Title: Asymmetrical Symmetry in Tigrinya Object Marking

Author: Jason Overfelt

Biography: Jason Overfelt is an Assistant Professor in the Department of Linguistics at Oakland University. He studied at Purdue University before receiving a Ph.D. in Linguistics from the University of Massachusetts Amherst in 2015. His previous work on Tigrinya investigates a variety of topics in the syntax of relativization and constituent questions. His other research interests include issues at the syntax-semantics interface, including topics in rightward displacement, antecedent-contained deletion, bare argument ellipses, sprouting, quantifier raising, and variable binding. He has published in the journals *Linguistic Inquiry*, *Syntax*, and *Lingua.*

Abstract: This chapter argues that, despite initial appearances, Tigrinya (Ethio-semitic, Eritrea and Northern Ethiopia; SOV) is an asymmetrical object language that employs two distinct ditransitive frames. It is argued that these frames are obscured by a surface ambiguity, but are reliably betrayed by the observed object marking patterns. This analysis provides a way of understanding some unexpected optionality of object marking in ditransitive constructions. It also correctly predicts that various interpretive and structural asymmetries correlate with the observed object marking pattern. Object marking in Tigrinya, which shows surface symmetry but deep asymmetry, therefore serves a cautionary role in the classification of languages as either symmetrical or asymmetrical.[0]

Keywords: Tigrinya; lexical ditransitives; argument structure; object symmetry; object marking

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Gloss abbreviations: 3 = third person, A = applied argument marker, AUX = auxiliary, COM = comitative, DIR = directional, DT = detransitivizer, F = feminine, GER = gerundive, INS = instrument, LOC = locative, M = masculine, N = N-marker, N_K = differential object marker, N_P = prepositional dative marker, O = direct argument marker, P = plural, PRS = present, PRF = perfect, S = subject marker, S = singular.

X.1 Introduction

Languages can generally be placed into one of two categories—symmetrical or asymmetrical—on the basis of the behavior of objects in ditransitive structures (Bresnan and Moshi 1990, van der Wal 2018). One way in which this difference manifests is in the ability for either the theme and/or goal argument, or just the goal argument, to be realized as an object marker on the verb. Swahili, for instance, is an asymmetrical object language. A goal argument can be incorporated into the verb as an object marker in (1a), but the same is not possible for the theme in (1b).

(1) a. A-li-**m**-pa kitabu
S.1-PAST-O.1-give 7.book
'She gave him a book.'

b. *A-li-**ki**-pa Juma
S.1-PAST-O.7-give 1.Juma
'She gave it to Juma.' (Swahili; van der Wal 2018: 123, (18))

By the same measure, KiLuguru is a symmetrical object language. A goal argument can be cross-referenced by object marking on the verb in (2a) and so, too, can the theme argument in (2b).[1]

(2) a. Chibua ko-**w**-eng'-a **iwana** ipfitabu
1.Chibua S.1-O.2-give-FV 2.children 8.books
'Chibua is giving children books.'

b. Chibua ko-**pf**-eng'-a iwana **ipfitabu**
1.Chibua S.1-O.8-give-FV 2.children 8.books
'Chibua is giving children books.' (KiLuguru; van der Wal 2018: 122 (15))

This paper contributes to the cross-linguistic picture of object (a)symmetry with an investigation of object marking in Tigrinya (Ethio-Semitic; Eritrea and Northern Ethiopia). At first appearance, lexical ditransitive predicates in Tigrinya seem to display symmetrical object properties. With respect to object marking, the pair of examples in (3) demonstrate that either a

[1] Research by van der Wal (2018) and the references therein has exposed a more articulated typology of symmetricality. According to van der Wal (2018), symmetry in causatives entails symmetry in applicatives, which entails symmetry in lexical ditransitives. Because Kifle (2011) has argued that Tigrinya applicatives are asymmetric, this paper investigates only lexical ditransitives. A recent investigation of applicative ditransitives can also be found in Graham and Harbour 2020.

goal in (3a) or theme in (3b) can be cross-referenced by an object marker when both arguments meet the necessary requirements. (We will cover precisely what the relevant requirements for object marking are in the following section.)

(3) a. ʔɨta gʷal n-ət-a dəbdabe **n-ət-i** **wədi** hib-a-**to**
that-FS girl N-that-FS letter N-that-ms boy GER.give-S.3FS-O.3MS
'The girl gave the boy the letter.'

b. ʔɨta gʷal **n-ət-a** **dəbdabe** n-ət-i wədi hib-a-**ta**
that-FS girl N-that-FS letter N-that-ms boy GER.give-S.3FS-O.3FS
'The girl gave the letter to the boy.'

On the basis of similar data, along with passivization and relativization facts, Kifle (2007, 2011) reaches exactly this conclusion. Namely, lexical ditransitives in Tigrinya are symmetrical object configurations.[2]

What follows represents a departure from this conclusion. There are several empirical considerations that cast doubts on the claim that Tigrinya lexical ditransitives (simply ditransitives from here on) are symmetrical object configurations. A number of these considerations are presented and accounted for below, but we can observe an initial asymmetry between goals and themes here. As shown in (4), when the necessary conditions on object marking are met by only the goal argument in a ditransitive, the goal is optionally cross-referenced by object marking on the verb. This contrasts with the behavior of theme arguments, both with typical transitive verbs and with ditransitives verbs, as in (5). Theme arguments are otherwise obligatorily cross-referenced by object marking on the verb, when only they satisfy the necessary conditions for object marking.

(4) ʔɨta gʷal **n-ət-i** **wədi** dəbdabe hib-a-(**to**)
that-FS girl N-that-ms boy letter GER.give-S.3FS-O.3MS
'The girl gave the boy a letter.'

(5) ʔɨta gʷal **n-ət-a** **dəbdabe** n-wədi 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.'

[2] We will return briefly to passivization in section X.6 and relativization in section X.7.

One of the major puzzles to be accounted for, then, is why otherwise obligatory object marking becomes optional on goals in ditransitives (4). The other major puzzle, demonstrated by (3), concerns the source of the apparent object symmetricality if, as will be argued below, Tigrinya ditransitives are in fact asymmetrical.

In the following sections of this chapter, I provide an account of these and other issues related to Tigrinya ditransitive constructions. I start in section X.2 by providing some relevant background on the verbal morphosyntax of Tigrinya. In section X.3 I formalize the claim that Tigrinya ditransitives are not symmetrical object constructions. I propose that Tigrinya is in fact more like English (Marantz 1993; Beck and Johnson 2004; Bruening 2010), Greek (Anagnostopoulou 2003), Spanish (Cuervo 2003), and Japanese (Kitagawa 1994; Miyagawa and Tsujioka 2004) in its employment of multiple asymmetrical ditransitive frames. Tigrinya resembles Spanish and Japanese further, following the research cited, in that these two ditransitive frames are masked by a surface ambiguity of the N-prefix, seen on the objects in (3)-(5), as a differential object marker on direct arguments or a preposition on indirect arguments, building upon a suggestion by Kifle (2011).

Section X.4 demonstrates how the two proposed asymmetric ditransitive frames allow us to accommodate the observation that object marking in Tigrinya is obligatory when possible, while still allowing for the optionality observed with the goal argument in (4). We will also see how these two ditransitive frames can conspire to create the illusion of symmetry shown in (3). In short, the presence or absence of object marking, and which argument is cross-referenced, reliably betrays one of the two underlying ditransitive frames to be proposed. A useful analogy can be drawn from American varieties of English. The availability of multiple ditransitive frames below artificially simulates the symmetrical object property of allowing passivization of either a goal (6a) or theme argument (6b).

(6) a. **Kim**$_1$ was given [x_1 [a book]]

b. **A book**$_1$ was given [x_1 [to Kim]]

Section X.4 also presents and argues against a pair of alternative analyses that would attempt preserve the idea that Tigrinya ditransitives are symmetrical object configurations.

As will become apparent, the proposed analysis predicts specific structural and interpretive asymmetries that directly correlate with the observed object marking pattern. Section X.5 investigates several of these predictions, showing that each is borne out. Section X.6 briefly

extends to the proposed analysis to available data on the passive construction in Tigrinya. It will be argued that the apparent object symmetry in this domain also betrays an underlying asymmetry between two ditransitive frames. Section X.7 summarizes the paper and concludes by pointing out the cautionary role of Tigrinya in the classification of languages as either symmetrical or asymmetrical object languages.

X.2 Object Marking and Marking Objects in Tigrinya

Tigrinya is an Ethio-semitic language spoken primarily in Eritrea and Northern Ethiopia. It is distantly related to Arabic and Hebrew and more closely related to Tigré and Amharic. Tigrinya is an SOV word-order language with a strongly head-final verbal domain and nominative-accusative alignment. These properties are illustrated with the causative-inchoative alternation of the verb *səbir* 'broke' in (7).

