

Two Ways of Licensing Subjects in Lobi: Evidence from Switch Reference & *Wh*/Focus Fronting

Shweta Akolkar, Sansan Claude Hien, and Kang Franco Liu

1. Introduction

In Lobi, the same verb form alternation occurs in two seemingly unrelated syntactic contexts. First, in select embedded clauses, this alternation tracks the (non-)coreference of the embedded and matrix subjects (1): FORM A surfaces when the subjects are coreferent (1a), and FORM B surfaces when they are not (1b). Descriptively, we take this to be a system of verbal switch reference (SR).¹

(1) Verb alternation: Lobi switch reference

- | | |
|---|--|
| a. 6ɛbɛ́i nə-r [á _i * _j (jɪ́) irí]
Bebe want.A-RE 3SG see.A Iri
'Bebe _i wants (himself _i * _j) to see Iri.' | b. 6ɛbɛ́i nə-r [á _i * _j (jɛ́) irí]
Bebe want.A-RE 3SG see.B Iri
'Bebe _i wants him/her _i * _j to see Iri.' |
|---|--|

Second, in *wh*/focus fronting contexts, this alternation tracks whether a subject or non-subject is focused (2): FORM A occurs with non-subject focus (2a), while FORM B occurs with subject focus (2b).

(2) Verb alternation: Lobi *wh*/focus fronting

- | | |
|--|---|
| a. f-ré irí (jɪ́)
2SG-RE Iri see.A
'Iri saw YOU.' | b. f-ré (jɛ́) irí
2SG-RE see.B Iri
'YOU saw Iri.' |
|--|---|

This paper proposes a unified account of the verb form alternation in Lobi across both SR and *wh*/focus contexts. We argue that the form of the verb reflects how its local subject is assigned Case. FORM A surfaces when the subject is assigned Case by its canonical licenser; FORM B surfaces when the canonical licenser is unavailable and the subject is assigned Case by a secondary licenser instead (following Bobaljik 1993, Rezac 2011, Kalin 2018, *i.a.*). As we will demonstrate, Lobi SR and *wh*/focus fronting present two different motivations for merging a secondary licenser: clause truncation and anti-locality obviation.

The rest of the paper is organized as follows: Section 2 provides background on Lobi and its morphosyntactic properties. Sections 3 and 4 describe and analyze Lobi SR and *wh*/focus, respectively, motivating the connection between Case and the verb form alternation. Section 5 concludes.

2. Language background

Lobi (ISO: lob) belongs to the Gur/Mabia branch of the Atlantic-Congo family. The language is spoken in northeastern Côte d'Ivoire around the town of Bouna and in neighboring regions of Burkina Faso and Ghana. All data in the paper has been provided by co-author Hien, a Lobi speaker from Côte d'Ivoire.

* UC Berkeley, {akolkar, sansan.claude1211_, kfliu}@berkeley.edu. We thank Amy Rose Deal, Peter Jenks, Line Mikkelsen, as well as audience members at the UC Berkeley Syntax & Semantics Circle, WCCFL 41, and ACAL 54 for helpful discussions. All authors share co-first authorship.

¹ Throughout the examples in this paper, we boldface focus-fronted elements (represented in small caps in the translations) and circle other pertinent elements discussed in the prose.

2.1. Basic morphosyntactic properties

The basic word order in Lobi is S(Aux)VO(X), where X stands for adverbs, adpositional phrases, and additional arguments (3). TAMP information is expressed by auxiliaries, which sometimes fuse with pronominal subjects to form portmanteau STAMP morphs; verbs themselves never inflect for TAMP (4).

(3) Canonical word order in Lobi

mi kɔɔ kʰɔ́ɔ-ré ɔljɔ ʃur dii
1SG PST cook.A-RE corn fufu yesterday
'I cooked corn fufu yesterday.'

(4) Invariant verb forms across TAM

a. mi kɔɔ cá-r 1SG PST run.A-RE 'I ran.'	b. mi- n cá-r 1SG-IPFV run.A-RE 'I run.'	c. m- a cá-r 1SG-FUT run.A-RE 'I will run.'
--	--	---

Finite clauses are marked by a suffix -RE, which in affirmative discourse-neutral contexts attaches to the verb (5a) or its pronominal object (5b).² In focus contexts, -RE follows the focused phrase (5c). There is at most one instance of -RE per CP. For the purposes of this paper, we treat -RE as an indicator of clause size (i.e. the presence/absence of a CP layer) due to its correlation with finiteness and the availability of a clause-internal focus position.

