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Remark

Syntactic negation in Ewe (Tongugbe) agent nominalization

Selikem Gotah¹

Soo-Hwan Lee²

^{1,2} New York University

Correspondence

Selikem Gotah

Department of Linguistics

New York University

10 Washington Pl,

New York, NY 10003, United States

selikem@nyu.edu

¹Both authors contributed equally to this paper.

Abstract

Drawing on evidence from the scope patterns and the availability of NPI licensing of the negation marker ma-, we show that NegP is realized in Ewe (Tongugbe) agentive nominals. We conclude that agentive nominals accommodate sentential negation, posing a challenge to previous assumptions. The implication of this work is that agent nominalization can be more verbal-like than what has been reported in the literature. We further examine where the Ewe agentive suffix $-l\acute{a}$ resides in syntax based on the argument structure of the predicates realized inside agentive nominals.

Keywords

agent nominalization; negation; scope; NPI licensing; Ewe (Tongugbe)

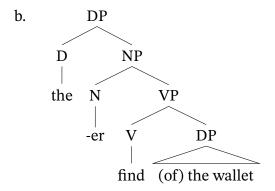
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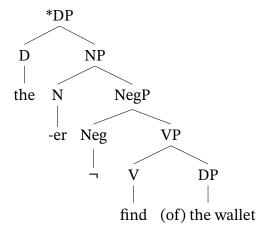
1 Introduction

Baker & Vinokurova (2009) claim that agent nominalization does not contain verbal or clausal elements such as adverbs and negation. Based on a survey of some languages, they conclude that this finding is universal. If Baker & Vinokurova's generalization is on the right track, we would not expect NegP inside agentive nominals. (1) and (2) illustrate Baker & Vinokurova's claim. Note that agentive nominals are derived using *-er* in English.

- (1) Attested structure based on Baker & Vinokurova (2009)
 - a. **[The finder of the wallet]** returned it to the front desk.



(2) Unattested structure based on Baker & Vinokurova (2009)



The question that arises is whether the structure in (2) posited to be unattested holds in all languages. We, therefore, investigate whether agentive nominals can be more articulated in structure than a bare verb phrase. Ewe (Tongugbe) provides an ideal testing ground for ad-

dressing this question. Contrary to Baker & Vinokurova's assumption, we show that NegP can be realized in Ewe agentive nominals. Collecting evidence from (i) scope patterns and (ii) negative polarity item (NPI) licensing, we argue that agent nominalization can be more verbal-like than what has been previously reported in the literature.

Prior to delving into our main inquiry, we lay out the basic patterns of Ewe syntax. Ewe (Kwa, Niger-Congo) is a Gbe language spoken in Ghana, Togo, and Benin. It is an SVO language, allowing SOV in some constructions (e.g., progressive), as shown in (3).

- (3) a. Kofi ŋlɔ̃ agbalẽ.

 Kofi write letter

 'Kofi wrote a letter.'

 (SVO)
 - b. Kofi le agbalẽ ŋlɔ̃.
 Kofi be letter write.PROG
 'Kofi is writing a letter.' (SOV)

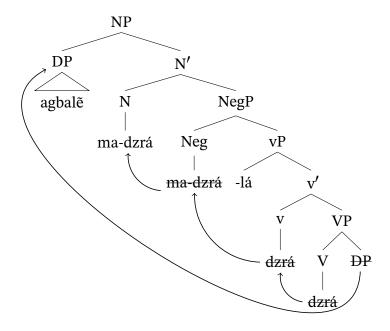
Unless otherwise specified, the data for this work are drawn from Tongugbe, a southwestern dialect of Ewe spoken in Ghana.

This paper provides empirical evidence that Ewe agent nominalization can contain sentential negation. As exemplified in (4), the agentive suffix -lá is realized together with the negation morpheme *ma*- inside the agentive nominal *agbalẽ-ma-dzrá-lá* 'a non-seller of books'. We will show that this poses a challenge to Baker & Vinokurova's analysis. While section 5 provides a fuller elaboration on how (5) is derived, we emphasize that *ma*- projects NegP.

(4) [Agbalẽ-ma-dzrá-lá] le gíyε. book-NEG-sell-LA be here 'The non-seller of books is here.'

²Agbalē-ma-dzrá-lá roughly translates as 'someone who does not sell books (at a particular time).' While the precise semantics of this agentive nominal is worth investigating, we narrow our scope of research to showing that *ma*- displays *syntactic* properties that are characteristic of sentential negation rather than non-sentential negation. Also, it should be noted that standalone nominalizations are indefinite. Those in sentences are (in)definite depending on the context.

(5) Tree structure for the agentive nominal in (4)



Furthermore, we investigate the syntactic locus of the agentive suffix $-l\acute{a}$ in Ewe. We do so by referring to the argument structure of the verbs participating in agent nominalization.

The layout of this paper is as follows: section 2 provides evidence for the presence of negation inside Ewe (agentive) nominalization. In order to verify whether the negation marker ma-induces sentential negation rather than non-sentential negation, we focus on the scope interaction between ma- and numeral quantifiers in section 3. We further examine NPI licensing using ma- in section 4. Section 5 provides our analysis for the derivation of negated agentive nominals. Section 6 discusses the absence of TP inside Ewe agentive nominals. Section 7 presents cases where $-l\acute{a}$ is used in non-agentive contexts. Section 8 concludes the paper.

