

DOUBLE PLURALITY IN CODESWITCHING

Evershed Kwasi Amuzu*

Abstract

This paper deals with the phenomenon of double plurality in codeswitching, with illustrations from Ewe-English Codeswitching (CS). It shows that English nouns (but never Ewe ones) may take two plurals, the English -s and its Ewe counterpart wɔ̃. -s always occurs on the stem of the noun while wɔ̃ occurs either immediately after -s or a few slots away. The paper demonstrates that the English noun-and-plural units are consistently embedded in Ewe-based NPs in which Ewe modifiers of the English nouns occur in slots associated with them in monolingual Ewe NPs. While -s may be dropped from mixed NPs that already show double plurality, the dropping of wɔ̃ from such NPs makes them unacceptable. Three theoretical questions are asked in our quest to explain this plural doubling phenomenon. One is why it involves only English noun heads. The second relates to why the two forms emerge as plurals even though -s is redundant. The third one is about the nature of language production involved: what bilingual processes are involved in the phenomenon of double plurality? It is shown that the two plurals arrive in their respective positions in the mixed NPs via separate paths in language production. The distribution of -s relates to processes that are conceptual (i.e. semantic-pragmatic) in nature. On the other hand, the distribution of wɔ̃ relates to processes that are morpho-syntactic in nature. Another issue briefly explored is what this bilingual phenomenon reveals about the linguistic properties of the plural category in monolingual NPs. The paper ends with a discussion of the role that language typology plays in determining whether plurals may be doubled or not doubled in CS.

1. Introduction

Double morphology is the codeswitching (CS) phenomenon in which a grammatical category is expressed twice with equivalent grammatical elements from two languages (see Appendix 1 for examples from Ewe-English CS).

Double plurality is the type of double morphology by which a nominal from one language is marked with two plural morphemes, one from the language

*Dr. Evershed Amuzu is a Lecturer in the Department of Linguistics, University of Ghana.

of the nominal and the center from another language. The paper explores this phenomenon with illustrations from Ewe-English CS.

The rest of the paper is in three sections, which deal with patterns of double plurality, explanation of the phenomenon, and the significance of the study respectively.

2. Patterns

Scrutiny of data shows that only English nouns are used in mixed NPs showing double plurality; English nouns may take two post-modifying plurals: the English plural *-s*, which is always bound to the noun stem, and the Ewe plural *wó*, which may follow *-s* immediately (as in examples 1 and 2 below) or be separated from it by other post-modifiers (as in examples 3 and 4).¹

- (1) Woawo-ε nye-na [executive member₀-s₊₁] wó₊₅] kple [patron₀-s₊₁]-wó₊₅]
 3PL -FOC be-HAB PL PL and PL PL
 ‘They normally are the executive members and patrons.’
 (Asilevi 1990: 70)

- (2) [Nye₋₂ [younger brother₀-s₊₁]-wó₊₅ kata]₊₇] wó shave- na...
 1sg PL PL all 3pl HAB
 ‘All my younger brothers, they shave...’
 (Amuzu 1998:72)

- (3) **Headmaster** la **inform** **student** -aɖe -wó be wó-a- **label**
 DEF INDEF-PL COMP 3PL-SUBJ
 [textbook₀-s₊₁]-yɛyɛ₊₁ -a₊₄ -wó₊₅].
 PL new the PL
 ‘The Headmaster informed some of the students to label the new textbooks.’
 (Asilevi 1990: 34)

(4) Nukata-ε me iron [nye₋₂ {shirt-s}₀₊₁ eve₊₂ sia₊₄ wó₊₅ hã₊₇] o?
 Why FOC 2sg.NEG 1sg PL two this PL too NEG

‘Why didn’t you iron these two shirts of mine as well?’

In example (1), the English plural *-s* and the Ewe counterpart *-wó* occur in succession after both **member** and **patron**. The same pattern emerges in (2), where the two plurals follow **brother**. In examples (3) and (4), however, the plurals are separated by other morphemes. In (3), two Ewe morphemes (the adjective *yeyε* ‘new’ and the definite article *-a* ‘the’) separate *-s* and *wó*; and in (4), they are separated by the Ewe cardinal *eve* ‘two’ and the proximal demonstrative *sia* ‘this’.

Carefully examined, three critical observations may be made about these CS patterns:

Observation 1:

There are two brackets defining the structure of each mixed NP. The inner bracket contains an NP constituent that is well-formed in English: the English morphemes occur in accordance with word order in the English NP, where the head noun (in 0 slot) is immediately followed by the plural marker (in +1 slot). Where an English adjective is involved, as in example (1) above, it appears in its ‘home’ adjective *-1* slot. This English constituent is embedded within a larger Ewe-based NP structure, which is represented by the outer bracket. This larger NP is Ewe-based because the order of morphemes / constituents is consistent with what obtains in the monolingual Ewe NP, which is captured in Appendix 2. It should be noted in example (4) above, for instance, that *nye* ‘my’ occurs in its pre-modifier *-1* slot and is followed by the English NP unit in the 0 slot of the Ewe noun head. This unit is then followed by various Ewe post-modifiers in their respective ‘home’ slots: the cardinal *eve* ‘two’ in +2 slot, the demonstrative *sia* ‘this’ in +4, the plural *wó* in +5, and the intensifier *hã* ‘too’ in +7. This word order is significant, and we shall be returning to it later in the paper.