(5) Distribution of -RE

a. mi ʃi- ré irí 1SG see.A-RE Iri 'I saw Iri.'	b. mi ʃi f- ré 1SG see.A 2SG-RE 'I saw you.'	c. f- ré mí ʃi 2SG-RE 1SG see.A 'I saw YOU.'
--	--	--

2.2. Finite clause structure

Given the ordering of auxiliaries in Lobi (6), we take the projection hierarchy in the TAMP domain to be NegP > TP > AspP.

(6) Order of TAMP markers

m-a kɔɔ na cá a
1SG-NEG PST PROG run.A NEG
'I was not running.'

Note that subjects precede all inflectional material, including negation. To capture this word order, and in keeping with analyses of related languages, we take the canonical subject position in Lobi to be Spec,FinP.³ Fin is the locus of nominative case assignment and bears bundled [uφ] and EPP features.

In the CP domain, topics precede foci, which themselves precede subjects. This ordering is illustrated in (7), where the subject is topicalized and the object is focused. Topicalization triggers obligatory resumption in Lobi; therefore the subject is pronounced in both the topic and subject positions. Given this word order, we assume a TopP > FocP > FinP hierarchy of CP projections.

² This morpheme has phonologically predictable allomorphs -re/e, -ne/e, etc.; allomorph ∅ is triggered in the context of non-pronominal DPs. For simplicity, we do not represent -RE in the glosses in the latter case. All allomorphs including ∅ optionally introduce a floating H tone which attaches to the following mora.

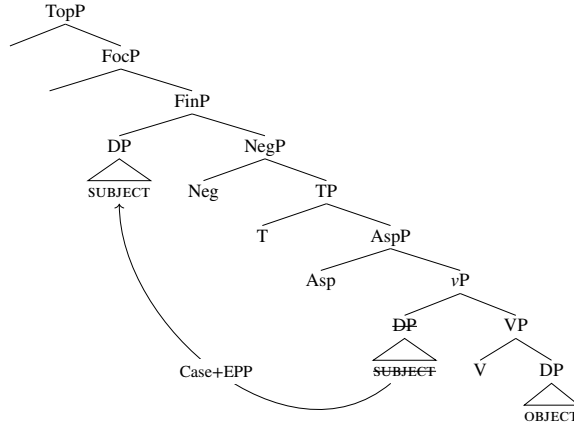
³ Grammatical subjects in Maba languages have been proposed to be in FinP for Dagaare (Hiraiwa & Bodomo 2008) and TP (higher than InflP) for Bùli (Sulemana 2021). For other Niger-Congo languages, subjects are analyzed as occurring in FinP for Shona (Julien 2002) and SubjP for Defaka (Bennett et al. 2012, Keine & Zeijlstra 2022). While these projections have different labels, they are all merged immediately above the inflectional domain.

(7) Order of topic, focus, and subject

[_{TopP} (6ε6ε_i) (,) [_{FocP} (m-ré_j) [_{FinP} (á_i) jĩ —_j]]]
 Bebe 1SG-RE 3SG see.A
 ‘Bebe, he saw ME.’

The proposed clause structure is summarized in (8).

(8) Lobi clausal spine



3. Switch reference

3.1. Overview of the pattern

As shown previously, Lobi marks SR on verbs in select embedded clauses: the verb must take FORM A in *same-subject* (SS) contexts, where the matrix and embedded subjects are coreferent (9a), and FORM B in *different-subject* (DS) contexts, where the matrix and embedded subjects are non-coreferent (9b).

(9) Lobi switch reference

- a. 6ε6ε_i kɔ̀ɔ̀ nə-r [á_{i,*j} (jĩ/*jé) irí] b. 6ε6ε_i kɔ̀ɔ̀ nə-r [á_{*i,j} (jé/*jĩ) irí]
 Bebe PST want.A-RE 3SG see.A/*B Iri Bebe PST want.A-RE 3SG see.B/*A Iri
 ‘Bebe_i wants (himself_{i,*j}) to see Iri.’ ‘Bebe_i wants him/her_{*i,j} to see Iri.’

This verb form alternation is observed in clauses embedded under a restricted class of verbs, including *na* ‘want’, *j’áál* ‘be about to’, *tu* ‘agree’, and *blé* ‘ask’. These embedded clauses appear to be structurally reduced, as is common among SR-marking clauses cross-linguistically (cf. Haiman & Munro 1983, Georgi 2012, *i.a.*). SR-marking clauses in Lobi lack the suffix -RE, which is associated with a CP layer (cf. §2.1) (10a), and relatedly, an embedded focus position (10b). In addition, they cannot host tense (10c) or negation (10d). By contrast, full-fledged CP complements must contain the suffix -RE (11a), allow elements to be focus-fronted to a clause-internal position (11b), and exhibit the full range of TAMP markers (11c-11d).

