Chapter 1

Hyperagreement and Case-licensing in Tigrinya

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This paper investigates the hyperactivity of nominal constituents in the Ethiosemitic language Tigrinya (Eritrea, Northern Ethiopia; SOV). Embedded arguments trigger ϕ -complete agreement in the embedded clause in addition to ϕ -complete object agreement on the matrix verb. We argue that this long-distance hyperagreement—adapting terminology from Carstens 2011—is fed by (possibly covert) clause-bounded scrambling (Polinsky & Potsdam 2001). Despite several indicators for Case-licensing in the language, hyperagreement in Tigrinya is not case-sensitive. Thus, we argue that Case-licensing is divorced from ϕ -agreement, like the closely related language Amharic (Baker 2015), and does not contribute to an Activity Condition for the language (cf. Chomsky 2001).

1 Introduction

A familiar state of affairs, from the perspective of English, is that a single nominal constituent can participate in A-relations—including morphological agreement and movement—only up to the point that it is assigned Case. This is the typical explanation for the contrast presented below in (1):

- (1) a. **They**₁ are likely [t_1 to be sleeping]
 - b. * They₁ are likely [that t_1 are sleeping]

By hypothesis, the embedded non-finite T° in (1a) is defective, in the sense that it cannot Agree with and assign Case to nominals (Chomsky 2001), leaving *they* visible for A-relations with the finite matrix T°. This results in A-movement into the matrix clause and agreement marking on the matrix predicate. It is because a finite T° can Agree with and assign Case to nominals that *they* in (1b) cannot move into the matrix clause and control agreement on the matrix predicate. This is a restriction commonly captured by the *Activity Condition* in (2).

(2) Activity Condition (adapted from Chomsky 2001: 6)
An DP/NP with a valued Case feature is inactive.
An inactive DP/NP is not accessible to A-relations.

The extent to which this can be a general picture for the expected behavior of nominals has been called into question. Nominal constituents in numerous languages, notably including members of the Bantu language family, are "hyperactive" in the sense of entering into multiple A-relations.

(3) Swahili hyperagreement (Carstens 2001)

Juma a-li-kuwa a-me-pika chakula Juma 3sg-pst-be 3sg-prf-cook food

'Juma had cooked food.'

(4) Luganda hyperagreement and hyperraising (Sheehan & van der Wal 2018)

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Abaana<sub>1</sub> ba-labika [t_1 ba-beera mu-nyuumba eno ] 2.children 2msg-seem 2msg-live 18-9.house 9.msg-live 18-9.house 18-9.house 18-9.house 18-9.house 18-9.house 18-9.house 18-9.house 18
```

'The children seem to live in this house.'

Observations of this type have motivated a line of analysis wherein the Activity Condition and the traditionally understood notion of Case-licensing may simply be parameterized between languages (e.g., Baker 2008; Carstens & Diercks 2013; Sheehan & van der Wal 2018). There is a growing consensus, however, that this also cannot be a universal picture. It has been found that Case-assignment, even in languages with traditional case-marking, is not necessarily a relevant factor in the formation of A-relations. Additionally, more and more languages that show properties of traditional Case-licensing also display hyperactivity (see Keine 2018; Sheehan & van der Wal 2018; Zyman 2023; Fong & Halpert to appear).

It is in this context that we present Exceptional Object Marking (EOM) constructions in Tigrinya, which are exemplified by data like in (5).

(5) Exceptional Object Marking construction in Tigrinya

```
(?anə) [ ?it-a səbajti ki-ti-xəjjid ]
I that-FSG woman.F IRR-SM.3FSG-go.IPFV
?i-ts'əbij-a
sm.1SG-expect.IPFV-OM.3FSG
```

'I expect the woman to leave.'

After presenting some relevant background information on Tigrinya in §2, we will present in more detail some of the basic properties of EOM constructions in §3. It is enough to observe here that our interest stems from the fact that an embedded argument controls ϕ -complete agreement on the embedded verb as well as ϕ -complete object agreement on the matrix verb. Tigrinya, therefore, presents another apparent case of nominal hyperactivity.

We propose in §4 that EOM constructions in Tigrinya arise as a result of long-distance agreement that is fed by clause-bounded A'-scrambling of an embedded argument (Polinsky & Potsdam 2001). In addition to accounting for the basic properties of EOM constructions, we present a range of other facts that both speak in favor of scrambling-fed hyperagreement and against alternative hyperraising analyses.

Tigrinya is also interesting from this perspective for presenting a language in which nominals show evidence of requiring Case for the purposes of licensing. As we discuss in §5, EOM constructions reveal Tigrinya to be a language in which Case-licensing is divorced from ϕ -agreement (Bhatt 2005; Carstens 2005; Baker 2008; 2012). As such, there is no clear sense in which Case contributes to the concept of an Activity Condition in the language. We consider the implications the language has on theories of hyperactivity in the remainder of the section before we conclude the paper in §6.

2 Background on Tigrinya

2.1 Ethnographic information and data collection

Tigrinya is an Ethiosemitic language, making it closely related to the languages Tigré and Amharic and more distantly to Arabic and Hebrew. It is spoken by approximately 10 million people primarily in Eritrea and Northern Ethiopia, although large immigrant populations exist world-wide (Eberhard et al. 2024). The language is not currently considered endangered.

Unless otherwise noted, the data presented in this paper were collected by the authors in individual interviews with four native Tigrinya speaking consultants. One individual, who is also proficient in English, is from the Mekele region of Northern Ethiopia and currently lives in Addis Abbaba. The other three consultants are from the Gash-Barka and Debub regions of Eritrea and are proficient in French.

2.2 Basic morphosyntax

As is typical of Semitic languages, tri-consonantal roots in Tigrinya acquire their category and certain inflectional information through transfixed vowel templates (Buckley 2003; Godfrey 2011). This is the case for the different aspectual verb forms, as illustrated below with the root /sbr/ (Leslau 1941).¹

- (6) a. Imperfective verb form ji-səbbir sm.3msG-break.ipfv 'It breaks.'
 - b. "Gerundive" verb form səbir-u break.ger-sm.3msg'It broke.'
 - c. Perfect verb form
 səbər-ə
 break.prf-sm.3msg
 'It has broken.'

Verbs also host affixal morphology to indicate finiteness, mood, and valency alternations, among other things.

¹As Nazareth 2011 observes, one or more of the traditional names for the aspectual verb forms in Tigrinya are possibly misnomers. For instance, while the term "gerundive" alludes to the wider usage of this verb form in the language, it seems to express the perfective aspect in matrix clauses. We retain the term gerundive here in acknowledgement of the previous work on the grammar of the language.

Tigrinya is a fairly well-behaved SOV language with a strongly head-final verbal domain. Illustrative examples are provided below in (7).

- (7) Causative-inchoative alternation in Tigrinya
 - a. jonas n=ət-a t'ɨrmuz səbir-u-wa
 Yonas.M ACC=that-FSG bottle.F break.GER-SM.3MSG-OM.3FSG
 'Yonas broke the bottle.'
 - b. ?it-a t'irmuz tə-səbir-a that-fsg bottle INTR-break.GER-SM.3FSG
 'The bottle broke.'

With respect to case-marking and agreement, Tigrinya is a nominative-accusative language. The grammatical subject of transitive and intransitive predicates, as in (7), is morphologically unmarked with nominative case. Grammatical objects are differentially marked with the accusative case. Definite and specific objects are typically marked with the prefixal accusative case marker n(i)= while other objects are morphologically unmarked (Nazareth 2011). It is common for accusative-marked nominals to undergo object shift (Overfelt 2022).

As the examples in (6) and (7) also show, affixal markers that cross-reference the grammatical subject can be observed in prefixal, suffixal, and mixed paradigms as a function of the aspectual form of the verb (Leslau 1941; Nazareth 2011; Tesfay 2016). Given the focus of this paper, we take special care to point out that grammatical objects may also be cross-referenced by object marking morphemes. Object markers, such as -wa in (7a), are always suffixal morphemes that appear on main verbs and follow the suffixal subject marker when one is present. Object marking typically tracks accusative case marking in monoclausal structures, but is also tied to notions like definiteness, specificity, and topicality (see Nazareth 2011 and Gebregziabher 2021).

3 Exceptional Object Marking in Tigrinya

We introduce the term Exceptional Object Marking (EOM) to describe constructions in which an embedded complement clause is transparent for the purposes of object marking on the matrix verb (Tesfay 2016; Gebregziabher 2021; Cacchioli & Overfelt submitted). The intended analogy is with Exceptional Case Marking constructions, whereby an embedded argument is thought to be exceptionally assigned Case from the matrix predicate:

(8) I expect [her to leave]

EOM in Tigrinya can be observed with the complement clause of several different types of predicates. These include the ki-marked complement clause of pseudo-modal predicates and intensional predicates. Examples of each are provided respectively in (9) and (10), where a matrix predicate hosts an object marker that cross-references an embedded argument.