Observation 2:

The second observation about the CS patterns presented above relates to what happens when either plural is dropped. While the English plural marker may be dropped and the structure will remain acceptable, the omission of the Ewe counterpart would render the sentence unacceptable. This is shown in the following versions of examples (1) – (4). The omission of either –s or *wó* is signaled with the symbol \emptyset . Note that while the first of each pair of examples is acceptable when only *wó* is present, the second of each of them is unacceptable because only –s is present.

Versions of (1):

- (5) a: [{**executive**₋₁ **member**₀ \emptyset ₊₁ } *wó*₊₅] kple [{**patron**₀ \emptyset ₊₁ } - *wó*₊₅]]
 -- PL and -- PL
- b: [{**executive**₋₁ **member**₀ -s₊₁ } * \emptyset ₊₅] kple [{**patron**₀ -s₊₁ } * \emptyset ₊₅]]
 PL -- and PL --
 ‘executive members and patrons.’

Versions of (2):

- (6) a: [Nye₋₂ {**younger**₋₁ **brother**₀ \emptyset ₊₁} - *wó*₊₅ kata)₊₇]...
 1sg -- PL all
- b: [Nye₋₂ {**younger**₋₁ **brother**₀ -s₊₁} * \emptyset ₊₅ kata)₊₇]...
 1sg PL -- all
 ‘All my younger brothers...’

Versions of (3):

- (7) a: [{**textbook**₀ \emptyset ₊₁ } yEyE₊₁-a₊₄ - *wó*₊₅]
 -- new -the PL
- b: [{**textbook**₀ -s₊₁ } yEyE₊₁-a₊₄ * \emptyset ₊₅]

PL new -the --
 'the new textbooks'

Versions of (4):

(8) a: [nye₋₂ {shirt₀ Ø₊₁} eve₊₂ sia₊₄ wó₊₅ hã₊₇]
 1sg -- two this PL too

b: [nye₋₂ {shirt₀-s₊₁} eve₊₂ sia₊₄ *Ø₊₅ hã₊₇]
 1sg PL two this -- too

'these two shirts of mine too'

The acceptability of the (a) examples as opposed to the (b) examples means that only *wó* is a critical, i.e. grammatically obligatory, marker of plurality in the mixed NPs. In other words, going back to examples (1) to (4) we may claim that *-s* is redundant from the point of view of grammar even though it is the one bound to the English noun stem.

Observation 3:

The third observation is that the double plurality cannot involve an Ewe noun head. For instance, examples (9) and (10) below, versions of (3) and (4) respectively, are unacceptable because the original English noun heads have been replaced with their Ewe counterparts:

(9) a: ...be wó-a- label agbalē₀ *-s₊₁ yɛyɛ₊₁-a₊₄ -wó₊₅.
 COMP 3PL-SUBJ PL new -the -PL
 '... that they should label the new textbooks.'

b: ...be wó-a- label agbalē₀ yɛyɛ₊₁-a₊₄ -wó₊₅.

(10) a: Nukata-ε me iron [nye₋₂ awu₀ *-s₊₁ eve₊₂ sia₊₄ wó₊₅ hã₊₇ o?
 Why FOC 2sg.NEG 1sg two this PL too NEG
 'Why didn't you iron these two shirts of mine as well?'

b: Nukata-ε me iron [nye₋₂ awu₀ eve₊₂ sia₊₄ wó₊₅ hã₊₇ o?

In the light of these observations, we need to answer three theoretical questions. *First*, why does the doubling of plurals happen only when an English noun head is involved? *Second*, why are the two plural forms needed on an English noun head even though only *wó*, as noted, is the critical marker of plurality? *Third*, what bilingual processes can be assumed to be involved in double plurality? That is, how do the two plural forms come to be repeated on one head noun?

3. The Double Plurality

3.1 Theoretical assumptions

The answers to these questions derive from the fact that Ewe-English CS is composite CS; that is, the languages involved play complementary abstract grammatical roles in the determination of the patterns in which morphemes from both are distributed (Amuzu 2005a, 2005b, and forthcoming). Underpinning the notion of composite CS are four theoretical assumptions:

3.1.1 Assumption 1

Our first assumption is what Myers-Scotton's 4-M model stipulates: that there are four types of morphemes in human languages (see Myers-Scotton and Jake 2000: 3ff and Myers-Scotton 2002: 72ff). These are:

- a. **content morphemes:** nouns, verbs, adjectives, adverbs, and a few others.
- b. **early system morphemes:** grammatical elements that have conceptual affinity with their content morpheme heads, e.g. verb satellites (e.g. INTO in LOOK INTO meaning 'to consider'), the pluralizer of nouns, demonstratives, intensifiers, etc
- c. **late bridge system morphemes:** elements that provide grammatical links between two units, e.g. copulas and possessive linkers

- d. **late outsider system morphemes:** critical grammatical elements, e.g. tense, modal, and aspect (TMA) markers, agreement inflections, case markers, etc

3.1.2 Assumption 2

The second assumption is that CS constituents are better understood in terms of the nature of their underlying abstract grammatical structures. This assumption stems from the view that the basis of syntax is the abstract representations underlying lexical items known as lemmas (Myers-Scotton and Jake 1995, 2001 and Myers-Scotton 2002). Briefly put, a lemma is the non-phonological set of information about a lexical item in a language which informs the lexical item's distribution as a surface-level element. Lemmas are supposed to be stored in speakers' mental lexicon of a language. They are thus language-specific. According to Myers-Scotton, "Lemmas contain lexical rules and these rules contain all the necessary information to realize surface constructions" (2002: 14). Specifically, a lemma consists of three subsets of lexical rules concerning the lexical item's meaning and distribution:

