth). According to Do, embedded subjects of \textit{seme} clauses behave similarly to subjects of \textit{manggi} clauses. Both are marked accusative (indicated by \textit{be}) when the embedded subject and the main clause subject do not refer to the same entity. Examples of subjects of \textit{seme} clauses showing this behaviour is given in (6).

\begin{verbatim}
\end{verbatim}

\textsuperscript{4} MYK is divided by books, with no division of pages. In this paper, we present page numbers calculated in the order of 1a, 1b, 2a, 2b, according to the general page presentation method.
(6) a. ememu niyalma-ø, [han be amba weile be some person.NOM han(Subj) ACC big matter ACC yabu-re niyalma waka, muse be do-NPST.PTCP person be_not 1.PL(INCL) ACC holto-fi geli amasi gene-mbi] seme deceive-ANT.CVB again backward go-NPST COMP hendu-mbi, speak-NPST 'Some say that han is not the person who will do great things, but that I would deceive them and go back.' (Cong 42:18a)
b. fusihūn gurun-ø [tere be enteheme doro] low country.NOM that(Subj) ACC eternally morality seme gūni-ha bihe, COMP think-PST.PRF 'Our country thought it was forever.' (Chong 1:18a)6

Do also observes that the accusative subjects are not merely restricted to embedded clauses headed by *seme* or *manggi*, but that they may appear in other embedded clauses with neither *seme* nor *manggi* present, as in (7).

(7) Accusative subjects in other embedded clauses (Do 2018)

a. [tere doro be kemuni bi-ci] saiyūn, that rule(Subj) ACC still be-COND.CVB good,Q 'Is it good if the rule continues?' (Ming 72:11b)

b. [ere-be akū o-ho de,] this(Subj)-ACC there_is_not become-PST.PTCP DAT be-ø adarame banji-re 1.PL.NOM(EXCL) how live-NPST.PTCP 'How will we live if this person dies?' (Ming 58:21a)

c. [mimbe ji-dere jakade] yaya 1.SG.ACC(Subj) come-NPST.PTCP because_of any ci neneme daha-fi, ABL in_advance surrender-ANT.CVB 'When I come, (they) surrender before anyone else,' (Cong:33:2b)

d. [cooha be isinji-re sidende,] han-ø, soldier(Subj) ACC reach-NPST.PTCP between han.NOM

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5 While ‘bihe’ has the form of V-ha, ‘V-ha bihe’ is generally understood as a pluperfect tense (Zaxarov 1879, Möllendorff 1892), or past perfect tense (Gorelova 2002, Baek 2011, Park 2017) of the initial verb. In this paper, we have glossed ‘V-ha bihe’ as the past perfect form of the initial verb.

6 Fusihūn gurun ‘low country’ is an expression a speaker uses to refer to his own country in a humble manner.
si uli efu i gūsa be nikan i ing
si uli efu GEN banner ACC Chinese GEN camp
ni dergi de ili-bu-fi,
GEN east DAT stand-CAUS-ANT.CVB
‘While the soldiers arrived, han put Si Uli Efu’s banner on the east side
of the Ming Dynasty’s camp,’
(Cong:41:18b)

3. Two Generalisations on the Distribution of Case Marking

In this section, we will present two generalisations on the distribution of case marking in embedded subjects based on a survey performed by Do (2018) on the subjects of embedded seme clauses in Lao.

3.1. Generalisation with Respect to Co-reference

Do (2018) proposes that case markings on the subjects of embedded seme clauses are also sensitive to co-referentiality; embedded subjects are marked by be when they are not co-referential with the main clause subject, as shown in (6). However, Do also reports that embedded subjects may appear without accusative case marking even if the embedded subject and the main clause subject are not co-referential, as in (8). This suggests that the distribution of the accusative marking in embedded subjects is not solely dependent on the co-referentiality between the main clause subject and the embedded subject.

(8) a. bi-ø [juwe gurun-ø emu gurun, juwe
1.SG.NOM two country.NOM one country two
boo-ø emu boo] seme gūni-me
house.NOM one house COMP think-SIM.CVB
banji-mbi kai,
live-NPST PTL
‘I live by thinking that two countries are one country and
two houses are one house.’
(Ming 74:3a)

b. yaya niyalma-ø, [ere gisun-ø jacì abka be
any person.NOM this word.NOM very heaven ACC
gidaša-ha] seme hendu-ci,
take_unfair_advantage_of-PST.PTCP COMP speak-COND.CVB
‘If someone says that these words seriously insulted the heaven,’
(Cong 54:9a)
To get a better picture of the distribution of accusative subject in *seme* clauses with respect to co-referentiality, we examined how embedded subjects are case marked based on co-referentiality. The result is presented in Table 1.

