Asymmetrical symmetry in Tigrinya object marking

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1 Background on Tigrinya

1.1 Ethnographic

- **Classification.** Tigrinya is an Ethio-Semitic language in the Afro-Asiatic branch. It is closely related to Tigré and Amharic and more distantly to Arabic and Hebrew.

- **Population.** There are approximately 7 million speakers world-wide. Tigrinya is not currently endangered.

- **Distribution.** Tigrinya is spoken predominantly in central highland Eritrea and the Tigray region of Northern Ethiopia on the Horn of Africa. Large immigrant populations exist world-wide.

1.2 Basic Verbal Morphosyntax

- **Nonconcatenative Root Morphology.** Tri-consonantal roots with a base meaning acquire their category and TAM information through transfixed vowel templates.

  (1) *Gerundive verb form*

  | sabir-u  | GER. break-S.3MS |
  | 'It broke.' |

  (2) *Perfect verb form*

  | sabir-∅  | PRF. break-S.3MS |
  | 'It had broken.' |

- **Agglutinating Synthetic Morphology.** Verbs commonly carry morphology marking finiteness, valency alternations, and agreement with the subject, objects, and applied arguments.

  (3) Yonas n-∅-a t’irmuz [sabir-u-wa]

  | Yonas N-that-FS bottle GER. break-S.3MS-O.3FS |
  | ‘Yonas broke the bottle.’ |

  (4) ϕ-∅ t’irmuz [∅-sabir-a]

  | that-FS bottle DT-GER. break-S.3FS |
  | ‘The bottle broke.’ |

  (Nazareth 2011:56, (55a))

  (5) m1s [∅-ab] t’awla ?anbir-u-wa

  | that-FS book on table GER. place-S.3MS-O.3FS |
  | ‘He placed the book on a table.’ |

  (adapted from Nazareth 2011:174, (174b))

  (6) mis [∅-ab] u yi-nabir-∅

  | with father-POS.3MS IMP-live-S.3MS |
  | ‘He lives with his father’ |

  (adapted from Gebregziabher 2013:166, (3))
1.3 Differential Object Marking

- **The Prefix** N. DP internal arguments may surface with the prefix [n(i)-], identified as case in recent literature on Tigrinya (Weldeyesus 2004, Kievit & Kievit 2009, Nazareth 2011, Gebregziabher 2013).

  (7) *?it-i sabaj [n]-at-a dabdabe tsihif-u-wa
  that-MS man N-that-FS letter GER.write-S.3MS-O.3FS
  ‘The man wrote the letter.’

- **Differential Object Marker (DOM).** N is descriptively a differential object marker (e.g., Aissen 2003). It obligatorily appears on definite DPs, including definite descriptions, proper names, and pronouns.

- **DOM Indefinites.** N on indefinite quantified DPs provides a specific interpretation.

  (8) [n]-hado sabaj ki-higiz-ao-ni
  N-one.M man INFIN-IMPRF.help-S.3MS-O.1S GER.ask-S.1S-O.3MS
  ‘I asked a (certain) man to help me.’ (Nazareth 2007:9, (4a))

  *N cannot* appear on a bare nominal Theme regardless of the interpretation or the presence of object marking.

  (9) *?it-i sabaj [n] dabdabe tsihif-u-wa
  that-MS man N-letter GER.write-S.3MS-O.3FS
  ‘The man wrote a (certain) letter.’

- **DOM and Object Shift.** Objects with DOM generally show evidence of undergoing Object Shift (e.g., López 2012; cf. Kalin & Weisser 2019).

  (10) *?it-i sab?aj [n]-at-a dabdabe]i sonu ij tsihif-u-wa
  that-MS man N-that-FS letter Monday write-GER-S.3MS-O.3FS
  ‘The man wrote the letter on Monday.’

1.4 Verbal Object Marking

- **Cross-referencing with Object Marking (OM).** Objects of transitive predicates with DOM are obligatorily cross-referenced by OM.

  (11) a. *?it-i sabaj n-at-a dabdabe tsihif-u-wa
  that-MS man N-that-FS letter GER.write-S.3MS-O.3FS
  ‘The man wrote the letter.’

  b. *?it-i sabaj n-at-a dabdabe tsihif-u
  that-MS man N-that-FS letter GER.write-S.3MS
  ‘The man wrote the letter.’

- **DOM Gates Object Marking.** Objects of transitive predicates without DOM cannot be cross-referenced by OM.