- *lexical-conceptual structure*, i.e. details about the lexeme's semantic and pragmatic properties (e.g. does a noun encode Agent, Patient, or Experiencer?; and does a verb encode Action, State, or Process?)
- *predicate-argument structure*, i.e. details about the lexeme's syntactic properties (namely details about its thematic structure that would be mapped on to grammatical relations); i.e., for example, whether a noun conceptualized as Patient is to be expressed as Subject or as Object.
- *morphological realization pattern*, i.e. specifications about language-specific devices—like word order restrictions, agreement, tense / aspect marking system, etc—for realizing the lexeme's grammatical relations with other lexemes in surface configurations, e.g.: Must a Subject come before its verb or may it occur elsewhere?; Are case-markers required on the Subject?; etc

As will be shown shortly, this notion of lexical structure is useful in explaining how surface CS configurations containing double plurals stem from the nature of the lemma information about the lexemes (e.g. the English nouns in the mixed NPs).

3.1.3 Assumption 3

The third assumption is that language production is modular, involving four stages of operation, also called levels. These are the conceptual level, lemma level, functional level, and surface/positional level. In table 1 below, details of what transpires at each stage are outlined in columns on the right. The first stage, the conceptual level, is pre-linguistic. Only universally available concepts, entities, propositions and the like are therefore activated at this stage.

The second stage, the lemma level, is the first linguistic level of production. Here, there is a conceptual activation of lemmas underlying language-specific content morphemes selected to encode the entities, predicates, etc that are mapped from the conceptual level. In some cases, the conceptual activation of a content morpheme also triggers the conceptual activation of an early system morpheme. For example, the form of a plural morpheme, which is an early system morpheme, may be selected to go with that of a noun because that plural item points (semantically) to the fact that there are two or more of the entity to which the noun refers.

The third stage, the functional level, involves morphosyntactic procedures aimed at projecting slots for the selected content morphemes. The projection of slots for the content morphemes is based on their language-specific lemma information about predicate-argument structure and morphological realization patterns. In other words, the forms of critical grammatical elements, referred to as “late system morphemes” under the 4-M model, are selected to express the content morphemes’ grammatical requirements (i.e. their predicate-argument structures and morphological realization pattern features). Word order issues are also decided here. In fact, what happens at the positional level (the fourth and final stage) is the articulation of grammatical decisions already made at the functional level.

Further details of the assumed production process are outlined in table 1 below:

Table 1: The language production model (cf. Amuzu's [2005a:20-21] adaptation of tables from Myers-Scotton and Jake [2001] and Myers-Scotton [2002])

<p>Conceptual Level</p> <p>[Speaker goes into bilingual mode (Grosjean 2001).]</p>	<ul style="list-style-type: none"> • <u>Pre-verbal / pre-linguistic speaker-intentions</u> are made, consciously or unconsciously. • Such intentions, which consist of universally available semantic and pragmatic information about entities, roles, states, processes, degrees, etc., are conflated as specific semantic/pragmatic (SP) feature bundles, which are necessarily language-specific. .
<p>Lemma Level</p> <p>[Both Ewe and English content morphemes and early system morphemes may be conceptually activated]</p>	<ul style="list-style-type: none"> • <u>Conceptual activation of content morphemes</u> (e.g. verbs, nouns, adjectives, adverbs, some pre/post-positions, some pronouns, etc). That is, language-specific SP feature bundles activate entries in the mental lexicon called lemmas, which support the realization of the content morphemes. • The content-morpheme lemmas may also point to lemmas supporting early system morphemes - e.g. <i>plurals</i>, intensifiers, definiteness markers, some adpositions, some verb satellites (e.g. up as in 'to breakup', etc). That is, early systems morphemes are also conceptually activated to semantically define their content morpheme heads (e.g. a plural specifies that there are more than one of the entity that a noun encodes). • Conceptual activation highlights the lexical-conceptual structure of a content morpheme or the unit that is formed by a content morpheme and an early system morpheme.

<p>Functional Level</p> <p>[Only Ewe morphosyntactic procedures may be deployed to guide the framing of mixed constituents, because of the SMP and the MOP.]</p>	<ul style="list-style-type: none"> • <u>Syntactic procedures</u> take place as information about the predicate-argument structures of the various content morphemes becomes available. The procedures involve the mapping of thematic structure of content morphemes (e.g. Agent vs. Patient) onto grammatical relations (e.g. Subject vs. Object). • <u>Morphological procedures</u> also take place as morphological realization information becomes available. This involves the deployment of language-specific devices for word order, agreement, tense / aspect / mood marking, case marking, negation, etc. • Late system morphemes—or <i>functional elements</i>—are selected to express the required grammatical categories.
<p>Positional / Surface Level</p> <p>[Ewe-based mixed constructions are produced.]</p>	<ul style="list-style-type: none"> • <u>Phonological and Morphological realizations</u> take place: i.e. there is articulation of surface structure morphophonemic forms.

The crucial point here is that because language production is characterised by these definable stages of operation, two languages in intensive contact have opportunity to interact in specifiable ways, especially at the second and third stages of production, to jointly constrain the structures of surface constituents in which their content morphemes occur. The nature and sequence of such an interaction are captured in the left column in the table above and discussed further in the next subsection.

3.1.4 Assumption 4

Our fourth, and final, assumption is that Ewe-English CS is composite CS, the kind of CS in which the two languages share responsibility for building the structure of bilingual constituents (i.e. clauses and phrases). The idea is that there is systematic interaction between the two languages at the lemma and functional levels. This idea is captured in the brackets in the left column in table 1 above.