(7) a. Yonas **n**-ət-a t'ɨrmuz səbir-u-wa
Yonas N-that-FS bottle GER.break-S.3MS-O.3FS
'Yonas broke the bottle.' (Kifle 2011: 56, (55a))

b. ʔɨt-a t'ɨrmuz tə-səbir-a
that-FS bottle DT-GER.break-S.3FS
'The bottle broke.' (Kifle 2011: 56, (55b))

Internal argument DPs, including *nəta t'ɨrmuz* 'that bottle' in (7a), may surface with the prefix *n(ɨ)-* (the N-marker). Recent literature on Tigrinya has identified the N-marker as an accusative, objective, or dative case marker (Weldeyesus 2004; Kievit and Kievit 2009; Kifle 2007; 2011; Gebregziabher 2013) and as a preposition in various contexts (Kifle 2011, Gebregziabher 2013). The same literature has also noted that the N-marker is descriptively a Differential Object Marker (DOM; e.g., Bossong 1991; Aissen 2003).[3] The Tigrinya DOM morpheme obligatorily appears on definite theme objects. This includes pronouns, proper names, and nominals with a definite determiner, as in (7a).

The DOM morpheme can also appear on quantified indefinite DPs, like *nɨħadə təməharaj* 'a student' in (8). The result is a specific interpretation for that DP.

(8) ʔɨt-i məmhɨr tɨmali **nɨ**-ħadə təməharaj məts'ħaf hib-u-wo

[3] See Kifle 2011: ch.9 for a more detailed discussion of differential object marking in Tigrinya and its interpretive effects.

that-ms teacher yesterday N-one.M student book GER.give- S.3MS-O.3MS

'Yesterday the teacher gave a (certain) student a book.' (Kifle 2007: 10, (4b))

Indefinite/non-specific bare nominals, in contrast, cannot grammatically appear with the DOM morpheme. This is so regardless of the interpretation of the DP as specific or non-specific (and regardless of the presence of the object marking suffix on the verb). The minimal pair in (9) illustrates.

(9) a. *ʔɨt-i səbaj **nɨ**-dəbdabe tsɨħif-u-wa
that-ms man N-letter GER.WRITE-S.3MS-O.3FS
'The man wrote a (certain) letter.'

b. ʔɨt-i səbaj dəbdabe tsɨħif-u
that-ms man letter GER.write-S.3MS
'The man wrote a letter.'

Objects carrying the DOM morpheme generally show evidence of undergoing an application of Object Shift. As shown in the example in (10), the default word order places the N-marked object to the left of the adverb *sənuj* 'Monday.

(10) ʔɨt-i səbaj [**n**-ət-a dəbdabe]$_1$ sənuj x_1 tsɨħif-u-wa
that-ms man N-that-FS letter Monday GER.write-S.3MS-O.3FS
'The man wrote the letter on Monday.'

We will see additional evidence for postulating applications of Object Shift for arguments carrying the DOM morpheme in section X.4.

Objects of transitive predicates N-marked with the DOM morpheme are obligatorily cross-referenced by a ϕ-agreeing suffixal object marker (OM) on the verb, as in (11a). Objects of transitive predicates that cannot carry the DOM morpheme, such as indefinite/non-specific bare nominals, cannot be cross-referenced by OM; see (11b).

(11) a. ʔɨt-i səbaj **n-ət-a** **dəbdabe** tsɨħif-u-*(**wa**)
that-MS man N-that-FS letter GER.write-S.3MS-O.3FS
'The man wrote the letter.'

b. ʔɨt-i səbaj **dəbdabe** tsɨħif-u-(***wa**)
that-MS man letter GER.write-S.3MS-O.3FS
'The man wrote a letter.'

Thus, OM is gated by DOM on the definite/specific object and is necessary when possible. This makes Tigrinya like Tigré according to Jake (1980), who claims that object marking is obligatory when possible. This also makes Tigrinya unlike Amharic, where object marking is optional according to Amberber (2005), Baker (2012) and Kramer (2014). Relevant examples are provided in (12) and (13).

(12) Lilet waraqat katb-at-(*tā)
Lilet.F letter.F wrote-S.3F-O.3F
'Lilet wrote a letter.' (Tigré; Jake 1980: 75, (5a))

(13) Almaz tämari-w-ɨn ayy-ätʃtʃ-(ɨw)
Almaz.F student-DEF.M-ACC see-3FS.S-3MS.O
'Almaz saw the male student.' (Amharic; Kramer 2014: 601, (14))

As discussed above, OM in Tigrinya can in principle cross-reference either the goal or the theme argument in ditransitive constructions. The relevant examples are repeated in (14).

(14) a. ʔɨt-a gʷal n-ət-a dəbdabe **n-ət-i** **wədi** hib-a-**to**
that-FS girl N-that-fs letter N-that-ms boy GER.give-S.3FS-O.3MS
'The girl gave the boy the letter.' (Goal OM)

b. ʔɨt-a gʷal **n-ət-a** **dəbdabe** n-ət-i wədi hib-a-**ta**
that-fs girl N-that-fs letter N-that-ms boy GER.give-S.3FS-O.3FS
'The girl gave the letter to the boy.' (Theme OM)

Similar to what was observed above with transitive predicates, OM with either of the internal arguments in ditransitives is gated by DOM on a definite/specific DP, a condition which is satisfied in each of the examples in (14). We will return to a discussion of the evidence to support this assertion in section X.5.1, at which point we will have a more articulated picture of ditransitive constructions. For now, we can also observe that, when both arguments are compliant with the conditions for OM, only a single OM affix is possible. This is regardless of the linear order of two morphemes, as demonstrated by the pair of examples in (15).

(15) a. *ʔit-a gʷal **n-ət-a** **dəbdabe n-ət-i** **wədi** hib-a-**ta-to**
that-FS girl N-that-FS letter N-that-MS boy GER.give-S.3FS-O.3FS-O.3MS
'The girl gave the boy the letter.'

b. *ʔit-a gʷal **n-ət-a** **dəbdabe n-ət-i** **wədi** hib-a-**to-ta**
that-FS girl N-that-FS letter N-that-MS boy GER.give-S.3FS-O.3MS-O.3FS
'The girl gave the boy the letter.'

An issue about which I will remain purposefully vague concerns the exact status of the OM morpheme, which displays properties considered to be diagnostic of both agreement markers and clitics. Both of these positions are represented in the recent literature on object marking in Amharic (Baker 2012; Kramer 2014). The current consensus, however, seems to be that Amharic OM is clitic doubling (Baker and Kramer 2018). Either position would ultimately be compatible with the analysis to be presented below. The relevant ingredient is only that OM be the result, at least in part, of a syntactic AGREE relationship (Chomsky 2001). The analysis presented in the following sections will capitalize on the built-in locality constraints on this relationship. Moreover, I will assume that, with respect to object marking, this relationship is established between the cross-referenced argument and a verbal functional head, which I identify as v^0 following Baker and Kramer (2018) and van der Wal (2018).[4]

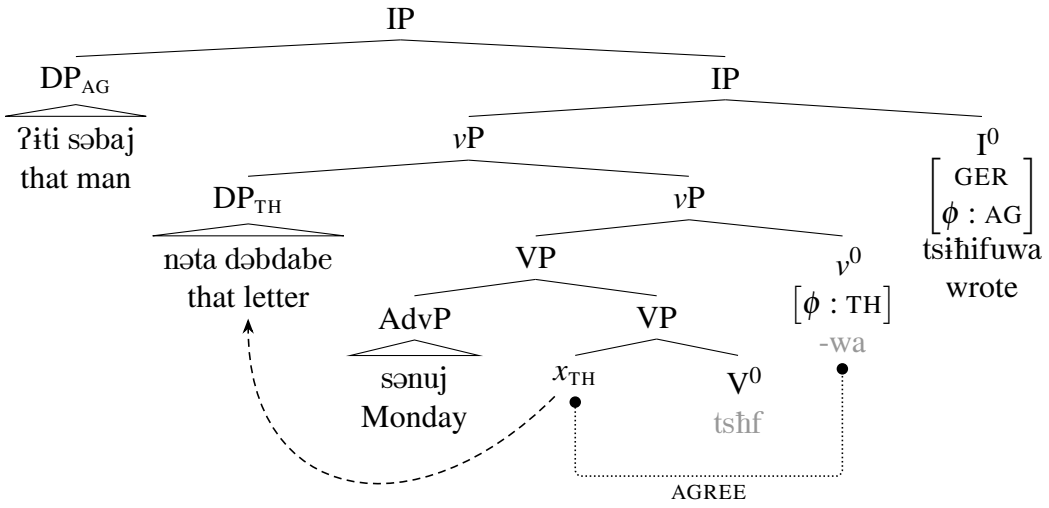
Given the discussion above, and the data to be investigated below, I will also treat DOM and Object Shift as correlates of a relationship with v^0, though not necessarily as a consequence of the same mechanism AGREE for ϕ-feature valuation (see, for example, Bhatt 2005 and Baker 2012). For concreteness, let us adapt the literature cited above and assume that DOM morphology on a DP reflects the presence of a formal Case feature. This Case feature enters the derivation unvalued and must receive a value as part of licensing the relevant DP. By hypothesis, valuation of this Case feature happens only in a spec-head configuration with v^0. This will require, as desired, that a DOM carrying argument undergoes syntactic movement to a specifier position within *v*P (e.g., López 2012, among others; see Kalin 2018 for a critical overview).