  (12) a. *?it-i sabaj dabdabe tsihif-u-wa
  that-MS man letter GER.write-S.3MS-O.3FS
  ‘The man wrote a letter.’

  b. *?it-i sabaj dabdabe tsihif-u
  that-MS man letter GER.write-S.3MS
  ‘The man wrote a letter.’
• **Uniqueness.** Only one object per clause can be cross-referenced by OM, regardless of order.

(13) a. *?it-i gw'al n-ot-a dâbdahe n-ot-i waâ dâbdahe
tat-tâ
that-FS girl N-that-FS letter N-that-MS boy give-GER-S.3FS-O.3FS-O.3MS
‘The girl gave the boy the letter.’

b. *?it-i gw'al n-ot-a dâbdahe n-ot-i waâ dâbdahe
tat-tâ
that-FS girl N-that-FS letter N-that-MS boy give-GER-S.3FS-O.3MS-O.3FS
‘The girl gave the boy the letter.’

• **Restricted Affixation.** The OM morpheme is realized only on the verb and cannot be realized on auxiliaries.

(14) a. ?it-i sbâjaj n-ot-a dâbdahe tsâhif-u-â
that-MS man-s N-that-FS letter write-GER-S.3MS-O.3FS Aux-S.3MS
‘The man has written the letter.’

b. *?it-i sbâjaj n-ot-a dâbdahe tsâhif-u-â
that-MS man-s N-that-FS letter write-GER-S.3MS-O.3MS Aux-S.3MS-O.3FS
‘The man has written the letter.’

• **Clitic or Agreement?** Tigrinya OM shows properties of both clitic doubling and agreement (Kramer 2014, Baker & Kramer 2018).

• **OM Requires AGREE.** Assume that OM in Tigrinya is:

  – the obligatory realization of a syntactic AGREE relationship (e.g., Chomsky 2001),
  – established between a verbal functional head v₀ and a local DP (e.g., Baker & Kramer 2018, van der Wal 2018),
  – and a correlate of DOM and Object Shift.

(15) a. ?it-i sbâjaj [ n-ot-a dâbdahe ]₁ sânuj x₁ tsâhif-u-wâ
that-MS man N-that-FS letter Monday write-GER-S.3MS-O.3FS
‘The man wrote the letter on Monday.’

b.
2 Setting up the Puzzle

2.1 The Issue: (A)symmetrical Objects

- **Bantu (A)symmetricality.** Bantu languages famously come in different flavors on the basis of the behavior of objects in ditransitive constructions (e.g., Bresnan & Moshi 1990, van der Wal 2018).

- **Asymmetrical Object Languages.** Only the Goal/Recipient argument of ditransitive predicates can surface as an OM on the verb.

\[(16) \text{Swahili asymmetric object marking} \quad \text{(van der Wal 2018:123, (18))}\]
\[
a. \quad \text{A-li-}m-\text{pa} \quad \text{kitabu} \\
\quad \text{S.1-PAST-O.1-give 7.book} \\
\quad \text{‘She gave him a book.’} \\
b. \quad * \text{A-li-}k\text{-pa} \quad \text{Juma} \\
\quad \text{S.1-PAST-O.7-give 1.Juma} \\
\quad \text{‘She gave it to Juma.’}
\]

- **Symmetrical Object Languages.** Either of the internal arguments of ditransitive predicates can surface as an OM on the verb.

\[(17) \text{KiLuguru symmetric object marking} \quad \text{(van der Wal 2018:122, (15))}\]
\[
a. \quad \text{Chibua ko-w-eng’-a} \quad \text{iwana ipfitabu} \\
\quad \text{1.Chibua S.1-O.2-give-fv 2.children 8.books} \\
\quad \text{‘Chibua is giving children books.’} \\
b. \quad \text{Chibua ko-pf-eng’-a} \quad \text{iwana ipfitabu} \\
\quad \text{1.Chibua S.1-O.8-give-fv 2.children 8.books} \\
\quad \text{‘Chibua is giving children books.’}
\]

- **Flexible Symmetry.** Languages differ in which type of ditransitive predicates show symmetricality (van der Wal 2018).

\[(18) \text{Implicational hierarchy of symmetricality by predicate type across languages} \quad \text{(van der Wal 2018:115, (3))}\]
\[
\text{causative} > \text{applicative} > \text{lexical} > \text{asymmetrical} \\
\text{symmetrical}
\]

2.2 The Empirical Domain: Tigrinya Lexical Ditransitives

- **Superficial Lexical Symmetry.** Lexical ditransitive predicates in Tigrinya superficially display symmetrical object properties (cf. Nazareth 2011).

- **Apparent Symmetry in OM.** When the conditions for OM are met by both arguments, either the Goal or Theme can be cross-referenced by OM.