To begin with, the assumption is that for a bilingual constituent to be produced, the speaker must enter what Grosjean (2001) calls “bilingual mode” at the conceptual level (ostensibly because the social setting motivates the interchangeable use of the two languages). At the lemma level, which, as noted elsewhere, is the first linguistic level, both English and Ewe content morphemes are selected because the speaker is already in bilingual mode. This means that the two languages are switched on to direct the activation of their respective content morphemes. The Ewe and English content morphemes are conceptually activated in their own rights just as they would have been were the speaker in monolingual mode. It is language-specific lemma information about each content morpheme that becomes available at this stage.

At the functional level, each content morpheme’s language-specific predicate-argument structure and morphological realization pattern features also become salient. However, once all aspects of the language-specific lemma information of Ewe and English content morphemes have become salient, only Ewe remains active at this level. What happens next is in my opinion the most important process in this composite CS: Ewe alone serves as the source of morphosyntactic means for expressing the content morphemes’ lemma requirements. That is, even English content morphemes’ English-origin lemma requirements have to be expressed using fitting Ewe morphosyntactic means. Two principles operate at this level to ensure that Ewe robustly performs this morphosyntactic responsibility. They are the Morpheme Order Principle (MOP) and the System Morpheme Principle (SMP), both of which have been adapted from Myers-Scotton (1993: 82).

With the MOP, the principle is that in any bilingual constituent that includes a singly-occurring content English morpheme and any number of Ewe morphemes, the order of the morphemes will be that of Ewe. Of course, a decision as to where in an Ewe structure to place an English verb, for example, will depend for instance on its valency and morphosyntactic properties in English.

For the SMP, the principle is that only Ewe critical grammatical elements may be picked to express structural requirements that must be fulfilled in the distribution of both Ewe and English content morphemes. This means that all late system morphemes required in the distribution of a lone English content morpheme in bilingual context must come from Ewe.

As Amuzu (2005a, 2005b, and forthcoming) have demonstrated, because the English content morphemes' English-origin subcategorization features are factored into any quest for slots for them in mixed constructions, they consistently occur in slots in Ewe-based structures where Ewe morphemes with analogous subcategorization features occur. Those Ewe morphemes they share slots with may or may not be their equivalents; indeed it is not uncommon to find English content morphemes that occur in slots that do not match those in which their Ewe counterparts occur.

Despite the dominant role that I perceive Ewe plays at the functional level, I designate Ewe-English CS as composite CS. This is in recognition of the role English plays in providing lemma information about its content morphemes. As noted, all English content morphemes retain their lemma properties in CS contexts. However, claiming Ewe-English CS to be a case of composite CS amounts to a rejection of the notion expressed in Myers-Scotton (1993) that Ewe-English CS is "classic CS". The point of departure is this: in Ewe-English CS as classic CS, Ewe would serve as the sole source of relevant lemma information that informs the distribution of even singly-occurring English content morphemes. That role would designate Ewe as a one-language matrix language (ML) and make English the embedded language (EL). It is stipulated in Myers-Scotton (1993, 2002) that EL content morphemes may only be fully integrated into ML grammatical frames if lemmas supporting them are sufficiently congruent

with those supporting their ML counterparts. In Amuzu (2005a and 2005b), for instance, it is demonstrated that this expectation does not explain all Ewe-English CS data and that the English content morphemes get fully integrated in the Ewe-based frames on the basis of their own lemma information. It is this together with the other assumptions discussed above that inform the explanation of double plurality presented below.

3.2 Explanation

First of all, let us recall that the structures of mixed NPs showing double plurality—exemplified in (1)–(4)—are based on the Ewe NP structure, captured in Appendix 2. We have demonstrated that except for English modifiers (e.g. the plural *-s* and adjectives), which occur in relation to the English noun in accordance with morpheme order in the English NP, all Ewe modifiers occur in their ‘home’ slots from the point of view of the Ewe NP. The English NP unit, however large, is located in the 0 slot associated with the noun heads in the Ewe NP. Example (11) is further illustration.

- (11) Ale be [efe₋₂ nenem₋₁ [{finding₀ -s₊₁ } ma₊₄ wó₊₅] ná be wo
vá nɔ famous.

So that his such PL that PL make
COMP 3sg come be

‘So, those specific findings of his made him famous.’

Here, *efe* ‘his’ and *nenem* ‘such’ occur in their pre-modifier home slots, the -1 and -2 slots respectively. After the English unit in the inner bracket (including the head noun *finding*, which appears in the 0 slot), the post-modifying Ewe morphemes occur in their traditional slots in the Ewe NP: the demonstrative *ma* ‘that’ in the +4 slot and the plural *wó* in the +5 slot. The explanation for this morpheme distribution pattern structure (i.e. in the larger NP) is the morpheme order principle (MOP) outlined in the previous section. The Ewe word / constituent order defines the overall structure of the larger NP.

We would also recall from section 2 that although the two plurals do co-occur with an English noun (see examples 1 to 4) only *wó* is grammatically vital. As noted, evidence of this fact is that while *wó* may not be deleted from any of the four examples, *-s* may be deleted (see examples 5 to 8). This indispensability of *wó* in NPs showing double plurality is due to the system morpheme principle (SMP), which ensures that only critical Ewe grammatical morphemes are picked to express such grammatical information in CS constructions. What is not explained by this account is why *-s*, though not grammatically vital, is permitted to also inflect the English noun head.