```
(9) Pseudo-modal predicates displaying EOM
      a. expl [ ?it-a
                        səbajti n=ət-ən
                                               dabdabe-tat
               that-FSG woman, F ACC=that-FPL letter-PL
         ki-ti-ts'əħif-ən
                                        ] ji-giba?-a
         IRR-SM.3FSG-write.IPFV-OM.3FPL SM.3MSG-need.IPFV-OM.3FSG
         'The woman needs to write the letters.'
                                                                      1
      b. expl [ ?it-om k'olsu biħidat ki-Ø-nbib-u
               that-MP children calmly IRR-SM.3MPL-read.IPFV-SM.3MPL
         ?all-o-wom
         have.ipfv-sm.3msg-om.3mpl
         'The boys have to read calmly.'
     Intensional predicates displaying EOM
(10)
      a. (?anə) [ ?it-a
                          səbajti
                                   ki-ti-xəjjid
                 that-FSG woman.F IRR-SM.3FSG-go.IPFV
         ?i-ts'əbij-a
         SM.1sg-expect.IPFV-OM.3FSG
         'I expect the woman to leave.'
      b. ?it-a
                  məmhir [ ?it-om təmharo n=ət-a
                                                          məts'haf
         that-FSG teacher that-MP student.P ACC=that-FSG book
         kɨ-Ø-nbɨb-u-wa
         IRR-SM.3MPL-read.IPFV-S.3mp-om.3FSG
         ti-dəlij-om
         have.IPFV-SM.3MSG-OM.3MPL
         'The teacher wants the students to read the book.'
```

It will become clear in the discussion to follow that there is no obvious sense in which the embedded clauses in the examples above should be considered defective domains, wherein nominal constituents would fail to be licensed. We find embedded arguments in their expected surface position within the embedded clause. We observe the appropriate ϕ -complete agreement between the embedded arguments and the embedded verb. Additionally, embedded arguments are always appropriately case-marked on the basis of their grammatical role. It must be said for full transparency, however, that there is reason to believe that these are reduced complement clauses, as evidenced by a resistance to complex tense-aspect constructions (Cacchioli & Overfelt submitted). That said, we still observe EOM in full finite kamzi-marked complement clauses of factive predicates (Spadine 2020), though with somewhat more variation (see Cacchioli in preparation).

(11) Factive predicate displaying EOM

```
(nɨħna) [CP ʔɨt-a səbajti kəmzɨ-xəd-ət ]
we that-fsg woman.f COMP-go.PRF-SM.3fsG
rasiʔɨ-na-ja/jo
forget.GER-SM.1PL-OM.3fsG/OM.3MsG
```

'We forgot that the woman left.'

We will argue in what follows that EOM in Tigrinya arises as the result of a long-distance agreement relationship between the matrix predicate and an embedded argument. There are, however, several properties of Tigrinya EOM constructions that any analysis must account for. For instance, as is typical of long-distance agreement, EOM is generally optional when it is possible. Moreover, its presence corresponds with an expected "emphatic" interpretation of the cross-referenced nominal. The minimal pair in (12) illustrates:

(12) Long-distance agreement is optional

```
a. [ ?it-a səbajti ki-t-xəjjid ] ji-gibba?
that-FSG woman.F IRR-SM.3FSG-go.IPFV SM.3MSG-need.IPFV
'The woman needs to leave.'
```

²Despite their reduced status, there are several indicators that the constructions in (9) and (10) are indeed bi-clausal constructions. See Cacchioli & Overfelt (submitted) for worked out arguments to this effect.

³Observe that the object marker in (11) may also be specified for default 3MsG agreement. We take this as evidence against an alternative analysis of EOM as clitic doubling by way of clitic raising (see Kramer 2014; Baker & Kramer 2018).

⁴We would refer the reader to Bhatt & Keine 2017 for an overview of the literature on longdistance agreement phenomena.

```
b. [ ?it-a səbajti ki-t-xəjjid ]
that-FSG woman.F IRR-SM.3FSG-go.IPFV
ji-giba?-a
SM.3MSG-need.IPFV-OM.3FSG
'The woman, she needs to leave.'<sup>5</sup>
```

There are also restrictions on how the long-distance agreement relationship is morphologically realized. The embedded argument ?ita səbajti 'the woman' in (12b) can only be cross-referenced by an object marker on the matrix predicate. It is not possible for the embedded argument to control agreement on the matrix subject marker to deliver a form of the matrix predicate as tɨgɨbba? in (13):

(13) Long-distance agreement cannot be realized as subject marking

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* [ ?it-a səbajti ki-t-xəjjid ] ti-gibba?-(a) that-fsg woman.f irr-sm.3fsg-go.ipfv sm.3fsg-need.ipfv-om.3fsg
```

'The teacher wants the students to read the book.'

Note that the inability of the embedded argument to control subject agreement is observed regardless of the presence of the object marker -a. Moreover, we observe this restriction despite the fact that the root /gb?/ in this context is an unaccusative predicate; witness the default 3MSG agreement for the subject marker ji- of jigiba?a in (9a) and (12). Even in the absence of an external argument in the matrix clause, EOM is restricted to exponence by an object marker.