  - **Cross-referenced Goal.** OM is able to cross-reference the Goal of lexically ditransitive predicates.

\[(19) \text{?it-a g”al n-ot-a doblabe n-ot-i w@di hib-a-to} \\
\quad \text{that-FS girl N-that-FS letter N-that-MS boy GER.give-S.3FS-O.3MS} \\
\quad \text{‘The girl gave the letter to the boy.’}
\]

  - **Cross-referenced Theme.** OM is able to cross-reference the Theme of lexically ditransitive predicates.

\[(20) \text{?it-i g”al n-ot-a doblabe n-ot-i w@di hib-a-ta} \\
\quad \text{that-FS girl N-that-FS letter N-that-MS boy GER.give-S.3FS-O.3FS} \\
\quad \text{‘The girl gave the boy the letter.’}
\]
2.3 The Puzzle: Unexpected Asymmetric Optionality of OM

- **Optional Object Marking of Ditransitive Goal.** When only the conditions for cross-referencing the Goal with OM are met, it is *optionally* cross-referenced by OM.

  (21) a. ḥaṭ-a ḡʷal n-or-i ḡawdi dabdbabe hib-a-tə
      that-FS girl N-that-MS boy letter GER.give-S.3FS-O.3MS
      ‘The girl gave the boy a letter.’

  b. ḥaṭ-a ḡʷal n-or-i ḡawdi dabdbabe hib-a
      that-FS girl N-that-MS boy letter GER.give-S.3FS
      ‘The girl gave a letter to the boy.’

- **Obligatory Object Marking of Ditransitive Theme.** When only the conditions for cross-referencing the Theme with OM are met, it is *obligatorily* cross-referenced by OM.

  (22) a. ḥaṭ-i ḡʷal n-or-a ḡawdi n-wədi hib-a-tə
      that-FS girl N-that-FS letter N-boy GER.give-S.3FS-O.3FS
      ‘The girl gave the letter to a boy.’

  b. * ḥaṭ-i ḡʷal n-or-a ḡawdi n-wədi hib-a
      that-FS girl N-that-FS letter N-boy GER.give-S.3FS
      ‘The girl gave the letter to a boy.’

- **The Puzzle Visualized.** The primary data to be understood can be summarized by Table 1.

<table>
<thead>
<tr>
<th>Transitive</th>
<th>Ditransitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theme</td>
<td>Goal</td>
</tr>
<tr>
<td>OM</td>
<td>✓</td>
</tr>
<tr>
<td>No OM</td>
<td>*</td>
</tr>
</tbody>
</table>

Table 1: Grammaticality of OM patterns with eligible arguments in transitive and lexical ditransitive predicates.

- **The Question.** Why does otherwise obligatory OM become optional on Goals in lexical ditransitive constructions?

3 Hidden Argument Structure Alternations

3.1 The Idea: Masked Asymmetry

- **Tigrinya is Asymmetric.** The apparent optionality betrays the availability of two asymmetric ditransitive frames.

- **OM is Obligatory.** v0 obligatorily probes and realizes the φ-features of the highest direct argument.

- **The Status of the Goal.** The Goal varies across the two argument structures as a direct or indirect argument.

- **The Answer.** Obligatory OM cross-references the Goal as a function of the “choice” between two ditransitive frames.
3.2 Asymmetric Ditransitive Frames

- **Multiple Ns.** The two ditransitive frames are masked by a surface ambiguity of the N-marker.
  - *Differential Object Marker.* The N-marker is DOM on direct arguments (N_k).
  - *Preposition.* The N-marker is a preposition introducing indirect arguments (N_P).

- **Double-Object Construction.** The verb embeds a small clause with possessive semantics (Green 1974, Kayne 1984, Beck & Johnson 2004).

\[
(23) \quad \text{vP} \quad \text{vP} \quad \text{vP} \quad \text{vP} \\
\quad \text{VP} \quad \text{VP} \quad \text{VP} \quad \text{VP} \\
\quad \text{H A V E P} \quad \text{H A V E P} \quad \text{H A V E P} \quad \text{H A V E P} \\
\quad \text{D P}_{\text{GL}} \quad \text{D P}_{\text{TH}} \quad \text{H A V E} \quad \text{H A V E} \\
\quad \text{[} \phi : \text{GL} \text{]} \quad \text{[} \phi : \text{TH} \text{]} \\
\quad \text{v}^0 \quad \text{v}^0 \quad \text{v}^0 \quad \text{v}^0
\]

  - The Goal and Theme arguments are both direct arguments.
  - N-marking is DOM (N_k) on the Goal and Theme.
  - The Goal, as the highest direct argument, is most local for agreement with v^0.
  - The Goal is cross-referenced by OM.