2 (Agent) nominalization & negation

Nominalization in Ewe involves verbal reduplication and sometimes object shift (Clements 1975, Fabb 1992). Nominalized intransitive verbs require reduplication, as (6) illustrates. The intransitive verb $v\acute{a}$ 'to come', shown in (6a), undergoes reduplication when nominalization takes place. The form va-va surfaces inside the nominal nu- $fi\epsilon$ - $l\acute{a}$ $w\acute{o}$ va-va 'the teacher's coming', as shown in (6b).

- (6) a. Nu-fǐé-lá **vá**. thing-teach-LA come 'The teacher came.'
 - b. [Nu-fiε-lá wó va-va] dó dzidzə ne mí. thing-teach-LA POSS.SG come-come plant happiness for us 'The teacher's coming made us happy.'

Nominalization involving transitive verbs requires reduplication of the verb and object shift (Clements 1975, Duthie 1996, Dorgbetor 2016, among others). This is demonstrated in (7). In (7a), which is a simple transitive sentence, the verb ϕ 0 'to play' precedes the object $sank\dot{u}$ 'keyboard.' In (7b), ϕ 0 'to play' undergoes reduplication (ϕ 0- ϕ 0) and the object $sank\dot{u}$ 'keyboard' undergoes object shift ($sank\dot{u}$ - ϕ 0- ϕ 0).³

- (7) a. Ama φ**o**-5 sankú. Ama play-HAB keyboard 'Ama plays the keyboard.'
 - b. [Sankú-φο-φό] víví-ε né Ama. keyboard-play-play sweet-HAB for Ama 'Ama enjoys playing the keyboard.'

Both (6) and (7) exhibit reduplication, which is associated with nominalization. However, they

³Reduplication does not target the habitual marker -o. Presumably, this would require a verbal projection other than NegP inside the nominal structure, which we argue is not the case (see section 6).

differ with respect to whether object shift is at play or not. The transitivity of the verb, in this respect, determines whether object shift is employed in the derivation.

When negation is applied inside nominalization, reduplication targets both the verb and the negative morpheme ma-, as shown in (8). (8a) shows that the negated verb $m\acute{e}$ - $v\acute{a}$ o 'to not come' is used in a simple intransitive sentence. (8b) shows that reduplication targets the negated verb as a whole (ma-va-ma-va).⁴

- (8) a. Nu-fíε-lá **mé-vá** σ. thing-teach-LA NEG-come NEG 'The teacher did not come.'
 - b. [Nu-fiε-lá wó **ma-va-ma-va**] dó dziku né mí. thing-teach-LA POSS.SG NEG-come-NEG-come plant anger for us 'The teacher's not coming made us angry.'

A similar derivation holds in (9). One difference between (8) and (9) is the transitivity of the verb and whether object shift takes place or not. (9b), unlike (8b), exhibits object shift.

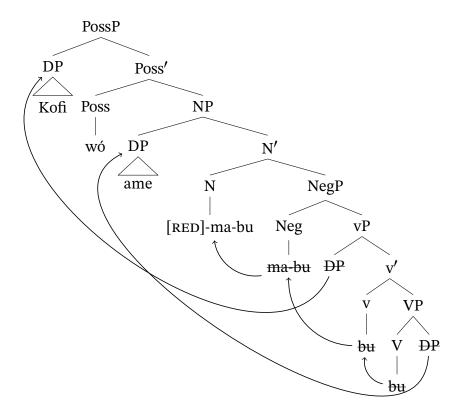
- (9) a. Kofi **mé-bu**-5 **ame** b. Kofi NEG-respect-HAB person NEG 'Kofi does not respect people.'
 - b. [Kofi wó **ame-ma-bu-ma-bu**] wo nukú né mí. Kofi POSS.SG person-NEG-respect-NEG-respect make surprise for us. 'Kofi's disrespecting people surprised us.'

So far, we have seen that nominalization is possible only in the presence of reduplication. We posit that reduplication triggers nominalization and that N of NP hosts a reduplication

⁴Ewe (Tongugbe) exhibits bipartite negation ($m\acute{e}$ -... $_{2}/o$) in clausal syntax. Collins et al. (2018) argue that the Neg marker $_{2}$ (or $_{2}$ 0) is realized in C of CP. Arguably, the lack of CPs in agentive nominals accounts for the absence of $_{2}$ 0 (or $_{2}$ 0) in (8b). Here, it may well be the case that Neg is spelled out as ma-when C is absent and as $m\acute{e}$ -when C is present. Under this type of approach, ma- and $m\acute{e}$ - are allomorphs realized in different syntactic environments. Regardless of whether ma- is actually associated with bipartite negation or not, however, the fact that ma-behaves like sentential negation is what is crucial for our analysis.

feature ([RED]). We have also observed that *ma*- is subject to reduplication. We assume that *ma*- and the verb undergo head movement to N, where reduplication is applied. Concerning object shift, we posit that the object moves to Spec,NP. This gives rise to the correct word order. (10) provides the derivation for the noun phrase in (9b).⁵

(10) Tree structure for the subject in (9b)



An anonymous reviewer asks why (10) does not refer to an individual, whereas (5) does if they have similar-looking structures. Here, we note that the following examples in English are subject to the same kind of inquiry:

(11) a. John's reading of a book

(non-individual-denoting)

b. the reader of a book

(individual-denoting)

⁵The movement of the subject DP (*Kofi* in this case) will be motivated in sections 3 and 4.