Lastly, EOM in Tigrinya comes with a degree of unselectivity. That is, any eligible nominal is, in principle, a possible target for long-distance agreement. For example, either the embedded subject ?anə 'I' in (14a) or the embedded object nəta məts'ħaf 'the book' in (14b) can control agreement on the object marker on the matrix predicate.

(14) Multiple targets for long-distance agreement

```
a. [ (?anə) n=ət-a məts'haf ki-Ø-nbib-a ]

I ACC=that-FSG book IRR-SM.1SG-read.IPFV-OM.3FSG
ji-giba?-ni
SM.3MSG-need.IPFV-OM.1SG

'I need to read the book.'
```

⁵For expository purposes, we will abstract away from the emphatic component of the translations for EOM constructions in the remainder of the manuscript.

At a descriptive level, examples of this type reveal that the long-distance agreement relationship that underlies EOM constructions is not indexed to a particular linear position nor to a particular grammatical role. Long-distance agreement is also not case-discriminating, meaning it is indexed neither to the morphological case-marking on a nominal nor to the absence of case-marking.

4 Scrambling and Long-distance Hyperagreement

With these issues in mind, we propose that the long-distance agreement relationship established in Tigrinya EOM constructions is fed by scrambling of a hyperactive nominal. Like the analysis for Tsez in Polinsky & Potsdam 2001, the scrambling operation targets a position at the edge of the embedded clause where the nominal becomes visible to the matrix predicate for a formal AGREE relationship. The basic proposal is sketched in (15):

(15) Clause-bounded scrambling feeds long-distance hyperagreement

$$\begin{bmatrix} vP & \dots & \begin{bmatrix} CP & DP & \dots & t_1 & \dots & V & \end{bmatrix} & V-oM & \end{bmatrix}$$

We offer a more detailed presentation of the analysis immediately below before turning to some additional evidence in its favor. We will also offer several considerations against alternative hyperraising analyses.

4.1 Scrambling feeds long-distance hyperagreement

We begin by laying out our assumptions regarding the basic syntax of object marking in mono-clausal constructions like (16).

(16) ?it-i k'ol?a n=ət-a məts'haf ji-nbib-a that-msg child Acc=that-fsg book sm.3msg-read.ipfv-om.3fsg 'The boy reads the book.'

Following Gebregziabher (2021) and Overfelt (2022), we understand object marking in Tigrinya to be the morphological realization of a formal AGREE relationship, in the sense of Chomsky 2001, between v° and the structurally highest internal argument.⁶ The representation in Figure 1 illustrates the phenomenon.

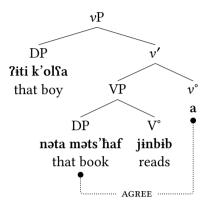


Figure 1: Object marking in monoclausal structures

A set of unvalued ϕ -features on v° cause it to probe its c-command domain for a matching set of valued ϕ -features. As the highest internal argument, the direct object *nəta məts'ħaf* 'the book' is identified as the goal. With this AGREE relationship established, all ϕ -features of the goal are copied to v° , which is ultimately spelled out as the object marking morpheme.

The long-distance agreement observed in EOM constructions, such as in (17) below, can be understood as the result of the same AGREE relationship between ν° and the highest embedded argument.

(17) [**?it-a** səbajti ki-t-xəjjid] ji-giba?-(a) that-FSG woman.F IRR-SM.3FSG-gO.IPFV SM.3MSG-need.IPFV-OM.3FSG 'The woman needs to leave.'

The representation and derivation in Figure 2 illustrate the proposal.

⁶Kramer (2014) and Baker & Kramer (2018) argue that object markers in Amharic arise as a result of clitic doubling and clitic raising, which is driven by a formal AGREE relationship. Gebregziabher (2021) argues that object markers in Tigrinya are purely agreement morphemes. We remain agnostic on the issue of the morphological identity of Tigrinya object markers. However, as noted in footnote 3, we believe that there are facts that speak against a clitic raising analysis, even if object makers are best treated as morphophonological clitics. We thank Ruth Kramer for discussion of this point.

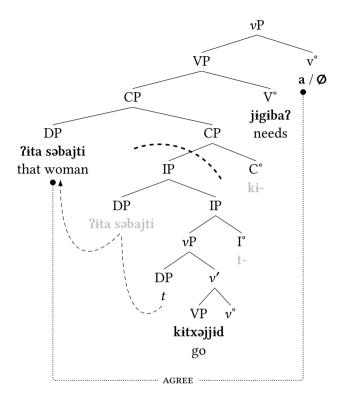


Figure 2: Long-distance object marking in biclausal structures

As an argument of the embedded predicate, the hyperactive DP $\it ?ita \ sabajti$ 'the woman' receives nominative Case within the embedded clause and controls the subject marker on the embedded verb. Long-distance agreement with the matrix predicate is made possible by scrambling of the hyperactive DP to the edge of the embedded clause . This movement reflects the information-structural properties associated with the cross-referenced nominal (Polinsky & Potsdam 2001). This movement also ensures that $\it v$ ° and the embedded argument are sufficiently local, assuming that AGREE is subject to a locality condition of the kind expressed by the Phase Impenetrability Condition (Chomsky 2000; 2001), a version of which is provided in (18).

(18) Phase Impenetrability Condition (PIC) Syntactic material contained in the complement of a phase head (v° , C°) is inaccessible to syntactic computation from outside the projection of that head.

This proposal provides us with the means for understanding those basic properties of EOM constructions presented in §3. The long-distance agreement relationship becomes as optional as the scrambling operation that displaces the hyperactive nominal. As Figure 2 also illustrates, a DP that has not undergone scrambling will be inaccessible, given the PIC, for an AGREE relationship with the matrix v° . In the case at hand, it is when *?ita səbajti* 'the woman' does not move beyond the embedded IP that it is not cross-referenced by an object marker on the matrix verb.

The proposed scrambling derivation helps us understand the ability, shown again in (19), to choose among multiple embedded nominals as the target for long-distance agreement.

```
(19) [ (?anə) n=ət-a məts'haf ki-∅-nbɨb-a ]

I ACC=that-FSG book IRR-SM.1SG-read.IPFV-OM.3FSG
ji-gɨba?-ni/a
SM.3MSG-need.IPFV-OM.1SG/OM.3FSG

'I need to read the book.'
```

Otherwise expected intervention effects between arguments are obviated by the scrambling of a lower nominal to the edge of the embedded clause. As illustrated in Figure 3, scrambling of the embedded object $nata\ mats'haf$ 'the book' ensures that it is local enough for AGREE with the matrix v° .

