Grammaticalisation of Subject Pronouns and the Emergence of Preverbal Particles: Effects on Kenyang Morphosyntax

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Abstract

Kenyang preverbal particles host phi-features of a preceding DP and an aspectual feature which is denoted by tone. Relevant literature on Kenyang (Niger-Congo group) treats them ambiguously as independent pronouns and subject markers; as subject markers only. Subjecting these particles to the independent pronominal tests shows that they are not independent pronouns but rather subject markers typical of many Bantu languages. An attempt to establish a grammatical pathway for the preverbal particles reveals that they are expressions somewhere on a continuum between independent pronouns and agreement markers. The preverbal particles are the reduced forms of the independent pronouns through the process of grammaticalisation. The remnant of this process as evident from the first person singular independent pronoun indicates that the grammaticalisation cline is not saturated yet but rather in a continuum. The consequence of this on Kenyang morphosyntax is that it alternates between a pro-drop and a non-pro-drop language. The minimalist program can accommodate non-pro-drop languages but not the otherwise without a review of some of its canons. This paper sets out to examine a hypothesis that traces the possible evolution of Kenyang preverbal particles within the grammaticalisation framework and its effects on Kenyang morphosyntax within the minimalist program.

Keywords: preverbal particles, grammaticalisation, pro, phi-features, double su

1.0 Introduction

The claim that agreement morphemes originate as personal pronouns has been attested since Meillet (1942[1912]). In a variety of typologically different languages it has been observed that subject agreement inflections evolved from the grammaticalisation of subject pronouns (Chafe 1977; Frajzynger 1997; Mithun 1991, 2000, among others).

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Grammaticalisation is a process involving a gradual drift in a grammar in the use of linguistic expressions. The process may see a function word or affix evolve out of a lexical morpheme (cf *lexical item>morpheme model* by Meillet 1948 [1912]; Heine and Reh 1984; Hopper and Traugott 1991, among others); or the evolution of syntactic and morphological structure through fixing of discourse strategies (the *syncretization process* in the sense of Givon 1976). This process turns lexemes into grammatical formatives and makes grammatical formatives still more grammatical (Lehman 1985:303). The result of the evolution according to Heine and Rey (1984:15) is that *linguistic units lose in semantic complexity, pragmatic significance, syntactic freedom and phonetic substance*. While linguists are in broad agreement about the nature of grammaticalisation process, there are nevertheless a range of different formal and functional theoretical models that have been proposed in order to account for what drives grammaticalisation processes and the nature of such processes. However, these theoretical models do not concern us here. Instead, the emphasis in this paper is to situate the Kenyang facts within a broader set of attested patterns of language change. Grammaticalisation often results in a potential shift in category. The size of the shift depends on the function of the new category in the grammar. Where the shift is maximally saturated on the cline (that is, the grammaticalisation chain is complete), the source category may eventually disappear or be attributed some other specialisation. However, where the shift is gradual and in progress, the new category may acquire a new function in addition to its inherent function resulting in a "layering" of functions that entails ambiguity, the resolution of which depends on its distribution.

Traugott and Heine have observed from a cross-linguistic study of typologically different languages that certain lexical classes are likely to become grammaticalised. They note that *for any given grammatical domain, there is only a restrictive set of lexical fields, and within them only a restricted set of lexical items are likely to be sources potential for grammaticalisation. For example, tense and aspect markers which derive from specific spatial configurations; modals from terms for possession or desire; case markers, including prepositions and postpositions derived from terms for body parts or verbs of motion* (Traugott and Heine 1991:7-8). Heine and Kuteva (2002:7) observe that some linguistic structure may assume a grammatical function without involving the grammaticalisation of any particular item figuring in the structure of the language. They note that "the assumption that there is essentially a one-to-one correspondence between source and target…is not entirely satisfactory".

Grammatical markers comprise inflectional morphemes that express concepts like tense, aspect, modality, number and person on a verb as well as case, number and gender on nominals. Traces of lexical meaning can be identified in the existing meaning. Fries (1927:90) describes these traces as "glimmering through" the new morpheme and claims that the original meaning can often provide an additional subtlety to the grammatical use. Four related mechanisms have been observed to result from the grammaticalisation of a given category. These are:

(a) Desemanticisation – also referred to as 'semantic bleaching" results in the broadening or abstraction of content meaning due to loss of lexical content;
(b) Extension – use in new contexts;
(c) Decategorisation – loss of morphosyntactic properties;
(d) Erosion – loss of phonetic substance;

<div align="right">(Heine and Kuteva 2002:2)</div>

The four mechanisms have been observed to be relevant in accounting for grammaticalisation processes and that they often co-occur in explaining the process in a particular context (see also Haris and Campbel 1995; Lehman 1993 for discussion on the synchronic and diachronic perspective relating to grammaticalisation processes).

Semantic reduction or bleaching occurs as a morpheme loses its specific lexical meaning. That is, from describing a narrow set of ideas, the meaning of the morpheme now incorporates a wider and more schematic range of semantic features. Having acquired grammatical meanings, the forms tend to become increasingly divergent from their old uses. They lose the categorial properties of their older uses, hence undergoing decategorisation. When the content meaning becomes unrestricted and more predictable, the form may eventually lose its meaning altogether. In French, for example, the 2nd person plural pronoun *Vous* has undergone grammaticalisation in that it now denotes politeness as well as plurality. Furthermore, through meaning extension, the French adverbial *ici* "here" became a demonstrative marker (in particular, a proximate demonstrative marker), as shown in the following constructions:

(1)   a. Il est ici
                  "He is here"
            b. Cet homme-ci
   "This man"   (Hopper and Traugott 1993:16-17)

Traugott and Hopper (1993:16-17) have also noted that in English, the word *go* became a change-of-state marker as revealed in the contrast between the following constructions:

(2)   a. He went home
         b. He went mad

Phonetic reduction takes place as a lexeme is incorporated into a more complex construction, and thereby loses its integrity as a word. Clitics, for example, must incorporate into a host in order to be fully interpreted because they are phonologically reduced and lack independent interpretation.

Despite the loss in semantic, morphosyntactic and phonetic substance, it has been observed that the linguistic items undergoing grammaticalisation may also gain new properties characteristics of their uses in new contexts. In general, the main task of grammaticalisation theory described above is to show how grammatical forms and constructions arise and develop through time and to explain why these forms and constructions are structured the way they are.

In connection with the objective of the paper, it is observed that Kenyang finite clauses obligatorily contain a preverbal element that, in addition to specifying the aspectual properties of the clause, also encodes information about person, number and noun class. A set of paradigms illustrating their use in the language reveals that they vary depending on the nature of the preceding nominal, which can be either a pronoun or a lexical subject. We note that in clauses where there is no nominal subject, the initial element is the preverbal particle, raising the question of whether or not it is best analysed in the construction type as a nominative pronominal fulfilling the subject function. Previous works on Kenyang have referred to them ambiguously as independent pronouns and subject markers (Tanyi 1998, 2000), as subject markers only (Ramirez (1998; Tyhurst 1985). Subjecting them to the independent pronominal test following Cardinaletti and Starke and (1997, 1999) shows that they are not independent pronouns but rather subject markers typical of many Bantu languages. The form of the particles suggests that it might not be appropriate to regard them as an independent subject pronoun. Part of the burden in this paper is to show why this is the case, by developing a deeper insight into the morphosyntactic characteristics of the preverbal elements. The objective is to relate the Kenyang preverbal particles to a source in order to sketch out the grammaticalisation chain along which their diachronic and synchronic features may be plotted.

