Negative Polarity Items in Ewe

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Abstract: This paper investigates negation and negative polarity items (NPIs) in Ewe. First, we analyze Ewe ke-NPIs in terms of NEG raising. Second, we show that three parameters of variation distinguish English NPIs from Ewe NPIs. Third, we give an analysis of bipartite negation in Ewe that builds on our NEG raising analysis of Ewe NPIs. Fourth, we give a brief survey of non-ke-NPIs, and discuss how they fit into the analysis.

Keywords: Ewe, bipartite negation, negative polarity items, weak and strong NPIs, events.

1. Introduction

A *negative polarity item* (NPI) is commonly taken to be an expression that only appears in certain contexts, prototypically those that are negative. For example, *any* and by extension, phrases constructed with *any*, such as *anybody,* are English NPIs. That is, they cannot occur in positive declarative clauses such as (1a), but can appear in ~~a~~ negative ones such as (1b):

(1) a. *Kofi saw anybody.
b. Kofi didn't see anybody.

The goal of this paper is to investigate Ewe negation and negative polarity. Consider the Ewe sentences (2) which correspond to the English sentences (1):

(2) a. *Kofí kpɔ́ ame-áɖéké
Kofi see person-any
b. Kofí mé-kpɔ́ ame-áɖéké o
Kofi NEG_1-see person-any NEG_2
"Kofi didn't see anybody."

One difference between English and Ewe is that Ewe has so-called *bipartite negation.* That is, in a wide range of cases negation is expressed with two particles: *me* which precedes the verb (henceforth, NEG_1), and *o* which follows the VP (henceforth, NEG_2). For a general survey of bipartite negation see Bell (2004). Bipartite negation will be analyzed in sections 2 and 11.

Setting aside the issue of bipartite negation for now, (2a) shows that *ame-aɖeke* "any person" cannot appear in a positive declarative clause, in the same way that *anybody* cannot appear in a positive declarative clause. For this reason, we assume that *ame-aɖeke* is an NPI in Ewe, just like *anybody* is an NPI in English. Henceforth, we refer to expressions formed with *aɖeke* "any" as *ke-NPIs*. However, as shown in what follows, there are significant differences between the syntax of ke-NPIs in Ewe and any-NPIs in English. We will show how these differences can be understood within the framework of Collins and Postal 2014 (henceforth, CP2014).

To situate Ewe, it is the westernmost language of Gbe, a subgroup of the Kwa language family. The Gbe languages are spoken in Ghana, Togo, Benin and some parts of Nigeria. In Ghana, Ewe is used as a medium of instruction and is a subject of study from primary school to higher education.

The data for this research was elicited from the third author, who is a native speaker of the Wedome (Ʊedome) variety of Ewe. The Wedome variety is spoken mainly in Ho, which is in the center of the Volta Region of Ghana. The third author also speaks and understands other varieties of Ewe such as Anlo and Tongu, which are spoken mainly in Southern Volta, and Mina/Gengbe spoken in Togo. Based on the sociolinguistic background of the third author, the majority of the data are based on standard/unified Ewe, with some influence from Wedome.

The paper is structured as follows. In section 2, we give an overview of the basic facts about Ewe negation. In section 3, we present present the basic framework of CP2014. In section 4, we give a NEG raising analysis of ke-NPIs. In sections 5-8, we discuss various properties of ke-NPIs and show how those properties follow from the analysis given in section 4. Sections 9-11 discuss Ewe bipartite negation. Section 12 discusses three non-ke-NPIs. Section 13 is the conclusion.

2. Bipartite Negation: Basic Facts

Before discussing NPIs and their analysis, we give an overview of the basic facts of Ewe negation in order to help the reader parse the relevant sentences which follow. As shown in (3), both NEG_1 and NEG_2 are necessary in bipartite negation:

(3) a. Kofí mé- ɖu nú o
Kofi NEG_1- eat thing NEG_2
"Kofi didn't eat."

b. *Kofí ɖu nú o
Kofi eat thing NEG_2

c. *Kofí mé- ɖu nú
Kofi NEG_1- eat thing

NEG_2 immediately follows the verb phrase. In the following example, NEG_2 must follow the direct object. (4c) shows that NEG_2 cannot be appear twice (this option will be omitted in the rest of the examples):

(4) a. Kofí mé-kpɔ́ nye *f*é agbalɛ̃́ o
Kofi NEG_1-see 1SG POSS book NEG_2
"Kofi didn't see my book."

b. *Kofí mé-kpɔ́ o nye *f*é agbalɛ̃́
Kofi NEG_1-see NEG_2 1SG POSS book

c. *Kofí mé-kpɔ́ o nye *f*é agbalɛ̃́ o
Kofi NEG_1-see NEG_2 1SG POSS book NEG_2

The following examples show that NEG_2 needs to follow various kinds of VP-internal PPs (see also Aboh 2010: 122-123):

(5) a. nye-mé-*ʃ*o nu kplé Kofí o
1SG-NEG$_1$-hit mouth with Kofi NEG$_2$
"I didn't speak with Kofi."

b. *nye-mé-*ʃ*o nu o kplé Kofí
1SG-NEG$_1$-hit mouth NEG$_2$ with Kofi

(6) a. wó-mé-le tá-me bu-ḿ tsó ga ŋú o
3PL-NEG$_1$-COP head-inside think-PROG from money about NEG$_2$
"They are not thinking about money."

b. *wó-mé-le tá-me bu-ḿ o tsó ga ŋú
3PL-NEG$_1$-COP head-inside think-PROG NEG$_2$ from money about

VP adjuncts must also appear to the left of NEG$_2$.

(7) a. nye-mé-dzi ha le azã́ɖu*ʃ*é o
1SG-NEG$_1$-sing song at party NEG$_2$
"I didn't sing at the party."

b. *nye-mé-dzi ha o le azã́ɖu*ʃ*é
1SG-NEG$_1$-sing song NEG$_2$ at party

(8) a. nye-mé-dzó háfí Kofí dzó o
1SG-NEG$_1$-leave before Kofi leave NEG$_2$
"I didn't leave before Kofi left."

b. *nye-mé-dzó o háfí Kofí dzó
1SG-NEG$_1$-leave NEG$_2$ before Kofi leave

The facts in (4-8) suggest that NEG$_2$ is in a position following the VP.

However, there are elements of the sentence that can follow NEG$_2$, for example, question particles (Ameka 1991: 64-65):

(9) Kofí mé-ɖu nú o a
Kofi NEG$_1$-eat thing NEG$_2$ Q
"Did Kofi not eat?"

Furthermore "because"-adjuncts either precede or follow NEG$_2$ with contrasting interpretations:

(10) a. me-dzó ɖé Kofí ta
1SG-leave Prep Kofi head
"I left because of Kofi."

b. nye-mé-dzó o ɖé Kofí ta
1SG-NEG1-leave NEG2 Prep Kofi head
"I didn't leave because of Kofi."
("I stayed because I wanted to talk to him.")

c. nye-mé-dzó ɖé Kofí ta o
1SG-NEG1-leave Prep Kofi head NEG2
"I didn't leave because of Kofi."
("I left for another reason.")

Compare (10b) to (8b), where NEG_2 may only follow the adjunct. The data suggests that "before"-clauses and "because"-clause occur in different syntactic positions. Arguably, "before"-clauses are VP-internal, and hence never follow NEG_2, while"because"-clauses may either be VP-internal or VP-external.

We turn to the placement of NEG_1, which precedes the verb and also preverbal auxiliary elements, for example, the future marker:

(11) Kofí mé-á-ɖu nú o [pronounced maɖu]
Kofi NEG_1-FUT-eat thing NEG_2
"Kofi will not eat."

Furthermore, in the negative imperative, NEG_1 precedes the imperative particle *ga-*:

(12) me-ga- ɖu-i o
NEG_1-IMP- eat-3SG NEG_2
"Don't eat it!"

In summary, the following generalizations about NEG_1 and NEG_2 hold for finite clauses which manifest bipartite negation:

(13) a. NEG_2 appears immediately after the VP.
b. NEG_1 precedes the future and negative imperative markers.