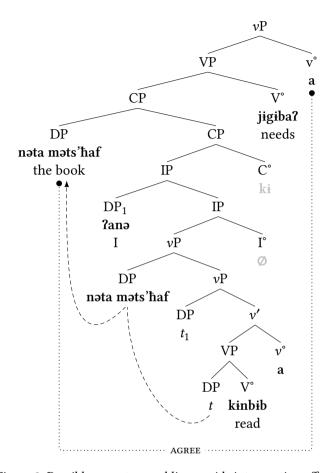


Figure 3: Possibly covert scrambling avoids intervention effects

It is, again, because of the in-principle optionality of the scrambling operation that the long-distance agreement observed in Tigrinya EOM constructions is not tied to a particular grammatical role in (19). Any nominal that is a candidate for scrambling is also a candidate for controlling object marking on the matrix verb. On the understanding that this scrambling operation may also covertly displace the hyperactive nominal, we also have an account for the independence of the phenomenon from any linear positioning. When scrambling is covert, the linear order of the embedded arguments in (19) will be maintained. When scrambling is overt, it is expected to rearrange the order of arguments. The example in in (20) shows that this is indeed possible.

⁷As Claire Halpert points out (p.c.), the expectation, without saying more, should be that long-

```
(20) [ n=ət-a məts'haf<sub>1</sub> ?anə t<sub>1</sub> ki-Ø-nbib-a

ACC=that-FSG book I IRR-SM.1SG-read.IPFV-OM.3FSG

ji-giba?-a

SM.3MSG-need.IPFV-OM.3FSG

'I need to read the book'
```

With regard to the type of movement that displaces the scrambled nominal, the evidence available from disjoint reference effects of the type associated with Condition C suggests that we are witnessing A'-movement. Relevant examples are provided in (21), where we find that the pronominal subject *nissa* 'she' cannot be coreferent with the c-commanded R-expression *Lemlem*.

(21) Hyperagreement does not bleed disjoint reference effects

```
a. (nissa) ni=naj=lɛmlɛm haw
she ACC=GEN=Lemlem.F brother.M
ki-ti-həgiz-o ji-gibo?-(o)
IRR-SM.3FSG-help.IPFV-OM.3MSG SM.3MSG-need.IPFV-OM.3MSG
'She*1/2 needs to help Lemlem1's brother.'
```

```
b. \mathbf{ni=naj=l\epsilon ml\epsilon m} \mathbf{haw}_1 \mathbf{nissa}\ t_1 \mathbf{ACC=GEN=Lemlem.F} brother.M she \mathbf{ki-ti-hagiz-o} \mathbf{ji-gibo?-o} \mathbf{IRR-sm.3FsG-help.IPFV-OM.3MsG} \mathbf{sm.3MsG-need.IPFV-OM.3MsG} 'She\mathbf{sm.3msg-need.IPFV-OM.3msG} 'She\mathbf{sm.3msg-need.IPFV-OM.3msg 'She\mathbf{sm.3msg-need.IPFV-OM.3msg} 'She\mathbf{sm.3msg-need.IPFV-OM.3msg-need.IPFV-OM.3msg}
```

These examples show that the disjoint reference effect is observed both with and without long-distance agreement in (21a). It is also observed in the case that scrambling is rendered overt in (21b). Obligatory reconstruction for the purposes of coreference relations is an expected property of A'-movement. As such, we maintain that A'-scrambling feeds long-distance agreement in Tigrinya.

Finally, the restriction to realizing long-distance agreement as object marking reflects the fact that the hyperactive nominal remains in the embedded clause. As mentioned in §3 and as we discuss in more detail in §4.3, there is no evidence for Raising into the matrix clause. Consequently, embedded arguments will never enter a sufficiently local relationship with the matrix I°, which by hypothesis is

distance agreement will necessarily cross-reference an overtly scrambled argument. It is not clear that this expectation is borne out, suggesting that more will ultimately need to be said about scrambling and the left periphery in Tigrinya.

necessary for controlling agreement on subject markers in Tigrinya (Tesfay 2016; Cacchioli & Overfelt submitted).

4.2 In support of scrambling and agreement

In addition to accounting for the basic properties of EOM, the idea that scrambling feeds hyperagreement finds support from several other considerations. For instance, it is a property of the grammar of Tigrinya that the nominal complement of a preposition is not visible for the purpose of AGREE relations with a predicate. Thus, the DP *?iti farat* 'the bed' cannot control object marking morphology on the verb from within the PP in (22):

(22) PPs are barriers to agreement

'He put the book on the bed.'

It is noteworthy, therefore, that long-distance hyperagreement is subject to the same visibility condition. From its position as the complement of the preposition b(i), the DP $?iti\ təmaharaj$ 'the student' in (23a) cannot control the object marker on the matrix predicate.

- (23) PPs are barriers to long-distance hyperagreement
 - a. [?it-en dəbdabe-tat [PP b=it-i təmaharaj]
 that-fpl letter-pl ins=that-msg student
 ki-Ø-Ø-ts'əħaf-a] ji-gibbo?-(*o)
 irr-intr-sm.3fpl-write.ipfv-sm.3fpl sm.3msg-need.ipfv-om.3msg
 'The letters need to be written by the student.'
 - b. [?it-en dəbdabe-tat [PP b=it-i təmaharaj]
 that-fpl letter-pl ins=that-msg student
 ki-Ø-Ø-ts'əħaf-a] ji-giba?-en
 irr-intr-sm.3fpl-write.ipfv-sm.3fpl sm.3msg-need.ipfv-om.3fpl
 'The letters need to be written by the student.'

There is nothing in principle wrong with long-distance agreement in this construction; the embedded subject *?itən dəbdabetat* 'the letters' in (23b) can control matrix object marking. This supports the claim that it is the PP layer that

renders its DP complement inaccessible for agreement. Furthermore it is an expected consequence of the claim that EOM constructions in Tigrinya employ the same AGREE relationship that is otherwise assumed to determine the realization of object marking.

The proposed analysis also predicts that long-distance hyperagreement should be sensitive to island boundaries. Because scrambling, either overtly or covertly, is responsible for feeding the long-distance agreement relationship, it should not be possible for the targeted nominal to be embedded inside a relative clause. As illustrated in (24), the result would necessarily involve a violation of the Complex-NP Constraint:



We see this prediction borne out in (25) below. The DP subject of the relative clause *Segen* cannot be cross-referenced by an object marker on the matrix verb.

More support for a scrambling-based analysis of Tigrinya EOM constructions can be found in the intervention effects that arise between the internal arguments of lexical ditransitive predicates. This includes the bi-consonantal root /hb/ 'give', which is presented in (26).

```
(26) n=ət-ən bir\text{so-tat n=ət-i} təmaharaj
ACC=that-FPL pen-PL ACC=that-MSG student
hib-e-jo
give.GER-SM.1SG-OM.3MSG
'I gave the student the pens.'
```

There is reason to believe that lexical ditransitives alternate between different

argument structures (Nazareth 2011; Overfelt 2022). For Overfelt (2022), one of these is a double-object frame illustrated for (26) in Figure 4.

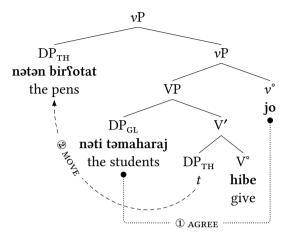


Figure 4: Agreement with the Goal argument in the double-object frame

In the double-object frame, the GOAL ?iti təmaharaj 'the student' and the Theme nəten bir Sotat 'the pens' are generated as arguments in the specifier and complement position of the verb, respectively. As the highest base-generated internal argument, the GOAL controls object marking on the predicate. In order to receive structural Case, the Theme subsequently undergoes an application of Object Shift to a position where it linearly precedes the GOAL; see again example (26).