[4] See also Roberts (2010), Nevins (2011), and Preminger (2014) for more general treatments of clitic doubling as agreement-based relationships.

Together, these assumptions provide the example in (16a), which has been repeated from (10), with the basic syntactic representation in (16b).[5]

(16) a. ʔɨt-i səbaj [n-ət-a dəbdabe]$_{TH}$ sənuj x_{TH} tsɨħif-u-wa
that-MS man N-that-FS letter Monday GER.write-S.3MS-O.3FS
'The man wrote the letter on Monday.'

b.



In the representation above, v^0 has probed its c-command domain and established an AGREE relation with the theme argument. As a definite/specific nominal carrying the DOM morpheme, the theme is eligible for being cross-referenced by OM. The result of AGREE, therefore, is necessarily the valuation of ϕ-features at v^0, which are ultimately spelled out as the OM affix *-wa* on the verb. As a DOM carrying argument, the theme also undergoes Object Shift to the edge of the *v*P where it achieves its surface position and has its Case feature valued. The following section integrates this basic picture of OM into a proposal for ditransitive configurations in Tigrinya.

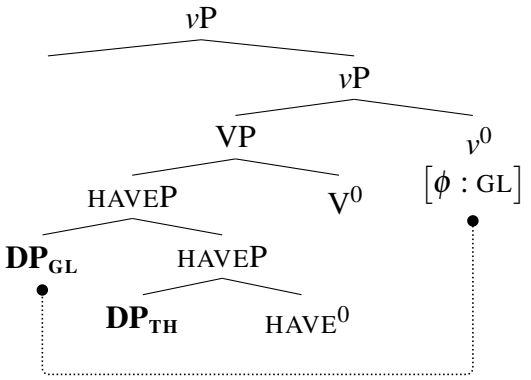
X.3 A Masked Asymmetry

The proposal to be made here is that, despite initial appearances, Tigrinya ditransitives are not symmetrical object configurations. Instead, I propose that Tigrinya employs the pair of asymmetric ditransitive frames in (17) and (18). There is a Double-Object Frame responsible for cross-

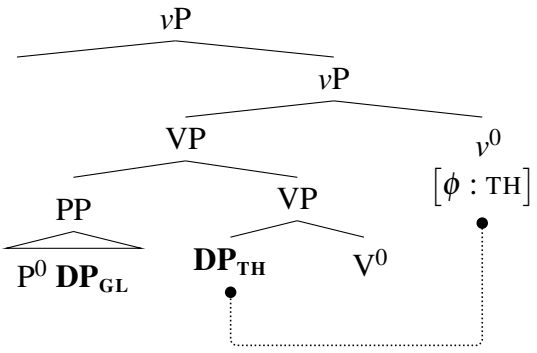
[5] Independent considerations regarding the distribution of morphemes suspected to be generated in the C^0-domain lead me to suspect that Tigrinya is a verb raising language (Overfelt 2009). This is illustrated in the representation in (16b), however nothing about the analysis presented in this paper hinges on this choice.

referencing the goal with OM and a Prepositional-Object Frame responsible for cross-referencing the theme.

(17) Double-Object Frame



(18) Prepositional-Object Frame



The existence of these two frames is obscured in the data above by a surface ambiguity of the N-marker as it appears on goal arguments. As discussed in the previous section, the N-marker is the realization of a DOM morpheme (N_K) when it appears on both themes and goals that are direct arguments of a verbal predicate. In addition to this, the N-marker may also be the realization of a preposition (N_P) that introduces the goal as an indirect argument.

In the Double-Object Frame (DO Frame) in (17), the verb embeds a small clause complement with possessive semantics (e.g., Green 1974; Kayne 1984; Beck and Johnson 2004; Harley and Jung 2015; cf. Yohannes 2010, 2016 on Tigrinya). Both the goal and the theme argument in this representation are generated as nominal direct arguments of the embedded predicate HAVE^0. N-marking on the goal and the theme in this construction, therefore, will be the N_K DOM morpheme. As the structurally higher of the two arguments, the goal will be most local for AGREE, meaning it will value the ϕ-features at v^0. Thus, this is the argument structure that results in the goal being cross-referenced by OM.

In the Prepositional-Object Frame (PP Frame) in (18) the verb combines with a nominal theme argument and a prepositional goal argument, like what has been proposed for Japanese (Kitagawa 1994; Miyagawa and Tsujioka 2004; cf. Bruening 2010 on English). As a direct argument, N-marking on the theme is again the N_K DOM morpheme. N-marking on the indirect PP goal argument, on the other hand, is the N_P preposition.[6] We will find that there is significant

[6] Baker (2012: 261 fn.6) suggests that something along these lines may be possible for certain predicates in Amharic.

explanatory power in adopting two assumptions regarding this PP-layer above the goal. The first is that the PP-layer in (17) makes the goal inaccessible to AGREE from v^0, meaning the goal fails to value the ϕ-features at v^0 in this configuration. The second is that the goal argument is no longer an intervener for an AGREE relationship between v^0 and the direct argument theme (Rezac 2008; see also Bobaljik 2008; Preminger 2014). The desired result is that this is the argument structure that results in the theme being cross-referenced by OM.

Before turning to an account of the observed OM patterns, let us examine some initial motivation for the claim that the N-marker is ambiguous between a DOM morpheme and a preposition. First, it has been argued in the literature that Tigrinya has a small set of polysemous prepositions.[7] Representative examples are provided in examples (19)-(21).[8]

(19) n-ət-a mətsħaf **ʔab** t'awla ʔanbir-u-wa
that-FS book LOC table GER.place-S.3MS-O.3FS
'He placed the book on a table.' (Kifle 2011: 174, (174b))

(20) **mis**-t-a məmħir məiʔ-u
COM-that-FS teacher GER.come-S.3MS
'He came with the teacher' (Gebregziabher 2013: 171, (12a))

(21) saba n-ət-i ʕitro **bi**-saʕri dəbiʔ-a-to
Saba.F that-MS jar INS-grass GER.seal-S.3FS-O.3FS
'Saba sealed the jar with grass.' (Kifle 2011: 184, (186a))

Among this set of prepositions there has also been claimed to be a directional preposition *ni-*, which is exemplified in (22) below.

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[7] Baker and Kramer (2014) have argued recently that supposed prepositions in Amharic are better treated as semantic case markers that are inserted at PF and licensed by null prepositions in the syntax. The issue remains to be fully settled for Tigrinya, though relevant discussion can be found in Gebregziabher 2013: ch.3. Whether or not the same is true in Tigrinya, what is relevant for the analysis is that N-marking can be associated with syntactic structure that is a barrier for AGREE. We will return briefly to the differences between Tigrinya and Amharic in the conclusion.

[8] Prepositions in Tigrinya can be contracted with determiners and the following noun. Like the various versions of *ni-*, the mono-syllographic preposition *bi-* in (21), can be contracted with either. Multi-syllographic prepositions, like *mis-* and *ʔab-*, in (19) and (20) respectively, can be contracted with determiners, but not with nouns (Kifle 2011: 164, fn.3).

(22) **nɨ**-ʔeritɨra kəjid-u ʔal-o

DIR-Eritrea GER.go-S.3MS PRS.AUX-S.3MS

'He has gone to Eritrea.' (Kifle 2011: 165, (163c))

The directional argument *nɨ-ʔeritɨra* 'to Eritrea' of a verb of motion in (22) carries an N-marker but does not trigger OM on the verb. Given the otherwise obligatory cooccurrence of object marking and the DOM morpheme seen in the minimal pair in (11), such data support the claim that prefixal *nɨ-* on nominals is not always the DOM morpheme. Instead, the claim is that N-marking in (22) involves a homophonous preposition (see also Kifle 2011: 247 and Gebregziabher 2013: 37).

Regarding the N-marker in ditransitives specifically, it is telling to observe that it has a different distribution on goal arguments than what has been observed on theme arguments. The minimal pair in (9) showed that indefinite/non-specific bare nominal theme cannot be N-marked. The example in (23) shows that indefinite/non-specific bare nominal goals, on the other hand, can be N-marked and retain an indefinite/non-specific interpretation.

(23) ʔɨt-a g^{w}al **nɨ**-wədi dəbdabe hib-a

that-fs girl N_P-boy letter GER.give-S.3FS

'The girl gave a letter to a boy.'

This suggests that N-marking on goals in ditransitives is not always the DOM morpheme, which otherwise indicates that an argument is subject to a definiteness/specificity requirement, a requirement that is not observed here. Again, the alternative being proposed is that N-marking in (23), like in (22), is an instance of the preposition N_P.