**Table 1. The distribution of case marking with respect to co-reference**

<table>
<thead>
<tr>
<th>Referents of the two subjects</th>
<th>Co-referential</th>
<th>Not co-referential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-reference</td>
<td></td>
<td></td>
</tr>
<tr>
<td>be (accusative)</td>
<td>1</td>
<td>87</td>
</tr>
<tr>
<td>ø (nominative)</td>
<td>61</td>
<td>154</td>
</tr>
</tbody>
</table>

The table above suggests that accusative subjects are always not co-referential with the main clause subject, as in (9), with only one exception, provided in (10).

(9) Accusative embedded subjects that are not co-referential

a. [simbe kemuni dain] seme gūni-mbi, 2.SG.ACC(Subj) still enemy COMP think-NPST

‘(Saracin) will think you are an enemy.’ (Ming 45:10b)

b. [mimbe dulba i bi] seme gūni-rahū, 1.SG.ACC(Subj) foolish GEN there_is COMP think-PRV

‘(It worries me) that (people) think I’m stupid.’ (Ming 59:23a)

(10) Accusative embedded subjects that are co-referential

[han be boo-de bedere-ki] seme hendu-he] manggi, tereci boo-de speak-PST.PTCP after after_that house-DAT bedere-he, return-PST.PTCP

‘After Han told (the people) to go home, then (everyone) came home.’. (Cong 16:6a)

7 The data used for the survey were collected by Do (2018). He performed a complete survey on the distribution of accusative subjects with respect to co-reference with five verbs that commonly take *seme* clauses (*gūni* - ‘think’, *hendu* - ‘say’, *ala* - ‘tell’, *donji* - ‘hear’, *gisure* - ‘speak’) in Lao (see Appendix).

8 87 out of 88 accusative subjects are not co-referential. According to Do (2018), the sole exception involves multiple embeddings in which the accusative marked subject is co-referential with the higher embedded subject, but is not co-referential with the main clause subject.
However, there is no obvious correlation between ø-marking and the property of co-referentiality of embedded subjects; among 215 tokens of ø-marked subjects, 61 tokens are co-referential, as in (11), while 154 are not, as in (12).

(11) Nominative embedded subjects that are co-referential
   a. [bi-ø gemu wa-ha] seme gūni-ha,  
      1.SG.NOM all kill-PST.PTCP COMP think-PST.PTCP  
      ‘(I) thought I killed them all.’       (Cong 41:25b)
   b. [si-ø inu aca-ki] seme gisure-he,  
      2.SG.NOM also be_in_harmony-OPT COMP speak-PST.PTCP  
      ‘(You) also said that you would be at peace (with us).’       (Cong 26:24a)

(12) Nominative embedded subjects that are not co-referential
   a. [kalka i morin-ø turga] seme donji-ha,  
      kalka GEN horse.NOM thin COMP listen-PST.PTCP  
      ‘(I) heard that Kalka’s horses are thin.’           (Ming 43:7a)
   b. [ginjeo i hoton de nikan i ginjeo GEN castle DAT Chinese GEN ilan minggan cooha-ø dosi-kabi] seme
      three thousand soldier.NOM enter-PST COMP  
      alanji-ha manggi, come_to_report-PST.PTCP after  
      ‘After (Unege Baksi) reported that 3000 Chinese soldiers entered
      Ginjeo Castle,’           (Ming 59:18b)

Note that the correlation between accusative subjects and co-referentiality is only a one-way correlation. For an embedded subject to be marked accusative, the embedded subject must not be co-referential with the main clause subject. However, the fact that an embedded subject is not co-referential with the main clause subject does not guarantee that it would be marked accusative. Hence, we arrive at the following generalisation on the distribution of accusative-marked embedded subjects.

(13) Generalisation 1: For an embedded subject to be marked accusative, the main clause subject and the embedded subject should not be co-referential obligatorily. (1 vs. 87)

3.2. Generalisation with Respect to Overtness of the Main Clause Subject

Chung and Do (2018) observe that the occurrence of accusative subjects in seme clauses are associated with the absence of an overt matrix subject and that embedded subjects are likely to appear without accusative marking when the main clause subject is covert, as in (14). In (14), subject of embedded seme clauses are ø-marked when the matrix subject is covert.

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Upon performing a survey using Do (2018)’s data on the distribution of case marking in Lao, it was revealed that among 215 tokens of nominative marked embedded subjects, only 4 tokens appear with overt main clause subjects, while 211 tokens appear with covert main clause subjects, as shown in Table 2.