While pursuing this type of question is not the main concern of this work, we assume that the distinction may be attributed to the different types of Ns that participate in the derivation. N in (5) is semantically individual-denoting, whereas N in (10) is semantically non-individual-denoting. In order to account for the appropriate intuition, N needs to be co-indexed with the individual-denoting -l\u00e1\u00e4 when it is introduced in the derivation. Previous analyses have put forward various ways of handling the co-indexation of N and an argument (see Alexiadou & Sch\u00e4fer 2010, F\u00e4bregas 2012, Roy & Soare 2013). For present purposes, we simply note that the co-indexation of N and -l\u00e1 is possible and that it gives rise to the appropriate semantics.

Agent nominalization requires an additional component to the general derivation of nominalization in Ewe. This component is the agentive suffix $-l\acute{a}$, as shown in (12).

(12) sankú-∳o**-lá** keyboard-play-LA 'a keyboard player/pianist'

Unlike the English suffix -er, Ewe $-l\acute{a}$ does not have an instrumental use since the form $-n\acute{u}$ expresses instruments. In (13), the Ewe counterpart for a can opener, which has an instrumental use, involves $-n\acute{u}$ instead of $-l\acute{a}$ ($gan\acute{u}goe-vu-n\acute{u}$ 'a can opener'). An anonymous reviewer mentions the English joke according to which a cat would refer to its owner as a can opener. While we agree with this intuition, we label such an interpretation under ordinary circumstances as semantically infelicitous, as shown in (13c). The same holds for (14c). The Ewe counterpart for a dishwasher (instrument) involves $-n\acute{u}$ instead of $-l\acute{a}$ ($agba-kl\acute{b}-n\acute{u}$ 'a dishwasher').

- (13) a. a can open-er (instrumental)
 - b. ganúgoe-vu**-nú** can-open-thing 'a can opener' (instrument for opening cans)

⁶See section 5 for empirical evidence suggesting that $-l\acute{a}$ is an argument.

⁷In section 7, we discuss cases where $-l\acute{a}$ is realized with non-agentive verbs.

c. #ganúgoe-vu**-lá** can-open-LA Intended: 'a can opener' (instrument for opening cans)

- (14) a. a dishwash-er (instrumental)
 - b. agba-kló-nú
 dish-wash-thing
 'a dishwasher' (instrument for washing dishes)
 - c. #agba-klá-**lá**dish-wash-LA
 Intended: 'a dishwasher' (instrument for washing dishes)

Inside agentive nominals, transitive and intransitive verbs pattern quite differently with respect to reduplication. Transitive verbs, unlike intransitive verbs, do not allow reduplication. The contrast between (15a) and (15b) illustrates this point.⁸

- (15) a. [**Dzo-dzo**-lá-5] nó gbo le me. jump-jump-LA-PL JUS.PL breathe PREP in 'The jumpers should take a rest.'
 - b. *Kofí vá zu [vu-**ku-ku**-lá]. Kofí come become car-drive-drive-LA Intended: 'Kofi became a driver (of a car).'

Instead of reduplication, object shift applies to transitive verbs undergoing agent nominalization, as shown in (16a). Note that ma- can be realized with $-l\acute{a}$, as in (16b):

- (16) a. **E**v**u-ku-lá** wo-nyɔ. car-drive-LA 3SG-be 'He is a driver (of a car).'
 - b. Euu-ku-lá-ó kplí u**u-ma-ku-lá-**ó síáá wó-ŋlɔ̃ dodokpó-ó. car-drive-LA-PL and car-NEG-drive-LA-PL both 3PL-write exam-DEF 'Both drivers and non-drivers took the exam.'

⁸It seems to be the case that a transitive verb stem can only reduplicate when it is not followed by another morpheme. A similar observation is made in progressive constructions involving transitive verbs, where the occurrence of the progressive morpheme blocks reduplication. We leave this issue for further research.

In sections 3 and 4, we examine whether *ma*- qualifies as sentential negation. In doing so, we address whether negation inside Ewe agentive nominals is associated with NegP.

Before moving on, it is worth mentioning that agentive nominals containing Neg (ma-) are not headless reduced relative clauses. To begin with, Ewe relative clauses are postnominal. The relative pronoun in Tongugbe is spelled out as $y\varepsilon$, as shown in (17).

(17) deví [yɛ me-kpɔ](*-lá) child REL 1SG-see-LA 'the child that I saw'

(17) shows that the suffix $-l\acute{a}$ observed in agentive nominals is not a part of Ewe (Tongugbe) relative clauses. Note also that the relative pronoun $y_{\mathcal{E}}$ is not realized in agentive nominals.

Moreover, the Ewe counterparts to English headless relative clauses are headed by nu 'thing' or ame 'person,' which is followed by the relative pronoun y_{ε} , as illustrated in (18). Agentive nominals do not exhibit this property.

