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COLOR TERMS AND LEXICAL CLASSES IN KRAHN/WOBÉ¹

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Many West African languages lack a separate category of adjectives; Krahn and Wobé are also said to lack this lexical class. However, an examination of color terms in the Gborbo dialect of Liberian Krahn reveals a class of words which are neither nouns or verbs. After describing the syntactic behavior of nouns and verbs and color nouns and verbs, it is shown that a third class of color words must be considered adjectives. The data supports proposals by Givón and Dixon that, universally, lexical categories are semantically based.

O. Introduction

Color terms have been widely studied in a variety of languages by linguists, anthropologists, and psychologists. Many studies assume that color terms are adjectives, but, as Welmers [1973] and Dixon [1977] show, in some languages, words for color are nouns or verbs. Gborbo Krahn, a Kru language spoken in western Liberia, has color words in three categories: noun, verb, and adjective. In this paper I show how color terms in the Gborbo dialect of Krahn are initiating a new lexical class of adjectives. Krahn is called Wobé in Côte d'Ivoire, so I will refer to the language as Krahn/Wobé. After surveying the status of adjectives in West African languages and describing the syntactic behavior of nouns and verbs in Krahn, I describe the use of color terms in Gborbo Krahn. Although other dialects of Krahn/Wobé may differ, a category of adjectives seems to be emerging in the Gborbo dialect. I discuss why color words are the earliest lexical items in this new grammatical class. The evidence from

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Krahn/Wobé supports claims by Dixon [1977] and Givón [1979, 1984] that, universally, lexical categories are semantically based.

1. Adjectives in West African Languages

In a chapter called “Adjectives and Un-adjectives”, Welmers [1973:249] argues that most Niger-Congo languages have either a very small class of adjectives or none at all. He notes that the term “adjective” is often applied to any attribute translated as an English adjective. Dixon [1977] claims that different “semantic types” tend to belong to certain lexical categories in the world’s languages. Some of the semantic types that Dixon claims are associated with adjectives in many of the world’s languages are either nouns or verbs in Gborbo. For example, to describe something shiny, a Gborbo speaker must use either the noun /*lilr*²²/ or the verb /*foN*¹/. There is no corresponding adjective.² In her grammar of Wobé, Egner [1989] identifies a small number of words she calls adjectives, but claims that these are a subclass of nouns and not a separate lexical class. In Gborbo Krahn, however, there are three basic color words which are neither nouns nor verbs and which seem to be initiating a new lexical class.

2. The Category *Verb* in Krahn

Like other Kru languages discussed in Marchese [1986], Krahn has a subject-verb-object order in simple sentences which changes to subject-auxiliary-object-

²Numbers refer to phonemic tones with 1 indicating the highest, 4 the lowest, and combinations indicating contour tone (see Bing [1993b] and Bearth & Link [1980]). The symbols /I, E, U, O/ correspond to [i, e, u, o] respectively. The symbol /N/ indicates nasalization, which extends leftward as far back as a voiceless obstruent. The following abbreviations are used in the translations:

1s, 3s, 1p, 3p = first and third person human singular or plural

3ns/3np = third person nonhuman singular or plural

A = adjective

AM = associative marker

EMP = emphatic particle

I = imperfect

N = noun

NEG = negative

part = particle

pl = plural

poss = possessive

Q = question marker

? = unknown factor, either tonal, lexical or morphological

V = verb

VAL = valence marker indicating a marked number of arguments; called “declarative marker” in Egner [1989]

verb order with the presence of either positive or negative auxiliaries. Thus, the verb occurs before its complements in (1a), but after its complements in (1b).³

- (1) a. *soko*³³ *pa*⁴³ *too*³⁴ 'Soko carved a mortar'
 Soko carve mortar
- b. *soko*³³ *se*³ *too*³⁴ *pa*⁴³ 'Soko didn't carve a mortar'
 Soko NEG mortar carve

Descriptive words, which are adjectives in English, are frequently stative verbs in Krahn (2a-b). As (2c) through (2e) illustrate, stative verbs may be predicates for pronoun subjects and can be negated like other verbs.

- (2) a. *O*³ *bei*³² 'he's big'
 3s be-big-part
- b. *ci*⁴ *kmu*³² 'leopards are powerful'
 leopard be-powerful
- c. *O*³ *se*³ *kmu*³² 'he's not powerful'
 3s NEG be-powerful
- d. *ci*⁴ *lan*² *E*³ *kmu*³² 'that leopard, it's powerful'
 leopard that 3ns be-powerful
- e. *O*³ *sei*³² *bE*³ 'he's not big'
 3s NEG-part be-big

Verbs may also be identified morphologically. Krahn verbs have a characteristic suffix /-yE³/ or /-e³/ called the declarative marker in Fisher [1979] and Egner [1989]. This suffix occurs in affirmative sentences when the verb occurs with added arguments, including instrumentals, as discussed in Bing and Duitsman [1993].