**Table 2. The distribution of case marking with respect to overtness**

<table>
<thead>
<tr>
<th>Case marking of the embedded subject</th>
<th>Overtness of the main clause subjects</th>
<th>Overt</th>
<th>Covert</th>
</tr>
</thead>
<tbody>
<tr>
<td>θ (nominative)</td>
<td></td>
<td>4</td>
<td>211</td>
</tr>
<tr>
<td>be (accusative)</td>
<td></td>
<td>24</td>
<td>64</td>
</tr>
</tbody>
</table>

What the table suggests is that while nominative-marked embedded subjects mostly guarantee the covertness of the main clause subjects (211 out of 215 tokens), the examples of which are given in (15), accusative marking on the embedded subject does not guarantee the overtness of the main clause subject. Among 88 tokens of accusative marked embedded subjects, 64 appeared with covert main clause subject, some examples of which are given in (16), while 24 appeared with overt main clause subject, some examples of which are given in (17). In (18), we have 4 examples of nominative-marked embedded subjects with overt main clause subjects.

(14) a. mederi muke-ø debe-nderakū, han i sea.GEN water.NOM overflow-NPST.PTCP.NEG emperor GEN mujilen-ø gëwaliya-ndarakū seme hendu-mbihe, mind.NOM change-NPST.PTCP.NEG COMP speak-PST

‘(The wise men) said that the sea was not overflowing and the emperor’s mind was not changed.’ (Ming 4:4b)

b. [emu minggan funceme nikan-ø uka-ka one thousand over Chinese.NOM flee-PST.PTCP seme] donji-fi, COMP listen-ANT.CVB

When (I) heard that over one thousand Chinese fled,’ (Ming 72:15a)

(15) Nominative embedded subject with covert main clause subject

a. [mini sain gebu-ø amala tuta-mbi] 1.SG GEN good name.NOM later fall_behind-NPST seme hendu-mbi dere, COMP speak-NPST PTL

‘(I) will say that **my reputation** will remain.’ (Ming 19:15b)
b. [cooha-øy ji-he] seme donji-fi, 
   soldier.NOM come-PST.PTCP COMP listen-ANT.CVB
   ‘(I) heard a military coming, ...’
   (Chong 6:5a)

(16) Accusative embedded subject with covert main clause subject

a. [han beise be isinji-mbi] seme 
   han beile.PL(Subj) ACC reach-NPST COMP
   donji-fi, 
   listen-ANT.CVB
   ‘(Amin Beile, Dudu Taiji and Yoto Taiji) heard that han and beile 
   had arrived, so ...’
   (Cong 9:17b)

b. jai suweni jeku uda-ra be nikan 
   also 2.PL.GEN grain buy-NPST.PTCP(Subj) ACC Chinese
   i kooli seme hendu-he bihe, 
   GEN custom COMP speak-PST.PRF
   ‘(I) also said that it is Chinese custom that you buy grain.’
   (Ming 43:21b)

(17) Accusative embedded subject with overt main clause subject

a. jiyanggiyūn-øy aikabade [membe ba be 
   general.NOM if 2.PL.ACC(EXCL)(Subj)  region ACC
   waliya-fi bedere-mbi] seme (guni-mbi ayoo, 
   abandon-ANT.CVB return-NPST COMP think-NPST PTL
   ‘Does the general think that we are abandoning the area?’
   (Cong 26:4a)

b. bi-øy dac i [sini erdemu 
   1.SG.NOM from_the_beginning 2.SG.GEN talent
   mute-re be geren ci 
   be_able-NPST.PTCP(Subj) ACC everyone ABL
   tuci-mbi] seme donji-ha bihe, 
   come_out-NPST COMP listen-PST.PRF
   ‘I was originally told that your talent goes beyond many people.’
   (Cong 21:1b)

(18) Nominative embedded subject with overt main clause subject

a. bi-øy [juwe gurun-øy emu gurun, juwe 
   1.SG.NOM two country.NOM one country two
   boo-øy emu boo] seme günı-me 
   house.NOM one house COMP think-SIM.CVB
   banji-mbi kai, 
   live-NPST PTL
   ‘I live by thinking that two countries are one country and 
   two houses are one house.’
   (Ming 74:3a)
b. yaya niyalma-ø, [ere gisun-ø jaci abka be any person.NOM this word.NOM very heaven ACC gidaša-ha] seme hendu-ci, take_unfair_advantage_of-PST.PTCP COMP speak-COND.CVB ‘If someone says that these words seriously insulted the heaven’ (Cong 54:9a)

c. geren hafasa-ø [ere-i boo-ø bayan] many officer.PL.NOM this-GEN house.NOM rich seme ala-ci, COMP report-COND.CVB ‘If the rulers report that this (person’s) house is rich,’ (Chong 23:1b)

d. karun tuwa-ha niyalma-ø, [sunja niyalma--ø outpost look-PST.PTCP person.NOM five person.NOM sa-bu-mbi] seme alanji-ha manggi, see-PASS-NPST COMP come_to_report-PST.PTCP after ‘After the person who looked at the outpost reported that five people were seen,’ (Ming 35:10b)