While finite clauses include NEG_1 and NEG_2, gerundive phrases do not in general manifest bipartite negation. As the following examples show, gerundive phrases are formed by verbal reduplication. When the verb is negated, the negation marker plus the verb are reduplicated, yielding the sequence: NEG-V-NEG-V.

(14) a. ame-ma-bu-ma-bu mé-nyó-o
person-NEG-respect-NEG-respect NEG_1-be.good-NEG_2
"Lack of respect is not good."

b. Kofi dzó nu-ma-*ƒ*o-ma-*ƒ*o ná Áma
Kofi leave mouth-NEG-hit-NEG-hit to Ama
"Kofi left without talking to Ama."

In these examples, there is a preverbal NEG *ma-*, but no post-VP NEG in the gerundive phrase. While we cannot pursue the issue of the distribution of NPIs in gerundive phrases, the following sentence shows when an NPI is present, NEG_2 appears:

(15) Kofi dzó nu-ma-*ƒ*o-ma-*ƒ*o ná ame-áɖéké o
Kofi leave mouth-NEG-hit-NEG-hit to person-any NEG_2
"Kofi left without talking to anybody."

In some conditional constructions, there is a post-VP *o*, but no preverbal negation:

(16) Me-ɖa nú (o) nye-mé-ɖa nú o Kofí á-dzó
1SG-cook thing ?? 1SG-NEG_1-cook thing NEG_2 Kofi FUT-leave
"Whether I cook or I don't cook, Kofi will leave."

The analysis of NEG_2 given in section 9 below does not cover the first post-VP *o* in cases like (16).

3. Collins and Postal 2014

CP2014 argue that Universal Grammar defines two fundamental types of NPIs. Type 1 are illustrated in (17), and Type 2 NPIs are illustrated in (18):

(17) a. I didn't see anything.
b. Nobody saw anything.

(18) a. If you see anything, tell me.
b. Did you see anything?
c. It surprises me that he saw anything.
d. Everybody who saw anything was afraid.
e. Only Kofi saw anything.

Roughly, Type 1 NPIs require a negation somewhere in the sentence. In (17a), there is a negation following the finite auxiliary. In (17b), the negation is part of the subject quantifier DP *nobody*. Type 2 NPIs do not require any negation. For example, (18a), the NPI *anything* occurs, but there is no overt negation anywhere in the sentence.

CP2014 argues that Type 1 and Type 2 NPIs have different syntactic structures. In this, CP2014 takes a sharply distinct position from mainstream views of NPIs, where all NPIs including those in (17) and (18) are analyzed as indefinites. Therefore, in mainstream views, there is no difference between the structure of the NPIs in (17) and (18).

In the framework of CP2014, Type 1 NPIs have a structure and meaning identical to the structure and meaning of negative quantifiers, accounting for the truth conditional equivalence of pairs like the following:

(19) a. I saw nobody. $\neg\exists x[\text{person}(x) \wedge \text{see}(I, x)]$
b. I didn't see anybody. $\neg\exists x[\text{person}(x) \wedge \text{see}(I, x)]$

In particular, CP2014 analyzes both the *nobody* and *anybody* of (19) as DPs of the form [[NEG SOME] body], where NEG modifies a covert existential quantifier SOME. The differences between (19a,b) lie in the fact that in the (19a), *SOME* is realized as null, while NEG is spelled out as *no*. In (19b), NEG raises to the post-Aux position, and *SOME* is spelled out as *any* (see rule (21)).

In these terms, a more precise structure of (17a) is given in (20b):

(20) a. I didn't see anybody

b. I did NEG_1 see [[<NEG_1> SOME] body]

Raising of NEG_1

In (20b), NEG_1 originates in a position modifying *SOME* (internal to the NPI *anybody*). NEG_1 then raises to the post-Aux position, but is interpreted in its position of origin, modifying *SOME*. The angled brackets around the lower occurrence of NEG_1 in (20b) indicate a non-pronounced occurrence. The reader is referred to CP2014 (chapters 3 and 5) for further discussion.

CP2014 claim that *any* in (20a) is a suppletive form of *SOME,* determined by the rule in (21):

(21) The SOME/any Mapping

a. SOME → *any*, in the context [<NEG> __] (NEG unpronounced)

b. SOME → null, in the context [NEG __] (NEG pronounced)

c. SOME → *some*, otherwise

Type 2 NPIs are analyzed in CP2014 as double negation structures. Consider again (18a), repeated below as (22):

(22) If you see anything, tell me.

First, there is no overt NEG preceding the verb in (22), unlike the situation with Type 1 NPIs illustrated in (17a). Second, the interpretation of *anything* in (22) is equivalent to the existential quantifier *something*. CP2014 argue that the NPI *anything* in (22) has the double negation structure in (23). The effect of such a structure is that the semantics of NEG_1 cancels that of NEG_2, so that the resulting interpretation is JUST *something*.

(23) If you see [[<NEG_1> [<NEG_2> SOME]] thing], tell me.

A binary NEG structure such as (23) contains two unpronounced NEGs. According to CP2014, the NEGs in (23) are unpronounced because they are deleted. NEG deletion involves a relation between individual NEGs and other phrases, their *NEG deleters*. The relevant NEG deleters in the case of Type 2 NPIs include the following:

(24) Some NEG Deleters in Binary NEG Structures

a. The conditional complementizer *if*

b. The yes-no question complementizer (the Q morpheme)

c. verbs such as *surprise*
d. the quantifier *every*
e. the phrase [only DP]

So in (23), the conditional complementizer *if* deletes the NEG_1 of the structure [NEG_1 [NEG_2 SOME]] (while NEG_1 deletes NEG_2). Because NEG_2 is deleted, *SOME* is realized as *any* by rule (21a). See CP2014 (chapter 4) for further detail.

THE CP2014 refer to Type 1 NPIs as *unary NEG NPIs*, since only one NEG modifies SOME. Type 2 NPIs are referred to as *binary NEG NP*Is, since there are two NEGs present. The distinction between unary NEG and binary NEG NPIs corresponds to the traditional distinction drawn between strong versus weak NPIs, and strict vs. non-strict NPIs (see CP2014: section 9.4 for discussion). The analysis of Type 2 NPIs plays only a very marginal role in this paper.

4. Analysis of ke-NPIs

The following examples illustrate a range of EWE expressions that contain *aɖeke* (built the morpheme *–ke*, see (29) below for an analysis breaking down *aɖeke* morpheme by morpheme):

(25) a. Kofi mé-kpɔ́ ame-áɖéké o
Kofi NEG_1-see person-any NEG_2
"Kofi didn't see anybody."

b. Kofi mé-yi afí-áɖéké o
Kofi NEG_1-go place-any NEG_2
"Kofi didn't go anywhere."

c. Kofí mé-kpɔ́ náné-ké o
Kofi NEG_1-see something-any NEG_2
"Kofi didn't see anything." (náné-ké = nú-áɖéké) (náné = something)

d. Kofí me-kpɔ́ avú áɖéké-wó o
Kofi NEG_1-see dog any-PL NEG_2
"Kofi didn't see any dogs."

As the following examples show, when a ke-NPI is present, NEG_1 and NEG_2 are obligatory (just as when no ke-NPI is present, as shown in (3) above):

(26) a. *Kofí kpɔ́ ame-áɖéké
Kofi see person-any

b. *Kofí yi afí-áɖéké
Kofi go place-any

c. *Kofí kpɔ́ nánéké
Kofi see anythin

d. *Kofí kpɔ́ avú áɖéké-wó
Kofi see dog any-PL

Ewe does not have negative expressions like English *nobody*, *nothing* and *nowhere*, which are used without any additional negative particle (like *n't* or *not*). English sentences with such negative quantifiers are translated with ke-NPIs.

aɖeke is composed of *aɖe*, an indefinite marker (illustrated in (27)) and *-ke* (see Westerman 1930: 70, and Agbedor 1994: 57):

(27) Kofí kpɔ́ avú áɖé
Kofi see dog INDEF
"Kofi saw a certain dog."