In sum, the observed OM pattern in a Tigrinya ditransitive construction is claimed to reliably betray one of the two argument structures presented above. The operative difference between them is the status of the goal as either a direct argument with N_K-marking in the DO Frame (17) or an indirect argument with N_P-marking in the PP Frame (18). This ultimately determines the relative visibility of the two arguments to AGREE from v^0. As will be shown in detail in the following section, this allows us to preserve the idea that OM is obligatory when possible while also accounting for the observed OM patterns in ditransitives.

X.4 Predicting Object Marking Patterns

Recall the data motivating the puzzles that were presented in the introduction. If Tigrinya is to be classified as an asymmetrical object language, it is necessary to identify an alternative source of the apparent symmetry in (24). Both the goal and theme argument in these examples are descriptively compliant with the requirements for OM: they are definite/specific and are N-marked. In such cases, either argument can be cross-referenced by an OM morpheme.

(24) a. ʔɨt-a gʷal n-ət-a dəbdabe **n-ət-i** **wədi** hib-a-**to**
that-FS girl N-that-FS letter N-that-MS boy GER.give-S.3FS-O.3MS
'The girl gave the boy the letter.'

b. ʔɨt-a gʷal **n-ət-a** **dəbdabe** n-ət-i wədi hib-a-**ta**
that-FS girl N-that-FS letter N-that-MS boy GER.give-S.3FS-O.3FS
'The girl gave the letter to the boy.'

This symmetry is undercut, however, by the asymmetrical behavior of goals and themes when only one of the arguments is compliant with OM requirements. When only the goal argument is definite/specific and N-marked, it is optionally cross-referenced by OM, as in (25). This is unexpected from the perspective of object marking elsewhere in the grammar. Object marking of compliant theme arguments is obligatory, both for the transitive predicates in section X.2 and the ditransitive predicate in (26).

(25) ʔɨt-a gʷal **n-ət-i** **wədi** dəbdabe hib-a-(**to**)
that-FS girl N-that-MS boy letter GER.give-S.3FS-O.3MS
'The girl gave the boy a letter.'

(26) ʔɨt-i gʷal **n-ət-a** **dəbdabe** n-wədi 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.'

The following subsections show how these three sets of facts are handled by the proposal in the previous section. I then sketch and argue against two potential alternative analyses that would treat Tigrinya ditransitives as symmetrical object configurations.

X.4.1 Hidden Ditransitive Argument Structure Alternations

As discussed in section X.3, the proposal is that Tigrinya object marking is obligatorily when possible and cross-references the highest direct argument. Whether the goal or theme is the highest

direct argument in a Tigrinya ditransitive is a function of which of the two proposed asymmetrical argument structures is employed.

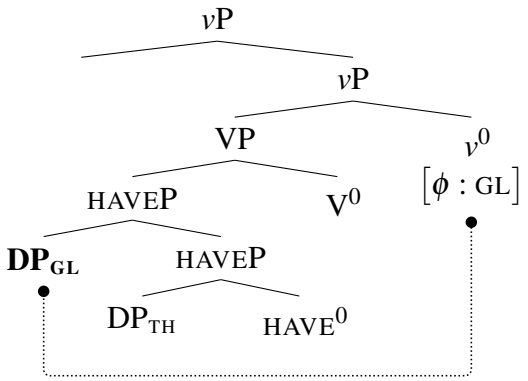
X.4.1.1 Apparent Symmetry of the Goal and Theme

Recall that, when both arguments of a Tigrinya ditransitive are OM compliant, either can be cross-referenced by OM. This apparent symmetry can be reduced to a choice between a pair of asymmetrical ditransitive frames that are obscured by a surface ambiguity of the morphological marking on goals.

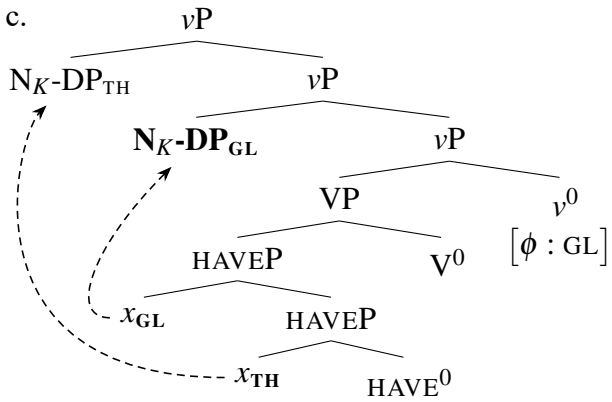
Cross-referencing the goal in (27) under the proposed analysis is the result of a syntax that employs the DO Frame. In this frame, the goal is the highest direct argument and, due to the usual locality constraints on AGREE, will be probed by v^0 first. The goal consequently values the ϕ-features at v^0 and determines the realization of the OM morpheme.

(27) a. ʔit-a gʷal n-ət-a dəbdabe **n-ət-i** **wədi** 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 boy the letter.'

b.



c.



A close look at (27a) shows that the representation in (27b) does not deliver the observed order of the theme preceding the goal. However, knowing from the discussion of (16) that objects marked with the DOM morpheme N_K undergo Object Shift, the set of local displacements illustrated in (27c) will provide the correct result.[9] While the ϕ-features at v^0 are assumed to be valued in full

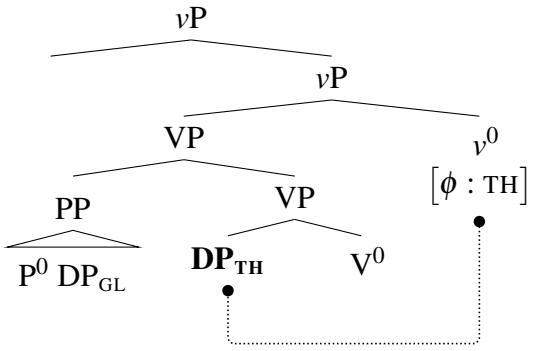
[9] Yohannes (2010) makes a similar proposal for Tigrinya ditransitives. The claim there, however, is that the arguments of ditransitives predicates, even without DOM morphology, move to separate dedicated Spec,AgrP positions. The analysis that is presented in (27) is very similar in spirit to a proposal for Zulu ditransitive constructions in Zeller 2015, which will be evoked again in section X.6 for a brief discussion of the passivization of Tigrinya ditransitives.

via AGREE with the theme, the movements here are expected as part of licensing the two arguments. The Case features associated with DOM morphology must be valued, which is hypothesized to happen only under a spec-head relationship with v^0. So long as we continue to understand the goal to be the higher argument in this structure, constraints on movement in the vein of Superiority will determine that the goal moves first, followed by the theme. The result to be expected is the observed theme-goal order.

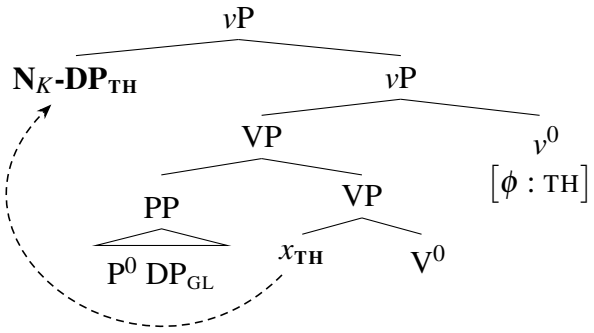
When both arguments are OM compliant, but it is the theme that is cross-referenced by OM, as in the minimally differing string in (28), the proposed underlying argument structure is the PP Frame. The goal here is introduced as part of a PP and, therefore, marked with the prepositional N_P. As proposed above, this means that the theme values the ϕ-features at v^0 and determines the realization of the OM morpheme.

(28) a. ʔit-a g^{w}al **n-ət-a** **dəbdabe** n-ət-i wədi 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 letter to the boy.

b.



c.



Again, the underlying argument structure does not generate the intended word order. The expected instance of Object Shift of the N_K marked theme, shown in (28c), again results in the valuation of the Case feature on theme and provides the correct word order of the theme preceding the goal.

X.4.1.2 Apparent Optionality of the Goal

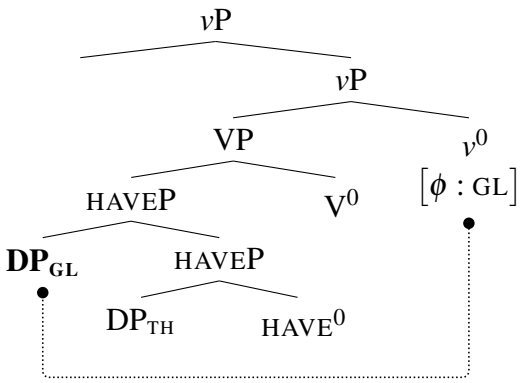
We turn now to the asymmetries between goals and themes. When only the goal is compliant with the requirements for OM, cross-referencing the goal with OM is optional. This is puzzling given that compliant theme arguments are otherwise obligatorily cross-referenced by OM. Given the availability of two asymmetrical ditransitive frames, however, this apparent optionality becomes

an expected property of goals, even while maintaining that object marking is obligatory when possible.