In sum, for an embedded subject to be marked nominative, the main clause subject must be covert. However, that the main clause subject is covert does not guarantee that the embedded subject would be marked nominative. Thus, we arrive at the following second one-way generalisation on the distribution of nominative-marked embedded subjects.

(19) Generalisation 2: For an embedded subject to be marked nominative, the main clause subject must be covert (4 vs. 211).

4. The Interplay

In the previous section, we arrived at two independent generalisations regarding case marking on embedded subjects in Manchu, which is provided again (20).

(20) a. Generalisation 1: For an embedded subject to be marked accusative, the main clause subject and the embedded subject should not be co-referential.

b. Generalisation 2: For an embedded subject to be marked nominative, the main clause subject must be covert.

The two generalisations possess obvious gaps; Generalisation 1 states the necessary condition for accusative marking on embedded subjects, leaving the question open when the nominative case is normally used or what case appears when the embedded subject is co-referential with the main clause subject. On the other hand, Generalisation 2 states the necessary condition for nominative marking, but fails to say anything...
about when the accusative case is used or what case appears when the main clause subject is overt. We argue that the interplay between the two generalisations can help paint a clearer picture of how the embedded subjects are case marked in Manchu.

Generalisation 1 states that embedded subjects can be marked accusative only if the main clause subject and the embedded subject are not co-referential. Or, to put it differently, embedded subjects cannot be marked accusative if the main clause subject and the embedded subject are co-referential.

<table>
<thead>
<tr>
<th>Co-reference</th>
<th>Overtness</th>
<th>Covert</th>
<th>Overt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-referential</td>
<td>ACC: NO</td>
<td>ACC: NO</td>
<td></td>
</tr>
<tr>
<td>Not co-referential</td>
<td>ACC: YES</td>
<td>ACC: YES</td>
<td></td>
</tr>
</tbody>
</table>

Thus, when the main clause subject and the embedded subject are co-referential, accusative marking is ruled out, but does not obligate the nominative marking regardless of the overtness of the main clause subject. On the other hand, when the main clause subject and the embedded subject are not co-referential, accusative marking is allowed.

Generalisation 2 states that embedded subjects can be marked nominative only if the main clause subject is covert. In other words, embedded subjects cannot be marked nominative if the main clause subject is overt. Thus, when the main clause subject is overt, nominative marking is ruled out, but it does not obligate the accusative marking regardless of whether the embedded subject is co-referential with the main clause subject or not. On the other hand, when the main clause subject is covert, nominative marking becomes possible.

<table>
<thead>
<tr>
<th>Co-reference</th>
<th>Overtness</th>
<th>Covert</th>
<th>Overt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-referential</td>
<td>NOM: YES</td>
<td>NOM: NO</td>
<td></td>
</tr>
<tr>
<td>Not co-referential</td>
<td>NOM: YES</td>
<td>NOM: NO</td>
<td></td>
</tr>
</tbody>
</table>

The interplay between the two generalisations will give us four different combinations on case marking. If we schematise the possibility of the accusative case marking and the nominative case marking using [± ACC], and [± NOM], we arrive at Table 5.9

When the main clause subject is covert and the embedded subject is co-referential

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9 Feature markings are used for the ease of explanation with no theoretical implications in mind.
with the main clause subject (E1), the embedded subject may be marked nominative but not accusative ([+NOM, -ACC]). When the main clause subject is covert and the embedded subject is not co-referential with the main clause subject (E2), the embedded subject may be marked either nominative or accusative ([+NOM, +ACC]). When the main clause subject is overt and the embedded subject is co-referential with the main clause subject (E3), the embedded subject cannot be marked either nominative or accusative ([+NOM, -ACC]). When the main clause is overt and the embedded subject is not co-referential with the main clause subject (E4), the embedded subject may be marked accusative, but not nominative ([+NOM, +ACC]).

Assuming that embedded subject NPs in Manchu must be assigned either nominative or accusative case (marking), we would expect to find only nominative marked subjects in E1, both nominative marked subjects and accusative marked subjects in E2, and only accusative marked subjects in E4. And in E3, embedded subjects will not be able to receive any structural case (marker), therefore, based on the above assumption, we expect the sentence to crash in E3.