Indefinites can be expressed in Ewe in two different ways. The form *avú áɖé* in (27) is a specific indefinite, and can be paraphrased as "a certain dog". But there is also a bare indefinite illustrated in (28). We do not investigate the difference between these two types of indefinite DPs here.

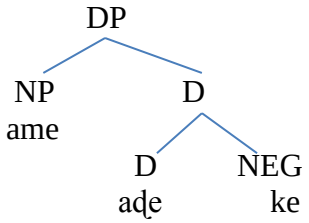
(28) a. e-kpɔ́ avú kpɔ́ a
2SG-see dog some.time Q
"Have you ever seen a dog?"

b. ɛ̃, me-kpɔ́ avú kpɔ́
yes, 1SG-see dog some.time
"Yes, I have seen a dog."

Now consider the internal structure of ke-NPIs. Agbedor (1994: 57) calls *–ke* a "negative quantifier marker" and assumes that ke-NPIs involve a "negative particle in the negative quantifier". Rongier (1988: 76) calls *–ke* a "suffixe de négation", and uses the expression "négation du nom" for ke-NPIs. He notes the relationship between *ke*-NPIs and verbal negation as well: "La négation du nom entraine celle du verbe…" ("Negation of the noun entails that of the verb…").

We assume that *–ke* is just NEG, and that *-ke* modifies *aɖe*. On these assumptions, the structure of Ewe ke-NPIs is as in (29):

(29) Structure of: *ame-áɖé-ké* "anybody"



This structure could be refined in various ways not directly relevant to the current paper. For example, the structure in (29) violates Kayne's 1994 LCA (Linear Correspondence Axiom), since NP precedes D (instead of following it). Furthermore, in Principles and Parameters/Minimalist syntax, *-aɖe* and *-ke* would head separate projections (see CP2014: 27 for discussion).

Recall from section 3 that CP2014 propose that negative quantifiers such as *nobody* and unary NEG NPIs such as *anybody* both have the underlying structure [[NEG SOME] body]. In Ewe, the parallel structure has an overt manifestation, in that both NEG *–ke* and SOME *aɖe* are realized overtly. Therefore, the Ewe structure supports the claim that UG admits the possibility of NEG modifying *SOME*.

Now consider the relation between the NEG marker *–ke* and the preverbal NEG marker mé-. Consider again (1) and (2) above, repeated below:

(30) a. Kofi didn't see anybody.

b. Kofí me-kpɔ́ ame-áɖéké o
Kofi NEG_1-see person-any NEG_2
"Kofi didn't see anybody."

As discussed in section 3, we assume that the post-Aux NEG in (30a) (that is, *-n't*) originates in a position modifying SOME internal to the NPI, but raises to the post-Aux position. We propose that (30a) and (30b) have parallel structures. Just as (30a) involves NEG raising, so does (30b). But a key difference between Ewe and English is that Ewe NEG raising in cases like (30b) leaves a copy NEG in the origin position.

(31) The *ke* in a ke-NPI is a copy of the original NEG raised from the position *ke-* occupies.

The DP internal NEG is resumptive element, arguably similar to the highlighted resumptive pronoun in English cases like: "He is the kind of guy who I wonder if *he* will ever get married." In this example, the resumptive pronoun occupies the position that in Principles and Parameters syntax would normally be occupied by a trace of the movement of the relative pronoun *who*.

Crucially, we are assuming that while a copy NEG can have a phonological shape identical to the raised element (see Bell (2004) for a discussion of this situation in Afrikaans), This need not be the case (just as in the resumptive pronoun case, the raised wh-phrase and its associated resumptive pronoun are not identical phonologically). In (30b), the preverbal NEG_1 is *mé-* and the DP internal copy is *–ke*. Even though these two elements are different phonologically, *-ke* is a copy left in the origin position by raising of NEG to the preverbal position.

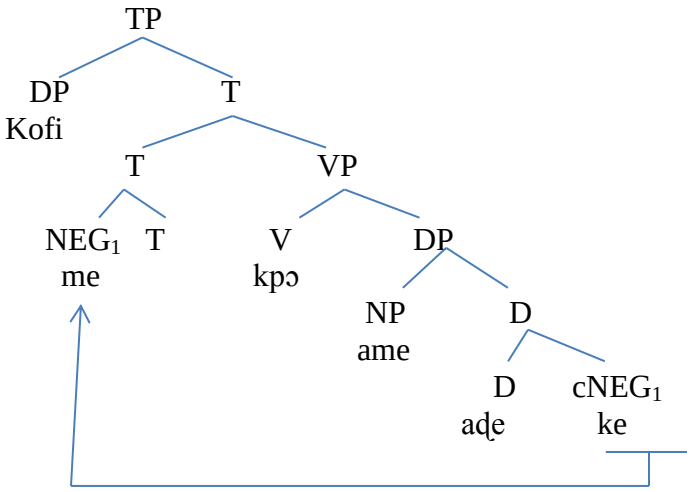
Given the assumption in (31), the analysis of (30b) is given below. The notation $cNEG_1$ means that *–ke* is a copy NEG, associated with the raising of NEG_1.

(32) Kofí mé- kpɔ́ ame - áɖé -ké o
NEG_1 see person - SOME $-cNEG_1$ NEG_2

NEG raising + copying

Leaving out the post-verbal NEG_2 for the moment, the structure of (32) is given below:

(33)



The T element in (33) can be filled by the future marker in some sentences, or left empty (in past and present tense sentences). The structure in (33) could be refined in varfious ways, but it suffices for our purposes.

Given this analysis of ke-NPIs, two parameters arguably distinguish Ewe from English. First, when NEG raises, it leaves a copy in Ewe, but not in standard English. It is important to specify standard English in this generalization, since in varieties of non-standard English NEG raising can leave a copy (see Blanchette 2015). This parameter is given below:

(34) Parameter A

Standard English:	NEG raising does not leave a copy.
Ewe:	NEG raising leaves a copy.

The second parameter is that NEG raising is optional in English, but obligatory in Ewe:

(35) Parameter B

Standard English:	NEG optionally raises from a unary NEG structure.
Ewe:	NEG obligatorily raises from a unary NEG structure.

This parameter accounts for the fact that English allows both (19a, b) while Ewe only has the analog of (19b). Example (19a) does not involve NEG raising, while (19b) does.

5. Non-Negative Contexts

In this section, we show that Ewe ke-NPIs may not appear in conditionals, in yes-no questions, in the complement of "surprise", in the restriction of universal quantifiers or in the scope of only-DPs. In this way, ke-NPIs differ from any-NPIs in English which appear in all those environments. The generalization is that ke-NPIs only appear if a preverbal-negation is present. We will show that this generalization follows from the analysis of ke-NPIs presented in section 4.

We will illustrate each context with two NPIs, *naneke* "anything", *avu-aḍeke-wo* "any dogs". The translations will illustrate that English *any*-NPIs are available in the corresponding contexts.

(36) a. *né e-kpɔ́ nánéké, gblɔ-e ná-m
if 2SG-see anything, say-3SG to-1SG
"If you see anything, tell me."

b. *né e-kpɔ́ avú áɖéké-wó, gblɔ-e ná-m
if 2SG-see dog any-PL, say-3SG to-1SG
"If you see any dogs, tell me."

If the NPI is replaced by an indefinite, the resulting examples are grammatical, as shown below:

(37) a. né e-kpɔ́ nú-áɖé, gblɔ-e ná-m (*nu-aɖe* can be fused as *náɖé*)
if 2SG-see thing-INDEF, say-3SG to-1SG
"If you see something, tell me."

b. né e-kpɔ́ avú áɖé-wó, gblɔ-e ná-m
if 2SG-see dog INDEF-PL, say-3SG to-1SG
"If you see some dogs, tell me."

The following examples show that ke-NPIs do not occur in yes-no questions:

(38) a. *e-kpɔ́ nánéké a?
2SG-see anything Q
"Did you see anything?"

b. *e-kpɔ́ avú áɖéké-wó a?
2SG dog any-PL Q
"Did you see any dogs?"