- (18) a. Me-kp5 **nu** yε Kofi dzrá. 1SG-see thing REL Kofi sell 'I saw what Kofi sold.'
 - b. Me-nyá ame yε Adzo l5.
 1SG-know person REL Adzo love
 'I know who Adzo loves.'

Additionally, TP adjuncts such as *ets*⁵ 'yesterday' can be realized in relative clauses, but not in agentive nominals (see also section 6). (19) illustrates this point.

- (19) a. Kofi wə də **ets**ə. Kofi do-HAB work yesterday 'Kofi worked yesterday.'
 - b. *do-ma-wo-la-etso
 work-NEG-do-LA-yesterday
 Intended: 'the person who did not work yesterday'

c. ame ye me-wo do **ets**o o person REL NEG-do work yesterday NEG 'the person who did not work yesterday'

Based on (17)–(19), we maintain our claim that relative clauses and agentive nominals in Ewe are distinct from each other. This paper focuses mainly on the latter.

3 Scope ambiguity

In order to show that Baker & Vinokurova's (2009) claim is not entirely correct, it is crucial to ascertain that ma- is associated with sentential negation. If ma- is associated with nonsentential negation as is the case for in-, un-, and non- in English, our evidence would not pose a challenge to their generalization. This is because non-sentential negation can arguably be realized in the absence of NegP. In (20), for instance, the realization of in- and un- is not sensitive to the realization of the sentential negation not in English. In other words, in- and un- are independently motivated.

- (20) a. John is (**not**) **in**different.
 - b. John is (**not**) **un**comfortable.

For our argument to go through, we must verify the status of *ma*- using diagnostics that can distinguish the two types of negation. Here, we test scope ambiguity using a quantifier and negation in the same context. Sentential negation induces scope ambiguity, whereas non-sentential

- (i) a. a non-runner (N), a non-teacher (N), a non-issue (N)
 - b. *non-run (V), *non-teach (V)

This suggests that *non*- is realized only after the noun category is derived. Hence, *non*- does not participate in agent nominalization. For this reason, English *non*- does not pose a challenge to Baker & Vinokurova's (2009) claim.

⁹English *non*- does not behave like Ewe ma-. Unlike ma-, non- merges with nouns, but not with verbs:

negation does not. (21), which displays sentential negation, shows that the universal quantifier (\forall) can be interpreted either below or above negation (\neg) , whereas (22), which displays non-sentential negation, shows that the universal quantifier must take scope over negation.

(21) Everyone's not having gone to the party surprised me.

a. No one went to the party
$$(\forall > \neg)$$

b. It is not the case that everyone went to the party
$$(\neg > \forall)$$

(22) Everyone's ineligibility surprised me.

a. No one is eligible
$$(\forall > \neg)$$

b. *It is not the case that everyone is eligible
$$(*\neg > \forall)$$

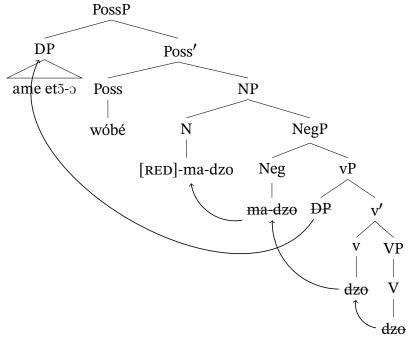
If ma- induces sentential negation, scope ambiguity would be available, as in (21). If ma- induces non-sentential negation, scope ambiguity would not be available, as in (22). (23) and (24) show that scope ambiguity is possible with ma- in the presence of a numeral quantifier. There are two possible readings for (23): (i) 'no one among the three people jumped' ($3 > \neg$) and (ii) 'not all three people jumped' ($\gamma > 3$). Likewise, (24) is ambiguous between the following readings: (i) 'no one among the three children crawled' ($3 > \neg$) and (ii) 'not all three children crawled' ($\gamma > 3$). Both examples suggest that ma- is associated with sentential negation.

- [Ame etɔ̃-ɔ wóbé ma-dzo-ma-dzo] wɔ nuku nũ. person three-DEF POSS.PL NEG-jump-NEG-jump make surprise for.1sG 'The three people's not jumping surprised me.' $(3 > \neg, \neg > 3)$
- [Đevi wóame **et** $\tilde{5}$ - $\tilde{5}$ wóbé **ma**-tá-**ma**-tá] wo nuku nũ. child CLF three-DEF POSS.PL NEG-crawl-NEG-crawl make surprise for.1SG 'The three children's not crawling surprised me.' $(3 > \neg, \neg > 3)$

¹⁰The universal quantifier *amesíame* 'everyone' in Ewe does not induce scope ambiguity. Negation can take scope over *amesíame* ($\neg > \forall$), but not vice versa. *Ameléké* 'no one' (NPI) is used instead to indicate the other scope reading ($\forall > \neg$). For present purposes, we abstract away from using *amesíame* in testing scope interpretations. In section 4, where we deal with NPI licensing, however, the distinction between the two will be useful.

The derivation for the subject in (23) is provided in (25). First, reduplication (RED) targets maand the verb dzo 'to jump' after V-to-N movement. This is spelled out as ma-dzo-ma-dzo 'not
jumping.' Second, the subject externally merged in Spec,vP moves to Spec,PossP (Possessor
Phrase), which is structurally higher than NegP. This induces scope ambiguity since the higher
copy is interpreted above Neg (3 > \neg), and the lower copy is interpreted below Neg (\neg > 3).