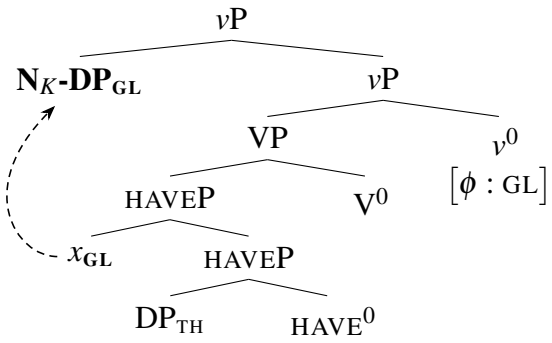
In a way similar to what was presented in (27), the DO Frame in (29) provides the underlying argument structure for cross-referencing the goal argument with OM.

(29) a. ʔɨt-a g^{w}al **n-ət-i** **wədi** dəbdabe 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.



c.

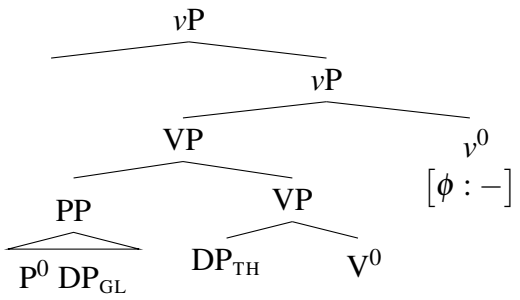


The goal in (29) is the highest direct argument and, again, determines the realization of OM. In line with established expectations, the N_K-marked goal undergoes string vacuous Object Shift to value its Case feature. The unmarked bare nominal theme, on the other hand, has no DOM morphology and can be assumed to be licensed in-situ. The result shown in (29c) is the desired ordering of the goal now appearing before the theme.

When only the goal is OM compliant, but is not cross-referenced by OM, it is because the PP Frame provides the underlying syntax. The expected result now is that OM is not realized in (30).

(30) a. ʔɨt-a g^{w}al **n-ət-i** **wədi** dəbdabe hib-a
that-FS girl N$_P$-that-MS boy letter GER.give-S.3FS
'The girl gave the boy a letter.'

b.



As shown in (30b), the goal is an indirect argument inside a PP and, by hypothesis, is not accessible to the AGREE relation from v^0, regardless of being OM compliant. This makes the theme the highest direct argument. Unlike in (28) above, however, the theme argument here is an indefinite/non-specific bare nominal that is not N_K-marked, making it non-compliant with the requirements for OM. Therefore it, too, fails to trigger object marking. Moreover, by identifying Object Shift as a reflex of DOM, we correctly predict that the theme does not shift and we observe the goal preceding the theme in this instance as well.

X.4.1.3 Obligation of the Theme

Finally, we consider those cases where only the theme is compliant with OM and is obligatorily cross-referenced by OM. This is now a reflection of the obligatoriness of object marking.

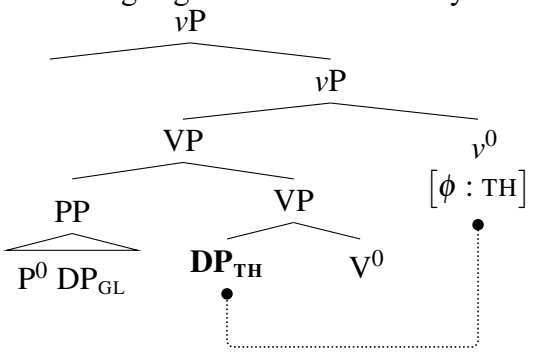
As we saw in the discussion surrounding (28), cross-referencing the theme requires the PP Frame. This ensures that the goal in (31) appears as an indirect argument inside a PP. This has the effect of making the theme the highest direct argument, which consequently determines the realization of OM.

(31) a. ʔit-i g^{w}al **n-ət-a** **dəbdabe** n-wədi hib-a-**ta**

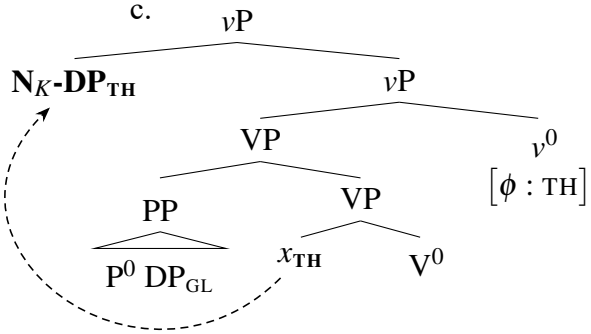
that-FS girl N_K-that-FS letter N_P-boy GER.give-S.3FS-O.3FS

'The girl gave the letter to a boy.'

b.



c.



The N_K-marked theme is expected to undergo the instance of object shift shown in (31c) for purposes of licensing. The goal, however, is expected to remain in-situ. While it is N-marked, the analysis has it marked with the preposition N_P. This is supported by the fact that the goal in (31) is an indefinite/non-specific bare nominal, which we have seen makes it incompatible with DOM. This in turn means it will not undergo Object Shift and we expect the theme to precede the goal once again.

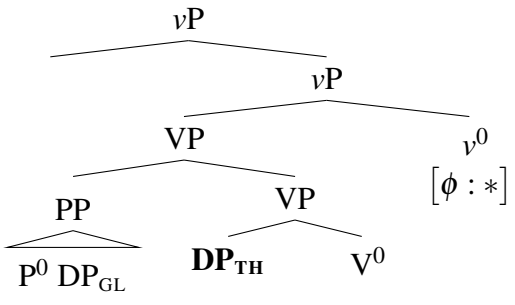
While the goal varies between being a direct and indirect argument, the theme is always a direct argument. In these instances where the theme is the only OM compliant argument, not cross-referencing it with OM violates the now established requirement to realize OM when possible. The example in (32) below shows how violating this requirement results in ungrammaticality.

(32) a. *ʔit-i g^{w}al **n-ət-a** **dəbdabe** n-wədi hib-a

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.



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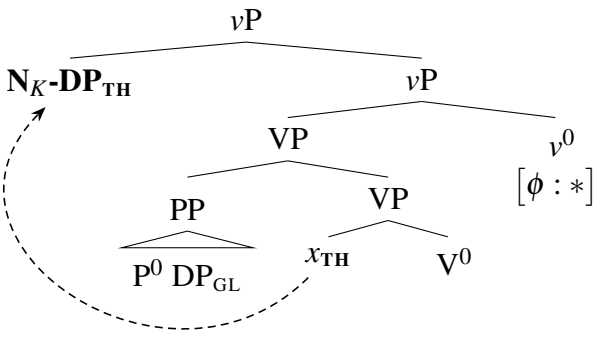


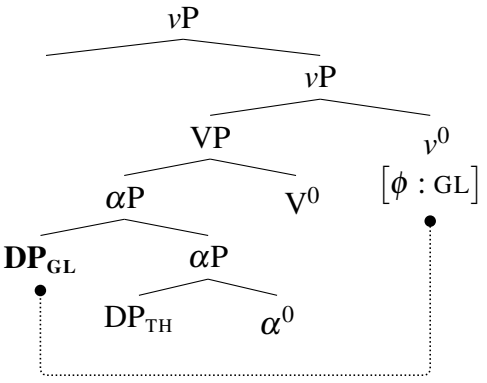
The ungrammaticality of (32) is the result of a failure to realize the OM morpheme that would obligatorily result from the AGREE relation established between v^0 and the OM compliant theme.

X.4.2 Two Potential Alternatives

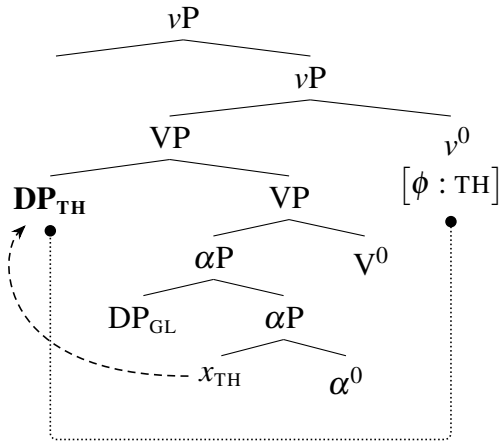
The analysis being proposed effectively claims that apparent symmetry in Tigrinya is simulated by a pair of asymmetrical ditransitive frames. This approach provides the benefit of also accounting for the asymmetrical behavior of goals and themes, each independent of the other. Let us consider, then, how two common treatments of symmetricality fair with respect to Tigrinya object marking.

A treatment of object symmetry, which can be traced back to McGinnis (2001) and Anagnostopoulou (2003) has movement determine the most local argument visible to AGREE from v^0. One way to execute this type of movement-based approach is sketched in (33) and (34), where the highest argument is determined by whether the theme moves to a position that is higher than the goal.