(10) Structurally reduced SR clauses

- a. *6ε6ε kɔ̀ɔ̀ nə-r [á jĩ/jé-(rɛ) irí]
 Bebe PST want.A-RE 3SG see.A/B-RE Iri
 Int: ‘Bebe wanted her/him/himself to see Iri.’
 b. *6ε6ε kɔ̀ɔ̀ nə-r [irí_i á jĩ/jé —_i]
 Bebe PST want.A-RE Iri 3SG see.A/B
 Int: ‘Bebe wanted her/him/himself to see IRI.’
 c. *6ε6ε kɔ̀ɔ̀ nə-r [á (kɔ̀ɔ̀/ná) jĩ/jé irí]
 Bebe PST want.A-RE 3SG PST/FUT see.A/B Iri
 Int: ‘Bebe wanted her/him/himself to have seen/see Iri.’

- d. *6ɛ6ɛ kɔ̀ɔ̀ nə-r [á-á ĵi/jé irí a]
 Bebe PST want.A-RE 3SG-NEG see.A/B Iri NEG
 Int: ‘Bebe wanted her/him/himself to not see Iri.’

(11) Full-fledged CP complement clauses

- a. 6ɛ6ɛ kɔ̀ɔ̀ ʒɪnã-né [á ĵi*(-rɛ) irí]
 Bebe PST remember.A-RE 3SG see.A-RE Iri
 ‘Bebe_i remembered that (s)he_{i,j} saw Iri.’
- b. 6ɛ6ɛ ʒɪnã-né [irí_i á ĵi —_i]
 Bebe remember.A-RE Iri 3SG see.A
 ‘Bebe_i remembered that (s)he_{i,j} saw Iri.’
- c. 6ɛ6ɛ ʒɪnã-né [á kɔ̀ɔ̀/ná ĵi irí]
 Bebe remember.A-RE 3SG PST/FUT see.A Iri
 ‘Bebe_i remembered that (s)he_{i,j} saw/will see Iri.’
- d. 6ɛ6ɛ ʒɪnã-né [á-á ĵi irí a]
 Bebe remember.A-RE 3SG-NEG see.A Iri NEG
 ‘Bebe_i remembered that (s)he_{i,j} did not see Iri.’

Although tense marking is prohibited in SR-marking clauses, aspectual markers (e.g. progressive, imperfective) are allowed (12). Therefore, we analyze these clauses as AspPs.

(12) Aspectual marking is licit in SR clauses

- 6ɛ6ɛ kɔ̀ɔ̀ nə-r [á nã ĵi/jé irí kpókópó]
 Bebe PST want.A-RE 3SG PROG see.A/B Iri every.day
 ‘Bebe wanted him/her/himself to be seeing Iri every day.’

3.2. Deriving the pattern

In this section, we propose that Lobi SS and DS clauses differ in terms of the behavior of their subjects: embedded subjects A-move out of SS clauses but remain in-situ in DS clauses (in line with Georgi 2012). The verb form reflects the source of Case assignment for the embedded subjects in their different positions.

3.2.1. To move or not to move: SS and DS subjects

We propose that in SS contexts, there is a single subject DP that originates in the embedded clause and raises to the matrix subject position, Spec,FinP.⁴ The obligatory coreference of the subjects is a result of their being copies of the same DP. Evidence from idiom connectivity and the behavior of the pronoun-like element in the embedded subject position support this analysis, demonstrating that the relationship between the two subjects is one mediated by movement. (13a) is a sentential idiom in Lobi; when the subject idiom chunk, presumably originating in the embedded clause, surfaces as the matrix subject, the idiomatic interpretation is retained (13b). In addition, the overt element that appears in the embedded subject position takes the form of a pronoun but patterns like a movement copy (i.e. a bound variable) rather than a typical pronoun: it requires a strictly local (14) and c-commanding (15) antecedent. We take this element to be the lower copy of the subject that is pronounced but subject to featural reduction (à la van Urk 2018).

⁴ Depending on the nature of the embedding verb, there may be intermediate movement to a second theta-position, Spec,vP of the matrix clause. We do not take all SS movement to be theta-driven, contra Georgi (2012), given the heterogeneous nature of SS-clause embedding predicates.