(39) a. e-kpɔ́ nú-aɖé a? (*nu-aɖe* can be fused as *naɖe*)
2SG-see thing-INDEF Q
"Did you see something?"

b. e-kpɔ́ avú áɖé-wó a?
2SG dog INDEF-PL Q
"Did you see some dogs?"

The following examples show that ke-NPIs are not licensed in the clausal complement of "surprise":

(40) a. *é-wɔ ŋku ná-m bé é-kpɔ́ nánéké
3SG-do surprise to-me that 3SG-see anything
"It surprises me that he saw anything."

b. *é-wɔ ŋku ná-m bé é-kpɔ́ avú áɖéké-wó
3SG-do surprise to-3SG that 3SG-see dog any-PL
"It surprises me that he saw any dogs."

(41) a. é-wɔ ŋku ná-m bé é-kpɔ́ nú-áɖé
3SG-do surprise to-me that 3SG-see thing-INDEF
"It surprises me that he saw something."

b. é-wɔ ŋku ná-m bé é-kpɔ́ avú áɖé-wó
3SG-do surprise to-3SG that 3SG-see dog INDEF-PL
"It surprises me that he saw some dogs."

The following examples show that ke-NPIs are not licensed in the restriction of a universal quantifier:

(42) a. *ame sía ame si kpɔ́ nánéké dó vɔvɔ̃́
everybody which see anything put fear
"Everybody who saw anything was frightened."

b. *ame sía ame si kpɔ́ avú áɖéké-wó dó vɔvɔ̃́
everybody which see dog any-PL put fear
"Everybody who saw any dogs was frightened."

(43) a. ame sía ame si kpɔ́ nú-áɖé dó vɔvɔ̃́
everybody which see thing-INDEF put fear
"Everyone who saw something was frightened. "

b. ame sía ame si kpɔ́ avú áɖé-wó dó vɔvɔ̃́
everybody which see dog INDEF-PL put fear
"Everyone who saw some dogs was frightened."

Lastly, only-DPs do not license ke-NPIs in Ewe:

(44) a. *Kofí ko-é kpɔ́ nánéké
Kofi only-FOC see anything
"Only Kofi saw anything."

b. *Kofí ko-é kpɔ́ avú áɖéké-wó
Kofi only-FOC see dog any-PL
"Only Kofi saw any dogs."

(45) a. Kofí ko-é kpɔ́ nú-áɖé
Kofi only-FOC see thing-INDEF
"Only Kofi saw something."

b. Kofí ko-é kpɔ́ avú áɖé-wó
Kofi only-FOC see dog INDEF-PL
"Only Kofi saw some dogs."

Evidence for the claim that ke-NPIs only appear if a pre-verbal negation is present is provided by the novel *Ku le Xɔme* (Akafia 1970). A search revealed 27 instances of *naneke* "anything", all of them in contexts containing a pre-verbal negation *mé-*.

These facts about ke-NPIs follow from our analysis of ke-NPIs as negative DPs. For example, consider (36a), repeated below:

(46) *né ekpɔ́ nánéké, gblɔ-e ná-m
if 2SG-see anything, say-3SG to-1SG
"If you see anything, tell me."

Under our assumption in (31) that *–ke* is a copy left by NEG raising, (46) is ungrammatical because the only way–*ke* can be introduced into the structure is as a copy of a raised NEG. But there is no raised NEG in (46). A similar explanation holds for (36)-(45).

The English translation of (46) with *anything* is grammatical because *anything* does not have to represent a unary NEG NPI. So there is no reason for it to be accompanied by a raised NEG. Rather, in the translation of (46), *anything* is a Type 2 NPI, which in the framework of CP2014 is a binary NEG NPI with the conditional complementizer *if* as the NEG deleter.

There are unary NEG NPIs in English that are not homophonous with binary NEG NPIs. As discussed by CP2014, *jackshit* has both an NPI and a non-NPI usage:

(47) a. Terry knows jackshit$_Z$ about transponders. (non-NPI usage)
b. Terry doesn't know jackshit$_A$ about transponders. (NPI usage)

We gloss the occurrence in (47a) as *jackshit*$_Z$ because it is equivalent to "zero". See Postal (2004: chapter 6). We gloss the occurrence in (47b) as *jackshit*$_A$ because it is equivalent semantically to *anything*.

The *jackshit*$_A$ usage cannot appear in non-negative contexts:

(48) *If he knows jackshit$_A$ about physics, he will be admitted.
"If he knows anything about physics, he will be admitted."

Example (48) is ruled out on the relevant interpretation, illustrating that *jackshit*$_A$ cannot occur in non-negative contexts.

A striking generalization about the environments where Ewe ke-NPIs occur is that they correspond to those environments where *jackshit*$_A$ appears in English. This parallel distribution strongly suggests that ke-NPIs and *jackshit*$_A$ should be analyzed in the same way. In the framework of CP2014, both are analyzed as unary NEG NPIs.

Another generalization apparent from the data in (36)-(45) is that Ewe lacks Type 2 NPIs in these contexts. For example, consider (37a), repeated below:

(49) né e-kpɔ́ nú-áɖé, gblɔ-e ná-m (*nu-aɖe* can be fused as *náɖé*)
if 2SG-see thing-INDEF, say-3SG to-1SG
"If you see something, tell me."

There is no Type 2 NPI in Ewe corresponding to *something* that appears in a conditional clause. Rather, Ewe simply uses the indefinite. Similarly, there is no Type 2 NPI used in yes-no questions, in the complement of "surprise", in the restriction of a universal quantifier or in the scope of an only-DP.

The simplest way to state this difference between Ewe and English is the following:

(50) Parameter C
Standard English: Allows Type 2 (binary NEG) NPIs.
Ewe: Disallows Type 2 (binary NEG) NPIs.

We return to possible grounds for revising this generalization in section 12.

6. The Remnant Raising Condition

One difference between English any-NPIs and Ewe ke-NPIs is that ke-NPIs can appear in subject position (see Agbedor 1994: 56):

(51) a. *Anybody didn't come to my house.
b. Ame-ádḛ́ké mé-vá nyĕ-a*f*é-me o
person-any NEG_1-come 1SG-house-inside NEG_2
"Nobody came to my house."

In the CP2014 framework, (51a) would have the following structure:

(52) $[_{DP}$ [<NEG_1> SOME] body$]_2$ did NEG_1 $[_{VP}$ come <DP_2> to my house]

In case like (52), NEG_1 raises to the post-Aux position, while the remnant DP_2 raises to subject position. We suggest that these cases are ungrammatical because such remnant raising is barred universally:

(53) The Remnant Raising Condition
If M = $[_{DP}$ $[_D$ <NEG_x> SOME] NP], then no occurrence of M
c-commands an occurrence of NEG_x.

In (52), the higher occurrence of DP_2 c-commands NEG_1, violating condition (53). This constraint could be thought of as a version of the well-known c-command constraint on NPIs, stated in terms of the framework of CP2014. As will be seen in section 9, the constraint in (53) also plays a role in accounting for a difference in licit fragment answers between Ewe and English.

The structure of the Ewe sentence in (51b) is given below:

(54) [ame-ádḛ́-ké$]_2$ mé- $[_{VP}$ vá <DP_2> nyĕ-a*f*é-me o]
[person-SOME-cNEG_1] NEG_1- come 1SG-house-inside NEG_2

Structure (54) does not violate (53) since instead of <NEG_1> there is a copy, cNEG_1, in DP_2. In effect, the copy NEG allows the structure to avoid a violation of (53), just as resumptive pronouns in English allow a structure to avoid a violation of island constraints.

7. Determiner Sharing

As in English, multiple NPIs can appear in a single Ewe clause:

(55) ame-áɖéké me-kpɔ́ nánéké o
person-any NEG_1-see anything NEG_2
"Nobody saw anything."

(56) a. sukúví áɖéké mé-no aha sésẽ́ áɖéké o
student any NEG_1-drink drink strong any NEG_2
"No student drank any whiskey."

b. sukúví áɖéké mé-no aha sésẽ́ áɖéké le ahadzrá*f*é áɖéké o
student any NEG_1-drink drink strong any at bar any NEG_2
"No student drank any whiskey in any bar."