- (3) a. *pa*⁴³ *too*³⁴ 'carve a mortar!'
 carve mortar
- b. *payE*⁴³ *na*² *faa*³³ 'carve a bird with a knife!'
 carve-VAL bird knife

³See discussions in Marchese [1986:Ch.4] and Egner [1989:152].

This declarative marker, glossed “VAL” for “valence marker”, generally does not appear in negative sentences. In (4b) the change of tone on the first word marks the negation; the valence marker is absent.

- (4) a. *OO*³³ *die*³³ *dE*³ *gbain*²¹ ‘she eats a lot’
 3s-I eat-VAL something a lot
- b. *OO*³² *di*³ *dE*³ *gbain*²¹ ‘she doesn’t eat a lot’
 3s-NEG-I eat something a lot

The sentences in (4) also illustrate how verbs are intensified with adverbs such as /*gbain*²¹/ rather than by reduplication, as nouns are.

3. The Category *Noun* in Krahn

Like nouns in many languages, nouns in Krahn may co-occur with determiners and/or possessives.

- (5) a. *pepa*²³ *lan*² ‘that paper’
 paper that
- b. *pepa*²³ *lan*³ ‘this paper’
 paper this
- c. *OO*³³ *too*³² ‘his basket’
 3s-poss basket
- d. *OO*³³ *cE*²³ ‘his ice’ (literally ‘his coldness’)
 3s-poss coldness

Most nouns have plural forms (often formed with the suffix /-I/ which assimilates to the height and tone of the final vowel of the stem).

- (6) a. *ku*¹ ‘ghost’
 b. *kui*²¹ ‘ghosts’

However, because Krahn has many morphemes with high front vowels, and because there is a great deal of vowel assimilation, as discussed in Bing and Duitsman [1993], the presence or absence of the suffix /-I/ is not a reliable test for identifying nouns.

Nouns function as arguments of verbs, so subjects and objects such as /*ku*¹/ ‘ghost’, /*cEE*³²/ ‘cold’, and /*too*³²/ ‘basket’ are easily identified as nouns.

- (7) a. *kua*²¹ *ji*³ 'a ghost comes'
ghost-I come
- b. *cEE*³² *ji*³ 'cold (weather) comes'
coldness-I come
- c. *OO*³³ *ble*³ *too*³² 'he has a basket'
3s-I have basket

Like verbs, nouns can sometimes be predicates of third person nonhuman pronouns in sentences with no copula.

- (8) a. *E*³ *cE*³² 'it's cold'
3ns coldness
- b. *E*³ *ku*¹ 'it's a ghost'
3ns ghost

However, unlike verbs, nouns can co-occur in the predicate with the copula /*nE*³/ or /*nie*³/ 'be' or with /*kon*³/ 'have':

- (9) a. *E*³ *nie*³³ *cE*³² 'it's cold'
3ns be-VAL coldness
- b. *OO*³³ *nie*³³ *cE*³² 'he's cold'
3s-I be-VAL coldness
- c. *OO*³³ *nie*³³ *ku*¹ 'he's a ghost'
3s-I be-VAL ghost
- d. *O*³ *kon*³/*nie*³³ *nEnE*²² 'she is careful'
3s have/be-VAL carefulness

Krahn often uses nouns for physical properties.

- (10) a. *ci*⁴ *nie*³³ *dli*¹ 'the leopard is dangerous'
leopard be-VAL danger
- b. *nyO*³ *nE*³ *dli*¹ 'people can be dangerous'
people be danger

- c. EN^1 nie^{33} $pEpE^{11}$ 'I'm very clean'
 1s be-VAL clean-clean

In sentences with negative auxiliary verbs, the verb complement precedes the verb when the auxiliary is present.

- (11) a. la^2 nie^{33} cE^{32} 'the shirt is wet/cold'
 shirt be-VAL coldness
- b. la^2 se^3 cE^{32} nE^3 'the shirt isn't wet/cold'
 shirt neg coldness be

Nouns, but not verbs, occur in a nominal construction with $/ka^3/$ 'such'. These are discussed in Egner [1989:150-151].