A clue to why *-s* appears in the NPs lies in the fact that *-s* accompanies only English noun heads and never Ewe noun heads (see examples 9 and 10 above). This happens because of what transpires at the lemma level. When an English noun is conceptually activated, its underlying lemma triggers the conceptual activation of *-s* as well, because *-s* has semantic tie with the noun. The selection of *-s* on conceptual or semantic ground is, however, not recognized during functional level processes, which are about grammatical procedures for satisfying predicate-argument structure and morphological realization requirements of content morphemes. The fact here is simple: if plurality is to be marked on an English noun selected for CS, then because of the MOP its slot has to be the +5 slot in the Ewe NP. *-s* does not occupy this +5 slot, and the SMP ensures that it is filled by the Ewe plural *wó*. This is why *wó* is obligatory in (1) – (4) as shown in the versions in (5) – (8).

The doubling of the plurals draws attention to their different functions and the different times during language production when their forms get picked. *-s* is picked at the lemma level because of its conceptual / semantic tie with the English noun head. On the other hand, *wó* is picked at the functional level to fulfil a structural need for an Ewe form in the plural +5 slot. This explanation is further supported by two other types of mixed NP in which plurality is expressed.

One type includes mixed NPs in which irregular English plural nouns are used. Such nouns are lexicalizations of the semantic affinity between the nouns and the plural. They represent the fusion of the nouns and the plural. In

Ewe-English CS, these irregular English nouns are used intact although *wó* too consistently appears in the +5 slot. This is shown in examples (12a) and (13a). Note that (12b) and (13b) are unacceptable because the singular forms of the irregular English nouns are used:

(12a) [Nice₋₁ children₊₀] ya₊₄ -wó₊₅] a, mia ga dzi ɔe
 this PL TP 3PL REP give_birth some
 a-kpe wó o a?
 FUT-add 3PL NEG Q
 ‘These nice children, won’t you have some more to add to them?’
 (Amuzu 2005a: 221)

(12b) Nice [*child ya -wó] a, mia ga dzi ɔe...

(12c) Nice [children ya *Ø] a, mia ga dzi ɔe...

(13a) Wo be [men₊₀ wó₊₅] ne nɔ afiyi ne [women₊₀ wó₊₅] na
 nɔ afimɛ
 3Pl say PL MOD be.at here CONJ PL
 MOD be.at there
 ‘They said men should be here and women there.’

(13b) Wo be [*man wó] ne nɔ afiyi ne [*woman wó] na nɔ afimɛ

(13c) Wo be [men *Ø] ne nɔ afiyi ne [women *Ø] na nɔ afimɛ

The contention here is that an irregular English noun is automatically picked at the lemma level because the lemmas supporting the noun and the plural together point to it; note in the (b) examples that the singular forms of the irregular nouns are unacceptable when they are pluralized by *wó*. That *wó* is, as expected, obligatory with an irregular plural English noun is demonstrated by the unacceptability of the (c) examples from which it is omitted.

Examples (14) to (18) illustrate another CS pattern that supports the explanation being offered for double plurality in the paper. In these examples the absence of *wó* does not lead to unacceptability:

- (14) Uncle be ne season dzi dɔ na cocoa la, ye-a fle
[sandal-s] a] na-m

Uncle say if top reach for cocoa TP LOG-FUT buy
 PL the to-1sg

‘Uncle said when the season arrives for cocoa he will buy (a pair of)
sandals for me.’

(Asilevi 1990: 90)

- (15) Me le [flower-s] ya] do-ge ɔe daddy fe backyard
 garden-a me

1sg be PL this plant-INGR ALL daddy poss the in

‘I will plant this flower in daddy’s backyard garden.’

(Asilevi 1990: 23)

- (16) Fifia hã gbe kple ati-wó yevu wó tsɔ le tsi-mati kple
[pill-s] wɔ-m

Now too herb and stick-PL whitemen take be
 syrup and PL do-PROG

mie-le zaza-m

1PL-be use-PROG

‘Now too, it is herbs and roots that the white man uses to prepare syrups
 and pills for us to use.’

(Nortsu-Kotoe 1999: 71)

- (17) Nya me se be wó be [afternoon-classe-s] gɔme dze-
 ge egba

1sg-TP 1sg hear COMP 3PL say PL under
settle-HAB today

'As for me, I have heard that afternoon classes commence today.'
(Amuzu 1998: 73)

- (18) **Wo forecast be [flood-s] ga nu gblē-ge this year**
3PL COMP PL REP thing spoil-PROG
'It has been forecast that floods will cause a lot of damage this year.'

The underlined English nouns exemplify the kind of nouns whose semantics Tiersma (1982) describes in one of his principles of "Local Markedness". He says that

When the referent of a noun naturally occurs in pairs or groups, and/or when it is generally referred to collectively, such a noun is locally unmarked in the plural. (Tiersma (1982: 835)

Note that **sandals** (14) are entities which always occur in pairs; that **flowers** (15) and **pills** (16) are entities which are generally referred to collectively; that **extra classes** constitute an event which entails sub-events or individual lessons; and that **floods** denote plenty of water over a hitherto dry parcel of land. These nouns are "locally unmarked in the plural", i.e. they may conveniently be regarded as singular nouns. Even though the plural -s form appears on such nouns, it does not do so because it is conceptually activated with them. And because -s is not conceptually salient as a plural at the lemma level, there are no grammatical procedures at the functional level either for the projection of the obligatory +5 slot for wÓ to automatically fill. Note, however, that when wÓ does appear with such a noun, it signals that different kinds, or different groups, of the entities in question are being referred to. For example, sandal-s a wÓ in (19), a version of (14), means 'the pairs of sandals', and flower-s ya wÓ in (20), a version of (15), means 'these kinds of flower':

- (19) Uncle be ne season dzi do na cocoa la, ye-a fle
 [sandal-s a wó] na-m

Uncle say if top reach for cocoa TP LOG-FUT
 buy PL the PL to-1sg

'Uncle said when the season arrives for cocoa he will buy the pairs of sandals for me.'