(25) Tree structure for (23)



Now we are in a position to address the issue as to whether ma- inside agentive nominals behaves like sentential negation. (26) provides empirical evidence that ma- projects NegP in the presence of the agentive suffix $-l\dot{a}$. Crucially, negation takes scope over the numeral quantifier in all three examples provided in (26). This is expected if ma- induces sentential negation. Note that this is not possible with non-sentential negation, as shown in (22).

¹¹It is not clear whether the numeral quantifiers in (26) take scope over negation since using a universal quantifier is often more natural when inducing this particular scope interpretation due to pragmatic reasons (e.g., scalar implicature). Here, we set this issue aside. What is important, however, is that negation freely takes wide scope, which is a defining property of sentential negation.

- (26) a. Agbalẽ-**eve-ma**-ŋlɔ̃-lá-ɔ́ le gíyɛ. book-two-NEG-write-LA-PL be here 'Those who did not write two books (but only one) are here.' $(\neg > 2)$
 - b. Euu-eve-ma- ϕ le-lá-5 dzó. car-two-NEG-buy-LA-PL leave 'Those who did not buy two cars (but only one) left.' ($\neg > 2$)
 - c. Edɔ-etɔ̃-ma-wɔ-lá-ɔ́ kpe ta. work-three-NEG-do-LA-PL meet head 'Those who are not doing three tasks (but only one or two) have met.' $(\neg > 3)$

The empirical picture presented in this section shows that ma- is associated with sentential negation even in cases where it is realized inside agentive nominals. This, in turn, suggests that Baker & Vinokurova's analysis does not hold for Ewe (Tongugbe). In the following section, we provide additional evidence highlighting the status of ma-.

4 NPI licensing

The syntactic status of ma- can be further verified using NPI licensing. Note that NPI licensing is possible with sentential negation. The English NPI any can be licensed by not, as in (27a), but not by un-, as indicated in (27b). 12

- (27) a. John is not happy about any of the offers. (NPI licensing)
 - b. *John is unhappy about any of the offers. (*X NPI licensing)

Collins et al. (2018) argue that NPI licensing is possible in Ewe clausal syntax. (28) and (29) show that NPI licensing takes place in the presence of sentential negation in plain sentences: the NPIs *nanéké* 'nothing (NPI)' in (28a) and *aléké* 'no (NPI)' in (29a) are licensed by negation. According to Collins et al. (2018), these NPIs, referred to as *ké*-NPIs, obligatorily require negation. In the absence of negation, the non-NPI counterparts *nusíanu* 'everything' and *kátã* 'all'

¹²We would like to thank an anonymous reviewer for providing the examples in (27).

have to be used instead, as shown in (28b) and (29b).

(28) a. Kofi **mé**-nyá **nanéké**-ɔ. Kofi NEG-know nothing.NPI-NEG 'Kofi doesn't know anything.'

(✓ NPI licensing)

Kofi nyá nusíanu(/*nanéké).
 Kofi know everything(/*nothing.NPI)
 'Kofi knows everything.'

(X NPI licensing)

(29) a. Kofi **mé**-wə də **aléké** ə. Kofi NEG-do work no.NPI NEG 'Kofi didn't do any work.'

(✓ NPI licensing)

b. Kofi wo do wó kátã(/*aléké)Kofi did work 3PL all(/*no.NPI).'Kofi did all the work.'

(X NPI licensing)

Note that the NPI *nanéké* 'nothing (NPI)' is licensed even when it is the subject of a sentence as shown in (30).

(30) **Nanéké**(/*nusíanu) **mé**-le **o**. nothing.NPI(/*everything) NEG-exist NEG 'There isn't anything.'

(✓ NPI licensing)

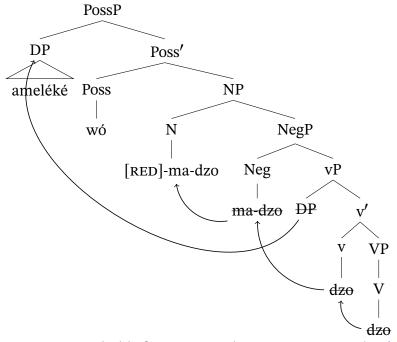
Examining whether NPI licensing is possible inside a nominal is crucial for our analysis. (31a) shows that *ma*- licenses *ameléké* 'no one (NPI).' (31b) shows that the non-NPI *amesíame* 'everyone' has to be realized in the absence of *ma*-. *Ameléké* 'no one (NPI)' is not possible here.

- (31) a. [Ameléké wó ma-dzo-ma-dzo] wo nuku nű. nobody.NPI POSS.SG NEG-jump-NEG-jump make surprise for.1SG 'No one's jumping surprised me.' (✓ NPI licensing)
 - b. [Amesíame(/*ameléké) wó dzó-dzó] wo nuku nũ.
 everyone(/*nobody.NPI) POSS.SG jump-jump make surprise for.1SG
 'Everyone's jumping surprised me.' (*X NPI licensing)

The derivation for the subject in (31a) is given in (32). Aside from head movement, (32) shows that Neg c-commands *ameléké* 'no one (NPI)' in Spec,vP before it moves to Spec,PossP. Under

this analysis, NPI licensing is possible because *ma*- projects NegP. In the absence of NegP, NPI licensing is not permitted. Hence, *ma*- induces sentential negation which is consistent with our findings from section 3.