- **PP-Object Construction.** The verb takes the DP-Theme and PP-Goal as arguments (Miyagawa & Tsujioka 2004).

\[
(24) \quad \text{vP} \quad \text{vP} \quad \text{vP} \quad \text{vP} \\
\quad \text{VP} \quad \text{VP} \quad \text{VP} \quad \text{VP} \\
\quad \text{PP} \quad \text{VP} \quad \text{VP} \quad \text{VP} \\
\quad \text{P}^0 \text{D P}_{\text{GL}} \quad \text{D P}_{\text{TH}} \quad \text{D P}_{\text{TH}} \quad \text{D P}_{\text{TH}} \\
\quad \text{[} \phi : \text{TH} \text{]} \quad \text{[} \phi : \text{TH} \text{]} \\
\quad \text{v}^0 \quad \text{v}^0 \quad \text{v}^0 \quad \text{v}^0
\]

  - The Goal is an indirect argument and the Theme is a direct argument.
  - N-marking is a preposition (N_P) on the Goal and DOM (N_k) on the Theme.
  - The Theme, as the highest direct argument, is most local for agreement with v^0.
  - The Theme is cross-referenced by OM.

3.3 Predicting OM Patterns

- **Apparent Optionality between the Goal and the Theme.** Which of the two arguments is cross-referenced by OM when both meet the conditions is a function of the underlying argument structure.

\[
(25) \quad \text{a. } \text{?i\-t-a} \quad \text{g\-al} \quad \text{n\-\-t-a} \quad \text{dabdabe} \quad \text{n\-\-t-i} \quad \text{wadi hib-a-\-to} \\
\quad \text{that-FS} \quad \text{N-that-FS} \quad \text{letter} \quad \text{N-that-MS} \quad \text{boy} \quad \text{GER.give-S.3FS-O.3MS} \\
\quad \text{‘The girl gave the letter to the boy.’} \\
\quad \text{b. } \text{?i\-t-i} \quad \text{g\-al} \quad \text{n\-\-t-a} \quad \text{dabdabe} \quad \text{n\-\-t-i} \quad \text{wadi hib-a-\-\-ta} \\
\quad \text{that-FS} \quad \text{N-that-FS} \quad \text{letter} \quad \text{N-that-MS} \quad \text{boy} \quad \text{GER.give-S.3FS-O.3FS} \\
\quad \text{‘The girl gave the boy the letter.’}
\]
Cross-referencing the Goal. The Goal is the highest direct argument in the double-object construction and will be probed first by $v^0$.

(26) a. $\text{?it-} a^\text{gul} n^\text{-at-} a^\text{dabdabe n-}^\text{-at-} i^\text{wadi hib-a-to}$
    that-FS girl $N_K$-that-FS letter $N_K$-that-MS boy GER.give-S.3FS-O.3MS
    ‘The girl gave the letter to the boy.’

b. $\text{vP} \quad \Longrightarrow \quad \text{c.}$

Cross-referencing the Theme. The Theme is the highest direct argument in the PP-object construction and will be probed by $v^0$.

(27) a. $\text{?it-} i^\text{gul} n^\text{-at-} a^\text{dabdabe n-}^\text{-at-} i^\text{wadi hib-a-ta}$
    that-FS girl $N_K$-that-FS letter $N_P$-that-MS boy GER.give-S.3FS-O.3FS
    ‘The girl gave the boy the letter.’

b. $\text{vP} \quad \Longrightarrow \quad \text{c.}$

PP as a Barrier to AGREE. The Goal—as an indirect argument—is inaccessible and non-intervening to the AGREE relation attempted between $v^0$ and the Theme (e.g., Rezac 2008; see also Bobaljik 2008 and Preminger 2014).
• **Apparent Optionality of the Goal.** Whether the Goal is cross-referenced by OM is a function of the underlying argument structure.

(28) a. ??it-a g^w^ al n-o-t-i wadi dabdabe hib-a-to
that-FS girl N-that-MS boy letter GER.give-S.3FS-O.3MS
‘The girl gave the boy a letter.’

b. ??it-a g^w^ al n-o-t-i wadi dabdabe hib-a
that-FS girl N-that-MS boy letter GER.give-S.3FS
‘The girl gave a letter to the boy.’

– **Cross-referencing the Goal.** The Goal is the highest direct argument in the double-object frame and will be probed first by $v^0$.