If *–ke* is analyzed as NEG, then how is it that multiple ke-NPIs yield only a single semantic negation? In particular, while (56a) above has two ke-NPIs, and (56b) has three, both are interpreted as having one semantic negation. CP2014 (chapter 6) propose that in such cases there is determiner sharing. So in (56a) there is a single underlying determiner [NEG SOME] which is shared by two DPs. Determiner sharing is indicated in (58) below by co-indexation of the two quantifiers and the two NEGs. The single determiner is realized by two copies of *aɖeke*.

Since there is only one underlying syntactic determiner [NEG SOME], it follows that there is only one semantic negation. CP2014 propose that such determiner sharing is interpreted in terms of polyadic quantification, where a single quantifier quantifies over n-ary sequences. In the simplest case, where only two DPs share a D, the result is exemplified by: there is no <x,y> x a student and y a quantity of whiskey such that x drank y.

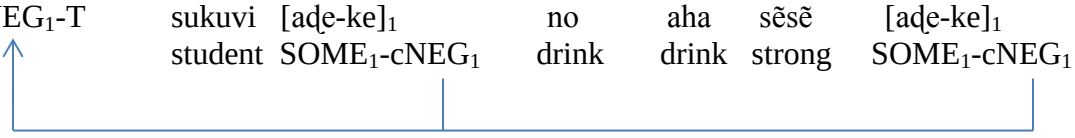
Although this article focuses on Ewe and English, it is worth mentioning that determiner sharing is the mechanism that CP2014 uses to analyze other cases of negative concord (see Blanchette, 2015 on the application of the CP2014 framework to the analysis of negative concord in non-standard English dialects).

Given this background, (55) and (56) raise the question of how NEG_1 can be related to the *–ke* of each ke-NPI. Recall that in (31) we assumed that *–ke* is always a copy of a NEG that has raised, repeated below:

(57) The *ke* in a ke-NPI is a copy of the original NEG raised from the position *ke-* occupies.

We propose that in such cases of multiple ke-NPIs the NEG_1 raises to T from the shared determiner [SOME NEG]. Since the shared determiner has two occurrences (two places in the tree), the resulting structure can be represented as follows (ignoring the VP final NEG_2 for the moment):

(58) NEG_1-T sukuvi $[aɖe\text{-}ke]_1$ no aha sẽsẽ $[aɖe\text{-}ke]_1$
student $SOME_1$-cNEG_1 drink drink strong $SOME_1$-cNEG_1



Structure (58) represents the underlying structure of (56a) before the subject raises to Spec TP (subject position). In (58), NEG_1 undergoes copy raising from the underlying shared D which has two occurrences.

Such raising recalls the phenomenon of Across-the-Board extraction: "Which plan did Bob buy and Luke sell?" In both ATB wh-movement and NEG raising in Ewe, a single syntactic object has two underlying occurrences (positions) and undergoes raising.

8. Long Distance Licensing

Ewe ke-NPIs need not occur with a *clausemate* preverbal negation. Example (59b) is a response to the assertion in (59a). Example (59c) with clausemate negation is given for comparison. The sentences in (60) provide an additional example.

(59) a. e-gblɔ bé Kofi ɖu núsíànú le dzodó*f*é
2SG-say that Kofi eat everything at kitchen
You said that Kofi ate everything in the kitchen.

b. nye-mé gblɔ bé Kofi ɖu nánéké le dzodó*f*é o
1SG- NEG_1 say that Kofi eat anything at kitchen NEG_2
"I didn't say Kofi ate anything in the kitchen."

c. me gblɔ bé Kofi mé-ɖu nánéké le dzodó*f*é o
1SG say that Kofi NEG_1-eat anything at kitchen NEG_2
"I said that Kofi did not eat anything in the kitchen."

(60) a. Dě e-gblɔ bé Kofi *f*o nɔví-a ŋútsu a?
Did you-say that Kofi hit sibling-his male Q
"Did you say that Kofi hit his brother?"

b. Ao, nye-mé-gblɔ bé Kofi *f*o ame-áɖéké o
No, 1SG- NEG_1-say that Kofi hit person-any NEG_2
"I didn't say that Kofi hit anybody."

c. me-gblɔ bé Kofi mé-*f*o ame-áɖéké o
1SG-say that Kofi NEG_1-hit person-any NEG_2
"I said that Kofi didn't hit anybody."

Since we are analyzing ke-NPIs as Type 1 NPIs, which are the unary NEG NPIs, one might expect the relation between negation and ke-NPIs to be clause bound (see CP2014: chapter on the clause boundedness of unary NEG NPIs). However, (59) shows that the ke-NPI may be separated from its preverbal NEG by a clause boundary.

We propose that such sentences involve high scope of the ke-NPI. On this analysis, the structure of (59b) would be as in (61a), and its interpretation would be as in (61b) (ignoring NEG_2 and the adjunct for simplicity):

(61) a. nye-me <[nu-aɖe-ke]$_2$> gblɔ be Kofi ɖu DP_2
1SG-NEG_1 thing-SOME-cNEG_1 say that Kofi eat anything
b. There is nothing that I said that Kofi ate.

We assume that quantificational DPs have at least two occurrences: a covert scope occurrence and a lower overt occurrence (c-commanded by the covert scope occurrence). See the discussion in CP2014 (chapter 2). In (61a), the higher occurrence of DP_2 in scope position is not

pronounced, as indicated by the angled brackets. Since NEG_1 raises to the matrix T from the scope position of DP_2, there is no clause boundary separating the ke-NPI from the raised NEG_1. The interpretation of (61a), given in (61b) is natural in the situation specified.

Cross-linguistically, unary NEG NPIs are commonly clause-bound. For example, Serbo-Croation ni-NPIs (which are in some ways similar to Ewe ke-NPIs), must in general have a clausemate negation (Progovac 1994: 41). The difference between Ewe and Serbo-Croation, on our view, is that Serbo-Croation does not allow its unary NEG NPIs to take matrix scope as in (61).

Our analysis of (59) tracks closely the analysis that CP2014 (chapter 9) gave of cases where strict NPIs seem to be separated from their associated NEG by a clause boundary, illustrated in (62):

(62) Andrew didn't claim that Carl said jackshit$_A$ about compilers.

Example (62) shows that although *jackshit$_A$* is a strict NPI, if it is stressed, it can appear with a non-clausemate negation. CP2014 propose that the DP *jackshit$_A$* in (62) has matrix scope and that NEG raising takes place from the scope occurrence of *jackshit$_A$* in the matrix clause. That analysis is entirely parallel to the one just given for the Ewe data in (59).

9. Bipartite Negation: Analysis

The goal of this section is to explain the syntactic relationship between NEG_1 and NEG_2 in cases like (63).

(63) Kofí mé-kpɔ́ ame-áɖéké o
Kofi NEG_1-see person-any NEG_2
"Kofi didn't see anybody."

First, we argue that in any clause containing both negation markers, the post-VP *o* is structurally higher than the preverbal *me-*. The argument is based on ellipsis involving Ewe NPIs. In the following examples, (64b) is an elliptical answer to the question in (64a), while (64c) is the non-elliptical form.

(64) a. ame-ka-é ne-kpɔ̂
person-which-FOC 2SG-see
"Who did you see?"

b. ame áɖéké *(o)
person any NEG_2
"Nobody"

c. nye-mé-kpɔ́ ame áɖéké o
1SG-NEG_1-see person any NEG_2
"I didn't see anybody."

In the following examples, the response phrase is an object:

(65) a. nú-ka-é ne-wɔ
thing-which-FOC 2SG-do
"What did you do?"

b. nánéké *(o)
anything NEG_2
"Nothing."

c. nye-mé-wɔ nánéké o
1SG-NEG_1-do anything NEG_2
"I didn't do anything."

In the following examples, the response phrase is a subject:

(66) a. ame-ka-é tsɔ́ nyĕ ga
person-which-FOC take 1SG money
"Who took my money?"

b. ame áɖéké *(o)
person any NEG_2
"Nobody. "

c. ame áɖéké mé- tsɔ́ wŏ ga o
person any NEG_1-take 2SG money $NEG2_2$
"Nobody took your money."