(32) Tree structure for the subject in (31a)



The same pattern holds for NPIs inside agentive nominals. (33) illustrates this point. In the presence of the agentive suffix $-l\dot{a}$, the NPIs, $nan\dot{e}k\dot{e}$ 'nothing (NPI)' in (33a) and (33b) as well as $al\dot{e}k\dot{e}$ 'no (NPI)' in (33c), are licensed by ma-.¹³

¹³The examples in (33) are not relative clauses. Recall the empirical facts covered in section 2. The agentive morpheme - $l\dot{a}$ has to be realized in agentive nominals, whereas the relative pronoun $y_ε$ has to be realized in relative clauses. The relative clause counterparts to (33a)–(33c) are given in (i)–(iii).

⁽i) [Ame yε-ɔ mé-dzrá nanéké-ɔ] wó-le gámá. person REL-PL NEG-sell nothing-NEG PL-be there 'Those who did not sell anything are there.'

⁽ii) [Ame yε-ɔ mé-ŋlɔ̃ nanéké-ɔ] wó-le gámá. person REL-PL NEG-write nothing-NEG PL-be there 'Those who did not write anything are there.'

- (33) a. [Nanéké-ma-dzra-lá-5] le gámá.
 nothing-NEG-sell-LA-PL be there
 'Those who did not sell anything are there.' (✓ NPI licensing)
 - b. [Nanéké-ma-ŋlɔ̃-lá-ɔ] le gámá.
 nothing-NEG-write-LA-PL be there

 'Those who did not write anything are there.' (✓ NPI licensing)
 - c. [Dɔ**-aléké-ma**-wɔ-lá-ɔ] le a∳eme. work-no-NEG-do-LA-PL be home 'The unemployed are home.' (✓ NPI licensing)

The empirical facts mentioned so far suggest that *ma*- exhibits properties of sentential negation, which is a conclusion that is in harmony with the observation that negation in Ewe is necessarily clausal (Agbedor 1994). In this regard, Ewe agentive nominals pose a challenge to Baker & Vinokurova's proposal. Our findings suggest agentive nominals can embed NegP, which makes them more verbal-like than what has been previously reported in the literature.

5 Putting the pieces together

Evidence from (i) scope (see section 3) and (ii) NPI licensing (see section 4) suggest that ma- is associated with NegP (see also Agbedor 1994, Collins et al. 2018). We have also seen that agent nominalization derived via - $l\acute{a}$ can be realized with ma-. Taken together, we argue that Ewe (Tongugbe) allows NegP inside agent nominalization, contra Baker & Vinokurova.

We also depart from Baker & Vinokurova with respect to where $-l\acute{a}$ originates in the syntax. Baker & Vinokurova assume that the English agentive morpheme -er is realized in N, as shown in (1). The same kind of analysis cannot be applied to Ewe (Tongugbe) $-l\acute{a}$, especially when

Related to this point, temporal adverbs can be realized inside relative clauses but not inside agentive nominals (see sections 2 and 6).

⁽iii) [Ame yε-ɔ mé-wɔ dɔ áléké-ɔ] wó-le aφeme. person REL-PL NEG-do work no-NEG PL-be home 'Those who did not do any work are home.'

the reflexive and reciprocal binding facts are taken into consideration. In (34a), $-l\dot{a}$ is realized together with the reflexive $doko\acute{e}$ 'self'. In (34b), $-l\acute{a}$ is realized together with the reciprocal $w\acute{o}n\partial\epsilon\partial$ 'each other'. An antecedent needs to be represented as a syntactic argument so that it can bind these anaphors. We argue that the agentive morpheme $-l\acute{a}$ in (34) is the antecedent and that it is introduced in Spec,vP as an external argument. As we will soon see, evidence from reduplication in (35a) suggests that $-l\acute{a}$ cannot be realized in N which is in accordance with our view.

- (34) a. [**Đokoé**-dzí-du**-lá**] Kofi nyó. self-top-win-LA Kofi be 'Kofi is a disciplined person.'
 - b. Kofi kplí Adzo wó-vá zu [wónɔɛɔ-de-lá-ɔ́]. Kofi and Adzo 3PL-come be each.other-marry-LA-PL 'Kofi and Adzo become a married couple.'

The tree structures for the negated agentive nominals in (35a) and (35b) are provided in (36) and (37), respectively. Ma- participates in V-to-N movement as Neg. This correctly predicts that the reduplication feature [RED] on N targets ma- since ma- forms a complex head with [RED]. The agentive suffix $-l\dot{a}$ is base-generated in Spec,vP and thus does not participate in V-to-N movement. This correctly predicts that the reduplication feature [RED] on N does not target $-l\dot{a}$ as it is not a part of the complex head. (35b), unlike (35a), does not involve reduplication since the verb is transitive. Instead, (35b) showcases object shift: the object $agbal\tilde{e}$ 'a book' moves to the initial position of the noun phrase.

(35) a. [Ma-dzo-ma-dzo-lá-5] sɔgbɔ.