(29) a. ??it-a g^w^ al n-o-t-i wadi dabdabe hib-a-to
that-FS girl N-k-that-MS boy letter GER.give-S.3FS-O.3MS
‘The girl gave the boy a letter.’

b. $v^P \implies c. $

\begin{align*}
&vP \\
&\downarrow \\
&vP \\
&\downarrow \\
&VP \\
&\downarrow \\
&\phi : GL \\
&\downarrow \\
&\text{HAVEP} \\
&\text{DP}_{GL} \\
&\downarrow \\
&\text{HAVEP} \\
&\text{DP}_{TH} \\
&\text{HAVE}^0
\end{align*}

– **Not Cross-referencing the Goal.** The Goal is an indirect argument in the PP-object frame and will not be probed by $v^0$. Because the Theme is not meet the conditions for being cross-referenced by OM, there is no OM.

(30) a. ??it-a g^w^ al n-o-t-i wadi dabdabe hib-a
that-FS girl N-p-that-MS boy letter GER.give-S.3FS
‘The girl gave a letter to the boy.’

b. $vP$

\begin{align*}
&vP \\
&\downarrow \\
&vP \\
&\downarrow \\
&VP \\
&\downarrow \\
&\phi : - \\
&\downarrow \\
&\text{PP} \\
&\downarrow \\
&\text{VP} \\
&\text{N}_p \text{DP}_{GL} \\
&\downarrow \\
&\text{DP}_{TH} \\
&\text{V}^0
\end{align*}
• **Obligation of the Theme.** The Theme can only be cross-referenced in the PP-object configuration, in which case it will always be the highest direct argument.

(31) a. ?it-i g^n al n-ot-a dābdabe n-wādi hib-a-ta
that-FS girl N-that-FS letter N-boy GER.give-S.3FS-O.3FS
‘The girl gave the letter to a boy.’

b. * ?it-i g^n al n-ot-a dābdabe n-wādi hib-a
that-FS girl N-that-FS letter N-boy GER.give-S.3FS
‘The girl gave the letter to a boy.’

– **Cross-referencing the Theme.** The Theme is the highest direct argument in the PP-object frame and will be probed by $v^0$.

(32) a. ?it-i g^n al n-ot-a dābdabe n-wādi hib-a-ta
that-FS girl N$_K$-that-FS letter N$_P$-boy GER.give-S.3FS-O.3FS
‘The girl gave the letter to a boy.’

b. $vP \quad \implies \quad c.$

![Diagram](attachment://diagram1.png)

– **Not Cross-referencing the Theme.** Because OM is obligatory realized on $v^0$ when possible, not cross-referencing the Theme results in ungrammaticality.

(33) a. * ?it-i g^n al n-ot-a dābdabe n-wādi hib-a
that-FS girl N$_K$-that-FS letter N$_P$-boy GER.give-S.3FS
‘The girl gave the letter to a boy.’

b. $vP \quad \implies \quad c.$

![Diagram](attachment://diagram2.png)
4 Structure Sensitive Predictions

- **Asymmetries Predicted.** This analysis correctly predicts interpretive and structural asymmetries that correlate with the observed OM pattern.

\[
\begin{align*}
(34) & \quad \text{vP} \\
& \quad \text{vP} \\
& \quad \text{VP} \\
& \quad \text{HAVEP} \\
& \quad \text{DP}_{\text{GL}} \\
& \quad \text{HAVEP} \\
& \quad \text{DP}_{\text{TH}} \\
& \quad \text{HAVE} \\
(35) & \quad \text{vP} \\
& \quad \text{vP} \\
& \quad \text{VP} \\
& \quad \text{V}^0 \\
& \quad [\phi : \text{GL}] \\
& \quad \text{HAVEP} \\
& \quad \text{P}^0 \text{DP}_{\text{GL}} \\
& \quad \text{DP}_{\text{TH}} \\
& \quad \text{V}^0 \\
& \quad [\phi : \text{TH}]
\end{align*}
\]

4.1 Goal-Marking Gates Theme-Marking

- **A Prediction.** The Theme cannot be \(N\)-marked and cross-referenced by OM unless the Goal is \(N\)-marked.

- **Demoting the Goal.** \(N\)-marking the Goal ensures it can be generated as an indirect PP argument and will not be probed by \(v^0\).

\[
(36) \quad \text{a. } \text{that-FS girl N}_K\text{-that-FS letter N}_P\text{-that-MS boy GER.give-S.3FS-O.3FS} \\
\text{‘The girl gave the boy the letter.’} \\
\text{b. } * \text{that-FS girl N}_K\text{-that-FS letter boy GER.give-S.3FS-O.3FS} \\
\text{‘The girl gave a boy the letter.’}
\]

4.2 Goal Specificity

- **A First Prediction.** Only a Goal that is not cross-referenced by OM can be either definite or indefinite.