Thus, in order to explore the hypothesis that Kenyang preverbal particles represent "pronominal subjects", it is worth considering the issue of where these expressions reside in a typology of such subjects. The sections of the paper that follow go to explore the grammaticalisation facts of Kenyang preverbal particles and to show the effects of this process on Kenyang morphosyntax. In this respect, Section 1 reveals that the properties of pronominal subjects vary cross-linguistically, hence the question of how to identify these subjects in languages is examined. Section 2 discusses the possible evolution of Kenyang preverbal particles. We note here that the grammatical pathways for Kenyang preverbal particles reveal that they are expressions somewhere on a continuum between independent pronouns and agreement markers. Section 3 examines the consequences of adopting the view in Section 2 on Kenyang morphosyntax. First it shows that temporal features, in particular aspect, had been encoded probably on nominals/pronominals rather than verbs in Kenyang. Second, Kenyang is a mixed language because it allows pro-drop and non-pro-drop constructions. Third, the feature valuation process in the syntax and the interpretation of the two types of structures (that is, those that allow pro-drop and the non-pro-drop structure) at the interfaces cannot be the same following Chomsky's (1995 and subsequent works) clausal architecture.

Chomsky (2001:2) maintains that the Principle of Uniformity be reflected across all human languages in structure, interface and derivation. This principle creates the possibility of creating two disparate phenomena as instances of a single uniform phenomenon cross-linguistically. Cross-linguistic variation is seen as *epiphenomenal* (Chomsky 1995:8). Thus Chomsky assumes that if we assume uniformity, we are able to use existing mechanisms in developing analyses, and to establish symmetry in otherwise asymmetric data. Of course, the existing minimalist mechanism for the computation and interpretation of subjects of finite clauses requires that the feature valuation process goes from nouns to verbs rather than the contrary. Nouns are phi-interpretable, while verbs are phi-uninterpretable. In other words, nouns agree with verbs instead of verbs agreeing with nouns given the pre-minimalist analysis of clause structure. Adopting the Minimalist technology in the analysis of null subjects poses some difficulties. If valuation goes from nouns to verbs, then null subjects which are inherently unspecified for phi-features, cannot value the corresponding phi-features on verbs, which are also uninterpretable.

The analysis presented here suggests a modification of the feature valuation mechanism to accommodate subject pro, while still preserving the tenets of the Principle of Uniformity.

1. Grammaticalisation of Subject Pronouns

The view that verbal agreement morphology developed from personal pronouns was first established in early work in historical linguistics in Indo-European languages by nineteenth century grammarians including Bopp (1916) and Muller (1875). A diachronic relation was established for the person and number verbal suffixes of the early Indo-European languages, common ancestors of the Indic, Germanic and Romance language families commonly referred to as Proto-Indo-European (PIE). In pursuit of this observation, twentieth century linguists such as Meillet (1912), among others that followed (see Szemerenyi 1989 and Lehmann 1993 for an overview), observed that the diachronic relation between agreement morphemes and personal pronouns in Indo-European languages can be detected from an inspection of the shape of various pronouns and agreement morphemes. To illustrate, the data in example (3) reflect the forms that are usually reconstructed for the set of personal pronouns (nominative and accusative) and the primary and secondary suffixes for the active present (and aorist), following Szeremenyi (1989:228-248).

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(3)    Pronouns                               Verb Agreement
       Nominative          Accusative              Prim   Second
       1sg   *eg(h)om, *ego *(e)me, *me, *mem      *-mi,  *-m
       2nd   *tu, *tu        *twe/*te, *twe/*te,   *-mi,  *-m
                             *twem/*tem
       3sg   -               -                     *-si   *-s(orig.*-t)
       1pl   *wei, *nsmes    *nes/*nos, *nes/nos, *nsme  *-mes  *-mes
       2pl   *yus, *usmes/uswes  *wes/*wos, *wes/*wos     *-tes  *-tes
       3pl   -               -                     *-nti  *nt
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A similar pattern is evident in Basque, where a reconstruction of the pronouns and absolutive agreement reveals that the absolutive paradigms are identical with the onset of the corresponding absolutive pronouns. Example (4) illustrates the different paradigms, as presented in Szeremenyi (1989).

(4)	Pronoun		Absolutive Agreement 'go'	
	Absolutive		Ergative	Verb 'go'
1sg	ni		ni-k	n-u
2sg	su		su-k	s-us
1pl	gu		gu-k	gu-s
2pl	sue-k		sue-k	s-us-e

The above grammaticalisation pattern is compatible with Li and Thompson's observation that 'subjects are essentially grammaticalized topics in the process of being integrated into the case frame of the verb' (1976:484). Thus, as topics evolve into subjects, resumptive pronouns inside the clause may be expected to evolve into inflectional morphemes. The study of non-Indo-European language families led to the discovery that such similarities can be observed cross-linguistically, leading to the insight that in general pronouns are the primary source of person/number agreement markers.

In many African languages, it is claimed that verbal agreement systems seem to have evolved historically from the morphological incorporation of pronouns into verbs or other heads. The cases that have been investigated reveal that pronominal systems are often in a transitional process between independent pronoun and agreement markers, resulting in the same form having ambiguous functions. The optionality in features following Bresnan (2001:146) represents a step in the gradual erosion and loss of independent forms. The pronominal inflection and the independent pronoun have different properties: the former is the reduced form of the latter. Despite this distinction, the pronominal inflection can play the same role in the clause that would have been played by the independent pronoun. In consequence, the issue of having ambiguous function remains tenable in the literature. In most Bantu literature, (Bresnan and Mchombo (1987; Mchombo (2004), for example), it has been observed that in constructions where the two forms co-occur, the independent pronominal occupies a position higher in the clause. In fact, the general conception about clause structure in Bantu is that it exhibits SVO word order. Between the subject and the verb is what is commonly referred to in the literature as the 'subject marker' (SM). The subject marker carries phi-features of the preceding subject and its presence is obligatory in all finite clauses. The subject marker is a bound morpheme affixed to the verb, as illustrated for Chichewa in (5):

(5)   Mikango   i-ku-sak-a   zigawenga   (Mchombo 2004:19)
        4-lions   4SM-Pres-hunt-fv   8-terrorists
        'The lions are hunting the eight terrorists'

Overt preverbal subjects can be omitted in Bantu languages. When this happens, according to Mchombo (2004:19) 'the subject marker which appears in the verbal morphology and which duplicates the phi-features of the subject effectively preserves that nominal's association with the grammatical function of subject'. The preverbal subject can also be displaced to postverbal position, as in (6):

        (6)   i-ku-sak-a   zigawenga   mikango
                4SM-Pres-hunt-fv   8-terrorists   4-lions

Mchombo analyses the function of the subject marker in clauses without preverbal subjects like (6) as an incorporated pronoun with a referential argument that is governed by the verb. In this respect, an external referential nominal cannot also occupy the structural position of the pronominal argument. However, it can be related to the argument position in an anaphoric relationship with the agreeing incorporated pronoun, as in example (5) (Mchombo 2004:21). Since the argument structure is otherwise satisfied by the subject marker in the absence of an overt NP, Mchombo further maintains that 'the subject marker satisfies the argument structure of the predicator, and the presence of the NPs is demanded by considerations extraneous to grammatical structure' (Mchombo 2004:21). According to Mchombo, when the subject marker is used as a grammatical agreement marker, it agrees with the nominal subject, as in (5). However, when the subject marker is used for anaphoric binding, its antecedent within the sentence has the topic function. This analysis treats the subject marker in Chichewa, Swahili and in some Bantu languages as 'a pronominal subject argument within the verbal morphology [which] remains functionally ambiguous retaining the status of an agreement marker too' (Mchombo 2004: 27; see also Givon 1976, 1984, 1990; Mchombo and Bresnan 1987). There is a substantial amount of literature of the morphosyntax of nominal incorporation and argument (see Stump 1984; Baker 1988, 1990, 1993, 1999 and Mithum 1986, 1992, 2000). Alongside these analyses, Roberts (1991) examines the morphosyntax of excoporation in languages.

The analysis developed by Mchombo shows that the subject marker and the NP are not in complementary distribution.

The question that immediately arises is what occupies the subject position if an NP is only anaphorically linked to the subject marker incorporated in the verbal morphology. One possible answer to this is that the subject position in such clauses is empty or occupied by a null subject. This observation runs contrary to what has been proposed for various Bantu languages by Mchombo and others. However, Lestholo's (2002) analysis of subjects and agreement in Ikalanga, a Bantu language spoken in Bostwana, argues that subject markers are not incorporated pronouns but rather subject-verb agreement markers.[2]

She observes that Ikalanga has overt preverbal subjects and obligatory subject markers. She argues that Ikalanga is a null subject language and that the subject marker represents standard subject-verb agreement, carrying phi-features that reflect the features of the subject, and thus license null subjects, rather like Italian and Spanish.