In the following examples, the response phrase is a locative:

(67) a. afĭ-ka-é ne-yi
place-which-FOC 2SG-go
"Where did you go?"

b. afĭ-áɖéké *(o)
place-any NEG_2
"Nowhere."

c. nye-mé-yi afĭ-áɖéké o
1SG-$NEG1_1$-go place-any NEG_2
"I didn't go anywhere."

In all the elliptical examples above, the presence of NEG_2 *o* is obligatory. We propose a deletion analysis of these facts. In particular, we follow the treatment of sluicing proposed in Ross (1969) and defended in Merchant (2001). Consider the following English sluicing example:

(68) John saw something. I don't know what.

According to Ross (1969) and Merchant (2001), the second clause of (68) has the following analysis:

(69) I don't know what$_1$ <[$_{TP}$ John saw t$_1$]>

In this sentence, *what* raises to the left periphery (Spec CP) and the TP is deleted (as indicated by the angled brackets). In the analysis of Merchant (2001), the deletion of the TP happens under semantic identity with the TP in the first clause in (68). See Merchant (2001) for the exact definition of semantic identity.

Transposing Ross' and Merchant's analysis to the relevant Ewe facts yields the following structure for (64b):

(70) [ame áɖéké]$_1$ <[$_{TP}$ nye-mé- kpɔ́ <DP$_1$>]> o
person any 1SG-NEG1-see NEG$_2$

In (70), the DP [ame aɖeke]$_1$ raises to the left periphery and the TP remnant is deleted. Crucially, NEG$_1$ is deleted, but NEG$_2$ is not. This supports the claim that NEG$_2$ is higher than NEG$_1$. If, on the contrary, NEG$_1$ were higher than NEG$_2$, it would be possible for NEG$_2$ to be deleted, leaving NEG$_1$. See Aboh (2010: 131) for a different argument reaching a similar conclusion about the relative height of NEG$_1$ and NEG$_2$.

An analysis of fragment answers parallel to that in (70) can also explain why an NPI cannot serve as an answer to an English wh-question:

(71) a. Who did you see?
b. *Anybody.

On the analysis of CP2014, the structure of (71b) would be the following:

(72) [[<NEG$_1$> SOME] body]$_2$ <[$_{TP}$ I NEG$_1$ saw DP$_2$]>

In this structure, NEG$_1$ raises to the post-Aux position, then remnant [[<NEG$_1$> SOME] body]$_1$ raises to the left periphery. Finally, TP is deleted. This structure violates the Remnant Raising Constraint in (53), since [[<NEG$_1$> SOME] body]$_2$ c-commands NEG$_1$.

Giannakidou (2006: 328) and Watanabe (2004: 562) take fragment answers to distinguish n-words (or negative concord items) from negative polarity items. N-words but not negative polarity items can be used as fragment answers. Consider what such a diagnostic says about Ewe, where ke-NPIs must be accompanied by NEG$_2$. In this respect, ke-NPIs are unlike n-words in other languages (such as Italian), where no such negative particle is needed in addition to the n-word itself in fragment answers.

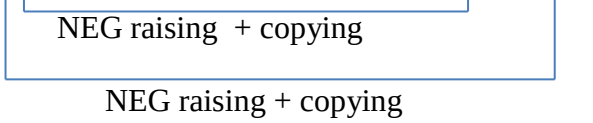
However, Ewe ke-NPIs pattern like n-words with respect to other criteria. For example, they can appear in subject position (unlike English NPIs) (see Watanabe 2004: 562). In CP2014, the distinction between NPIs and n-words can be captured as follows. Unary NEG NPIs are unary NEG structures where the NEG raises and leaves a gap. N-words are unary NEG structures where in some case the NEG raises, and when it raises it leaves a copy (instead of a gap). All differences between NPIs and n-words should follow from this distinction. We are not able to pursue the issue here.

So here are the assumptions that we are making so far about bi-partite negation in sentences like (63):

(73) a. Even though there are three occurrence of NEG (preverbal *mé*, NPI *-ke* and post-VP *o*), there is only one semantic negation.
b. *-ke* is a copy left by raising of NEG_1 to adjoin to T.
c. NEG_2 is higher in the structure than NEG_1.

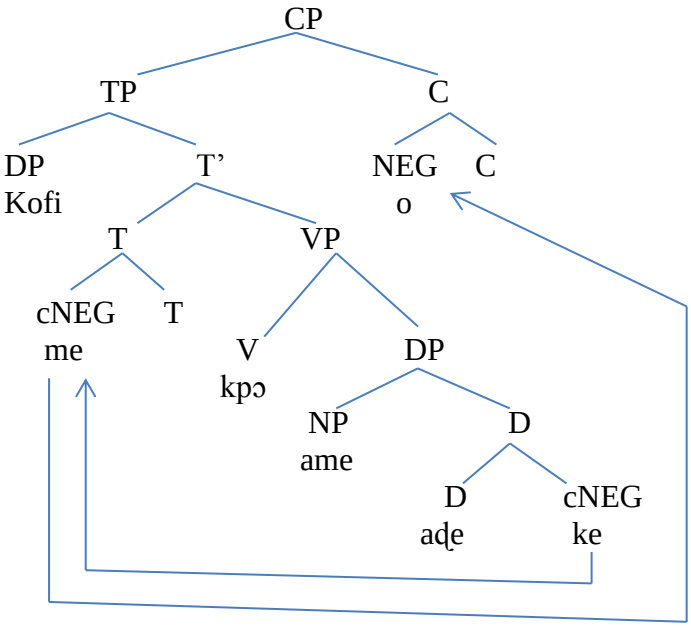
We propose that NEG_1 is also a copy, left by movement of NEG_2 to a right peripheral position in the clause. In particular, we will assume that there is a rightward complementizer position COMP and that NEG_2 raises and adjoins to this position. The analysis of (63) is sketched below:

(74) Kofí mé- kpɔ́ ame - ádé -ké o
cNEG see person - SOME –cNEG NEG



On this analysis, there is only one underlying NEG, which originates in a position where it modifies SOME. NEG RAISES to T and leaves a copy in D. Further, NEG raises again to COMP, leaving a copy in T. So NEG raises twice, leaving two copies. But the NEG is only interpreted in its underlying (SOME modification) position. This explains why there are three surface occurrences of NEG, but only one semantic negation. A tree structure illustrating this analysis is given below:

(75)



What remains to explain is the presence of bipartite negation in sentences that do not involve ke-NPIs, such as the examples in (3). Getting to that requires a detour to develop some tools.

10. Event Syntax

Consider the following simple English sentence involving no NPIs:

(76) Susan sang

This sentence can be represented in predicate logic in terms of quantification over an event (we leave out reference to time). See Davidson (1967) and Maienborn (2011) for more recent discussion:

(77) ∃e.sing(e, Susan)
"There is an event e such that e is a singing event and Susan is the singer in that event."

We adopt a syntactic version of this hypothesis, containing a covert quantifier over events binding an event variable:

(78) [<[SOME EVENT]$_1$> [Susan sang DP$_1$]]

On this view, a silent quantificational occurrence of DP$_1$ binds an occurrence of DP$_1$ which is interpreted as a variable. The noun EVENT as well as the quantifier SOME are silent. We do not take any stand on the exact location of the event variable DP$_1$. We only assume that the scope position of the quantificational DP$_1$ must c-command its variable occurrence.

On the Davidsonian view, the negative sentence (79a) would have the semantic representation in (79b).