- **P}^0 and Non-specificity.** A Goal that is not cross-referenced by OM is \(N\)-marked by a preposition \((N_P)\), which does not enforce the definiteness/specificity constraints of DOM \((N_K)\).

\[
(37) \quad \text{a. } \text{that-FS girl N}_P\text{-that-MS boy letter GER.give-S.3FS} \\
\text{‘The girl gave a letter to the boy.’} \\
\text{b. } \text{that-FS girl N}_P\text{-boy letter GER.give-S.3FS} \\
\text{‘The girl gave a letter to a boy.’}
\]
• **A Second Prediction.** A Goal that is cross-referenced by OM must be definite/specific.

• **DOM and Definiteness.** A Goal that is cross-referenced by OM is necessarily $N$-marked with DOM ($N_K$), which enforces definiteness/specificity constraints.

\[(38)\]

a. \begin{align*}
?i\text{-}t\text{-}a & \text{ gʷal } n@t-i \ w@di \ d@bdabe \ hib-a-t0 \\
& \text{that-FS \ } N_K\text{-that-MS \ boy \ letter \ GER.give-S.3FS-O.3MS} \\
& \text{‘The girl gave the boy a letter.’}
\end{align*}

b. * \begin{align*}
?i\text{-}t\text{-}a & \text{ gʷal ni-w@di \ d@bdabe \ hib-a-t0} \\
& \text{that-FS \ } N_K\text{-boy \ letter \ GER.give-S.3FS-O.3MS} \\
& \text{‘The girl gave a (certain) boy a letter.’}
\end{align*}

4.3 **The CAUSE-HAVE Interpretation**

• **Interpretive Asymmetry.** The English double-object construction has a possessive component to its meaning that is not necessarily found in the PP-object construction (Green 1974, Beck & Johnson 2004).

\[(39)\] *English PP-object construction*

a. Sam sent the letters to Kim.

b. Sam sent the letters to Zagreb.

\[(40)\] *English double-object construction*

a. Sam sent Kim the letters.

b. # Sam sent Zagreb the letters.

• **A Prediction.** If the OM pattern betrays the proposed asymmetrical ditransitive constructions, an inanimate Goal cross-referenced by OM should be infelicitous.

• **CAUSE-HAVE in Tigrinya.** Inanimate Goals that are cross-referenced by OM lead to infelicity.

\[(41)\]

a. \begin{align*}
?i\text{-}t\text{-}a & \text{ gʷal ni-?asmora } d@bdabe \ sadid-a \\
& \text{that-FS \ } N_P\text{-Asmara \ letter \ GER.send-S.3FS} \\
& \text{‘The girl sent a letter to Asmara.’} \quad \text{(No OM; PP-object frame)}
\end{align*}

b. * \begin{align*}
?i\text{-}t\text{-}a & \text{ gʷal ni-?asmora } d@bdabe \ sadid-a-ta \\
& \text{that-FS \ } N_K\text{-Asmara \ letter \ GER.send-S.3FS-O.3FS} \\
& \text{Literally: ‘The girl sent Asmara a letter.’} \quad \text{(Goal OM; Double-object frame)}
\end{align*}

\[(42)\]

a. \begin{align*}
?i\text{-}t\text{-}a & \text{ gʷal n-\text{-}at-\text{-}on } d@bdabe \ ni-?asmora \ sadid-a-tan \\
& \text{that-FS \ } N_K\text{-that-FP \ letter \ N_P\text{-Asmara \ GER.send-S.3FS-O.3FP} \\
& \text{‘The girl sent the letters to Asmara.’} \quad \text{(Theme OM; PP-object frame)}
\end{align*}

b. * \begin{align*}
?i\text{-}t\text{-}a & \text{ gʷal n-\text{-}at-\text{-}on } d@bdabe \ ni-?asmora \ sadid-a-ta \\
& \text{that-FS \ } N_K\text{-that-FP \ letter \ N_K\text{-Asmara \ GER.send-S.3FS-O.3FS} \\
& \text{Literally: ‘The girl sent Asmara the letter.’} \quad \text{(Goal OM; Double-object frame)}
\end{align*}

• **HAVEP.** The asymmetry can be understood as an effect of the semantic contribution of the small clause headed by HAVE$^0$ in the double-object frame of both languages.
4.4 Condition A

- **Binding Asymmetry.** The Goal c-commands the Theme in the English double-object construction, but not in the PP-object construction (Barss & Lasnik 1986).

  (43) a. Tom gave [ Sue₁ [ the pictures of herself₁ ]].
  b. * Tom gave [ the pictures of herself₁ [ to Sue₁ ]].