Looking more closely at the nature of the grammaticalisation cycle, Creissels (2005) posits three stages in the evolution of pronominal subject markers.

Stage 1: subject markers cannot co-occur with a co-referential NP; the choice between NP and subject marker depends on discourse context.

Stage 2: subject marker is required by the clause, and a co-referential NP may or may not co-occur with it.

Stage 3: subject marker becomes a fully grammaticalised agreement morpheme and does not license a null subject.

Creissels et al. (2007) observe that stage 2 subject markers are common in Bantu languages, and Kenyang conforms to the same pattern. In the same respect, Van Gelderen (2004, 2008) defines a number of principles underlying grammaticalisation, including the following:

Head Preference Principle (HPP): *Be a head, rather than a phrase* (2008:246).

Specifier Incorporation Principle (SIP): *When possible, be a specifier rather than an adjunct* (2008:250).

The HPP explains the grammaticalisation of pronouns into subject agreement morphemes, while the SIP possibly explains the incorporation of topic into clause-initial (subject) position from clause-external (adjunct) position.

2. The Evolution of Kenyang Preverbal Particles

Kenyang is predominantly SVO. In every Kenyang finite clause, lexical subjects co-occur with a preverbal particle that functions as the subject marker in many Bantu languages. The morphosyntactic structure of the preverbal particle to some extent is determined by the class prefix of the nominal itself. The preverbal particle is the reduced form of the preceding nominal and agrees with the lexical subject in number and noun class. Independent pronouns that appear in sentence initial position, where they function (arguably) as subjects must be immediately followed by a preverbal particle. Each preverbal particle to some extent appears to be the reduced form of the independent pronoun. In this section, an attempt is made to analyse the preverbal particles in Kenyang as the result of a process of grammaticalisation. The intention is to demonstrate that Kenyang preverbal particles are somewhere on a continuum between independent subject pronouns and subject agreement markers, along the lines claimed for some other African languages, as observed above. It is important to make explicit that the analysis presented here is not based on the reconstruction of such elements in Proto-Bantu since little literature exists in this area, to my knowledge. Rather, the analysis should be viewed as an attempt to map out a possible path of evolution for such elements, based on attested patterns in other language families. The historical evidence for the path of evolution sketched out here must await future research.

Kenyang nouns can be classified into various classes depending to a large extent on their prefixal morphology. The class of a noun to some extent dictates the nature of the following preverbal particle that agrees with the noun in all finite clauses. In addition, the morphosyntactic shape of the preverbal particle is determined by the class prefix of the nominal itself, as illustrated in the following constructions:

(7)   àkók   à   tɛ́m   m̀bòk
        3a-pig 3aSM-Pf   dig   hole
        'The pig has dug a hole'

(8)   ɛ̀kɛ̀t   ɛ̀   sɔ́ŋɔ́
        7-house   7SM-Impf   burn
        'The house is burning'

(9)   sὲkwópsɛ́   kwɛ́n
        13-spoon   13SM-Pf   fall
        'The spoon has fallen'

Each of the preverbal particles is the reduced form of the preceding noun, specifically it the class prefix. Thus, a plausible hypothesis is that a new word has been created from the nominal with a different function (from a lexical category to a functional category).

Alongside lexical subjects, independent pronouns in Kenyang can also appear in sentence initial position, where they function (arguably) as a subject, as well as appearing in postverbal position, where they thus function (uncontroversially) as objects. What distinguishes the functions is that in clause-initial position, the pronoun must be immediately followed by a preverbal particle ((the subject marker), while there are no such particles agreeing (as object markers) within the form that occurs in the postverbal position. In addition, there exists some morphological relationship between the preverbal particles and the preceding clause-initial pronominal. It is worth observing that each preverbal particle to some extent is the reduced form of the independent pronoun, as exemplified in (10):

(10)

Independent Pronominals		Preverbal Particles	
Singular	Plural	Singular	Plural
1st Pers mɛ	bὲsɛ́	m̀, ǹ, ŋ̀/mɛ̌	sɛ́, sê
2nd Pers wɔ	béká	ò, ǒ	bà, bǎ
3rd Pers Human yi	βɔ	à, ǎ	bà, bâ
3rd Pers Non-Hum yɔ	βɔ	variable depending on noun	
Class			

Table : Independent Pronominals and Preverbal Particles by Person, Number and Human/Non-Human

Unlike the preverbal particles that occur with lexical nouns, which often consist of the first syllable of the preceding noun class prefix, the situation with respect to independent pronominal elements is more complicated. The first set of observation that can be made in connection with (10) is that the preverbal particles that occur with pronominal elements may be composed of:

(a) a syllabic nasal prefix (*m,n,ŋ*) which is the first sound of the pronominal element. The choice of nasal depends on the nature of the first sound of the following verb;
(b) a suffix instead of a prefix as is the case for the second person singular ɔ, and the first person plural;
(c) a morpheme formed by combining the first and last sound of the pronominal element as we can see for the second person plural *ba*;
(d) a morpheme generally used to mark singular/plural alternations of nouns in class 1/2 interpreted as [+Human]. The cases involved here are the preverbal particles for the third person singular *a*, and plural pronominal *ba*;[3]
(e) it is possible, however to argue for a mutation process involving the form *bɔ* of the third person plural to give us *ba*.

Consider the following examples:

(11) mɛ   ŋ̀   kwù   ǹdὲn
      1sg   1SM-Pfbuy   dress
      'I have bought a dress'

(12) yi   à   kwù   ǹdὲn
      3sg   3SM-Pfbuy   dress
      'He/she has bought a dress'

(13) bὲsέ sέ   kwù   ǹdὲn
      1pl   1SM-Pfbuy   dress
      'We have bought a dress'

---

[3] It might be argued that, the third person singular preverbal particle represents a case of suppletion. However, the first proposal is more accommodating since it applies even to those classes in which the singular/plural alternation remains irregular and unpredictable. Thus, it can be maintained that there is an unmarked preverbal form for the third person singular and plural corresponding to the noun classes that also co-occur with the form of preverbal particle.

The only exception to the pattern observed is the first person singular mɛ̌, which is used to mark imperfect clauses. This pronoun can never co-occur with a preverbal particle. Given this co-occurrence restriction, it carries the tonal aspectual marker that is hosted by the preverbal particle in other cases. The presence of a temporal feature on this pronominal is restricted to its appearance in clause-initial position. In postverbal positions, the pronoun appears unmarked for aspect, but is otherwise identical in form, hence its uncontroversial status as an independent pronoun.

(14)	a.	mɛ̌		kwù	ǹdὲn
		1SM-Impf		buy	dress
		'I am buying a dress'			

	b.	*mɛ̌	m/n/ŋ	kwù	ǹdὲn
		1SM-Impf	1sg.PrevPart.	buy	dress
		I am buying a dress'			

The observation that can be drawn from the morphosyntactic properties of the form mɛ̌ as opposed to the other forms of preverbal particles is that the former is a historical remnant of the grammaticalisation of subject pronouns into preverbal particles in Kenyang. In sum, the hypothesis developed here is that grammaticalisation of the subject pronouns into inflectional particles resulted in their decategorisation. The reduced forms (which carry a temporal feature) now assume the role of functional affixes that carry phi-features relating to the independent subject pronominal.

Morphosyntactic Observation

Analysing Kenyang preverbal particles as the reduced (grammaticalised) forms of independent pronouns that have also been fused with (tonal) temporal morphology leads to the following assumptions:

a. preverbal particles are not independent pronouns but spell-outs of phi-features that show an agreement relationship with the subject;
b. Their reduced forms make them suitable to appear in a functional position rather than a lexical position, which entails that the subject position in Kenyang is obligatorily empty when the preverbal particle is clause-initial;
c. It follows from (b) that Kenyang has two kinds of finite clauses:

(i) clauses that allow their subjects to drop;
(ii) a clause that does not allow its subject to drop.