(13) SS subject can be interpreted idiomatically

- a. t^hāngbá-n t̃-né [6ε6É_j kóð nǎ-r]
 god-IPFV come.A-RE
 ✓ Idiomatic: ‘It is raining.’
 ✓ Literal: ‘God is coming.’
- b. t^hāngbá-n_i j’áál-é [á_i t̃]
 god-IPFV about.to.A-RE 3SG come.A
 ✓ Idiomatic: ‘The rain is about to fall.’
 ✓ Literal: ‘God is about to come.’

(14) SS marking is strictly local

- sāṣā_i kóð j̃nǎ-né [6ε6É_j kóð nǎ-r [á_{*i/j} j̃ irí]]
 Sansan PST remember.A-RE Bebe PST want.A-RE 3SG see.A Iri
 ‘Sansan_i remembered that Bebe_j wanted himself_{*i/j} to see Olo.’

(15) SS marking requires c-command

- [6ε6É_i kún]_j kóð nǎ-r [á_{*i/j} j̃ irí]
 Bebe friend PST want.A-RE 3SG see.A Iri
 ‘Bebe’s friend wanted to see Iri.’

In Lobi DS contexts, by contrast, there must be two distinct subject DPs in the numeration, accounting for their disjoint reference (Georgi 2012, Keine 2013, *i.a.*).⁵ The embedded subject cannot move to the matrix subject position, as it is occupied by the matrix subject. We also rule out movement to the matrix object position, as the embedded subject does not pattern syntactically or semantically like a matrix object. Pronominal objects obligatorily take the suffix -RE in discourse-neutral clauses (cf. §2.1), but pronominal DS subjects are never followed by -RE (16).⁶ The DS subject also cannot be interpreted as the thematic object of the matrix predicate (17). We conclude that rather than moving to a position in the matrix clause, the embedded DS subject simply remains in-situ.

(16) DS subjects cannot take -RE

- a. 6ε6É tu-(ré) [sí jé irí]
 Bebe agree.A-RE 1PL see.B Iri
 ‘Bebe agreed for us to see Iri.’
- b. *6ε6É tu s-(ré) jé irí
 Bebe agree.A 1PL-RE see.B Iri
 Int: ‘Bebe agreed for us to see Iri.’

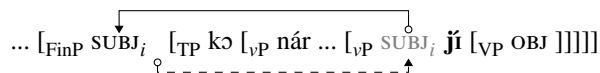
(17) Embedded interpretation of ‘only’

- 6ε6É blé-re [sāṣā díbára-n jé irí]
 Bebe ask.A-RE Bebe only-IPFV see.B Iri
 ‘Bebe asked for only Sansan to see Iri.’
 ✓ Context: *Bebe expressed the request (directly or indirectly) that Sansan and no one else see Iri.*
 ✗ Context: *Bebe asked Sansan (directly) to see Iri; he didn’t ask anyone else see Iri.*

3.2.2. Licensing SS and DS subjects

Recall that both SS and DS clauses are truncated AspPs, meaning they lack the canonical nominative Case licenser, Fin. Given the evidence that SS subjects move to the matrix clause but DS subjects remain in the embedded clause, we propose that SS and DS subjects employ different strategies for getting Case. SS subjects are licensed by matrix Fin. Their movement to matrix Spec,FinP is motivated by the EPP requirement associated with the [uϕ] feature on Fin (cf. §2.2), as represented in (18).⁷

(18) FORM A in SS: matrix Fin licenses the embedded subject



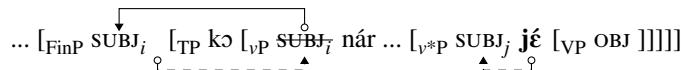
⁵ Condition B ensures that their reference is disjoint; the binding domain of Lobi pronouns is CP.

⁶ This contrasts a raising-to-object structure, discussed in §3.3, where the raised pronominal DP does take -RE and obligatorily resumes.

⁷ In the schematizations, solid lines represent movement while dashed lines represent licensing relations.

Because DS subjects cannot be licensed by matrix Fin, which must license the matrix subject, we propose that a secondary subject licenser must be merged in DS clauses. While primary licensers are always active in the derivation when present, secondary licensers are merged “iff the derivation will otherwise not converge,” as per the Licensing Economy Principle in Kalin (2018: 139). We take the secondary licenser in Lobi to be v^* , a flavor of v .⁸ The licensing v^* assigns Case to DS subjects in their base position, as represented in (19).

(19) FORM B in DS: embedded v^* licenses the embedded subject



The FORM A/B alternation reflects the flavor of v that appears in a given clause. FORM A indicates that the typical, non-licensing v is present, while FORM B indicates that v^* is present.