- (20) Me le [flower-s ya -wó] do-ge de daddy fe
 backyard garden-a me

1sg be PL this PL plant-INGR ALL daddy poss
 the in

'I will plant this flower in daddy's backyard garden.'

In (19) and (20), we may say that the nouns are locally marked in the plural, and that *wó* is accordingly mandatory in the slot +5.

4. Concluding Remarks

This paper dealt with the phenomenon of double plurality in Ewe-English CS. It explained that while *-s* pluralizes English nouns in the relevant mixed NPs on semantic ground (i.e. *-s* is conceptually activated at the lemma level along with the English nouns), *wó* pluralizes those English nouns on structural ground (i.e. *wó* is obligatorily assigned a +5 plural slot following the application of the MOP and the SMP at the functional level).

Based on this explanation, one might be tempted to suggest that there is a connection between the times of activation of the two plurals and their order of appearance in the mixed NP (i.e. that *-s* always comes before *wó* because it is selected at the lemma level while *wó* always follows later because it is selected at the functional level). This suggestion has no merit. I dare say that were Ewe a prefix-plural language, the two plurals would have distributed in the order plurals double in Acholi-English CS. Myers-Scotton (2006: 207) cites *lu-civilian-s* as a typical example of double plurality in Acholi-English CS. Here *lu*, the Acholi

plural, is a prefix while *-s* as expected occurs as suffix on the English noun stem. The point is that in both Ewe-English CS and Acholi-English CS the lemma and functional level processes culminate in framing the mixed constituent surface structure.

Having said so, I should revisit the 4-M model classification of plural morphemes. Following the model we have assumed matter-of-factly that the plural is an early system morpheme. There is reason to believe, however, that there is more to plurals than the 4-M model currently reveals.

The model distinguishes early system morphemes from late system morphemes on the basis of two features, [\pm Conceptually Activated] and [\pm Quantification] and classifies plurals as early system morphemes. The former feature is concerned with whether a system morpheme has a semantic or pragmatic value with the content morpheme it accompanies. The latter feature, on the other hand, deals with whether a system morpheme is a critical or mandatory grammatical element in the distribution of content morphemes. Early system morphemes have a plus reading for the first feature but a minus reading for the second one. For late system morphemes, the reverse is the case (see Myers-Scotton 2002: 73). In reference to their functions in the NPs where they co-occur, it is only *-s* which qualifies as an early system morpheme; in those NPs *wÓ* needs to be analysed as a late system morpheme.

Of course calling *wÓ* a late system morpheme is novel since plurals have hitherto not been classified as late system morphemes. But that is not the point here. The argument, rather, is that the evidence adduced in this paper points to plurals having plus settings for both features and that the phenomenon of double plurality derives directly from the fact that the two features may be split between plural forms from different languages.²

This argument has implications for our analysis of the plural category outside NPs showing double plurality. In NPs in which there is no plural doubling (i.e. in monolingual NPs and in mixed NPs in which only one plural is realized), the one plural form may be said to combine the two plural functions. *WÓ* exemplifies such plurals. It performs the multiple functions in monolingual as well as mixed

NPs—e.g. the (a) versions of (5) to (8)—where it occurs alone. In example (1), reproduced below as (21), *wó* occurs with **student** in the multiple-function capacity but with **textbook** in only the grammatical-function capacity because *-s* expresses the conceptual plural function with **textbook**.

(21) **Headmaster** la **inform** [**student**₀ *-ade*₊₄ *-wó*₊₅] be wó-a-
label

DEF INDEF-PL COMP 3PL-SUBJ

[{**textbook**₀ *s*₊₁} *yεyε*₊₁ *-a*₊₄ *-wó*₊₅].

PL new the PL

‘The Headmaster informed some of the students to label the new textbooks.’

(Asilevi 1990: 34)

Wó plays the multiple functions as well as the late (i.e. grammatical) plural function in mixed NPs because it comes from the language that is active from the lemma level through to the functional level; *-s*, on the other hand, is restricted to playing the early (i.e. conceptual) plural function in the mixed NPs because it comes from a language that may be active only at the lemma level.

Now, in order not to ignore the fact that plurals are not always purely early system morphemes, as is claimed in the 4-M model, I propose the following five-way (instead of the current four-way) classification of morphemes for further cross-linguistic verification:

- (i) Content morphemes
- (ii) (Purely) early system morphemes: e.g. the English *-s* in mixed NPs showing double plurality, as in (1) to (4); and prepositions in lexicalized verb phrases, e.g. **up** in **break up**
- (iii) Multiple-function system morphemes: e.g. most plurals in monolingual contexts; and some plurals as used in mixed NP, e.g. *wó* in mixed NPs **not** showing double plurality, as in the (a) versions of (5) to (8)³

- (iv) Late bridge system morphemes
- (v) (Purely) late system morphemes: e.g. *wó* as used in mixed NPs showing double plurality, e.g. (1) to (4); and case-markers, noun number markers, etc.