In (ci) the phi-features of the missing subject can be recovered from the phi-features of the preverbal particle. There are two types of null subjects in Kenyang: those that allow their phi-features to be retrieved form the features of the preverbal particle, and clauses that do not have preverbal particles and whose clause-initial pronouns carry no temporal features but allow subject drop with a null generic interpretation. The first person singular pronoun mĕ serves to illustrate the clause type in (cii).

Theoretical Implications

There are interface implications with respect to the assumptions presented above in (c), given Chomsky's (19995-2008) overview of the architecture of the clause. In virtue of this overview:

(a) Nouns agree with verbs and not vice versa(that is not in the opposite direction) in the juxtaposition of interpretable/uninterpretable features for feature valuation as illustrated in the following:

$$
\begin{array}{ccc}
\text{T} & \text{N} & \text{V} \\
\alpha & \beta & \delta \\
[+\text{tns}] & [+\varphi] & [-\varphi] \\
[-\varphi] & [\text{uCase}] &
\end{array}
$$

Given the schema in (a), it is obvious that:

(i) the computational procedure for the Kenyang clause with mĕ will be similar to the computational procedure of English clauses;
(ii) the computational procedure for Kenyang clauses that lack preverbal particles and allow null generic subjects will be similar to that of Chinese whereby the valuation of features is by default;
(iii) the computational procedure for Kenyang clauses that have preverbal particles and also allow pro drop can not be accommodated within Chomsky's recent conception of the morphosyntactic features that appear on the heads of lexical items without modification. Thus, if valuation goes from nouns to verbs and not vice versa, then pro which is inherently unspecified for phi-features can not value the phi-features of the verb which themselves are uninterpretable.
(iv) the computational procedure for Kenyang clauses in

(iii) can be accommodated within Chomsky's analysis based on the following modifications: such subjects must have a D-feature to determine whether the subject is pronounced or not at PF.

In the section that follows, I will present the derivation of the different types of finite clauses in Kenyang. I will also propose an analysis of pro that can be accommodated within Chomsky's Minimalism.

3. Derivation of Finite Clauses in Kenyang

It was mentioned in Section 2 that two types of finite clauses can be identified in Kenyang comprising finite clauses that allow subject drop and a finite clause that does not allow subject drop. This section presents an overview of each of the clause types. I will proceed by examining the structure of the clause that prohibits pro-drop and then clauses that allow pro-drop.

3.1. Finite Clause Without Pro-Drop

The occurrence of this clause type is restricted to the first person singular (1sg) pronoun in imperfect clauses. The structure requires a clause-initial element that is identical to the object/subject pronominal in segmental terms, but carries a tone feature that corresponds to aspect marking. Its characteristic behaviour indicates that at a particular point in the diachronic study of Kenyang pro(nominals) carried temporal features. In virtue of lacking a preverbal particle, the clause type does not lend itself to any straightforward analysis.

(15)   mɛ̌   kwù   ǹdɛ̀n
         1SM.Impf   buy   dress
         'I am buying a dress'

The element in clause-initial position can not be dropped as the resulting structure will be ungrammatical (of course given that the phi-features are hosted by the missing subject):

(16)   *kwù   ǹdɛ̀n
          buy   dress
          'I am buying a dress'

3.2. Finite clauses that Allow Pro-Drop

Two types of finite clauses that allow subject drop will be considered in this section. These comprise those finite clauses in which the subject is followed by a preverbal particle and those finite clauses that contain a subject but lack a preverbal particle. The two types of clauses allow pro-drop having two different interpretations: The former (that is, involving clauses that carry a preverbal particle) allows pro-drop with a definite interpretation. The referential phi-features of the silent subject are specific and directional. In the latter, pro requires an indefinite or a generic interpretation. The phi-features of the second type are retrieved by default. It is obvious that the structural configuration giving rise to the two varied interpretations (that is, a definite interpretation and an indefinite or a generic interpretation) is distinct. I will now proceed with the presentation of each of the two types of clauses.

(a) Pro-drop in clauses with preverbal particles

A morphosyntactic description of the preverbal particles suggests that they are not independent subject pronouns but expressions that may have resulted from the grammaticalisation of subject pronouns. In this respect, it is assumed that Kenyang clauses with preverbal particles in clause-initial position have a null subject and that the referential properties of the missing subject can be retrieved from the phi-features on the preverbal particles. In other words, the preverbal particles are spell-outs of phi-features of grammaticalised subject pronouns. The following schema serves to illustrate the point:

(17)   Lexical/Pronominal Subject   Preverbal Particle   V

αPers αPers
βNum βNum
δClass δClass
                      Aspec

We observe from the schema that there is a one-to-one correspondence between the phi-features of the subject and those of the preverbal particle. The second schema (18) shows the structure of the clause that has undergone subject drop. We see that the phi-features of the silent subject can be recovered from those of the preverbal particles.

(18)	Subject	Preverbal Particles	V
	Pro	αPers	
		βNum	
		δClass	
		Aspect	

The following sentences serve to illustrate the two schemas in (17) and (18). Sentences (19) and (20) have lexical and pronominal subjects, while sentence (21) lacks either. The preverbal particle is preceded by pro:

(19)   Ako   à   dàk   ὲ-kátì
        Ako   3SM.Pf tear 7-book
        'Ako has torn a book'

(20)   yi   à   dàk   ὲ-kátì
        3sg   3SM.Pf tear 7-book
        'He/she has torn a book'

(21)   pro   à   dàk   ὲ-kátì
        pro   3SM.Pf tear 7-book
        'He/she has torn a book'

(b) Pro-drop in clauses without preverbal particles

The other subset of the clause type addressed in this section, as indicated above, has a pronominal element in clause-initial position but lacks a preverbal particle. In this case, neither the verb nor the pronominal element carries temporal morphology. Agreement is completely switched off in the clause structure. In this respect, Kenyang patterns like Chinese, whereby the interpretation of finiteness is discourse-oriented. The schema in (22) represents the structure of the clause type.

(22)	Pronominal	Preverbal Particle	V
	αPers	-	
	βNum	-	

The schema is restricted to a particular verb, *ßέ*, which is one way of expressing 'say' in Kenyang.

The other form of expressing *say* in the language is *rèm*. Constructions with rèm pattern like regular Kenyang clauses in which the subject position can be filled by a lexical noun or a pronominal element. The clauses contain agreeing preverbal particles, which are marked for aspect. The examples also illustrate the fact that the verb *rèm* can be followed by the complementizer *bɛ́* when it selects an embedded clause. In contrast, the verb *βɛ́*, patterns quite differently. First, it never co-occurs with a preverbal particle, as indicated by the ungrammaticality of (23d). Secondly, it can never be preceded by a lexical subject (common or proper nouns), as shown by the ungrammaticality of (24b) and thirdly, it can never be followed by the complementizer *bɛ́*, as indicated by the ungrammaticality of (24d).