3.3. Predictions of the analysis

Since our analysis takes Lobi SR to be a consequence of the nominal licensing mechanism, we predict that the correlation between verb form and subject (non-)coreference may come apart in certain contexts. If the matrix and embedded subjects are *disjoint*, but the embedded subject can somehow be licensed without v^* , FORM A (‘SS marking’) should surface. On the other hand, if the matrix and embedded subjects are *coreferent* but two distinct DPs are merged in the derivation, FORM B (‘DS marking’) should surface.

Both predictions are borne out. Lobi has a raising-to-object (RtO) construction (20) where the embedded verb takes FORM A, despite the non-coreferent subject DPs. The embedded subject occurs in the matrix object position, before the suffix -RE and is resumed in its base position. Assuming the embedded subject is licensed in the matrix object position, there is no need to merge v^* downstairs. Instead, the usual v is merged, and the embedded verb takes FORM A.

(20) FORM A in Lobi RtO construction

sãã fɔrsí f-rɛ [fɪ jɪ kpákpala lá]
 Sansan force.A 2SG-RE 2SG see.A guest.PL DEF
 ‘Sansan forced you to see the guests.’

Moreover, when the embedded subject is a reflexive bound by the matrix subject, the embedded verb takes FORM B despite the coreference of the subjects (21). Here, there are two separate subject DPs merged in the derivation which happen to be coreferent; the embedded subject is not a movement copy. Therefore, v^* is still needed to license the reflexive downstairs.

(21) FORM B in DS clauses with embedded reflexive subjects

sãã kɔɔ nə-r [ûn-tʰɛtʰɛ-nɪ jɛ irí]
 Sansan PST want.A-RE 3SG.POSS-REFL-IPFV see.B Iri
 ‘Sansan wanted himself to see Iri.’

4. Wh/focus fronting

4.1. Overview of the pattern

Wh/focused elements in Lobi must surface clause-initially (i.e. fronted). This word order change is concomitant with the same verb form alternation observed in SR contexts. Specifically, non-subject focus (e.g. object, adjunct focus) triggers verb FORM A while subject focus triggers verb FORM B.⁹

⁸ See Coon et al. (2014) for a similar proposal for Q’anjob’al, where a licensing flavor of Voice licenses notional objects in non-finite clauses without the canonical licenser Infl.

⁹ Similar subject/non-subject asymmetries are observed in other Gur languages (e.g. Hiraiwa & Bodomo 2008 on Dàgáàrè; Sulemana 2021 on Bùlì; Issah & Smith 2020 on Dagbani) and African languages more broadly (e.g. Amaechi & Georgi 2019 on Igbo; Bennett et al. 2012 on Defaka, i.a.).

(22) Discourse-neutral

- a. fi jĩ-ré irí
2SG see.A-RE Iri
'You saw Iri.'
- b. irí jĩ f-ré
Iri see.A 2SG-RE
'Iri saw you.'

(23) Focus fronting

- a. Subject focus
f-ré (jé/*jĩ) irí
2SG-RE see.B/*A Iri
'YOU saw Iri.'
- b. Object focus
m-ré irí (jĩ/*jé)
1SG-RE Iri see.A/*B
'Iri saw ME.'
- c. Adjunct focus
dii fi (jĩ/*jé) irí
yesterday 2SG see.A/*B Iri
'You saw Iri YESTERDAY.'

(24) Wh-fronting

- a. Subject wh-question
amé (jé/*jĩ) irí
who see.B/*A Iri
'WHO saw Iri?'
- b. Object wh-question
amé irí (jĩ/*jé)
who Iri see.A/*B
'WHO did Iri see?'
- c. Adjunct wh-question
mbóóra fi (jĩ/*jé) irí
when 2SG see.A/*B Iri
'WHEN did you see Iri?'

In the following subsections, we demonstrate that *wh*/focus fronting involves \bar{A} -movement to Spec,FocP, and that the FORM A/B alternation in focus contexts reflects anti-locality obviation (or not) and the attendant Case-licensing mechanisms. In this vein, *wh*/focus fronting and SR both incur complications for subject licensing and therefore result in the same verb alternation.¹⁰

4.2. *Wh/Focus fronting as movement*

Evidence for a movement analysis of Lobi focus fronting comes from reconstruction for binding, island sensitivity, and idiom connectivity. First, Lobi reflexives must be bound within the domain of a CP (i.e. subject to Condition A), as shown in (25a). The fact that they reconstruct to be bound by the subject when focus-fronted in (25b) indicates that they originate from a lower position.