(79) a. Susan did not sing.
b. ¬∃e.sing(e, Susan)

In other words, (79) represents negation of an existential quantification. In the framework of CP2014, negated existential quantifiers have representations like that of (80):

(80) no boy = [[NEG SOME] boy]

Here NEG is realized as *no* and SOME is covert. So (79a) would be represented with a negated existential quantifier over events, as follows:

(81) [<[$_{DP}$ [<NEG$_1$> SOME] EVENT]$_1$> [Susan NEG$_1$ sing DP$_1$]]

An issue that (81) raises is that NEG has raised to Aux from the clause initial [$_{DP}$ [<NEG> SOME] EVENT] violating (53), the Remnant Raising Condition. Given this consideration, a better representation of (80a) would be (82):

(82) [$_S$ Susan did NEG$_1$ [$_{VP}$ <[$_{DP}$ [<NEG$_1$> SOME] EVENT]$_1$> [$_{VP}$ sing DP$_1$]

Here [$_{DP}$ [<NEG$_1$> SOME] EVENT] is in a low scope position (perhaps adjoined to VP), and NEG$_1$ raises to Aux, which c-commands the low scope position; see CP2014 on this use of low scope positions, and the relation between NEG raising and scope. In other words, the event quantifier DP has scope lower than the overt occurrence of NEG in the post-Aux position.

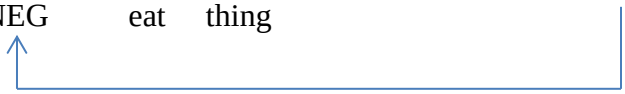
11. Bipartite Negation and Event Syntax

Now we can analyze Ewe sentences which manifest bipartite negation but which do not contain any ke-NPIs, such as sentence (3), repeated below:

(83) Kofí mé- ɖu nú o
Kofi NEG$_1$-eat thing NEG$_2$
"Kofi didn't eat."

If in (83) NEG$_1$ occurs in the preverbal position as the result of NEG raising, what is the source of NEG$_1$? Analogizing from the account of English in section 10, we propose that (83) contains a silent event quantifier, and that the NEG raises from this quantifier to T, as shown below (ignoring the post-VP NEG for the moment):

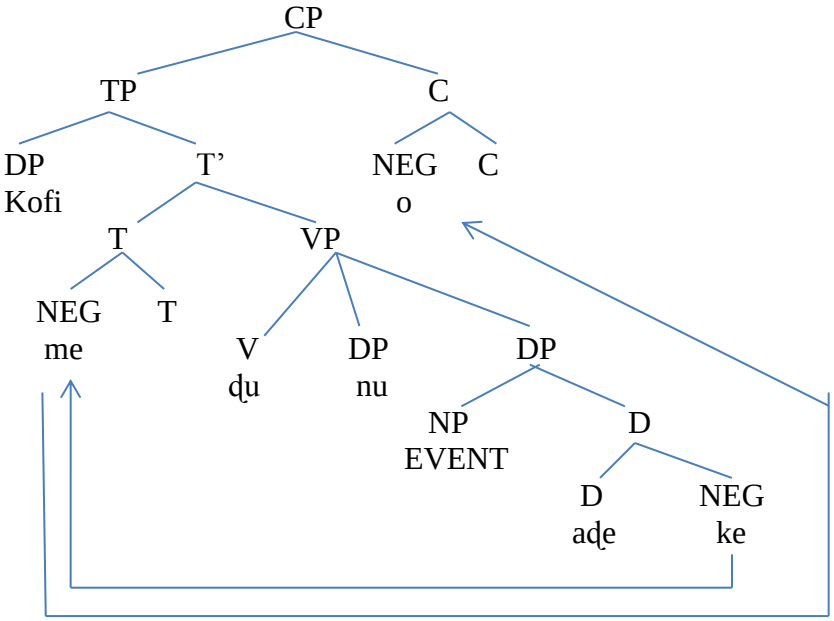
(84) Kofí mé- [$_{VP}$ ɖu nú [EVENT [SOME cNEG]]
NEG eat thing



But the diagram is misleading in one important way. In a completely filled out analysis, NEG would raise from the scope position of the event quantifier, not the in-situ position (see CP2014: chapter 5 for discussion). We leave out the representation of scope positions here for the sake of readability.

A tree diagram for this analysis is given below:

(85)



In this diagram, NEG raises to C. See Aboh (2010) on C positions in the Gbe languages.

12. Non-ke-NPIs in Ewe

So far we have focused on Ewe ke-NPIs. In this section, we investigate three other NPIs: *haɖe* "yet", *kura* "at all", and *gbeɖe* "ever". None of these NPIs involve the morpheme *-ke*.

Example (86a) shows that *haɖé* "yet" can appear with negation, while (86b) illustrates that it cannot appear in a positive declarative clause:

(86) a. nye-mé-kpɔ́-e haɖé o
NEG$_1$-1SG-see-3SG yet NEG$_2$
"I haven't seen him yet."

b. *me-kpɔ́-e haɖé
1SG-see-3SG yet

However, unlike ke-NPIs, *haɖé* "yet" does occur in the non-negative context of yes-no questions:

(87) a. e-kpɔ́ Kofí haɖé a
2SG-see-3SG Kofi yet Q
"Have you seen Kofi yet?"

b. e-ɖu nú haɖé a?
2SG-eat thing yet Q
"Did you set yet?"

But even though *haɖe* "yet" appears in yes-no questions, it does not appear in conditionals, with the verb "surprise", in the restriction of a universal quantifier or with only-DPs, as show below. Note that English "yet" is also unacceptable the corresponding contexts.

(88) a. né Kofí dzó (*haɖe) lá, gblɔ-e ná-m
if Kofi leave (*yet) REL, tell-3SG to-me
"If Kofi has left, tell me."

b. é-wɔ ŋku ná-m bé Kofí dzó (*haɖé)
3SG-do surprise to-me that Kofi leave (*yet)
"It surprises me that Kofi has left."

c. ame sía ame si dzó (xó, *haɖé) lá le afíma
everybody which leave (already, *yet) REL COP there
"Everybody who has left is there."

d. Kofí ko-é dzó (*haɖé)
Kofi only-FOC leave
"Only Kofi has left."

Like ke-NPIs, *haɖe* "yet" can appear as the elliptical answer to yes-no question:

(89) a. e-ɖu nú a?
2SG-eat thing Q
"Did you eat?"

b. haɖé *(o)
yet NEG_2
"Not yet."

c. nye-mé-ɖu nú haɖé o
$1SG\text{-}NEG_1$-eat thing yet NEG_2
"I didn't eat yet."

Consider now the NPI *kura* "at all". (90a) shows that *kura* can appear with negation, while (90b) indicates that it cannot appear in a positive declarative clause following the object. But example (90c) shows that *kura* can be used following the subject, where it translates as "even". We have not investigated this usage.

(90) a. nye-mé lɔ̃ Kofi kúrá o
$1SG\text{-}NEG_1$ like Kofi at.all NEG_2
"I don't like Kofi at all."

b. *me lɔ̃ Kofí kúrá
1SG like Kofi at.all

c. Áma kúrá lɔ̃ Kofí
Ama even likes Kofi
"Even Ama likes Kofi."
("It is quite difficult for Ama to like people.")

Given further linguistic context, *kura* can follow the direct object. We have not investigated this usage either:

(91) me lɔ̃ Kofí kúrá hafi wo-le nye dzu-m
1SG like Kofi at.all/even before 3SG-COP 1SG insult-PROG
Lit.: "I even like Kofi before he is insulting me."
"I like Kofi even though he is insulting me."
Context: I saw Kofi and I wanted to greet him, and he started insulting me.

Just as with English *at all*, *kura* often appears following other NPIs:

(92) …ye-mé-kpɔ́ nánéké kúrá le fóto-á me o
…3SG-NEG1-see anything at.all LOC foto-DEF in NEG2
"…he didn't see anything at all in the photograph." (Akafia 1970: 17)

Like *haɖe* "yet", it can appear in the non-negative context of a yes-no question:

(93) a. Áma lɔ̃ Kofí kúrá -a
Ama love Kofi at.all -Q
"Does Ama like Kofi at all?"
(context: Ama has been doing something doing bad to Kofi.)

b. Áma se nú-ma gɔme kúrá -a?
Ama hear thing-that under at.all -Q
"Does she understand that at all?"