(23)   a.   wɔ   ɔ̀   rèm   bɛ́   ɔ́   tɛ́m   m̀-mɛ́n
                you   2sg.Pf say   that   2sg.Pf shoot   9-goat
                "You said that you shot a goat"

        b.   *wɔ   rèm   bɛ́   ɔ́   tɛ́m   m̀-mɛ́n
                you(2sg)   say   that   SM-Pf shoot   9-goat
                "You said you shot a goat"

        c.   wɔ   βɛ́   ɔ̀   tɛ́m   m̀-mɛ́m
                you   say   2sg.Pf shoot   9-goat
                "You said you shot a goat"

        d.   *wɔ   ɔ̀   βɛ́   ɔ́   tɛ́m   m̀-mɛn
                you   2sg.Pf say   2sg.Pf shoot   9-goat
                "You said you shot a goat"

(24)   a.   Ako   à   rèm   bɛ́   à   tɛ́m   m̀-mɛ́n
                Ako   SM-Pf say   that   3SM-Pf   shoot   9-goat
                "Ako said he shot a goat"

        b.   *Ako   ßɛ́   à   tɛ́m   m̀-mɛ́n
                Ako   say   SM-Pf shoot   9-goat
                "Ako said he shot the goat"

        c.   yi   βɛ́   à   tɛ́m   m̀-mɛ́n
                he/she say   2sg.Pf shoot   9-goat
                "S/he said you shot a goat"

     d.   *yi   ßɛ́   bɛ́   à   tɛ́m   m̀-mɛ́n
            you(2sg)   say   that   SM-Pf soot   9-goat
            "You said you shot a goat"

(25) a.   yi   à   rèm   bɛ́   à   tɛ́m   m̀-mɛ́n
            s/he   SM-Pf say   that   SM-Pf shoot 9-goat
            "S/he said s/he shot the goat"

     a.   *yi   rèm   bɛ́   à   tɛ́m   m̀-mɛ́n
            s/he   say   that   SM-Pf shoot 9-goat
            "S/he said s/he sot the goat"

A lexical subject as observed from the illformedness of (24b) cannot be followed by the verb ßɛ́. For such constructions to have lexical subjects there must be a corresponding pronominal element (to the lexical subject) intervening between the subject and the verb. This gives rise to double subject construction in Kenyang. In terms of linear ordering, the lexical subject precedes the pronominal element. This means that (24b) will become grammatical if constructed as (26):

(26) Ako yi   ßɛ́   à   tɛ́m   m̀-mɛ́n
       Ako he/she say   3SM-PfPf   shoot 9-goat
       'Ako said he has shot a goat'

Thematically both lexical and pronominal subjects have the same semantic role. Discourse properties show that the lexical subject is topic and more emphatic, while the following pronoun simply reinforces this notion. The comment is introduced after the verb. It is also appropriate for a lexical subject to be followed by a pronoun that shows no correspondence to it. Here each expression will bear a different semantic role and the related discourse properties will be different for each as well.

The lexical subject can also precede the pronominal subject in constructions with the verb rèm, however the presence of the complementizer bɛ́ is obligatory after the verb. In addition, the preverbal particle must intervene between the pronoun and the verb in the matrix clause. Given that there is no preverbal particle in the matrix clause that carries agreement features or temporal feature in constructions with ßɛ́, it is assumed in this context that aspect and agreement are spelled out by default (that is, these features are contextually determined) in the derivation of the clause.

In Kenyang, both *Ako* (a lexical element) and *yi* (a pronominal element) of example (26) can be dropped in the sentence to yield the following:

(27) Pro   βέ   à   tέm   m̀-mέm
      pro   say   3SM-PfPf   shoot goat
      'I/you/he/she/we/you/they/a certain x said he/she shot a goat'

When a clause-initial subject drops, the nullness properties can be attributed to anybody since the verb does not carry referential phi-features to mark definiteness in interpretation. The phi-features of the missing subject of the matrix clause cannot be retrieved per se from the phi-features of the preverbal particle in the embedded clause. Consequently clauses of this type allow pro-drop with an indefinite of generic interpretation.

Having demonstrated that Kenyang preverbal particles are in fact spell-outs of grammaticised subject pronouns, and that finite clauses in the language allow null subjects-, the conventional pro with a definite referential interpretation and a null indefinite or generic pro, the objective in the last section of this paper is to consider how pro is analysed in generative grammar, in particular, in the Minimalist Program of Chomsky (1995 and subsequent works).

4. Analysis of Pro in Generative Grammar: Overview

Independently of which specific parameter is adopted in the analysis of null subjects (cf. Permutter 1971; Taraldsen 1978; Chomsky 1981; Rizzi 1982, 1986; Huang 1984, 1989; Safir 1985; Jaeggli and Safir 1989), a popular view has been maintained in the framework preceding the Minimalist Program, that null subjects in finite clauses are unpronounced pronominals that are inherently unvalued for phi-features. The licensing and identification conditions which are operative in languages displaying 'rich' inflectional information entail that the phi-features of null subjects which are inherently unspecified, can be inherited through licensing by a nominative case assigner INFL:

Pro   INFL
α β
$-\varphi$ $+\varphi$

However, the probe-goal technology that defines the Minimalist Program of Chomsky (1995 and subsequent works) presents a major challenge to attempts to define a null subject parameter: null subjects cannot function as goals since they are unspecified for phi-features. In the architecture of the clause presented in MP, subjects, including lexical subjects and pronominals enter the derivation carrying an interpretable set of phi-features; the corresponding phi-features, on the contrary, are uninterpretable on verbs. The mechanism of valuation goes from nouns to verbs (with the interpretable phi-features of the nominal valuing the uninterpretable phi-features on the verb) and not in the opposite direction.

$$
\begin{array}{ccc}
N & T/INFL & V \\
\alpha & \beta & \delta \\
+\varphi & -\varphi & -\varphi \\
uCase & +tns &
\end{array}
$$

If the phi-features of pro are unspecified and hence uninterpretable, alongside the phi-features of T, which are also uniterpretable, then the mechanism of valuation becomes defective (uninterpretable features cannot be matched against corresponding uninterpretable features). Thus, the question remains: how can subject pro be accommodated within the minimalist technology? A problem inextricably linked to the question is that the Government and Binding Theory (GB theory) of empty categories is incompatible with the Minimalist Program. Some attempts have been made on how to resolve this dilemma in Minimalism. A brief overview of these attempts, and another proposal suggested in this paper constitute the focus of the remaining discussion in this section.

Attempts to resolve the problem of how to accommodate pro within minimalism have been proposed with some controversies. The theoretical proposals relating to how pro might best be accounted for in the Minimalist framework have been couched into two Hypotheses: Hypothesis A and Hypothesis B. The former argues that there is no pro in [Spec, T] position in null subject languages and that languages which do not have overt material in [Spec, T] should be analysed as 'I-Subject' (Inflectional Subject) languages. I-Subject languages comprise languages in which the functional head I, bearing subject agreement morphology, absorbs the subject role of the clause (see Borer 1986, 1989; Davis and Dubinsky 1996 for detailed discussion).

Hypothesis B, in contrast, asserts that there is a subject pro in the [Spec, T] position in null subject languages and proposes an analysis of pro that is consistent with the architecture of the clause in minimalism. The two hypotheses differ empirically in one crucial respect: Hypothesis B implies that in null subject languages, expletive pronouns, overt or null, are barred from occurring in [Spec, T], since pro must move to the relevant [Spec, T] position to value the EPP-feature of T. In contrast, the possibility that [Spec, T] may be filled by expletives remains implicit and without clarification in Hypothesis A. According to Hypothesis A, the presence/absence of an expletive pronoun in a given language depends upon the properties of T, and the ability of T to satisfy the EPP. According to this hypothesis, there may be more than one option at work in a single language, in particular, in languages having referential null subjects alongside overt expletives (Finnish being an example, following Holmberg 2004, 2005). In this case, the choice between a null subject or an expletive to satisfy the EPP-feature depends on assumptions that may not be purely linguistic. The properties of the hypotheses are summarised below.

(i) Hypothesis A: There is No Pro in [Spec,T] in Null Subject Languages

There is no pro in null subject constructions. Instead, Agr (the set of φ–features of I) is itself referential; Agr is a referential, definite pronoun, albeit a pronoun phonologically expressed as an affix. As such, Agr is also assigned a subject theta-role, possibly by virtue of heading a chain whose foot is in vP, receiving the relevant theta-role. (Holmberg 2005:537)

This hypothesis deals with the problem of denying its premise, that is, by supposing that in some languages, the phi-features of T (or I/AGR) are interpretable. The hypothesis introduces the possibility that languages differ fundamentally from one another in terms of whether they need to satisfy the EPP or not. According to this view, AGR is interpretable as a definite and referential pronoun. By virtue of having this property, it is assigned a theta role like any nominal category and 'absorbs' nominative case. By virtue of being interpretable, referential and carrying the subject theta-role, AGR effectively satisfies the EPP-feature in null subject languages. It follows from this observation that the [Spec, T] position in these languages is not filled by any overt material. The possibility of having overt material in [Spec, T], including expletives, is excluded since the EPP has been valued by AGR and hence is not available for another category.