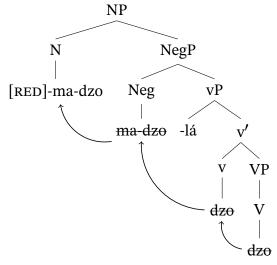
NEG-jump-NEG-jump-LA-PL many
'The non-jumpers are many.'

¹⁴In our analysis, vP is compatible with VoiceP (Kratzer 1996).

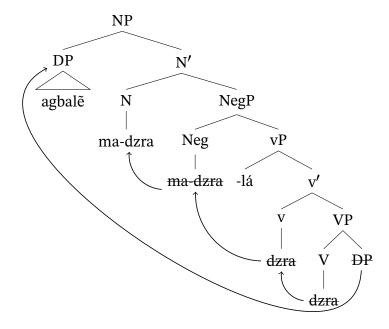
 $^{^{15}}$ An anonymous reviewer asks whether ma- can be analyzed as an adjunct instead of a head. This seems unlikely since typical adjuncts such as adverbs do not undergo reduplication.

b. [**Agbalẽ-ma-dzrá-lá**-á] səgbə. book-NEG-sell-LA-PL many 'The non-sellers of books are many.'

(36) Tree structure for (35a)



(37) Tree structure for (35b)



The structural position of NegP in (36) and (37) accounts for the scope facts and the NPI licensing facts in (26) and (33). One implication here is that agentive nominals can be more extensive

in size than just a bare VP.

6 Temporal adverbs and aspectual marking

We have seen that NegP can be projected above vP in Ewe agentive nominals. This section ex-

amines whether these agentive nominals can host a functional projection other than NegP. We

focus on whether or not temporal adverbs and tense-associated aspectual marking can be re-

alized inside -lá-bearing nominals. This will demonstrate whether TP can participate in agent

nominalization. Note that tense marking is not a prominent feature of Ewe, as Ewe is consid-

ered to be an aspect-heavy language, which draws on aspectual morphemes in encoding events

(see Ameka 2008, Essegbey 2008). For this reason, temporal adverbs such as etso 'yesterday, to-

morrow' are often used to indicate particular points in time, as illustrated in (38).

(38) a. Kofí du molu **ets**o.

Kofí eat rice yesterday

'Kofí ate rice yesterday.'

b. Kofí la du molu etso.

Kofí POT eat rice tomorrow

'Kofí will eat rice tomorrow.'

Temporal adverbs, along with other tense-associated markers, cannot be embedded inside agen-

tive nominals. (39), which hosts etso 'yesterday, tomorrow,' illustrates this point.

(39) a. ***ets**o-do-wo-**lá**

yesterday-work-do-LA

Intended: 'someone who worked yesterday'

b. *etso-do-la-wo-lá

tomorrow-work-POT-do-LA

Intended: 'someone who will work tomorrow'

The same can be said about agentive nominals hosting ma-, as in (40).

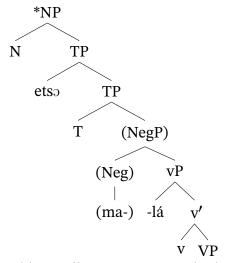
21

(40) a. *ets\(\)-d\(\)-ma-w\(\)-l\(\) yesterday-work-NEG-do-LA Intended: 'someone who did not work yesterday'

b. *etso-do-ma-la-wo-lá tomorrow-work-NEG-POT-do-LA Intended: 'someone who will not work tomorrow'

The illicit structure provided in (41) is based on the ill-formed noun phrases provided in (39) and (40). The unavailability of a temporal adverb inside a -lá-bearing NP suggests that TPs cannot participate in agent nominalization. Based on this assumption, we conclude that Ewe (Tongugbe) agentive nominals do not contain TPs.

(41) The unavailability of TP inside agentive nominals



Additionally, we examine whether tense-associated aspectual marking is possible inside Ewe agentive nominals. The examples in (42) and (43) show that the prospective aspectual morpheme (-)ge, which encodes future tense, is possible in simple sentences but not in agentive nominals.

(42) a. Kofi le dzo-dzo **ge**. Kofi be jump-jump PROSP 'Kofi will jump.' b. *dzo**-ge**-lá

jump-PROSP-LA

Intended: 'the person who will jump'

c. *ma-dzo**-ge**-lá

NEG-jump-PROSP-LA

Intended: 'someone who will not jump'

(43) a. Ama le agbalẽ dzra **gé**.

Ama be book sell PROSP

'Ama will sell a book.'

b. *agbalē-dzra-ge-lá

book-sell-PROSP-LA

Intended: 'someone who will sell books'

c. *agbalē-ma-dzra**-ge**-lá

book-NEG-sell-PROSP-LA

Intended: 'someone who will not sell books'

Our findings from temporal adverbs and tense-associated marking suggest that Ewe agentive nominals do not bear TPs or AspPs. An anonymous reviewer wonders what kind of cross-linguistic implications can be established based on these facts. Here, we wish to remain rather conservative about what our findings suggest. We note in passing, however, that English, French, and Romanian agentive nominals have been reported to include Asp(ect)P in their structure (see Alexiadou & Schäfer 2010, Roy & Soare 2013, 2014, 2020, Soare & Roy 2022). This, in many ways, relates to what we mentioned at the outset of this work: agentive nominals can be more articulated in structure than what has been assumed in the previous literature. Future research remains to be done on what additional conclusions can be drawn.