- **A Prediction.** If the OM pattern betrays the proposed asymmetrical ditransitive constructions, the Goal will not c-command the Theme when the Theme is cross-referenced by OM.

- **Condition A as a Function of OM.** The Goal fails to bind the Theme when the Theme is cross-referenced by OM, giving rise to Condition A effects.

  that-FS girl N₉-Keffy.M N₉-that-FP of self-3MS picture-p GER.give-S.3FS-O.3FP
  * ‘The girl gave the pictures of himself₁ to Keffy₁.’ (Theme OM; PP-object frame)

  (45) ?it-a gʷal ni-kefi₁ n-ot-ōn naj [gọza? riʔisu]₁ siʔilt-at hib-a-to
  that-FS girl N₉-Keffy.M N₉-that-FP of self-3MS picture-p GER.give-S.3FS-O.3MS
  ‘ The girl gave Keffy₁ the pictures of himself₁.’ (Goal OM; Double-object frame)

5 Conclusion

- **Tigrinya is Asymmetrical.** Tigrinya is an asymmetrical object language that employs (at least) two asymmetrical ditransitive frames.

- **A Masked Ambiguity.** The two ditransitive frames below are masked by the surface ambiguity between an DOM and a Π₀.

  (46) **Double-Object Construction**

  (47) **PP-Object Construction**

  ![Diagram](image)

- **Obligatory OM.** OM is uniformly obligatory across the language.

- **The Lesson.** Symmetrical object behaviors can be mimicked by asymmetrical object languages (see also Zeller 2015).
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All errors and misrepresentations of the comments of ideas of others are solely my responsibility.

Glosses

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References


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**Appendix A: Against Agreement at the Edge**

- **An Alternative.** Tigrinya may have a single ditransitive construction in which \( v^0 \) probes and cross-references the derived highest eligible argument (e.g., Bhatt & Anagnostopoulou 1996, Zeller 2015, Haddican & Holmberg 2019).

- **The OM Optionality Unsolved.** It remains to be explained why otherwise obligatory OM is optional on a Goal and obligatory on a Theme.

\[
(48) \quad \begin{array}{c}
\text{vP} \\
\alpha P \\
\text{DP}_{GL} \\
\text{VP} \\
\text{DP}_{TH} \\
\end{array} \\
\begin{array}{c}
\text{vP} \\
\alpha P \\
\text{DP}_{GL} \\
\text{VP} \\
\text{DP}_{TH} \\
\end{array} \\
\phi : \text{GL} \\
\phi : \text{TH} \\
\end{array}
\]

(49) \quad \begin{array}{c}
\text{vP} \\
\alpha P \\
\text{DP}_{TH} \\
\text{VP} \\
\text{DP}_{GL} \\
\end{array} \\
\begin{array}{c}
\text{vP} \\
\alpha P \\
\text{DP}_{TH} \\
\text{VP} \\
\text{DP}_{GL} \\
\end{array} \\
\phi : \text{TH} \\
\phi : \text{GL} \\
\end{array}
\]

(50) \quad \begin{array}{l}
\text{lit-a} \quad \text{g"al} \text{ n-ot-i} \quad \text{wo} \text{d} \text{d} \text{b} \text{a} \text{b} \text{a} \text{b} \text{a} \text{(to)} \\
\text{th} \text{at-FS} \quad \text{girl} \quad \text{N-tha} \text{-MS} \quad \text{boy} \quad \text{letter} \quad \text{GER} \text{.give-S.} \text{3FS} \text{-O.} \text{3MS} \\
\end{array}

\text{‘The girl gave the boy a letter.’}
Appendix B: Apparent Symmetry in the Passive

- **Passivization.** Suppression of the external argument and promotion of the internal argument is possible with the addition of the prefix [t@-].

(52) ?it-a dabdabe t@-ts’ilif-a
that-FS letter DT-GER.write-S.3FS
“The letter was written.”

(53) * n-@s-a dabdabe t@-ts’ilif-u-wa
N-that-FS letter DT-GER.write-S.3MS-O.3FS
‘The letter was written.’

- **Apparent Symmetry in Passivization.** Either the Goal or Theme can be promoted to subject in reduced-valency configurations.

  - **Promoted Goal.** A passivized lexical ditransitive permits promotion of the **Goal** to subject.

(54) ?it-om t@m@har-o mats’haf-ti t@-wahib-om
that-MP student-P book-P DT-GER.give-S.3MP
‘The students are given books.’ (Nazareth 2011:261, (265a))

  - **Promoted Theme.** A passivized lexical ditransitive permits promotion of the **Theme** to subject.