(25) Focused fronted DPs reconstruct for binding

- a. á_i jĩ-ré ɔ̀ɔ̀-tʰéʰé_{i/*j}
3SG see.A-RE 3SG.POSS-REFL
'He saw himself.'
- b. ɔ̀ɔ̀-tʰéʰé_{i/*j} á_i jĩ —_i
3SG.POSS-REFL 3SG see.A
'He saw HIMSELF.'

Moreover, focused elements cannot escape movement islands, e.g. coordinated structures and relative clauses (Ross 1967).

(26) Focus fronting is subject to islands

- a. ***dii**_i ɓɛɓé jĩ irí [—_i na ní]
yesterday Bebe see.A Iri and today
Int: 'Bebe saw Iri YESTERDAY and today.'
- b. ***ɓɛɓé**_i irí kú [sí ké dɔ̀n —_i]
Bebe Iri kill.A snake DEM bite.REL
Int: 'Iri killed the snake that bit BEBE.'

Lastly, focus fronting shows connectivity effects: fronted subjects can still retain idiomatic readings.

(27) Focus fronting retains idiomatic readings

- tʰãngbá-n**_i —_i ɪná
god-IPFV come.B
✓ Idiomatic reading: 'It is RAINING that is happening.'
✓ Literal reading: 'It is GOD that is coming.'

¹⁰Given that *wh*- and focus fronting pattern together, discussion and examples moving forward will feature only focus fronting for simplicity.

All three diagnostics show that focus-fronted elements must be displaced—not base-generated—to the clause-initial position via movement. By contrast, topicalization, which also involves leftward dislocation to the clause edge, exhibits the *opposite* properties and patterns like base-generation: as shown in (28), the topicalized element must resume (as opposed to leaving a gap) and cannot be interpreted idiomatically.

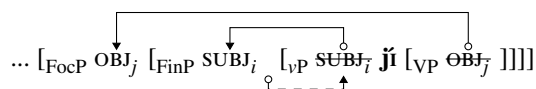
(28) Topicalization loses idiomatic readings

- t^hangbá-n** (.) **á** ɪ-né
 god-IPFV 3SG come.A-RE
 ✗ Idiomatic reading: ‘Raining, it is happening.’
 ✓ Literal reading: ‘God, he is coming.’

4.3. Deriving *wh*/focus extraction asymmetry

Given the movement analysis that we adopt, the derivation of non-subject focus fronting is straightforward: the subject is licensed by the canonical licenser Fin and attracted to its canonical position Spec,FinP due to EPP. Given the non-licensing *v* merged in the derivation, the verb takes FORM A. The focused XP then undergoes \bar{A} -movement to Spec,FocP. This derivation is schematized in (29).

(29) FORM A with non-subject focus: Fin licenses the subject



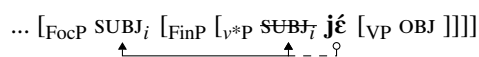
However, there are complications with deriving subject focus. Recall that the landing site for focus movement is Spec,FocP, and that FocP immediately dominates FinP. Should focused subjects be licensed at Spec,FinP, their subsequent movement to Spec,FocP would be too short, in violation of the SPEC-TO-SPEC ANTI-LOCALITY movement constraint (30).¹¹

(30) SPEC-TO-SPEC ANTI-LOCALITY (from Deal 2019: 408)

Movement of a phrase from the Specifier of XP must cross a maximal projection other than XP.

We thus propose that subject focus fronting in Lobi instantiates another context where the licensing *v** is merged. This secondary licensing mechanism allows the focused subject to be assigned Case low in its base position, i.e. Spec,*v**P, and skip FinP en route to FocP. As a result, FORM B verbal morphology is spelled out. This derivation is shown in (31).

(31) FORM B with subject focus: *v** licenses the subject



Note that in subject focus contexts, both subject licensors Fin and *v** are present and active in the derivation, but only *v** licenses. Additional theoretical assumptions are needed to ensure that Fin cannot probe the licensed subject again and crash the derivation for violating anti-locality. Following Chomsky (2001), we assume that *v** deactivates the licensed DP upon licensing (i.e. no multiple case valuation). When Fin merges, it probes but fails to find an active nominal (assuming failed Agree does not crash the derivation; Preminger 2014), as all DPs in the derivation must be licensed by this point.¹² Without a viable ϕ -goal, the EPP feature on Fin does not need to be satisfied, thereby obviating anti-locality.