7 Non-agentive interpretations

In the preceding sections, we have dealt with $-l\acute{a}$ -bearing NPs that are agentive. In this section, we discuss some issues regarding the *agentivity* of $-l\acute{a}$. In some cases, $-l\acute{a}$ can be associated with verbs that do not require an agent but rather an experiencer. In (44), the verb se 'to hear' assigns

an experiencer theta-role to -lá.16

(44) nya-se-lá word-hear-LA '(unintentional) hearer'

This state of affairs shows that, like lexical subjects, $-l\acute{a}$ can be assigned different theta-roles depending on the nature of its predicate. While our discussion is mostly restricted to $-l\acute{a}$ that induces an agentive reading, we wish to emphasize that the non-agentive use of $-l\acute{a}$ has structural consequences, especially when we consider nominalization involving unaccusatives. The reduplication pattern observed in (35a) for unergative nominalization is obtained in (45), which hosts unaccusative verbs.

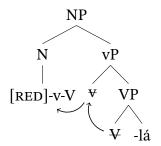
- (45) a. Kofi ne yi kodzí kaba-e anyené mé-vá zu **ku-ku-lá** 5. Kofi 3SG go hospital early-TOP SUBJ NEG-come be die-die-LA NEG 'Had Kofi gone to the hospital earlier, he wouldn't have (been a 'dier') died.'
 - b. Ati-ɛ wó ŋe-ŋe ná bé Kofi vá zu **ge-ge-lá**. stick-DEF POSS.SG break-break give COMP Kofi come be fall-fall-LA 'The fact that the stick broke is the reason Kofi (became a faller) fell.'

We posit that the externally merged position of $-l\acute{a}$ in these nominals differ from the externally merged position of $-l\acute{a}$ in agentive nominals. While $-l\acute{a}$ is base-generated in Spec,vP in nominals derived from unergative and transitive predicates, $-l\acute{a}$ associated with unaccusative predicates is base-generated in the complement position of the predicate, following standard assumptions. This is well in line with the claim that $-l\acute{a}$ is a syntactic argument rather than a simple head (i.e., N) in syntax. (46) illustrates this point.

¹⁶The verb *se* can be used to mean 'to hear (unintentionally).' Hence, *se* can be used with a non-agentive subject, as shown below.

⁽i) Kofi se flui bé Ama kplí Adzo wó-le nu Φ õ. Kofi hear unintentionally COMP Ama and Adzo PL-be mouth strike.PROG 'Kofi overheard Ama and Adzo talking.'

(46) Tree structure for -lá-bearing nominals derived from unaccusative verbs in (45)



 $-L\acute{a}$ seems to behave just like an ordinary DP that receives its theta-role based on where it is introduced in syntax. Under this view, $-l\acute{a}$ can be agentive or non-agentive depending on the type of predicate it is realized with. Note that English -er also has an agentive and non-agentive use. This depends on the type of predicate that -er is realized with. Consider the following examples from Roy & Soare (2014):

d. dishwash**er** (instrumental)

With regard to our claim that $-l\acute{a}$ can be realized as an internal argument, an anonymous reviewer asks whether $-l\acute{a}$ can be realized as an object of a transitive verb. $-L\acute{a}$ behaves like a subject rather than an object. A similar observation has been made about English -er (see Rappaport Hovav & Levin 1992, Alexiadou & Schäfer 2010, among others). Based on the subjecthood of $-l\acute{a}$, we do not expect $-l\acute{a}$ to be realized as an object of a transitive verb. From a structural perspective, this can be captured by assuming that $-l\acute{a}$ is the closest argument to N. Note that N and $-l\acute{a}$ have to be co-indexed for the appropriate semantics to come out (see section 2). Based on Relativized Minimality (Rizzi 1990), we assume that the invention of an argument between N and $-l\acute{a}$ disturbs the structural adjacency necessary for the co-indexation. Hence, $-l\acute{a}$ cannot be realized as an object since the intervening subject would devastate the structural

relationship between N and -lá.

We reiterate that -lá inside an agentive nominal behaves like a regular lexical subject with respect to theta-role assignment. This provides theoretical support to our claim that agentive - lá is base-generated in Spec,vP following Collins 2005 (see also Fábregas 2012, Ntelitheos 2012, Roy & Soare 2013, 2014, 2020, Soare & Roy 2022 for similar analyses on agentive morphemes in Spanish, Malagasy, French, and Romanian).

8 Conclusion

In this paper, we have shown that Ewe (Tongugbe) allows NegP inside agentive nominals. Based on the scope and NPI licensing facts, we have confirmed that ma- is associated with sentential negation. Our findings pose a challenge to Baker & Vinokurova's (2009) claim that NegP cannot be realized inside agentive nominals. The implication of this work is that agentive nominals can be more verbal-like than previously assumed in the literature. In order to flesh out the precise argument structure of the verbs participating in agent nominalization, we have emphasized that -la is externally merged in Spec,vP. We note, however, that -la can be basegenerated elsewhere in the structure when the verb does not imply agentivity, similar to how regular DPs can be base-generated in different syntactic positions depending on the properties of their predicates.

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