Various linguists subscribe to some version of Hypothesis A (including Alexiadou and Anagnastopoulou 1998; Manzini and Roussou 2000; Manzini and Savoia 1997; Zushi 2003; Platzack 2004; Barbossa 2006, among others). In subscribing to Hypothesis A, they also develop a technology that is consistent with the hypothesis.

The correctness of Hypothesis A, however, has been called into question. Holmberg (2005), for example, argues that Finnish (a 'partial' null subject language) provides a counterexample to the claims stipulated in the hypothesis. He claims that if Hypothesis A is correct, overt expletives ought not to appear in [Spec, T] in null subject languages, which are generally assumed not to have overt expletive pronouns. Chomsky (1995:288) maintains that a 'pure' expletive such as 'there' does not trigger agreement and appears not to be assigned case. Its only function is to satisfy the EPP. Holmberg, however, contradicts the claim by stipulating that Finnish is a null subject language which has an overt nominal expletive (see Holmberg 2005:541-543 for detailed discussion).

Hypothesis A is also unattractive in other conceptual respect, in particular, in terms of the Principle of Uniformity. The hypothesis that [Spec, T] position can be occupied by an overt subject or by pro is consistent with the Principle of Uniformity at least as far as basic clausal architecture is concerned in generative grammar. However, Hypothesis A introduces the possibility that some languages might differ fundamentally from others in terms of whether their clauses contain a [Spec, T] position or not. Putting it slightly differently, they can differ fundamentally from each other in terms of whether they need to satisfy the EPP or not.

Furthermore, Uniformity is threatened by Hypothesis A due to its assumption of case 'absorption' by the inflectional head: in an overt subject language, finite T values the [uCase] feature on the DP in [Spec, vP] nominative (Pesetsky and Torrego 2004). In a null subject language, where the D feature of T entails that T has pronominal features, and there is no overt DP in [Spec, vP] requiring case valuation, the case feature present on finite T is 'absorbed' by the pronominal properties of T itself. In this case, the absence of case valuation of the DP in [Spec, vP] by T under Agr configuration violates Uniformity. Finally, the fundamental claims that subject-verb agreement is an asymmetric relationship has to be abandoned as soon as the phi-features of AGR (ultimately of V) are permitted to be interpretable.

In sum, adopting the hypothesis that verbal agreement features are interpretable in null subject languages leads to both empirical and conceptual difficulties. The second hypothesis seeks to confront the properties of null subjects directly while maintaining the view that verbal agreement features are uninterpretable.

(ii) Hypothesis B: There is Pro in [Spec, T] in Null Subject Languages

The null subject is specified for φ–features, values the uniterpretable features of Agr, and moves to Spec, IP, just like any other subject. This implies that the nullness is a phonological matter: the null subject is a pronoun that is not pronounced. (Holmberg 2005: 538)

Given Hypothesis B, pro is analysed just like any overt pronoun as far as the computational procedures of narrow syntax are concerned. Holmberg argues that for pro to be accommodated within the minimalist system of Chomsky, it must carry a set of interpretable phi-features capable of valuing the corresponding uninterpretable phi-features on T. He observes that the non-overtness of pro may thus be due either to the result of a deletion process involving the pronoun in the phonology, or the result of a pronoun that fails to have a PF realization (Holmberg 2005:559).

Subscribing to Hypothesis B are the analyses developed by Müller (2007) and Roberts (2007). Based on the notion of impoverishness in Distributed Morphology both suggest that the link between rich agreement and null subjects can account for the analysis of pro-drop in a variety of typologically different languages. On the basis of this assumption, Müller suggests that for classical pro-drop languages like Italian and Spanish, morphological richness is conceived as an absence of person impoverishment. Accordingly, 'a single impoverishment rule applying to T that leads to person feature neutralization in any domain (including tense, mood, number and gender) blocks pro-drop throughout' (Müller 2007:8). His observation is captured in the following generalization on pro:

An argument pro DP cannot undergo Agree with T in the syntax if T has been subjected to (perhaps vacuously) person feature neutralizing impoverishment in morphology. (Muller 2007: 2)

Müller suggests that pro-drop be analysed as a pronominal element that is not phonologically realized.

Pro is based-generated as an external argument in the specifier of vP and undergoes Agree with T, thereby triggering subject-verb agreement and receiving nominative case. In languages where T has an EPP property, pro will also move to [Spec, T].

Roberts maintains that the deletion of pro takes place in the phonology and that the deleted pronoun satisfies the EPP. However, his account of the nullness effect is different from Holmberg's as summarized below:

A null pronoun (pro) with interpretable features occupies Spec TP function like an overt pronoun. The nullness effect is the result of the deletion of the D-feature of pro under identity with T after movement of pro has deleted the EPP-feature of T. (Roberts 2007)

In line with Holmberg, they maintain that pro in null subject languages has a D-feature valued as definite, which values the uninterpretable D-feature of T under Agree. The D-feature of T is unvalued, while that of pro is valued like other argument DPs.

4.2 An Alternative Analysis of Pro

Given that null subject languages have 'rich' agreement morphology but that their non-null subject counterparts have impoverished agreement, the lack or rich agreement morphology in non-null subject languages is the result of the existence of a wide pattern of 'system-defining syncretism' in the verbal paradigms of these languages. As a consequence, subjects in these languages must be overtly expressed in the specifier position of T.

Given further that the null subject pro is a specific type of pronoun that is distinguished from other pronominal types in that it is classified as weak and defective, it is characterized as a defective goal in the computational system. What gives pro definite interpretation is the present of a D-feature within its feature matrix. The presence of the D-feature further distinguishes pro from other weak pronouns like clitic pronouns in that it does not need to incorporate into a head in order to be licensed as interpretable.

Clitic pronouns, on the contrary, must incorporate into a head in order to be interpreted. Incorporation requires raising of the clitic together with its copy adjoined into the new head. Having some independent referential interpretation (by virtue of having a D-feature), pro can function like any other overt pronominal in the grammar. It can function as an active goal entering into an Agree relation with an active probe. However, by virtue of carrying a D-feature, pro is distinguished from overt and strong pronouns in that it is a defective goal that has a null interpretation in the phonology. The D-feature attributes referentiality to pro, but the property of being weak attributes a null PF-realisation to pro. In this respect, the null PF-realisation of pro can be accounted for in two ways: either it is the result of a deletion process involving corresponding interpretable features shared by both probe and goal in the phonology, or it is the result of the weak morphological properties inherent to pro itself. Considering these morphological properties of pro (weak, defective goal) the following observation can be made:

(28) a. a defective goal β incorporates into a probe α iff β is uninterpretable without α;

b. a defective goal β deletes at PF iff α carries a corresponding superset of interpretable features of β;

c. a goal β is null at PF iff β is defective carrying a D-feature.

The assumption in (28a) holds for clitic pronouns, since they must incorporate to be
licensed as interpretable. The rest of the discussion centres on the development of (28b) and (28c) given the descriptive technology of Minimalism.

Supposing that the null subject pro enters the derivation carrying a set of interpretable phi-features, an interpretable D-feature and an uninterpretable case feature in consonant with what is articulated in Holmberg's Hypothesis B, Müller 2007 and Roberts 2007, the issue that arises is how to account for the nullness of pro in the grammar. The following suggestions can be made, given the morphological properties of (28b) and (28c) presented above.

(29) a. the null subject pro carries an interpretable φ-set and an interpretable D-feature; T carries an uninterpretable φ-set but has a corresponding interpretable D-feature. By virtue of T having a superset of interpretable

D-feature like pro, a pattern of system-defining syncretism is created by this configuration that neutralizes the role of the D-feature on pro. The D-feature on pro and T delete on the basis of feature identity in the phonology.

        b. the null subject pro carries interpretable φ-features and an interpretable D- feature; pro values the corresponding uninterpretable features on T as interpretable. Pro is interpreted as null by virtue of having an interpretable D-feature.