(33) In-situ Theme



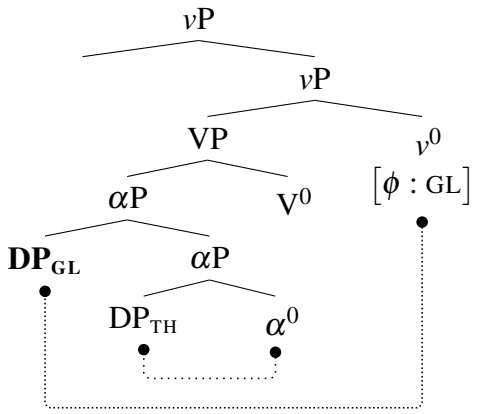
(34) Ex-situ Theme



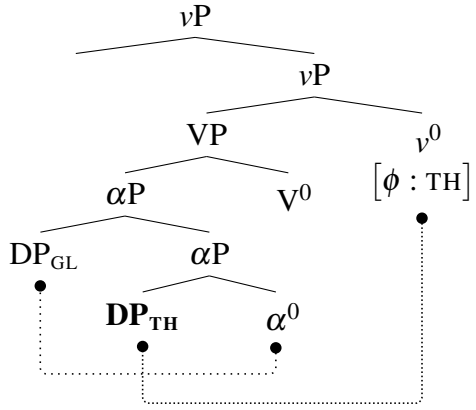
On this analysis, it is when the theme does not shift higher than the goal in (33) that v^0 probes and agrees with the goal. When the theme is shifted to a position that places is structurally higher than the goal, as in (34), the theme will be probed by v^0 and will trigger object agreement.

A more recent alternative, which is presented in Haddican and Holmberg (2019) and applied to Bantu object marking in van der Wal 2018, has the most local argument visible to AGREE from v^0 determined by an additional AGREE relationship with an applicative head α^0. An agreement-based approach of this type is sketched below in (35) and (36).

(35) Applicative-Theme Agreement



(36) Applicative-Goal Agreement



In the normal case, α^0 agrees with its complement, the theme, and the goal is left as the highest active argument, in the sense of Chomsky 2001. The result, illustrated by (35), is that the goal is probed by v^0 and OM cross-references the goal argument. The exceptional case arises when α^0 agrees with its specifier, the goal. In this case, the goal becomes inactive for AGREE and the theme argument is left as the highest active argument. As shown in (36), v^0 will probe the theme, which is cross-referenced by OM.

Each of the movement-based and agreement-based alternatives can provide an account for the apparent symmetry of object marking in Tigrinya that is based on an option between the respective derivations above. However, they do not obviously help us understand the observed asymmetry between the goal and the theme when only one of these arguments is compliant with the requirements on OM. The relevant examples are repeated below.

(37) ʔɨt-a gʷal **n-ət-i** **wədi** dəbdabe hib-a-(**to**)
that-FS girl N-that-MS boy letter GER.give-S.3FS-O.3MS
'The girl gave the boy a letter.'

(38) ʔɨt-i gʷal **n-ət-a** **dəbdabe** n-wədi 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.'

The optionality of cross-referencing the OM compliant goal in (37) proves troublesome for the movement-based approach of (33) and (34). When only the goal is definite/specific and is N-marked, it should be treated as the highest argument, as in (33). This accounts for the observation that it can control OM. However, it is left unexplained why an OM compliant goal argument only optionally triggers OM while this is obligatory for OM compliant themes. The agreement-based

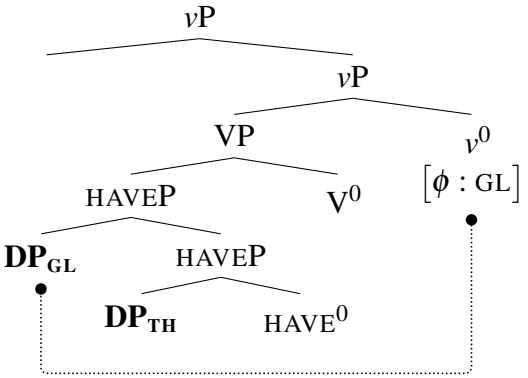
approach of (35) and (36), on the other hand, finds trouble in the obligation of the theme to trigger OM in (38). When only the theme is compliant with OM requirements and controls OM, this is to be attributed to the syntax in (36). However, it is unclear what precludes the derivation in (35), where the goal would determine OM, instead of the theme.

As proposed in section X.4.1, these asymmetries, in addition to the apparent symmetry of goals and themes, can be understood as optionality at the level of which of two asymmetric ditransitives frames is employed.

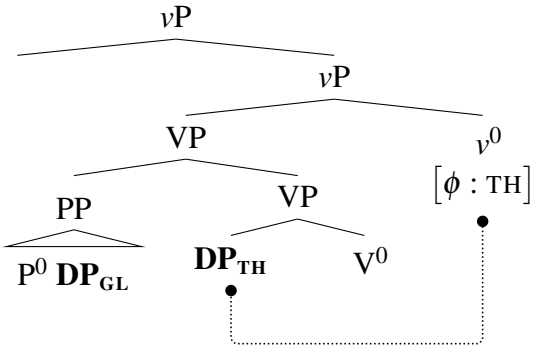
X.5 Structure Sensitive Predictions

Recall the pair of asymmetric ditransitive structures provided again in (39) and (40) that have been proposed for Tigrinya. It was argued that the observed object marking pattern can reliably be attributed to which of these argument structures underlies any given ditransitive construction.

(39) Double-Object Frame



(40) Prepositional-Object Frame



This analysis makes a very strong, broad prediction. If the observed object marking pattern indeed corresponds to each of these argument structures, then various structural and interpretive asymmetries related to these argument structures should correspond directly to the presence or absence of object marking and which argument it cross-references. As the following subsections show, this is precisely the case.

X.5.1 Goal-Marking Gates Theme-Marking

Looking at the structures above, part of the proposal is that cross-referencing the theme argument relies on the underlying presence of the PP Frame. Recall that, in this frame, the goal argument is

introduced as an indirect object inside a PP. If this is correct, cross-referencing the theme should be possible only if the goal argument is N-marked.

The examples in (41) show that this prediction is borne out. When OM cross-references the theme, the goal necessarily carries N-marking. Moreover, this is the case regardless of the definiteness/specificity of the goal.

(41) a. ʔɨt-i gʷal n-ət-a dəbdabe *(**n**)**-ət-i** **wədi** 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 letter to the boy.' (Theme OM; PP Frame)

b. ʔɨt-i gʷal n-ət-a dəbdabe *(**nɨ**)**-wədi** 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.' (Theme OM; PP Frame)

As per the syntax in (40), it is the PP Frame that ensures the goal is demoted to an indirect PP argument. This is what permits v^0 to probe past the goal and agree with the theme. The requirement of N-marking here is a reflection of the fact that the goal must be introduced by the prepositional N_P when the theme is cross-referenced by OM.[10]

X.5.2 The Specificity of the Goal

This takes us directly into a set of two additional predictions. First, whenever the goal is not cross-referenced by OM, we expect that it can be either definite/specific or indefinite/non-specific. It is when the goal is not cross-referenced by OM that the proposed analysis asserts that it is an indirect argument marked with the preposition N_P. Unlike arguments marked with the DOM morpheme,

[10] For full disclosure, there is a general remaining puzzle in the fact that (i) is ungrammatical.
(i) *ʔɨt-a gʷal wədi dəbdabe hib-a
that-FS girl boy letter GER.give-S.3FS
'The girl gave a boy a letter.'
When neither argument is compliant with the requirements for OM, the goal must still be N-marked; compare (42b). One way to interpret this observation is that, in the DO Frame, at least one of the arguments must be eligible for N_K marking. This might be related to the generalization formulated in Alexiadou and Anagnostopoulou (2001) that only a single argument can remain in-situ in the VP. Similar ideas have also been formalized as a requirement for symmetry breaking in the syntax (e.g., Moro 2000; Richards 2010). If it is not possible to mark either argument with N_K, then it seems that the PP Frame becomes obligatory, in which case the goal will be N_P-marked. Another interpretation of (i) is that the goal cannot be licensed in-situ in the DO Frame. This could be understood as an inability to license the goal via (pseudo)incorporation with the verb from its specifier position. Further exploring these issues must be left for another occasion.

arguments marked with this preposition are not subject to any sort of definiteness/specificity constraints. This prediction is realized above in (41). When the theme is cross-referenced by OM, the N-marked goal is not subject to any definiteness/specificity constraints.

The data in (42) provide additional confirmation of this prediction.

(42) a. ʔɨt-a gʷal **n-ət-i** **wədi** dəbdabe hib-a
that-FS girl N_P-that-MS boy letter GER.give-S.3FS
'The girl gave the boy a letter.' (No OM; PP Frame)

b. ʔɨt-a gʷal **nɨ-wədi** dəbdabe hib-a
that-FS girl N_P-boy letter GER.give-S.3FS
'The girl gave a letter to a boy.' (No OM; PP Frame)

The absence of OM in such examples was argued to indicate the PP Frame as the underlying argument structure (see section X.4.1.2). Thus, the goal is expected to carry the N_P morpheme and should not be subject to any definiteness/specificity requirements. These examples above show that, in fact, the goal can be either definite/specific (42a) or indefinite/non-specific (42b) in the absence of OM.