It is correctly predicted, under the proposed scrambling-based analysis, that only the Theme argument in the double-object frame is accessible for long-distance agreement under an EOM predicate. At a descriptive level, the Theme should serve as an intervenor for agreement with the GOAL. The examples in (27) provide data to demonstrate that this is precisely the case. The Theme *noten birSotat* 'the pens' is able to control the object marker on the matrix predicate, but the GOAL *?iti təmaharaj* 'the student' is not.⁸

⁸ Observe that the matrix object marker in (27a) cross-references Theme while the embedded object marker cross-references the GOAL. We take this as evidence against an alternative analysis of EOM as agreement concord, whereby the observed hyperagreement on the matrix verb is parasitic on the agreement that surfaces on the embedded verb (see Henderson 2006).

- (27) Double-Object Frame embedded under EOM predicate: Theme-Agreement
 - a. ? **?it-ən birYo-tat** n=ət-i təmaharaj that-FPL pen-PL ACC=that-MSG student ki-Ø-hib-o ji-giba?-**en** IRR-SM.1SG-give.IPFV-OM.3MSG SM.3MSG-need.IPFV-OM.3FPL 'I need to give the student the pens.'
 - b. * ?it-ən bir``ro-tat n=ət-i təmaharaj that-fpl pen-pl ACC=that-msG student ki-Ø-hib-o ji-giba?-o IRR-SM.1sG-give.IPFV-OM.3MsG SM.3MsG-need.IPFV-OM.3MsG 'I need to give the student the pens.'

The contrast ultimately comes down to the fact that the Theme, but not the Goal, is able to undergo scrambling to a position that makes it visible to agree from the matrix v° . The representation and derivation in Figure 5, which omits the base position of the embedded subject for exposition, demonstrates this. Observe that the Goal argument, by hypothesis, remains inside the VP. As per the PIC, this renders the Goal incapable of undergoing scrambling to the edge of the embedded clause. On the other hand, from a shifted position at the edge of the predicate, scrambling of the Theme is possible. Thus, only the Theme is capable of scrambling into a sufficiently local enough relationship with the matrix v° for controlling agreement on the object marker.

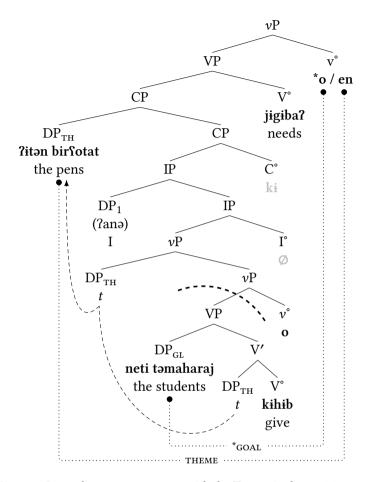


Figure 5: Long-distance agreement with the $\ensuremath{\mathsf{THeme}}$ in ditransitives embedded under an EOM predicate

This interpretation of the facts makes yet another prediction. If it were made possible for the GOAL argument to undergo scrambling to the edge of the embedded clause, it would then become visible for long-distance agreement. This would be made possible, given present assumptions, if the GOAL were locally scrambled to the edge of the embedded predicate. Examples like (28) suggest that this is exactly the case.

- (28) Double-Object Frame with additional scrambling of the Goal: Goal-agreement
 - a. * n=ət-i təmaharaj ?it-ən birYo-tat

 ACC=that-MSG student that-FPL pen-PL

 ki-Ø-hib-o ji-giba?-en

 IRR-SM.1SG-give.IPFV-OM.3MSG SM.3MSG-need.IPFV-OM.3MSG

 'I need to give the student the pens.'

Evidence that the GOAL has undergone an intermediate step of scrambling to the edge of the predicate is found in the fact that, unlike in previous examples, the GOAL now precedes the THEME in (28). The expected result is that the THEME is no longer an intervenor and object marking on the matrix predicate now cross-references the GOAL.

Figure 6 demonstrates how agreement with the Goal arises. In the course of the derivation, the Goal undergoes an instance of scrambling to an intermediate position at the edge of the embedded predicate. This has the result of reordering the Goal before the Theme in the way observed in (28). It also places the Goal in a position that, according to the PIC, is accessible to syntactic computation from outside the vP. The relevant effect is that the Goal is able to subsequently scramble to the edge of the embedded predicate where the matrix v° can establish the formal agree relationship that determines the shape of the object marker.

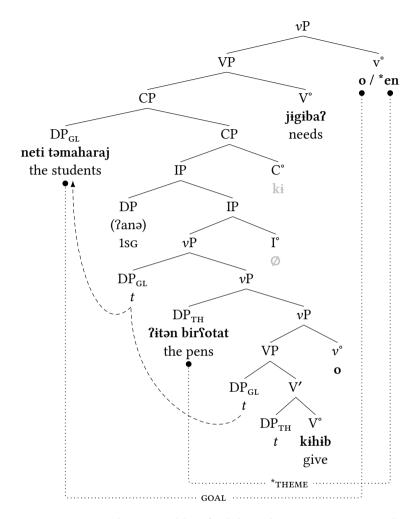
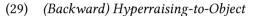


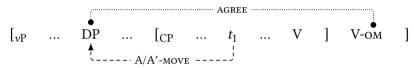
Figure 6: Intermediate scrambling feeds long-distance agreement with the $\ensuremath{\mathsf{GoAL}}$

While this scrambling-based analysis offers an account for EOM patterns with ditransitives, it will be necessary to say slightly more. Something must prevent the Theme from covertly scrambling over the intermediate position of the Goal in (28a) to control matrix object marking. Similarly, the Goal appears unable to covertly scramble through an intermediate position to Spec,CP in (27b). Space precludes a satisfactory discussion of these observations. However, we hope that they would follow from general Economy conditions that militate against movements without detectable effects on the output (e.g., Fox 2000).

4.3 Against (Backward) Hyperraising-to-Object

The scrambling-based analysis defended in the previous section represents only one of the analytical possibilities for long-distance hyperagreement. While it is not possible to engage with all of the alternatives, we would like to address a particularly salient and previously explored approach: (Backward) Hyperraising-to-Object. Under such an analysis, which is sketched in (29), the hyperactive nominal moves from the embedded clause, either overtly or covertly, to a position in the matrix clause that is reserved for grammatical objects (see Bruening 2002 and Deal 2017 as especially Tesfay 2016 and Gebregziabher 2021 on Tigrinya).





There are several factors that speak against an analysis of this type for EOM constructions in Tigrinya. As noted in §3, definite and specific objects are typically prefixed with the accusative case-marker n(i). While this is not obligatory, it is always a possibility for grammatical objects. In the case of long-distance hyperagreement, however, the case of the targeted nominal is necessarily determined by the embedded predicate. In both examples of (30) for instance, the embedded subject $?ita\ sabajti$ 'the woman' controls object marking on the matrix predicate. This argument cannot, however, carry the accusative case-marker expected of grammatical objects.