The propositions in (29a) and (29b) characterize the two alternative approaches considered in this paper to account for the nullness phenomenon of pro in null subject languages. The discussion that follows explains how each of these approaches works, and considers which of the two is favourable.

Suppose following Chomsky (1995:282) that D is interpretable and that it is a feature associated with I/T. The D-feature on I/T may be strong or weak. The distinction in feature strength determines whether the specifier of IP/TP must be satisfied overtly by raising of a nominal or not. On the basis of this assumption it follows from (29a) that the D-feature is interpretable on T. Correlated with null subjects it can be suggested that being a weak pronoun, the null subject pro carries an interpretable D-feature. The presence of the D-feature on pro attributes definiteness and makes pro visible in the C_{HL} like any overt nominal. Thus, pro enters the derivation carrying interpretable phi-features $[i\varphi]$, an interpretable D-feature $[iD]$ and an uninterpretable case feature $[uCase]$. Through Agree the corresponding uninterpretable phi-features on T are valued as interpretable and deleted. The case feature of pro is also valued as nominative and deleted by T. The EPP-feature on T is deleted by movement of pro from its [Spec, v] position into [Spec, T]. A phonological redundancy rule applies at Spell-Out interpreting similar features that appear on different syntactic heads as null. In this respect, the interpretable D-feature on both pro and T can be deleted in the phonology on the basis of feature identity. The consequence of such deletion is that pro will be spelled out as null in the phonology hence the nullness effect of pro can be viewed as the result of a phonological deletion of identical features.

According to this analysis, the distinction between consistent null subject languages like Italian and Spanish and non-null subject languages like English and German rests on the presence of an interpretable D-feature on pro in the former, as opposed to the absence of a D-feature on pro in the latter. The presence/absence of the D in the grammar is correlated with 'rich' agreement morphology. Languages with a wide pattern of system-defining syncretism have impoverished agreement morphology. This accounts for the absence of the D-feature in the inflectional system. As a result, an overt subject must raise into the specifier of T to satisfy the EPP. However, null subjects can be realized by default in languages that lack agreement morphology (for example, Chinese). In contrast, languages with rich inflectional systems have a D-feature which explains the possibility of having null subjects in the grammar.

Suppose that in addition to attributing definiteness and referential interpretation to a nominal, the D-feature also modifies the phonological interpretation of the nominal at Spell-Out. That is, there exists a relation between morphophonologically visible subjects and the D-feature such that the presence or absence of a D-feature also determines whether the subject is pronounced or not pronounced at PF. Subjects that lack a D-feature tend to be pronounced because they are morphophonologically visible in the grammar as opposed to subjects with a D-feature. The null versus non-null contrast can be described from these properties as follows:

Subject Visibility and the D-feature

Subjects must be pronounced at PF if their constituent structures are morphophonologically visible and lack a D-feature. In contrast, subjects will be unpronounced and hence null if their constituent structures are morphophonologically visible but have a D-feature.

According to the proposition in (29b), the category D is an interpretable feature on pro but an uninterpretable feature on T. Thus, pro enters the derivation having an interpretable φ-feature, an interpretable D-feature and an uninterpretable case feature [uCase]. Agree operates between pro and T with pro valuing and assigning interpretability to the corresponding uninterpretable features on T. Raising of pro into [Spec, T] deletes the EPP-feature on T.

By virtue of having the D-feature, pro is characterized as weak, as opposed to pronominal forms that lack a D-feature at LF. As a consequence of this pro is spelled out as null at PF.

In sum, the distinction between the two analyses set out in (29) reduces to the issue of whether or not the D-feature is interpretable on T. As the reader will have observed, both analyses have the capacity to account for the Kenyang facts. However, the analysis set out in (29b) has two important theoretical advantages: firstly, adopting the position that the D-feature on T is uninterpretable preserves the Minimalist assumption of feature asymmetry between Probe and Goal, which are only active under the circumstances that each carries uninterpretable features that match corresponding interpretable features on each other. Thus, adopting this analysis ensures consistency in the circumstances under which the operations Match and Agree apply. The second theoretical advantage of the analysis set out in (29b) is that it resolves the question of which category carries an interpretable D-feature in the derivation: according to the analysis developed here, and after Roberts (2007), the interpretable D-feature is uniquely associated with the pronominal).

5. Conclusion

The paper set out to examine the grammaticalisation path way of Kenyang preverbal particles and its effect on Kenyang morphosyntax. The observation drawn from the analysis reveals that preverbal particles are expressions some where on a continuum between independent pronouns and agreement markers. In fact, these particles are spell-outs of phi-features of the independent pronoun. It follows from the observation that Kenyang has two types of finite clauses comprising those that allow pro-drop and a particular clause type that does not allow pro-drop (Kenyang in this respect may be seen as a partial pro-drop or mixed language). In the former, two types of pro can be identified. There is a pro that has referential and definite interpretation and there a pro that requires an indefinite or generic interpretation. Analysing Kenyang as a subject drop language has important theoretical implications within the context of minimalism couched in Chomsky (1995 and subsequent works). If pro must be accommodated within the system of feature valuation proposed in the Minimalist Program, the phi-features of pro which have been identified as inherently unspecified for phi-features in the framework preceding MP will have to be interpretable rather than uninterpretable.

References

Alexiadou, A. and Anagnastopoulou, E. (1998). Parameterizing AGR: Word Order, V-Movement and EPP-Checking. Natural Language and Linguistic Theory, **16**,491-539.

Barbossa, P.(2006). Two Kinds of Subject Pro. Ms., Cambridge University, Cambridge.

Baker, M. (1988). Incorporation: A Theory of Grammatical Function Changing. Chicago: University of Chicago Press.

Baker, M. (1993). Noun Incorporation and the Nature of Linguistic Representation. In W. Fowley (Ed.), The Role of Theory in Linguistic Description. 13-44. Berlin: Mouton de Gruyter.

Baker, M. (1996). The Polysynthesis Parameter. Oxford: Oxford University Press.

Borer, H. (1986). I-Subjects. Linguistic Inquiry, **17**, 375-416.

Borer, H. (1989). Anaphoric AGR. In O. Jaeggli and K. J. Safir (Eds.), The Null Subject Parameter. 69-109. Dordrecht: Kluwer.

Bopp, F. (1916). Uber das Conjugationssystem der Sanskritsprache in Vergleicgung mitjenem der griechischen, persischen und germanischen Sprachen. Frankfurt: Andreaische Buchandlung.

Bresnan, J. (2001). Lexical Functional Syntax. Oxford: Blackwell.

Bresnan, J. and Mchombo, S. (1987). Topic, Pronoun, and Agreement in Chichewa. Language, **63**, 741-782.

Cardinaletti, A. (1997). Subjects and Clause Structure. In L. Haegeman (Ed.), The New Comparative Syntax. 33-63. London: Longman.

Cardinaletti, A. and Starke, M. (1999). Pronouns in Germanic and Romance Languages: An Overview. In H. Van Riemsdjijk (Ed.), Clitics in the Languages of Europe. 145-235. Berlin: Mouton de Gruyter.

Chafe, W. (1977). The Evolution of Third-Person Verb Agreement in Iroquoian Languages. In C. N. Li (Ed.), Mechanisms of Syntactic Change. 493-524. Austin: University of Texas Press.

Chomsky, N. (1981). Lectures on Government and Binding. Dordrecht:Foris.

Chomsky, N. (1995). The Minimalist Program. Cambridge, MA: MIT Press.

Chomsky, N. (2000). The Minimalist Inquiry: The Framework. In R. Martin, D Micheals, and J. Uriagereka (Eds.), Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik. 89-155. Cambridge, MA: MIT Press.

Chomsky, N. (2001). Derivation by Phase. In M. Kenstowicz (Ed.), Ken Hale: A Life in Language. 1-53. Cambridge, MA: MIT Press.

Chomsky, N. (2002). On Nature and Language. Cambridge: Cambridge University Press.