The contrapositive holds as well. When the goal is cross-referenced by OM, we should expect that it can be only definite/specific. This is shown in the examples immediately below.

(43) a. ʔɨt-a gʷal **n-ət-i** **wədi** dəbdabe 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.' (Goal OM; DO Frame)

b. *ʔɨt-a gʷal **nɨ-wədi** dəbdabe hib-a-to
that-FS girl N_K-boy letter GER.give-S.3FS-O.3MS
'The girl gave a letter to a boy.' (Goal OM; DO Frame)

According to the syntax and analysis laid out in the previous section, cross-referencing the goal with OM is achieved only in the DO Frame in (39). As a direct argument in this frame, the N-marking on the goal is expected to be the N_K DOM morpheme. Thus, we observe the requirement for the goal to be specific/definite in (43a) and we observe ungrammaticality otherwise, as in (43b).

X.5.3 The CAUSE-HAVE Interpretation

It has been known at least since work by Green (1974) that the English DO Frame and PP Frame are not interpretively parallel. There is an additional animacy constraint on the goal in the DO Frame in (44) that is not observed in the PP Frame in (45).

(44) English DO Frame

a. Sam sent **Kim** the letters.

b. #Sam sent **Detroit** the letters.

(45) English PP Frame

a. Sam sent the letters to **Kim**.

b. Sam sent the letter to **Detroit**.

Following Harley (2002), Beck and Johnson (2004), and others, we can suppose that this is an effect of the semantic contribution of a silent predicate HAVE^0 heading the small clause employed in the DO Frame. The infelicity in (44), therefore, can be attributed to the infelicity of asserting that Detroit possesses letters. The absence of this animacy restriction, and its resultant infelicity, from the PP Frame in (45) can be taken to indicate the absence of the relevant predicate.

This difference in the syntax and semantics of the two ditransitive frames that have been proposed for Tigrinya is reflected in (39) and (40). To the extent that these reflect the correct representations and, moreover, that the observed OM pattern betrays the underlying argument structure, it is possible to formulate a prediction regarding goal animacy. Specifically, we should expect to see animacy constraints on the goal only when the goal is cross-referenced by OM. This is precisely what we observe in the pairs of examples below.

(46) a. ʔɨt-a gʷal nɨ-ʔasməra dəbdabe sədid-a
that-FS girl N$_P$-Asmera letter GER.send-S.3FS
'The girl sent a letter to Asmera.' (No OM; PP Frame)

b. #ʔɨt-a gʷal **nɨ-ʔasməra** dəbdabe sədid-a-**ta**
that-FS girl N$_K$-Asmera letter GER.send-S.3FS-O.3FS
#'The girl sent Asmera a letter.' (Goal OM; DO Frame)

(47) a. ʔit-a gʷal **n-ət-ən** **dəbdabe** nɨ-ʔasməra sədid-a-**tən**
that-FS girl N_K-that-FP letter N_P-Asmera GER.send-S.3FS-O.3FP
'The girl sent the letters to Asmera.' (Theme OM; PP Frame)

b. #ʔit-a gʷal n-ət-ən dəbdabe **nɨ-ʔasməra** sədid-a-**ta**
that-fs girl N_K-that-FP letter N_K-Asmera GER.send-S.3FS-O.3FS
#'The girl sent Asmera the letters.' (Goal OM; DO Frame)

When OM cross-references the inanimate goal argument *Asmera*, the capital of Eritrea, the result seen in the (b.) variants above is infelicity. The language consultant even provided the additional comment that these examples do not make sense because, as a city, Asmera is unable to receive letters. As in English, these examples can be improved in as far as Asmera can be conceived of as a collection of individuals capable of possession. The (a.) variants, on the other hand, in which the goal is not cross-referenced by OM, are entirely acceptable.

The proposed analysis predicts exactly this paradigm. Cross-referencing the goal with OM requires the DO Frame in (39), which has been claimed to embed a small clause complement headed by a predicate HAVE^0. The observed animacy constraint can be understood as a reflex of the possessive semantics of this head. When the goal is not cross-referenced by OM, the proposal is that the PP Frame in (40) provides the underlying argument structure. As the object of a preposition in this frame, the goal is expected to not be subject to any animacy conditions.

X.5.4 Condition A Effects

Barss and Lasnik (1986) observed a number of structural asymmetries between the goal and theme arguments in the English DO Frame and PP Frame. Among these is the observation that the goal licenses reflexives in the DO Frame, but not in the PP Frame. A pair of examples to illustrate this are provided in (48).

(48) a. Tim gave [Pam_1 [the pictures of herself_1]]

b. *Tim gave [the pictures of herself_1 [to Pam_1]]

Given the proposed shapes of the DO Frame and the PP Frame for Tigrinya in (39) and (40), we should expect to see similar binding effects in Tigrinya ditransitives as well. Importantly, it should be expected that these effects will vary as a function of the observed object marking pattern. The goal should license reflexives in the theme position only when the goal is cross-referenced by OM since this requires the DO Frame, which provides the required structural configuration of the

arguments. The predictions of the analysis are realized again, as shown in the minimal pair of examples below:

(49) a. ʔɨt-a gʷal **nɨ-kefi**$_1$ n-ət-ən naj [gəzaʔ riʔɨsu]$_1$ siʔɨlt-at hib-a-**to**
that-FS girl N_K-Keffy.M N_K-that-FP of own self-3MS picture-P GER.give-S.3FS-O.3MS
'The girl gave Keffy$_1$ the pictures of himself$_1$.' (Goal OM; DO Frame)

b. *ʔɨt-a gʷal nɨ-kefi$_1$ **n-ət-ən naj [gəzaʔ riʔɨsu**]$_1$ **siʔɨlt-at** hib-a-**tən**
that-FS girl N_P-Keffy.M N_K-that-FP of own self-3MS picture-P GER.give-S.3fs-O.3FP
*'The girl gave the pictures of himself$_1$ to Keffy$_1$.' (Theme OM; PP Frame)

The fact that reflexive licensing is dependent on the observed OM pattern is expected by the proposed analysis. As noted above, the DO Frame that provides the appropriate structural configuration for the goal to bind the theme is also responsible for producing goal OM in (49a). When the theme argument is cross-referenced by OM, this involves introducing the goal as an indirect argument inside of a PP. As per the structure in (40), this means the goal should not bind the theme. The inability to the license the reflexive in (49b) supports this proposal.[11]

X.5.5 Section Summary

This section has identified and investigated a general prediction made by the proposed analysis of Tigrinya ditransitives. Namely, if the observed OM pattern betrays one of the two asymmetric ditransitive frames in (39) and (40), there should be structural and interpretive asymmetries between the goal and theme that are correlated with the observed OM pattern. We have seen several instances above in which this prediction is borne out. The asymmetries investigated uniformly converge on the existence of the pair of asymmetric ditransitive frames presented in (39) and (40).

[11] It is worth pointing out that the example in (49a) has a default word order where the N-marked goal precedes the N-marked theme, contrary to the theme-goal ordering observed in (27). It is unclear at this point whether the theme in (49a) has failed to under Object Shift or if the goal has undergone additional Scrambling. Either of these is in principle compatible with the facts in (49) given the proposal that the goal, as a constituent of a PP, cannot c-command the theme.

X.6 A Note on Apparent Symmetry in the Passive

It was noted in the introduction that object marking is not the only primary object property on the basis of which Kifle (2007, 2011) reaches the conclusion that lexical ditransitives in Tigrinya are symmetrical object configurations. This section provides a brief, preliminary investigation of one other source of evidence, namely passivization.[12]

The Tigrinya passive is formed with the prefixation of the detransitivizing morpheme *tə-*.[13] As shown in (50), the theme argument of a transitive predicate loses its other primary object properties, such as carrying the DOM morpheme and being cross-referenced by OM. That the theme controls subject marking in the passive suggests that it is promoted to the status of grammatical subject.

(50) a. ʔɨt-a dəbdabe tə-ts'ɨħif-a
that-FS letter DT-GER.write-S.3FS
'The letter was written.'

b. ***n**-ət-a dəbdabe tə-ts'ɨħif-u-**wa**
N_K-that-FS letter DT-GER.write-S.3MS-O.3FS
'The letter was written.'

Kifle (2011) observes that either internal argument of a ditransitive can be promoted to subject in the passive. The examples provided in (51) show promotion to subject of the goal argument and the theme argument, respectively.

(51) a. ʔɨt-om təməhar-o məts'ħaf-ti tə-wahib-om
that-MP student-P book-P DT-GER.give-S.3MP
'The students are given books.'

b. ʔɨt-i məts'ħaf-ti **nɨ**-təməhar-o tə-wahib-u
that-MS book-P N-student-P DT-GER.give-S.3MS
'The books are given to students.' (Kifle 2011: 261, (265))

Despite these initial appearances it is again possible to identify an initial breakdown in the apparent symmetry between goals and themes in ditransitives. When the remaining internal

[12] For a discussion of relative clauses in Tigrinya, see Palmer 1962 and Overfelt 2009 and especially Kifle 2011: ch.8 for the relativization of the arguments of ditransitives.