These predictions are borne out, as shown in Table 6. Only accusative case marking is predicted to be possible in E1, and as predicted, we get accusative case marking in 61 out of 62. In E2, either case marking should be possible. And as predicted, we get 150 accusative markings and 63 nominative markings. In E4, only accusative case marking is predicted to be possible. And we get 24 accusative case markings out of 28. And as predicted, we were not able to find any sentence that fits in the category of E3.

Table 5. The interplay between two generalisations—prediction

<table>
<thead>
<tr>
<th>Co-reference</th>
<th>Overtness</th>
<th>Covert</th>
<th>Overt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-referential</td>
<td>E1</td>
<td>[+NOM, -ACC]</td>
<td>E3</td>
</tr>
<tr>
<td>Not co-referential</td>
<td>E2</td>
<td>[+NOM, +ACC]</td>
<td>E4</td>
</tr>
</tbody>
</table>

Table 6. The interplay between two generalisations—results

<table>
<thead>
<tr>
<th>Co-reference</th>
<th>Overtness</th>
<th>Covert</th>
<th>Overt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-referential</td>
<td>E1</td>
<td>NOM: 61, ACC: 1</td>
<td>E3</td>
</tr>
<tr>
<td>Not co-referential</td>
<td>E2</td>
<td>NOM: 150, ACC: 63</td>
<td>E4</td>
</tr>
</tbody>
</table>
5. Conclusion

In this paper, we have laid out two generalisations on the case marking of embedded subjects in Manchu based on a survey performed on the basis of Manchu written corpus of Lao. One was a generalisation regarding the distribution of accusative case marking, while the other was a generalisation on the distribution of nominative (ø-) case marking. We also argued that the interplay between the two generalisations accurately predicts the distribution of case marking in embedded subjects, albeit with some exceptions. Assuming that one exception in E1 can be excluded from the discussion (see footnote 8), all the relevant exceptions are found in E4. While the prediction is that no nominative marked embedded subjects should appear in E4, we find 4 tokens of nominative marked embedded subjects. These are in fact exceptions to Generalisation 2 which states that nominative marked embedded subjects should only appear with covert main clause subjects. Unfortunately, we do not yet have convincing explanation to these exceptions and we leave it for future research.10

Abbreviations

ABL = ?
ACC = accusative
ANT = anterior
CAUS = causative
COMP = complementiser
CONC = concessive
COND = conditional
CVB = converb
DAT = dative
DUR = durative
EXCL = exclusive
GEN = genitive
IMP = imperative
INCL = inclusive
NEG = negation
NMLZ = nominaliser
NOM = nominative
NPST = non-past
OPT = optative
PASS = passive

10 It has been proposed that objects are distinguished from the subject via differential case marking when the object is equal to or higher than the subject in terms of animacy or definiteness (de Hoop and Narasimhan 2005, Næss 2007, de Hoop and Malchukov 2008). If so, it may be that the 4 null-marked subjects are not marked accusative as they do not need to be distinguished from the matrix subject, as among the 4 null-marked subjects, three are inanimate, while one is the subject of a passive clause.
PL = plural
PRF = perfect
PRV = preventive
PST = past
PTCP = participle
PTL = particle
Q = question particle/marker
SG = singular
SIM = simultaneous
Subj = subject

References

APPENDIX

**A survey of case marking on the subject of seme clause in Lao (Do 2018)**

<table>
<thead>
<tr>
<th>Main clause subject</th>
<th>Co-reference</th>
<th>gūni- (think)</th>
<th>hendu- (speak)</th>
<th>ala- (report)</th>
<th>donji- (hear)</th>
<th>gisure- (say)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overt</td>
<td>Co-referential</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>ACC: 0 NOM: 0</td>
</tr>
<tr>
<td></td>
<td>Not</td>
<td>ACC: 9 NOM: 1</td>
<td>ACC: 8 NOM: 2</td>
<td>ACC: 4</td>
<td>ACC: 3</td>
<td>–</td>
<td>ACC: 24 NOM: 4</td>
</tr>
<tr>
<td>Covert</td>
<td>Co-referential</td>
<td>Nom: 19</td>
<td>ACC: 1 NOM: 4</td>
<td>NOM: 16</td>
<td>ACC: 1</td>
<td>ACC: 61</td>
<td>Nom: 63</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>56</td>
<td>98</td>
<td>81</td>
<td>44</td>
<td>24</td>
<td>303</td>
</tr>
</tbody>
</table>