(30) Case-marking is determined by the embedded predicate

- a. [**?it-a səbajti** kɨ-t-xəjjɨd] jɨ-gɨba?-a that-FSG woman.F IRR-SM.3FSG-go.IPFV SM.3MSG-need.IPFV 'The woman needs to leave.'
- b. * [n=ət-a səbajti ki-t-xəjjid]

 ACC=that-FSG woman.F IRR-SM.3FSG-go.IPFV
 ji-giba?-a
 SM.3MSG-need.IPFV-OM.3FSG
 'The woman needs to leave.'

The fact that the hyperactive nominal is necessarily unmarked for nominative

⁹See also footnote 3 and footnote 8 for cursory considerations of some of the other alternatives.

case suggests that it is an argument of the embedded predicate. The inability to carry accusative case furthermore suggests that it is at no point a grammatical object of the matrix clause.

It is also with respect to word order that the hyperactive nominal behaves like a constituent of the embedded clause. In the examples in (31) and (32), the nominals that control matrix object agreement appear in positions where they are able to follow modifiers of the embedded predicate.

```
(31) [ (bi-bikeri) sɛgɛn (bi-bikeri) maj ki-ti-sətti
INS-cup Segen.F INS-cup water IRR-SM.3FSG-drink.IPFV
ji-giba?-a
SM.3MSG-need.IPFV-OM.3FSG
'Segen needs to drink water with a cup.'
```

```
(32) (*?ab dʒərdin) təsfaj [ (?ab dʒərdin) ?ane kɨ-Ø-həgɨz-o Loc garden Tesfay.M Loc garden I IRR-SM.1sg-help-om.3msg jɨ-ts'əbɨjɨ-ni SM.3msg-expect.IPFV-SM.1sg 'Tesfay expects me to help him in the garden.'
```

The ability to follow embedded modifiers suggests a lack of raising, presuming that these modifiers would not themselves raise into the matrix clause. This appears to be the case in light of the example in (32). Note that there is a strong preference against placing ?ab dʒərdin 'in the garden' in a position that precedes the matrix subject *Tesfay*. This suggests that embedded modifiers cannot undergo long-distance scrambling (see also Spadine 2020), which in turn suggests that the hyperactive nominals in (31) and (32) are constituents of the embedded clause.

We would also ask the reader to recall the conclusion, supported by the example repeated below, that there is no evidence for an operation of Raising-to-Subject in Tigrinya. This is, in fact, a conclusion that Lumsden & Girma (2011) and Leung & Girma (2017) reach in separate investigations of Amharic.

```
(33) No Raising-to-Subject in Tigrinya
```

```
* [ ?it-a səbajti ki-t-xəjjid ] ti-gibba?-(a) that-fsg woman.f IRR-SM.3FSG-go.IPFV SM.3FSG-need.IPFV-OM.3FSG
```

'The teacher wants the students to read the book.'

The relevant contrast is between (33) and the minimally differing example from (30a). The contrast reveals that the matrix predicate is necessarily marked for default agreement and cannot agree with the logical subject of the sentence ?ita səbajti 'the woman'. This strongly suggests that this DP does not undergo Raising to become the grammatical subject of the matrix clause. In as far as one would expect Raising-to-Object to employ the same mechanism that permits Raising-to-Subject, the absence of one strongly implies the absence of the other.

In sum, there is no available evidence to support an analysis in which a hyperactive nominal raises from the embedded clause into a position in the matrix clause. To all appearances, hyperactivity in Tigrinya comes in the form of scrambling-fed hyperagreement.

5 Prospects for Case and Activity

Among the questions that arise in light of what has preceded is what makes hyperagreement possible in Tigrinya. A possibility that was mentioned in §1 is that Case is not involved in the licensing of nominals in the language. This would make Tigrinya like at least some Bantu languages in that a lack of traditional Case-licensing would leave nominals active for multiple A-relations. The discussion to follow casts doubt on such an approach and suggests alternative paths forward for understanding hyperactivity in Tigrinya and beyond.

5.1 Case-licensing in Tigrinya

Like other Semitic languages, including Amharic, Arabic, and Hebrew, Tigrinya shows several indicators of being a language in which nominal constituents are subject to a requirement for Case-licensing. That is, there are a number of environments in which nominal constituents can only surface if they are morphologically marked with either case morphology or prepositions (Vergnaud 1977/2008; Sheehan & van der Wal 2018). This represents a set of challenging facts for any proposal that would extend to Tigrinya the claim that nominals remain active for multiple A-relations due to a lack of Case-licensing.

As mentioned in §3, definite and specific objects, but not subjects, carry accusative case-marking morphology. Moreover, on the basis of the examples in (34), there is reason to believe that this is associated with an application of object shift, similar to what was claimed for ditransitives in §4.2.

- (34) Definite and specific objects shift for accusative case morphology
 - a. ?it-i təmaharaj k'olt'ifu dəbdabe ts'iħif-u that-мsg student quickly letter wrote.ger-sm.3msg 'The student quickly wrote a letter.'
 - b. ?it-i təmaharaj n=ət-a dəbdabe k'olt'ifu that-msg student Acc=that-fsg book quickly ts'iħif-u-wa read.GER-SM.3MSG-OM.3FSG

 'The student quickly wrote the letter.'

This relationship between case morphology, grammatical role, and structural position is suggestive, though not conclusive, of Case-licensing in the language.

It is possible to make a similar, and perhaps more convincing argument with reference to oblique arguments. As discussed in detail by Nazareth (2011), oblique arguments may be introduced by one of a short list of highly polysemous prepositions, such as the locative ?ab in (35a). When such arguments are definite and specific, they may instead be marked with accusative case morphology and cross-referenced by a series of applicative markers that suffix to the verb; see (35b).

- (35) a. **?ab=t-i Sarat** məts'haf ?anbir-u LOC=that-MSG bed book put.GER-SM.3MSG 'He put the book on the bed.'
 - b. n=ət-i Yarat məts'haf ?anbir-u-lu
 ACC=that-MSG bed book put.GER-SM.3MSG-AM.3MSG
 'He put the book on the bed.'

Again, it is the requirement to morphologically flag a nominal constituent with one of various means that suggests it requires Case-licensing.

Gebregziabher (2013) argues that possessive constructions in Tigrinya alternate between two separate frames in a way familiar from other Semitic languages. These are the so-called "free state" and "construct state" arrangement of the possessor and possesse nominals that are presented in (36).

- (36) Free and construct state possessive constructions in Tigrinya
 - a. ?it-i naj=t-i məmhir məts'haf that-msg gen=that-msg teacher book 'the book of the teacher.'
 - b. ?it-a hafti ?it-i məmhir that-FSG sister.F that-MSG teacher 'the teacher's sister'

The free state in (36a) sees the possessor in a pre-nominal position and marked with the genitive preposition naj.¹⁰ For the construct state in (36b), the possessee appears in a morphologically unmarked form while surfacing in a post-nominal position. In the same way as above, the relationship observed here between morphological marking and structural positioning is indicative of a requirement for Case-licensing.