4.4. Predictions of the analysis

On an anti-locality account of extraction asymmetries, the quirks of subject extraction are not tied to subjecthood, but rather the subject’s exceptionally high position and proximity to the landing site of focus

¹¹ Similar approaches to accounting for canonical subjects’ invisibility for higher probing have been proposed in Bošković (2015, 2016), Erlewine (2016, 2020), Deal (2019), *i.a.*

¹² We leave it to future work to determine how non-subject DPs are licensed in Lobi.

movement. By this logic, anti-locality violations can be obviated if the focused subject has to move over a longer distance. This holds true in Lobi. As shown in (32), long-distance subject extraction triggers FORM A in both the matrix and embedded clauses.¹³

(32) Long-distance focus fronting in Lobi triggers FORM A

f-ré 6é6ε fínā [fí (ǰí) -ré irí]
 2SG-RE Bebe remember.A 2SG see.A-RE Iri
 ‘Bebe remembered that YOU saw Iri.’

The fact that the embedded verb takes FORM A confirms that the verb form alternation does not simply track subject \bar{A} -movement. In this case, the focused embedded subject is probed by matrix Foc, rather than its local Foc. Assuming that \bar{A} -extracted elements move successive-cyclically via the phase edge (Chomsky 1977, 2001), the focused subject is licensed by its canonical licensor Fin and transits through the outermost projection of the embedded CP domain, straight to matrix Spec,FocP without stopping at embedded Spec,FocP. FORM A surfaces as no v^* is merged in the derivation.

(33) FORM A with long-distance subject focus: Fin licenses the subject

... [_{FocP} SUBJ_i ... [_{CP_{max}} SUBJ_i [_{FocP} [_{FinP} SUBJ_i [_{VP} SUBJ_i ǰí-ré ...]]]]]

In summary, the verb alternation in Lobi tracks the focus extraction of local subject vs. else: FORM A signals that the subject is licensed by Fin, and can be overlooked by the local Foc probe for anti-locality considerations. FORM B reflects the merging of v^* , which licenses the subject low and renders it a viable goal for the local Foc probe. In other words, v^* serves to resolve the tension between the subject’s needs of getting Case-licensed and checking the local Foc’s feature.

5. Concluding remarks

5.1. Subject licensing in Lobi

In this paper, we have argued that the FORM A/B alternation observed in SR and *wh*/focus fronting contexts arises in response to complications in subject Case-licensing. In Lobi, subjects may be licensed by either the primary licensor Fin or the secondary licensor v^* . Fin is always active (i.e. obligatorily merged) in the derivation (cf. Kalin 2018, Rezac 2011, *i.a.*). Its bundled [$u\phi$] and EPP features require strict structural adjacency for licensing and obligatorily attract the subject to Spec,FinP. Fin licenses Lobi subjects in canonical root clauses, SS clauses (after subject movement), and non-local-subject focus contexts. On the other hand, v^* can license the subject in its base-merged position and is merged only when needed for convergence (cf. Licensing Economy Principle, Kalin 2018). v^* licenses subjects in DS clauses and local subject focus contexts, where Fin is either absent due to clause reduction or inaccessible due to anti-locality constraints.

The merging of v^* is not a look-ahead last-resort mechanism for potential anti-locality obviations. Rather, we assume that both options of merging licensing and non-licensing flavors of v are available in the grammar, but one of the two derivations will simply not converge. Whether the subject is ultimately licensed by Fin or v^* is the consequence of independent aspects of the grammar. For example, the anti-locality constraint on movement rules out derivations where the subject is licensed by Fin and subsequently moved to FocP, leaving derivations that involve v^* as the *only* convergeable options. Also per the Licensing Economy Principle, the grammar disfavors derivations where v^* is merged when Fin can readily serve as the subject licensor. This explains why FORM B morphology *never* surfaces in canonical root clauses, SS clauses, or non-subject focus contexts; in these scenarios, merging both Fin and v^* would be uneconomical as the subject can be unproblematically licensed by (matrix) Fin.

¹³Cross-clausal subject movements consistently trigger resumption in Lobi (across SS, focus fronting, and raising-to-object constructions). We leave the precise syntactic formulation of this empirically robust pattern for future work.

5.2. Conclusion

We have presented a unified analysis of the verb FORM A/B alternation in two disparate syntactic contexts in Lobi, namely SR and *wh*/focus fronting. We have shown that these subject-oriented phenomena are by-products of nominal licensing in Lobi, rather than dedicated reference-tracking or subject-sensitive systems. Existing syntactic analyses of SR (Georgi 2012, Keine 2013, *i.a.*) or subject extraction asymmetries (Bennett et al. 2012, Issah & Smith 2020, Keine & Zeijlstra 2022, *i.a.*) do not transparently lend themselves to such a unifying analysis.