Furthermore *kúrá* "at all" cannot occur in other NPI environments, such as in conditional clauses, the complement of "surprise", the restriction of "every" and in the scope of only-DPs:

(94) a. né e-lɔ̃-na Áma (*kúrá) lá, *f*o nu nê
if 2SG-like-HAB Ama (*at all) REL, hit mouth to.3SG
"If you like Ama at all, talk to her."

b. é-wɔ ŋku ná-m bé Áma lɔ̃ Kofí (*kúrá)
3SG-do surprise to-1SG that Ama like Kofi (*at all)
"It surprise me that Ama likes Kofi."

c. ame sía ame si lɔ̃ Kofi (*kúrá) lá le afísia
Everybody who likes Kofi (*at all) REL COP here
"Everybody who likes Kofi is here."

d. Áma ko-é lɔ̃ Kofí (*kúrá)
Ama only-FOC likes Kofi (*at all)
"Only Ama likes Kofi."

Like the ke-NPIs, *kúrá* can be used in an elliptical answer to a question:

(95) a. e-lɔ̃ Kofí a?
2SG-like Kofi Q
"Do you like Kofi?"

b. kúrá o
at.all NEG_2
"Not at all."

c. nye-mé lɔ̃ Kofí kúrá o
1SG- NEG_1 like Kofi at.all NEG_2
"I don't like Kofi at all."

Lastly, example (96a) shows that the NPI *gbeɖe* "ever" can appear with negation, while (96b) illustrates an often used reduplicated form *gbeɖe gbeɖe.* (96c) shows that this NPI cannot appear in a positive declarative clause. Examples (97a,b) provide additional illustration:

(96) a. nye-mé-á yi China (kpɔ́) gbeɖé o
1SG- NEG_1-FUT go China one.time ever NEG_2
"I will never go to China."

b. nye-mé-á yi China gbeɖé gbeɖé o
1SG- NEG_1-FUT go China ever ever NEG_2
"I will never go to China."

c. *me-á yi China (kpɔ́) gbeɖé
1SG-FUT go China one.time ever

(97) a. Kofí mé-wɔ-a é-*f*é a*f*éme-dɔ́ gbeɖé o
Kofi NEG_1-do-HAB 3SG-POSS home-work ever NEG_2
"Kofi never does his homework."

b. *Kofí wɔ-a e-*f*e a*f*éme-dɔ́ gbeɖé
Kofi 3SG-do-HAB 3SG-POSS home-work ever

Just like the previous two NPIs, *gbeɖé* "ever" occurs in yes-no questions. For some reason, it only occurs in this context in the presence of *kpɔ́* "one time", which is itself not an NPI. See Rongier (1989: 212):

(98) a. a yi China gbe ɖeká -a
2SG. FUT go China day one -Q
"Will you ever go to China?"

b. *a yi China gbeɖé -a
2SG.FUT go China ever?

c. a yi China kpɔ́ gbeɖé -a
2SG.FUT go China one.time ever -Q
"Will you ever go to China?"

Like the other NPIs discussed in this section *gbeɖe* "ever" does not appear in other NPI contexts, such as conditionals, the complement of "surprise", the restriction of "every" or the scope of only-DPs:

(99) a. né e-yi China (*gbeɖé, *kpɔ́ gbeɖé) lá, a-srɔ̃́ China-gbe
if 2SG-go China ever one.time ever REL, 2SG.FUT-learn China-language
"If you go to China, you will learn Chinese."

b. é-wɔ ŋku ná-m bé a-yi China (*gbeɖé, *kpɔ́ gbeɖé)
3SG-do surprise to-me that 2SG.FUT-go China ever, one.time ever
"It surprises me that you will go to China."

c. ame sía ame si yi China (*gbeɖe, *kpɔ́ gbeɖe) la, a-srɔ̃́ China-gbe
everybody which go China ever, one.time ever REL, 2SG.FUT-learn China-lang.
"Everybody who goes to China will learn Chinese.

d. Kofí ko-é a-yi China (*gbeɖé, *kpɔ́ gbeɖé)
Kofi only-FOC FUT-go China ever, one.time ever
Only Kofi will go to China

But like ke-NPIs, *gbeɖé* "ever" can be used as an elliptical answer to a question. However, *gbeɖé* "ever" is different from all other Ewe NPIs in that NEG_2 is optional in the elliptical answer.

(100) a. e-dí bé ye-á-yi China a?
2SG-want that LOG-FUT-go China Q
"Do you want to go to China?

b. gbeɖé (o)
ever NEG_2
"Never."

c. nye-mé-a-yi China gbeɖé o
1SG-NEG-FUT-go China ever NEG_2

Ameka (1991:691) proposes that *gbeɖé* can be used either adverbially or as a "completive signal", which is used to express disagreement or rejection of a proposition. Without going into syntactic detail, we propose that when NEG_2 is present in (101b), *gbeɖé* is being used adverbially, and when NEG_2 is absent, it is being used as a completive signal.

The data in (86)-(100) support the following generalization:

(101) An NPI A in Ewe may appear in a yes-no question unaccompanied by a pre-verbal NEG iff A is not a ke-NPI.

The data concerning Ewe non-ke-NPIs is difficult to account for because they are distinct in distribution both from ke-NPIs and from English Type 2 any-NPIs. ke-NPIs require that sentences containing them have a pre-verbal negation, but non-ke-NPIs do not have such a stringent requirement. However, non-ke-NPIs are quite a bit more restricted than Type 2 any-NPIs in English.

If Ewe non-ke-NPIs were unary NEG NPIs, then that would explain why they do not appear in conditionals, with "surprise", with "every" and with only-DPs. However, it would leave unexplained the fact that they can appear in yes-no questions (where no overt NEG is present).

If non-ke-NPIs were Type 2 NPIs (binary NEG NPIs in the framework of CP2014) , that would explain why they occur in yes-no questions (with no overt NEG present), but would leave unexplained the fact that they do not occur in conditionals, with "surprise", with "every" and with only-DPs.

If Ewe non-ke-NPIs were Type 2, the generalization in (104) below (see also (50)) would have to be modified. Ewe *would* allow a small number of Type 2 NPIs, which are adverbs and which contain no determiner (parallel to *aɖeke*). Therefore, Ewe would not have a series of *nominal* Type 2 NPIs, that is, NPIs corresponding to English *anything*, *anybody*, *anywhere*, etc.).

We must leave it open for the present whether Ewe non-ke-NPIs are property analyzed as Type 1 NPIs (unary NEG NPIs) or Type 2 NPIs (binary NEG NPIs).

13. Conclusion

We have shown that Ewe ke-NPIs correspond to Type 1 NPIs (unary NEG NPIs). We left it open as to whether Ewe non-ke-NPIs are Type 1 (unary NEG) or Type 2 NPIs (binary NEG). We have argued that the differences between Ewe and English can be characterized in terms of the following three parameters:

(102) Parameter A

Standard English:	NEG raising does not leave a copy.
Ewe:	NEG raising leaves a copy.

(103) Parameter B

Standard English:	NEG optionally raises from a unary NEG structure.
Ewe:	NEG obligatorily raises from a unary NEG structure.

(104) Parameter C

Standard English:	Allows Type 2 (binary NEG) NPIs.
Ewe:	Disallows Type 2 (binary NEG) NPIs.

Other languages arguably fall into the classification made available by these parameters. For example, one can analyze Serbo-Croatian as a language where NEG raising is obligatory and always leaves a copy. However, Serbo-Croatian has clear nominal Type 2 NPIs (binary NEG NPIs). See Progovac 1994 for an overview.

The analysis of Ewe provides strong support for the basic assumptions of CP2014. There it is proposed that English NPIs fall into two classes: unary NEG NPIs and binary NEG NPIs. We suggest that in Ewe, binary NEG NPIs do not exist (except for possibly three adverbial NPIs discussed in section 12). This means that the whole domain of nominal Ewe NPIs is composed of unary NEG NPIs. That fact provides indirect support for the theoretical distinction previously based principally in English. That is, we take UG to allow for two types of NPIs. English instantiates both types. In some cases, (e.g., any-NPIs, ever-NPIs), they are ambiguous between unary NEG and binary NEG structures. Ewe only allows unary NEG NPIs, manifested as the ke-NPIs. These share basic properties with English unary NEG NPIs, specifically restriction to negative contexts.

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