[13] The prefix *tə-*, which is also found in (7), may best be analyzed as an anticausative morpheme, as it also derives inchoative, reflexive, and reciprocal predicates (Kifle 2011: ch.2.4.4).

argument in the passive is not OM compliant—because it is indefinite/non-specific—we see a familiar requirement for obligatory N-marking only on the goal in (51b). This contrast is expected by the present analysis. Marking the goal with the preposition N_P ensures that the theme is the highest direct argument, as per the syntax of the PP Frame in (40), and would be promoted to subject. As indefinite/non-specific themes otherwise do in the DO Frame of (39), the theme in (51a) goes without the DOM morpheme N_K or the N_P preposition.

With that said, Kifle (2011) points out that the remaining internal argument in the passive, whether that be the theme in (52a) or the goal in (52b), can be cross-referenced by OM, given that it is compliant with OM requirements.

(52) a. ʔit-om təməhar-o **n-ət-i** **məts'ħaf-ti** tə-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.'

b. ʔit-i məts'ħaf-ti **n-ət-om** **təməhar-o** tə-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.' (Kifle 2011: 262, (266))

Kifle (2011) also notes of these examples that they provide strong evidence for the symmetricality of Tigrinya ditransitives. The ability to cross-reference the remaining internal argument in the passive of ditransitives is a well-known property of relatively uncontroversial symmetrical object languages (Bresnan and Moshi 1990).

Unlike the data in (51), these observations are not both straightforwardly consistent with the present analysis. The DO Frame syntax from (39) makes it possible to understand the grammaticality of (52b). If the AGREE relationship with v^0, which results in OM, together with the valuation of the Case feature associated with DOM renders the goal inactive (e.g., Chomsky 2001), the theme becomes the highest direct argument relative to I^0 in the absence of an external argument. Thus, the theme is probed by I^0 and promoted to subject position. It is (52a) that is problematic. Cross-referencing the theme with OM has been argued to be the result of the underlying syntax of the PP Frame in (40). If the goal is indeed contained inside a PP in this configuration (recall the arguments from sections X.3 and X.5), something must be said for why that preposition is not observed on the promoted goal in (52a).

Alternatively, one might pursue an analysis in which it is the DO Frame that also underlies (52a). One way to do this within the present system, which is inspired by the treatment of Zulu

passive ditransitives in Zeller 2015, would be to understand the presence of DOM morphology as an indicator of the visibility of an argument to v^0.[14] The absence of DOM morphology on the goal argument in the passive construction in (52a) is permitted under contract of being licensed, not by movement to *v*P, but ultimately by promotion to IP. Moreover, it is the absence of DOM morphology, and more specifically its associated Case feature, that renders the goal invisible to probing from v^0. This effectively permits the probing of the DOM carrying theme, which results in the valuation of the ϕ-features at v^0.

Fully understanding and accounting for the interaction of object marking and passivization presents a clear opportunity for a productive line of future research. Another challenge to be addressed in this venture will be the possibility of some amount of speaker or dialectal variation around the problematic example in (52a). In my own data collection, examples like (52a) were consistently judged to be ungrammatical. The alternatives that were provided, which are shown in (53), involve no N-marking on the theme and the marginally possible, although dispreferred, inclusion of an object marker that, along with subject marking, cross-references the promoted goal.

(53) **ʔɨt-i** **wədi** ʔit-a dəbdabe tə-wahib-u-(ʔ**wo**)
that-MS boy that-FS letter DT-GER.give-S.3MS-O.3MS
'The boy was given the letter.'

To the extent that these prove to be robust facts, they too are arguably compatible with the basics of the analysis proposed in the previous sections. Promoting the goal to subject position will require it to be the highest direct argument at the time of asking from I^0. This is only made possible by the syntax of the DO Frame in (39). The preference for not including an object marker could be seen as a need for the goal to remain active for AGREE beyond the derivation of the *v*P. The lack of N-marking on the theme can be seen as a reflection of the fact that it is licensed by some means other than Object Shift in the derivation of (53). This would ensure that the goal remains the highest direct argument for AGREE with I^0. Understanding if and how the data in (52) and (53) can be accounted for together remains a challenge for future research.

[14] For Zeller (2015), it is an anti-focus feature that determines visibility to both T^0 and the functional head that is responsible for OM.

X.7 Conclusion

The primary purpose of this paper has been to account for the apparent optionality of object marking in Tigrinya ditransitive constructions. It was suggested that Tigrinya employs two separate ditransitive frames that are masked by a surface ambiguity of the N-marker. Building off of a suggestion by Kifle (2011: 247), the analysis rested on the claim that the goal in a ditransitive structure can be introduced as either a direct argument or as an indirect argument. When the goal is a direct argument it is probed by v^0 and triggers object marking. However, when the goal is an indirect argument it is inside of a PP that is opaque for an AGREE relationship with v^0, which allows probing of the theme. This results in a situation where the presence or absence of object marking and which argument it cross-references corresponds directly to either the DO Frame or the PP Frame. This analysis preserved the otherwise obligatory nature of object marking in Tigrinya observed with transitive verbs. This analysis also correctly predicted that the observed object marking pattern corresponds to specific interpretive and structural asymmetries. The nature of these asymmetries was found to support the claim that Tigrinya employs the two proposed asymmetric ditransitive argument structures.

Among the remaining issues for this analysis includes the need to integrate the syntax proposed for ditransitives in the active voice with the passive data in the previous section. As noted, this will also necessarily include establishing the facts regarding object marking in the passive and sorting out any potential variation.

To this we can add the need to investigate the relativization of Tigrinya ditransitives, which is discussed by Kifle (2011: ch.8). As noted by Bresnan and Moshi (1990), the ability to relativize goal and theme arguments serves as another diagnostic of object symmetry. A full discussion of relative clauses is beyond the scope of this chapter. Although, it is interesting to note that here too the initial symmetry breaks down upon closer inspection. The following examples are adapted from Kifle (2011: 269, (274)) and show that either the goal argument (54a) or theme argument (54b) of a ditransitive can be relativized.

(54) a. ʔɨt-a [$_{CP}$ tesfay n-ət-i mətsʼħaf zɨ-hab-**a/*o**] səbajti
that-FS Tesfay N-that-MS book REL-PRF.give-{O3FS/*O3MS} woman
'the woman that Tesfay gave the book'

b. ʔɨt-i [$_{CP}$ tesfay n-ət-a səbajti zɨ-hab-**a/o**] mətsʼħaf
that-FS Tesfay N-that-FS woman REL-PRF.give-{O3FS/O3MS} book
'the book that Tesfay gave the woman'

Where the symmetry breaks down is in the observable object marking pattern. When the goal argument is relativized, it is obligatorily cross-referenced by OM. I take this to indicate that the DO Frame necessarily feeds goal relativization. On the other hand, if either the DO or PP Frame feeds relativization of the theme, as similarly suggested also by Kifle (2011: 270), we expect to observe that either argument can be cross-referenced by OM. Specifically, the syntax derived from the DO Frame in (27c) would result in OM cross-referencing the goal, while the PP Frame in (28c) would result in OM cross-referencing the theme.

Future research will also involve a comparative investigation of the relatively closely related language Amharic. Baker (2012: 261) notes that, in the usual cases, when the optional object marking that appears on ditransitive verbs is present, it necessarily cross-references the goal argument, as in (55).

(55) ləmma l-almaz tarik-u-n nəggər-at (*nəggər-ə-w)
Lemma DAT-Almaz story-DEF-ACC tell-(S.3M)-O.3F tell-S.3M-O.3F
'Lemma told Almaz the story/his story.' (Baker 2012: 261, (16))

One avenue to explore in this regard would attribute the difference between Tigrinya and Amharic to the general absence of the PP Frame from Amharic (though see Baker 2012: 261, fn.6). This, in turn, could be made to follow from a specific execution of the idea presented by Baker and Kramer (2014), and noted in footnote 7, that prepositions in Amharic are better treated as post-syntactically inserted case markers. Thus, it could be the availability and differing nature of prepositions in Tigrinya and Amharic that make the proposed PP Frame available only to the former language.

In conclusion, Tigrinya, along with Spanish and Japanese, plays an informative role in the typological landscape of symmetrical and asymmetrical object languages. If the presence of two distinct ditransitive frames masked by a surface ambiguity can create the effect of object symmetricality, then the same could be true a priori for any suspected symmetrical object language. Thus, demonstrating object symmetricality in any language must go further than the

observation that both internal arguments of a predicate display primary object behaviors. At minimum, it is also necessary to demonstrate that the same underlying syntax feeds the primary object behaviors of both arguments. As we have seen, there is reason to believe that this is not the case in Tigrinya.

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