References

- Amaechi, Mary & Doreen Georgi. 2019. Quirks of subject (non-)extraction in Igbo. *Glossa: A Journal of General Linguistics* 4(1). 1–36.
- Bennett, Wm. G., Akinbiyi Akinlabi & Bruce Connell. 2012. Two subject asymmetries in Defaka focus constructions. In Jaehoon Choi, E. Alan Hogue, Jeffrey Punske, Deniz Tat, Jessamyn Schertz & Alex Trueman (eds.), *Proceedings of the 29th West Coast Conference on Formal Linguistics*, 294–302. Somerville, MA: Cascadia Press.
- Bobaljik, Jonathan David. 1993. On ergativity and ergative unergatives. In Colin Phillips (ed.), *Papers on case and agreement 2 (MIT working papers in linguistics 19)*, 45–88. Cambridge, MA: MIT Working Papers in Linguistics.
- Bošković, Željko. 2015. From the Complex NP Constraint to everything: on deep extractions across categories. *The Linguistic Review* 32. 603–669.
- Bošković, Željko. 2016. On the timing of labeling: deducing Comp-trace effects, the subject condition, the Adjunct Condition, and tucking in from labeling. *The Linguistic Review* 33(1). 17–66.
- Chomsky, Noam. 1977. Conditions on transformations. In *Essays on form and interpretation*, 81–162. New York, New York: Elsevier North-Holland, Inc.
- Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz (ed.), *Ken Hale: a life in linguistics*, 1–52. Cambridge: MIT Press.
- Coon, Jessica, Pedro Mateo Pedro & Omer Preminger. 2014. The role of case in A-bar extraction asymmetries: evidence from Mayan. *Linguistic Variation* 14(2). 179–242.
- Deal, Amy Rose. 2019. Raising to ergative: Remarks on applicatives of unaccusatives. *Linguistic Inquiry* 50(2). 388–415.
- Erlewine, Michael Yoshitaka. 2016. Anti-locality and optimality in Kaqchikel agent focus. *Natural Language & Linguistic Theory* 34(2). 429–479.
- Erlewine, Michael Yoshitaka. 2020. Anti-locality and subject extraction. *Glossa: A Journal of General Linguistics* 5. 1–38.
- Georgi, Doreen. 2012. Switch-reference by movement. In Philipp Weisser (ed.), *Perspectives on switch-reference: Local modeling and empirical distribution*, 1–40. Leipzig: Linguistische Arbeitsberichte, Universität Leipzig.
- Haiman, John & Pamela Munro (eds.). 1983. *Switch reference and universal grammar: Proceedings of a symposium on switch reference and universal grammar*. Amsterdam: John Benjamins.
- Hiraiwa, Ken & Adams Bodomo. 2008. Object-sharing as symmetric sharing: predicate clefting and serial verbs in Dàgáàrè. *Natural Language & Linguistic Theory* 26. 795–832.
- Issah, Samuel A. & Peter W. Smith. 2020. Subject and non-subject ex-situ focus in Dagbani. *Glossa: A Journal of General Linguistics* 5. 1–36.
- Julien, Marit. 2002. *Syntactic heads and word formation*. New York: Oxford University Press.
- Kalin, Laura. 2018. Licensing and Differential Object Marking: the view from Neo-Aramaic. *Syntax* 21(2). 112–159.
- Keine, Stefan. 2013. Deconstructing switch-reference. *Natural Language & Linguistic Theory* 31(3). 767–826.
- Keine, Stefan & Hedde Zeijlstra. 2022. Clause-internal successive cyclicity: phasality or DP intervention? Ms. UCLA & Universität Göttingen.
- Preminger, Omer. 2014. *Agreement and its failures* (Linguistic Inquiry Monograph 68). Cambridge, MA: MIT Press.
- Rezac, Milan. 2011. *Phi-features and the modular architecture of language* (Studies in Natural Language and Linguistic Theory 81). Dordrecht, the Netherlands: Springer.
- Ross, John. 1967. *Constraints on variables in syntax*. Massachusetts Institute of Technology dissertation.
- Sulemana, Abdul-Razak. 2021. *Non-finite complementation: a case study of Bùlɔ̀*. MIT dissertation.
- van Urk, Coppe. 2018. Pronoun copying in Dinka and the Copy Theory of Movement. *Natural Language & Linguistic Theory* 36. 937–990.