Finally, the demoted agent in passive constructions betrays a need to Caselicense nominal constituents. As we see again in (37a), the agentive grammatical subject of a transitive predicate is clause initial and morphologically unmarked with nominative case. Passivization in Tigrinya results in both the promotion of an internal argument to the status of grammatical subject and the demotion of the agent argument. In (37b), we find that the demoted agent must be marked with the preposition b(i)- and that it follows the grammatical subject.

- (37) Active-passive alternation in Tigrinya
 - a. ?it-i təmaharaj n=ət-a dəbdabe that-msG student ACC=that-FsG letter ts'ahif-u-wa write.GER-SM.3MSG-OM.3FSG

'The letter was written by the student.'

b. ?it-a dəbdabe b=it-i təmaharaj tə-ts'ahif-a that-FSG letter INS=that-MSG student INTR-write.GER-SM.3FSG 'The letter was written by the student.'

The regular relationship that we observe here and above between structural positioning and morphological marking is what one would expected if nominal constituents in Tigrinya are subject to a requirement for Case-licensing.

¹⁰For the sake of accuracy, we would note that Gebregziabher (2013) analyzes the *naj* clitic as a nominal copula with the grammatical function of a Linker.

5.2 The implications of Exceptional Object Marking

In light of the conclusion that nominals in Tigrinya are Case-licensed, we remain faced with the question of what makes hyperactivity possible in Tigrinya. Moreover, we should like to account for why hyperactivity is not observed in other languages. We cannot offer a fully articulated answer to these questions at this time. However, we would recall some conclusions of the preceding discussion that, when taken together, provide us with a clear direction for moving forward.

First, it was observed in §4.3 that a hyperactive nominal shows the case-marking that is suspected on the basis of its grammatical role in the embedded clause. Thus, *?ita səbajti* 'the woman' in the example repeated below cannot be marked with accusative case:

Framed somewhat differently, we are observing that the matrix predicate enters into an AGREE relationship with an embedded argument that does not result in Case assignment.¹¹ This means that, in Tigrinya and other languages, Case-assignment and ϕ -agreement cannot be seen as necessary consequences of the same formal AGREE relationship (Bhatt 2005; Carstens 2005; Baker 2008; see Baker 2012 on Amharic).

Second, in §4.1 we offered a way of understanding the observation that a hyperactive nominal remains accessible to additional A-relations regardless of both the grammatical role it has in the embedded clause and the Case that is assigned. As shown below with another familiar example, either the nominative

¹¹One might suppose that the embedded argument in (38a) is assigned both nominative and accusative Case, resulting in an instance of case stacking. While possible in principle, it would be necessary to ensure obligatory deletion of the outermost case-maker, which would consequently never be detectable on the surface. It is not clear what evidence could be presented to either confirm or disconfirm such an analysis.

subject or accusative-marked object can control agreement on the matrix object marker:

```
(39) [ (?anə) n=ət-a məts'ħaf ki-Ø-nbib-a ]

I ACC=that-FSG book IRR-SM.1SG-read.IPFV-OM.3FSG
ji-giba?-ni/a
SM.3MSG-need.IPFV-OM.1SG/OM.3FSG
'I need to read the book.'
```

We noted in §3 that there is no reason to suspect that the arguments in the example above are not fully licensed, in part because they carry the case-marking that is appropriate for their grammatical role within the embedded clause. Thus, while Case assignment is relevant to licensing nominals in Tigrinya (recall §5.1), Case does not contribute in anyway to the concept of an Activity Condition in the language.

Returning now to the question of hyperactivity, the facts above can be interpreted in various ways. They might be taken to suggest that the Activity Condition is simply not operative for Tigrinya nominals, either due to parametric variation (Baker 2008; Oxford 2017), because it is not a constraint on the relevant formal relationships (Bhatt 2005), or because its invocation is unnecessary to account for the facts (Nevins 2005). Perhaps a more generous interpretation might suggest that Case is not the relevant feature for licensing and Activity (Carstens 2011; Diercks 2012; Carstens & Diercks 2013, see also Kalin 2017).

Regardless of the precise interpretation of the facts at hand, Tigrinya makes clear that Case and Case-licensing are neither explanatory nor predictive of the (non-)hyperactivity of nominals in a given language. That is, it would not be straightforward to explain the hyperactivity of a given nominal constituent in Tigrinya by making an appeal to formal Case features. It is also not obviously possible to predict on the basis of Case-licensing whether or not nominals in a language display hyperactivity; compare English and Tigrinya. Together, these results should point us towards theories of (non-)hyperactivity, in Case-licensing languages and beyond, which do not rely on the assignment Case (e.g. Carstens & Diercks 2013; Keine 2018; Halpert 2019; Zyman 2023).

6 Conclusion

The empirical focus of this paper has been Exceptional Object Marking constructions in Tigrinya. These constructions are characterized by long-distance agreement between a matrix object marker and a hyperactive embedded argument. We proposed that A'-scrambling places embedded arguments, possibly covertly, in a sufficiently local enough position within the embedded clause for a formal AGREE relationship with the matrix v° . This analysis provides an account for the basic properties of EOM constructions and provides better empirical coverage than an alternative hyperraising analysis. It remains unclear at present why Tigrinya should show hyperagreement but lack Raising altogether (cf. Fong 2019 on Mongolian).

The discovery that Tigrinya nominals display hyperagreement might be seen as unexpected given the conclusion that the nominal constituents in the language are subject to a requirement for Case-licensing. As noted, this places Tigrinya on a growing list of languages that present significant problems for the standard conception of the Activity Condition. We suggest that, moving forward, attempts to account for the (non-)hyperactivity—both hyperagreement and hyperraising—of nominals cross-linguistically would do well to exploit linguistic features beyond theoretical Case.

Abbreviations

1 = first person, 2 = second person, 3 = third person, ACC = accusative, AM = applicative marker, COMP = complementizer, DEM = demonstrative, F = feminine, GEN = genitive, GER = gerundive, GL = goal argument, INS = instrumental, INTR = intransitive, IPFV = imperfective, IRR = irrealis, LOC = locative, M = masculine, OM = object marker, PL = plural, PRF = perfect, PST = past, REL = relative, SG = singular, SM = subject marker, TH = theme argument.