My last concluding remark is that there is evidence that the phenomenon of double plurality is not a universal feature of CS and that whether it obtains or not depends on the typology of the languages involved. To this end, the existence of double plurality in Ewe-English CS as opposed to its non-existence in Akan-English CS and Ga-English CS is revealing.

Unlike Ewe and English which have just one plural marker each, both Akan and Ga, two languages related to Ewe which also have CS relationship with English, have four plural markers.⁴ It turns out, as preliminary studies show (see Quarcoo, 2009 and Agyei-Owusu 2009), that in both Akan-English CS and Ga-English CS with the exception of the profession plurals *-foɔ* (Akan) and *-foi* (Ga) only the English suffix *-s* may occur on an English noun in bilingual clauses. In the following examples, therefore, English nouns consistently occur with only *-s* (contrary to the fact that in Ewe-English CS the Ewe counterpart would automatically also appear); Quarcoo and Agyei-Owusu in their independent studies noted that the appearance of any Akan / Ga plural marker in addition to *-s* would make the sentences unacceptable:

- (22) [Saa mo **farm-s** no], [mo **correspondent-s** a ε-wɔ hɔ
no] n-kaa ho
- That your PL DET your PL who 3PL-
be there DET NEG-say skin
asem n-kyerε mo?
matter NEG-tell you
- 'Those farms of yours, your correspondents who are there, haven't they told you anything about them?'

(Akan-English CS; Quarcoo 2009)

- (23) [Problem-s no] deε ε-bε ba, na yε bε-solve -o
 PL DET EMP 3sg-FUT come, and 1PL FUT-solve
 ‘As for the problems, they will come and we will solve (them).’

(Akan-English CS; Quarcoo 2009)

- (24) **Mechanic-s** é ní ò-bàá-tsé àmĕ-!ĕ
 PL DET that 2sg-FUT-call them-DEF
 ‘The mechanics that you call...’

(Ga-English CS; Agyei-Owusu 2009)

- (25) Mí-! nã mĩshèè yè [proverb-s-é] ní nyé-tsɔɔ wɔ-!ɔ
 1sg-get happiness LOC PL-DET that 2sg-
 teach us-DEF
 ‘I am happy that you have taught us these proverbs.’

(Ga-English CS; Agyei-Owusu 2009)

It seems to me that after *-s* is selected along with the English nouns during lemma level processes no fresh processes are initiated at the functional level to project an obligatory slot for an Akan / Ga plural, because there are competing candidates. In fact, as noted, with the exception of the group / profession plurals *-foɔ* (Akan) and *-foi* (Ga), no Akan/Ga plural marker may even occur alone with an English noun. This is illustrated with the following experiment with the English nouns **brother** and **teacher** (note that the profession markers go with **teacher** because teachers do constitute a professional group):

Akan:

- **a-brother*, **n-brother*, **brother-nom*, **brother-foɔ* ‘brother’
 **a-teacher*, **n-teacher*, **teacher-nom*, *teacher-foɔ* ‘teachers’

Ga:

***brother-ji, *brother-i, *brother-bii, *brother-foi** ‘brothers’

***teacher-ji, *teacher-i, *teacher-bii, teacher-foi** ‘teachers’

This situation, where foreign-origin nouns are accorded a different morphological treatment from what is accorded their indigenous counterparts, is not extraordinary in language contact. It is well-known, for example, that foreign nouns borrowed or switched into noun-class languages are (usually) not subjected to the noun classification system in the borrowing languages; they are generally assigned to one or two noun classes irrespective of the classes to which their counterparts in the borrowing languages belong. This has happened in noun borrowing into Swahili and Logba (see Myers-Scotton 1993, 2002 and Dorvlo forthcoming respectively), and we may conjecture that the phenomenon is a simplification strategy by which the borrowing speakers avoid having to apply the intricate language-internal noun-class system to borrowed nouns. I believe that a similar strategy is at play in Akan-English and Ga-English CS with respect to the pluralization of switched English nouns: the English nouns are exempted from inflecting for any of the four Akan/Ga plurals, an exemption which spares the Akan/Ga codeswitcher from worrying about plural form which suits an English noun he/she wants to use in CS. Consequently, English nouns that require plural marking in CS contexts occur with only the English –s.

Further cross-linguistic CS research may confirm the following CS typology with regard to plural marking:

- When the language of functional level processes (i.e. the language of CS grammar) has more than one plural marker (as is the case with Akan and Ga), plural doubling would/may be inhibited as a result of a simplification strategy to avoid applying a language-internal plural selection system to switched/borrowed nouns.

- When, on the other hand, the language of CS grammar has just one plural marker (as is the case with Ewe), plural doubling would be optional and the distribution of the two plurals would follow the rules that have been spelt out in this paper.

NOTES

1. For a clarification of how slots are numbered in mixed NPs, see Appendix 2 below.
2. We have repeatedly implied that –s performs the conceptual (early system) plural function and that wó performs the grammatical (late system) plural function in the mixed NPs in which they co-occur. And, we have also repeatedly implied that the splitting of the two functions results from the fact they do not become salient at the same stage during language production.
3. Some determiners, demonstratives, and intensifiers may also be found to be multiple-function system morphemes.
4. In Akan, there are at least four plurals: the homorganic nasal plural prefix n-, another prefix a-, and two suffixes: -foɔ, which is a group or profession plural marker, and nom, which is a kinship plural marker. Ga also has four plural suffixes: -ji, -i, -bii, and the group or profession plural suffix foi (Agyei-Owusu, 2009).