Chomsky, N. (2004). Beyond Explanatory Adequacy. In A. Beletti (Ed.), Structures and Beyond: The Cartography of Syntactic Structures, Vol. 3. 104-31. Oxford: Oxford University Press.

Chomsky, N. (2008). On Phases. In R. Freidin, C. P. Otero, and M. L. Zubizarreta (Eds.), Foundational Issues in Linguistic Theory: Essays in Honor of Jean-Roger Vergnaud. 133-166. Cambridge, MA: MIT Press.

Creissels, D. (2005). A Typology of Subject and Object Markers in African Languages. In F. K. E. Voeltz (Ed.), Studies in African Linguistics. 43-70. Amsterdam/Philadelphia.: John Benjamins.

Creissels, D., Dimmendaal, G. J., Frajzyngier, Z., and König, C. (2007). Africa as a Morphosyntactic Area. In B. Heine, and D. Nurse (Eds.), A Linguistic Geography of Africa. Cambridge: Cambridge University Press.

Davis, W., and Dubinsky, S. (1996). The Syntax of Non-NP Subjects in an Exploration of Subject Properties. Ms., University of Illinois, Illinois.

Dryer, M. S. (2005). The Expression of Pronominal Subjects. The World Atlas of Languages, 101, 410-411.

Frajzynger, Z. (1997). Grammaticalzation of Number and Verbal Plurals. Linguistic Typology, 1, 193-242.

Fries, C. C. (1927). The Expression of the Future. Language **3**, 87-95.

Givón, T. (1976). Topic, Pronouns and Grammatical Agreement. Linguistic Inquiry, **2**, 149-185.

Givón, T. (1984). Syntax: A Typological Functional Introduction, Vol.1. Amsterdam: John Benjamins.

Givón, T. (1990). Syntax: A Topological Functional Introduction, Vol. 2. Amsterdam: John Benjamins.

Harris, A. C., and Campbell, L. (1995). Historical Syntax in Cross-Linguistic Perspective. Cambridge: Cambridge University Press.

Heine, B., and Reh, M. (1984). Grammaticalization and Reanalysis in African Languages. Hamburg: Helmut Buske.

Heine, B., and Kuteva, T. (2002). World Lexicon of Grammaticalization. Cambridge: Cambridge University Press.

Holmberg, A. (2005). Is there Little Pro? Evidence from Finnish. Linguistic Inquiry,**36**, 533-564.

Hopper, P. J., and Traugott, E. C. (1993). Grammaticalization. Cambridge: Cambridge University Press.

Huang, C-T. J. (1984). On the Distribution of Reference of Empty Pronouns. Linguistic Inquiry, **15**, 531-574.

Huang, C-T. J. (1989). Pro-drop in Chinese: Generalised Control Theory. In O. Jaeggli, and K. J. Safir (Eds.), The Null Subject Parameter. (PP185-214). Dordrecht: Kluwer.

Jaeggli, O., and Safir, K. J. (1989). The Null Subject Parameter and Parametric Theory. In O. Jaeggli, and K.J. Safir (Eds.), The Null Subject Parameter. 1-44. Dordrecht: Kluwer.

Lehman, W. P. (1985). Papers on Diachronic Syntax: Six Case Studies. Lingua, 67, 344-346.

Lehman, W. P. (1993). Historical Linguistics: An Introduction. New York: Holt, Rinehart and Winston.

Letsholo, R. (2002). Subject Agreement in Ikalanga. Paper Presented at the 26th Penn Linguistics Colloquium, University of Pennsylvania, Philadelphia.

Li, C. N., and Thompson, S. A. (1976). Subject and Topic: A New Typology of Language. In C. N. Li (Ed.), Subject and Topic. New York: Academic Press.

Manzini, R. M., and Roussou, A. (2000). A Minimalist Theory of A-Movement and Control. Lingua, **110**, 409-447.

Manzini, R. M., and Savoia, M. (1997). Null Subjects without Pro. UCL Working Papers in Linguistics, **9**, 1-12.

Mchombo, S. (2004). The Syntax of Chichewa. Cambridge: Cambridge University Press.

Meillet, A. (1912). L'evolution des Formes Grammaticales. Linguistique Historique et Linguistique Generale. Paris: Champion. 130-49.

Mithum, M. (1986). On the Nature of Noun Incorporation. Language, **62**, 32-7.

Mithum, M. (1991). The Role of Motivation in the Emergence of Grammatical Categories: The Grammaticalization of Subjects. In E. C. Traugott, and B. Heine (Eds.), Approaches to Grammaticalization, 2, 159-184. Amsterdam: John Benjamins.

Mithum, M. (2000). The Reordering of Morphemes. In S. Gildea (Ed.), Reconstructing Grammar: Comparative Linguistics and Grammaticalization. 231-255. Asterdam: John Benjamins.

Muller, M. F. (1875). Lectures on the Sciences of Language. London: Longman, Green and Company.

Müller, G. (2007). Some Consequences of Impoverishment-Based Approach to Morphological Richness and Pro-drop. Ms., Institut fur Linguistik, University of Leipzig.

Perlmutter, D. (1971). Deep and Surface Structure Constraints in Syntax. New York: Holt, Rinehart and Winston.

Pesetsky, D. and Torrego, E. (2004). Tense, Case and the Nature of Syntactic Categories. In J. Gueron and J. Lecarme (Eds.), The Syntax of Time. 495-537. Cambridge, MA: MIT Press.

Platzack, C. (2004). Agreement and the Person Phrase Hypothesis. Working Papers Scandinavian Syntax, **73**, 83-112.

Ramirez, C. (1998). The Kenyang Noun Phrase. Cameroon: SIL Publications.

Rizzi, L. (1982). Issues in Italian Syntax. Dordrecht: Foris.

Rizzi, L. (1986). Null Objects in Italian and the Theory of Pro. Linguistic Inquiry, **17**, 501-552.

Roberts, I. (1991). Excorporation and Minimality. Linguistic Inquiry, **22**, 209-218.

Roberts, I. (2004). Some Consequences of a Deletion Analysis of Null Subjects. Ms., University of Cambridge, Cambridge, United Kingdom.

Roberts, I. (2006). Clitics, Head Movement and Defective Goals. Ms., University of Cambridge, Cambridge, United Kingdom.

Roberts, I. (2007). A Deletion analysis of Null Subjects: French as a Case Study. Ms. University of Cambridge, Cambridge, United Kingdom.

Safir, K. (1985). Missing Subjects in German. In J. Toman (Ed.), Studies in German Grammar. 193-229. Dordrecht: Foris.

Stump, G. T. (1984). Agreement vs. Incorporation in Breton. Natural Language and Linguistic Theory, **6**, 391-434.

Szeremenyi, O. (1989). The New Sound of Indo-European. Diachronica, **6**, 237-251.

Tabe, F. A. E., and Green, M. J. (2012). Subject versus Topic: Evidence from Kenyang. Transactions of the Phi logical Society, 110, 1-16.

Tanyi, E. M. (1998). Kenyang Lexicon. Yaoundé: CABTAL.

Tanyi, E. M. (2000). Kenyang Segmental Phonology. Yaoundé: SIL.

Taraldsen, K. T. (1978). The Scope of Wh Movement in Norwegian. Linguistic Inquiry, 9, 623-40.

Traugott, E. C., and Heine, B. (1991). Approaches to Grammaticalization, Vol. 2. Amsterdam: John Benjamins.

Tyhurst, J. (1985). Tone in Kenyang Noun Phrase. MA. Thesis, University of California, Los Angeles.

Van Gelderen, E. (2004). Grammaticalization as Economy. Amsterdam: John Benjamins.

Van Gelderen, E. (2008). Linguistic Cycles and Economy Principles: The Role of Universal Grammar in Language Change. In E. Seoane, and M. J. López-Couso (Eds.), Theoretical and Empirical Issues in Grammaticalization. 245-64. Amsterdam: John Benjamins.

Zushi, M. (2003). Null Arguments: The Case of Japanese and Romance. Lingua, **2**, 559-604.