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References

- Baker, Mark C. 2008. *The syntax of agreement and concord*. Cambridge, UK: Cambridge University Press.
- Baker, Mark C. 2012. On the relationship of object agreement and accusative case: Evidence from Amharic. *Linguistic Inquiry* 43. 255–274.
- Baker, Mark C. 2015. *Case: Its Principles and its Parameters*. Cambridge, UK: Cambridge University Press.
- Baker, Mark C. & Ruth Kramer. 2018. Doubled clitics are pronous: Amharic objects (and beyond). *Natural Language & Linguistic Theory* 36. 1035–1088.
- Bhatt, Rajesh. 2005. Long distance agreement in Hindi-Urdu. *Natural Language & Linguistic Theory* 23. 757–807.
- Bhatt, Rajesh & Stefan Keine. 2017. Long-distance agreement. In Martin Everaert & Henk van Riemsdijk (eds.), *The blackwell companion to syntax*. Malden, MA: John Wiley & Sons, Inc.
- Bruening, Benjamin. 2002. *Raising to object and proper movement.* Ms., University of Deleware. Newark, DE.
- Buckley, Eugene. 2003. Emergent vowels in Tigrinya templates. In Jacqueline Lecarme (ed.), *Selected papers from the 5th Conference on Afro-Asiatic Linguistics*, 105–125. Amsterdam, NL: John Benjamins.
- Cacchioli, Gioia. in preparation. Genève: Universitè de Genève. (Doctoral dissertation).
- Cacchioli, Gioia & Jason Overfelt. Submitted. *The syntax of verbal modality in Tigrinya*. Université de Genève & Oakland University.
- Carstens, Vicki. 2001. Multiple agreement and case deletion: Against ϕ -incompleteness. *Syntax* 4. 147–163.
- Carstens, Vicki. 2005. Agree and EPP in Bantu. *Natural Language & Linguistic Theory* 23(2). 219–279.
- Carstens, Vicki. 2011. Hyperactivity and hyperagreement in Bantu. *Lingua* 121. 721–741.
- Carstens, Vicki & Michael Diercks. 2013. Parameterizing Case and activity: Hyper-raising in Bantu. In Seda Kan, Claire Moore-Cantwell & Robert Staubs (eds.), *Proceedings of the 40th annual meeting of the North East Linguistic Society*, 99–119. Amherst, MA: UMass Amherst GLSA.

- Chomsky, Noam. 2000. Minimalist inquiries: the framework. In Roger Martin, David Michaels & Juan Uriagereka (eds.), *Step by step: essays on Minimalist syntax in honor of Howard Lasnik*, 89–156. MIT Press.
- Chomsky, Noam. 2001. Derivation by Phase. In Michael Kenstowicz (ed.), *Ken Hale: A life in language*. Cambridge, MA: MIT Press.
- Deal, Amy Rose. 2017. Covert hyperraising to object. In Andrew Lamont & Katerina Tetzloff (eds.), *Proceedings of NELS 47*. Amherst, MA.
- Diercks, Michael. 2012. Parameterizing case: evidence from Bantu. *Syntax* 15(3). 253–286.
- Eberhard, David M., Gary F. Simons & Charles D. Fennig (eds.). 2024. *Ethnologue: languages of the World*. SIL International.
- Fong, Suzana. 2019. Proper movement through spec-cp: an argument from hyperraising in mongolian. *Glossa: a journal of general linguistics* 4(1).
- Fong, Suzana & Claire Halpert. to appear. A-dependencies. In Sjef Barbiers & Maria Polinsky (eds.), *The ambridge handbook of comparative syntax*.
- Fox, Danny. 2000. Economy and semantic interpretation. The MIT Press.
- Gebregziabher, Keffyalew. 2013. *Projecting possessors: A morphosyntactic investigation of nominal possession in Tigrinya*. Calgary, Canada: University of Calgary. (Doctoral dissertation).
- Gebregziabher, Keffyalew. 2021. Clitics or agreement markers: A view from Tigrinya clausal possession and modal necessity. In Akinbiyi Akinlabi, Lee Bickmore, Michael Cahill, Michael Diercks, Laura L. Downing, James Essegbey, Katie Franich, Laura McPherson & Sharon Rose (eds.), Celebrating 50 years of ACAL: Selected papers from the 50th Annual Conference on African Linguistics, 73–119. Berlin: Language Science Press.
- Godfrey, Ross Martin. 2011. *Optimal inflections in Tigrinya: A constraint-based approach to non-concatenative morphology in a Semitic language*. Toronto: University of Toronto. (MA thesis).
- Halpert, Claire. 2019. Raising, unphased. *Natural Language & Linguistic Theory* 37. 123–165.
- Henderson, Brent. 2006. Multiple agreement, concord and case checking in Bantu. In Olaoba F. Arasanyin & Michael A. Pemberton (eds.), *Selected proceedings of the 36th annual conference on african linguistics*, 60–65. Somerville, MA: Cascadilla Proceedings Project.
- Kalin, Laura. 2017. Nominal licensing is driven by valued (phi-)features. *Nordlyd* 43(1). 15–29.
- Keine, Stefan. 2018. Case vs. positions in the locality of A-movement. Glossa 3(1).

- Kramer, Ruth. 2014. Clitic doubling or object agreement: the view from Amharic. *Natural Language and Linguistic Theory* 32. 593–634.
- Leslau, Wolf. 1941. *Documents Tigrigna*. Paris: La Société de Linguistique de Paris. Leung, Tommi & Girma Halefom. 2017. The theory and syntactic representatin of control structures: An analysis from Amharic. *Glossa* 2(1). 1–33.
- Lumsden, John S. & Girma Halefom. 2011. On the absence of raising constructions in Amharic. *Folia Orientalia* 48. 131–141.
- Nazareth Amlesom Kifle. 2011. *Tigrinya applicatives in Lexical-Functional Grammar*. Bergen: University of Bergen. (Doctoral dissertation).
- Nevins, Andrew. 2005. Derivations without the Activity Condition. *MIT Working Papers in Linguistics* 49. 287–310.
- Overfelt, Jason. 2022. Asymmetrical symmetry in Tigrinya object marking. In Andrew Nevins, Anita Peti-Stantić, Mark de Vos & Jana Willer-Gold (eds.), *Angles of Object Agreement*, 135–163. Oxford, UK: Oxford University Press.
- Oxford, Will. 2017. The Activity Condition as a microparameter. *Linguistic Inquiry* 48. 711–722.
- Polinsky, Maria & Eric Potsdam. 2001. Long-distance agreement and topic in Tsez. *Natural Language & Linguistic Theory* 19. 583–646.
- Sheehan, Michelle & Jenneke van der Wal. 2018. Nominal licensing in caseless languages. *Journal of Linguistics* 54. 527–589.
- Spadine, Carolyn. 2020. *The structure of attitude reports: Representing context in grammar*. Cambridge, MA: MIT. (Doctoral dissertation).
- Tesfay Tewolde Yohannes. 2016. *DPs*, Phi-features and tense in the context of Abyssinian (Eritrean and Ethiopian) Semitic languages. Firenze, Italy: Firenze University Press.
- Vergnaud, Jean-Roger. 1977/2008. Letter to Noam Chomsky and Howard Lasnik on 'Filters and Control'. In Robert Freidin Freidin, Carlos P. Otero & Maria Luisa Zubizarreta (eds.), Foundational issues in linguistic theory: Essays in honor of Jean-Roger Vergnaud, 3–15. MIT Press.
- Zyman, Erik. 2023. Raising out of finite clauses (hyperraising). *Annual Review of Linguistics* 9. 29–48.