APPENDIX 1

In the following codeswitching examples of Ewe-English CS, notice that the following grammatical categories have been expressed two times, first in English and then in Ewe: the determiner (1) and (2), the proximal demonstrative (3), and the intensifier (4):

- (1) Me dzi be na tsɔ [the usual type -a ko]
 1sg want that 2sg.SUBJ take the only
 a-gbã xɔ-a
 FUT-roof house-the
 ‘I would like you to use only the usual type to roof the house.’
 (Amuzu 1998: 74)
- (2) E-kpɔ be [Azumah fe style throughout the fight -a]
 2sg-see that Azumah poss the
 me nɔ hectic abe previous fights- wó o
 NEG beNPRES like PL NEG
 ‘You’ll observe that Azumah’s style throughout the fight wasn’t as hectic as previous fights.’
 (Asilevi 1990: 59)
- (3) Be ma set example a, [this Saturday ya ko] nye
 cousin...
 COMP 3sg-POT TP this only 3sg
 ‘To set an example, it is only this Saturday that my cousin...’
- (4) Xɔ-a le [very beautiful nɔɔ]
 House-the be very
 ‘This house is very beautiful.’

APPENDIX 2

For the purpose of this analysis, and following Duthie (1996), I refer to the slot in which a noun functions as head of an NP as 0 slot (“zero slot”), the “nucleus” of the NP. The 0 slot is the “centre of gravity” in relation to which we have pre- and postposed peripheries – i.e. pre-modifiers and post-modifiers respectively. Each modifier slot is identified by a plus / minus digit that reflects how many places it is to the right or to the left of the 0 slot. Thus, the English plural is marked +1 to show that its slot is directly to the right of the head. As will become clear, the order of Ewe morphemes in relation to the English noun head is what we find in monolingual Ewe NPs. A comprehensive outline of the Ewe NP structure is therefore provided in the table below. Notice, for example, that the Ewe plural *wó* is in +5 slot.

The Ewe Noun Phrase Structure (Amuzu 2005a)

-2	-1	0	+1	+2	+3	+4	+5	+6	+7	+8
por-NP	(INT1)	N PRO	(ADJ)	(CARD)	(ORD)	(DET) (REL)	(PL)	(QT)	(INT2)	(CLS)
Kofi fe Kofi's éfe 'his' nye 'my'	nenem, ale sigbe such		Nyui 'good' lolo 'big' bubu 'other'	dɛka 'one' eve 'two'	Evelia 'second' búbu 'other' mamɛ 'last, remain- ing'	-(l)a 'the' aɖe 'some' ma 'that' si which	wó	kafã 'all'	pɛ/ko 'only' hã 'too' boɲ 'rather' koɲ 'in particular'	

REFERENCES

- Agyei-Owusu, Akua. (2009). The MLF Model and Ga-English Codeswitching. An M.Phil Sociolinguistics Term Paper, Department of Linguistics, University of Ghana.
- Amuzu, Evershed K. 1998. *Aspects of Grammatical Structure in Ewe-English Codeswitching*. M. Phil. Thesis. Oslo: University of Oslo.
- Amuzu, Evershed K. 2005a. *Ewe-English Codeswitching: A Composite rather than Classic Codeswitching*. PhD. Dissertation, Australian National University.
- Amuzu, Evershed K. 2005b. Revisiting the Classic Codeswitching – Composite Codeswitching Distinction: A Case Study of Nonverbal Predication in Ewe-English Codeswitching. In M. Florey and P. McConvell (eds.), *Australian Journal of Linguistics* 25.1, 2005, pp. 127-151.
- Amuzu, Evershed K. Forthcoming. Producing Composite Codeswitching: The role of the modularity of language production. *International Journal of Bilingualism*.
- Asilevi, Francis. 1990. *English-Ewe Code-mixing in Conversational Discourse: A case of English as a second language in Ghana*. MA Thesis. Accra: University of Ghana.
- Dorvlo, Kofi. Forthcoming. Ewe Borrowings into Logba. *International Journal of Bilingualism*.
- Duthie, A. 1996. *Introducing Ewe Linguistic Patterns*. Accra: Ghana Universities Press.
- Grosjean, Francois. 2001. The Bilingual's Language Modes. In Janet Nicol (ed.), *One Mind, Two Languages: Bilingual Language Processing*. Oxford: Blackwell.
- Myers-Scotton, Carol. 1993. *Duelling Languages: Grammatical Structure in Codeswitching*. Oxford: Clarendon Press.
- Myers-Scotton, Carol. 2002. *Contact Linguistics: Bilingual Encounters and Grammatical Outcomes*. Oxford University Press.

- Myers-Scotton, Carol. 2006. Natural codeswitching knocks on the laboratory door. *Bilingualism: Language and Cognition* 9 (2), 203-212.
- Myers-Scotton, Carol and Jake, Janice. 2001. Explaining Aspects of Codeswitching and Their Implications. In: Janet Nicol (ed.), *One Mind, Two Languages: Bilingual Language Processing*, 84-116. Oxford: Blackwell.
- Nortsu-Kotoe, Peter, K. 1999. *A Linguistic Analysis of Ewe Adverts*. BA Long Essay. Accra: University of Ghana.
- Quarcoo, Millicent. 2009. *Grammatical Constraints on Noun and Verb Phrases in Twi-English Codeswitching*. MPhil Thesis. Legon: Department of English, University of Ghana.
- Tiersma, Peter Mijes. 1982. Local and General Markedness. *Language*, Vol. 58-4.