(55) ?it-i mats’haf-ti ni-t@m@har-o t@-wahib-u
that-MS book-P N-student-P DT-GER.give-S.3MS
‘The books are given to students.’ (Nazareth 2011:261, (265b))

- **Apparently Symmetrical OM in the Passive.** Either the Theme or Goal can be cross-referenced by OM in the passive.

  - **Promoted Goal, Cross-referenced Theme.** OM is able to cross-reference an eligible Theme of a passivized lexical ditransitive.

(56) ?it-om t@m@har-o n-@t-i mats’haf-ti t@-wahib-om-wo
that-MP student-P N-that-MS book-P DT-GER.give-S.3MP-O.3MS
‘The students are given the books.’ (Nazareth 2011:262, (266a))

  - **Promoted Theme, Cross-referenced Goal.** OM is able to cross-reference an eligible Goal of a of a passivized lexical ditransitive.

(57) ?it-i mats’haf-ti n-@t-om t@m@har-o t@-wahib-u-wom
that-MS book-P N-that-MP student-P DT-GER.give-S.3MS-O.3MP
‘The books are given to the students.’ (Nazareth 2011:262, (266b))

- **The Asymmetry Betrayed.** The underlying asymmetry is indicated by difference in *N*-marking on the remaining internal arguments of a passivized lexical ditransitive.
(58) ʔit-om ʔəməhər-o mətsʰəfi-ti tə-wahib-o
that-MP student-P book-P DT-GER.give-S.3MP
‘The students are given books.’
(Nazareth 2011:261, (265a))

(59) ʔit-i mətsʰəfi-ti ni-ʔəməhər-o tə-wahib-u
that-MS book-P N_P-student-P DT-GER.give-S.3MS
‘The books are given to students.’
(Nazareth 2011:261, (265b))
Appendix C: N as a Preposition

- **Multiple Ns.** Tigrinya employs at least two separate morphemes that are exponed as [n(i)-].
  
  - **Differential Object Marker.** The N-marker is DOM on direct arguments (Nₖ).
    
    (60) * ?it-a gw'al ni-wǝdni ni-dabdabe hib-a
    that-FS girl Nₚ-boy Nₖ-letter GER.give-S.3FS
    ‘The girl gave a letter to a boy.’

  - **Preposition.** The N-marker is a preposition introducing indirect arguments (Nᵢ).
    
    (61) ?it-a gw'al ni-wǝdni dabdabe hib-a
    that-FS girl Nₚ-boy letter GER.give-S.3FS
    ‘The girl gave a letter to a boy.’

- **Prepositions.** Adpositions precede their nominal complements (Nazareth 2011, Gebregziabher 2013).
  
    (62) n-ǝt-a matshaf [tǝb] tǝwlǝ 'anbir-u-wa
    that-FS book on table PRF.place-S.3MS-O.3FS
    ‘He placed the book on a table.’
    (adapted from Nazareth 2011:174, (174b))

    (63) [mís] 'abu-u yi-nabir-∅
    with father-POS.3MS IMP-live-S.3MS
    ‘He lives with his father’
    (adapted from Gebregziabher 2013:166, (3))

- **Amharic Ditransitives.** Lexical ditransitives in Amharic only permit cross-referencing the Goal with OM, which is otherwise optional in the language (Amberber 2005, Baker 2012, Kramer 2014).
  
    (64) lemma ɬ-almaz tarık-u-n nǝɡgger-at
    Lemma DAT-Almaz story-DEF-ACC tell-(S.3M)-O.3F
    ‘Lemma told Almaz the story.’
    (adapted from Baker 2012:261, (16))

    (65) * lemma ɬ-almaz tarık-u-n nǝɡgger ø-w
    Lemma DAT-Almaz story-DEF-ACC tell-S.3M-O.3M
    ‘Lemma told Almaz the story.’
    (adapted from Baker 2012:261, (16))

- **Prepositions v. Case Markers.** The difference between Tigrinya and Amharic could be understood as a reflection of the absence of a PP-object frame in Amharic.
  
  - **Tigrinya Prepositions.** [n(i)-] can be the realization of a preposition (overt or covert) in ditransitives that presents a locality barrier to AGREE with Goal (Overfelt today).
  
  - **Amharic Case Markers.** The Goal in ditransitives is always a direct argument visible to AGREE given that
    1.) Amharic “prepositions” are post-syntactically inserted case markers (Baker & Kramer 2014)
    2.) that are the realization of functional Kase layer that is visible/transparent to AGREE with the Goal (cf. Baker & Kramer 2014).