- (12) la^2 $pEpE^{11}$ ka^3 'such a clean shirt'
 shirt clean-clean (N) such

Nouns can be intensified by reduplication rather than with adverbials such as $/gbain^1/$ 'very'.

- (13) a. E^3 nie^{33} $klin^1$ $klin^1$ 'it's really clean'
 3ns be-VAL clean clean
- b. la^2 $klin^1$ $klin^1$ 'the shirt is really clean'
 shirt clean clean

Nouns may be attributive in compounds or associative constructions as in (14).⁴

- (14) a. dli^{21} ci^4 die^{33} kEN^3 'the dangerous leopard ate the deer'
 danger leopard eat-VAL deer
- b. $nyOO^{33}$ $nEnE^{22}$ nie^{33} $nymO^{33}$ ji^1 'a careful person is good'
 person-3s carefulness be-VAL good come

In Gborbo, as in other West African languages, many attributes may be expressed either with verbs or nouns. The most reliable way to identify a word as a noun is by its co-occurrence with the copula $/nE^3/$ in the predicate, its ability to co-occur in nominal phrases with $/ka^3/$, and its intensification by reduplication.

⁴For discussions, see Egner [1989:26-29], Bearth & Link [1980:172-175], and Paradis [1984].

4. Color Terms in Gborbo

Like many other African languages such as Akan [Bartle 1983], Yoruba [Welmers 1973:257], and Emai [Schaefer 1984], Krahn has only three basic color terms, 'black', 'white', and 'red', more accurately translated as 'dark-cool', 'light', and 'bright-warm'. This system is distributed across the spectrum like other three-color systems described in Berlin and Kay [1969] and Kay and McDaniel [1978]. Although in Gborbo there are only three basic colors (plus a possible fourth, 'yellow'), there are many terms for the three colors. These lexical items include not only verbs and nouns, but a third category as well, adjectives.

4.1. Color verbs. Among color words are the stative verbs /*gbe*³/ 'dark', /*plu*¹/ 'light', and /*sain*⁴¹/ 'bright'. These correspond to the Wobé verbs cited in Egner [1989:110].

(15)	Gborbo Krahn		Wobé	
a.	<i>la</i> ² <i>gbe</i> ³ shirt be-black	'the shirt is black'	/kpe ³ /	'dark'
b.	<i>dE</i> ³ <i>plu</i> ¹ thing be-white	'the thing is white'	/plu ¹ /	'light'
c.	<i>dE</i> ³ <i>sain</i> ⁴¹ thing be-red	'the thing is red'	/sain ⁴¹ /	'bright'

Like other verbs, these stative verbs can be predicates for pronouns as well as nouns.

(16) a.	<i>O</i> ³ <i>gbe</i> ³ 3s be-black	'he's black'
b.	<i>O</i> ³ <i>plu</i> ¹ <i>lao</i> ¹³ 3s be-white Q	'is he a white person?'

In sentences with negative auxiliaries, color verbs pattern like other verbs; in (17) verb complements precede the verbs.

(17) a.	<i>la</i> ² <i>se</i> ³ <i>gbe</i> ³ shirt neg black	'the shirt is not black'
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- b. *lɪ*² *sooN*²² *se*³ *plu*¹ ‘the two shirts are not white’
 shirt-pl two neg be-white
- c. *mi*²³ *se*³ *jai*³³ *plu*¹ ‘the hair is not blondish’
 hair neg sort of be-white

Color verbs serve as predicates in interrogative sentences. Questions are formed by adding a question word, (16b), or by lengthening the final vowel of a declarative sentence, (18).

- (18) a. *la*² *gbee*³³ ‘is the shirt black?’
 shirt be-black-Q
- b. *la*² *pluu*¹² ‘is the shirt white?’
 shirt be-white-Q

Unlike nouns, which are intensified by reduplication, color verbs are intensified adverbially with /*gbaiN*²¹/ ‘very’.

- (19) a. *aN*¹ *la*² *gbe*³ *gbaiN*²¹ ‘my shirt is very black’
 1s-AM shirt be-black very
- b. *E*³ *plu*¹ *gbaiN*²¹ ‘it’s very white’
 3ns be-white very
- c. *E*³ *saiN*⁴¹ *gbaiN*²¹ ‘it’s deep red’
 3sn be-red very

4.2. Color nouns. There are several nouns for each of the three basic colors, reflecting particular luminosities or collocations.

- (20) a. *la*² *nie*³³ *pOO*⁴⁴ ‘the shirt is (very) white’
 shirt be-VAL white
- b. *la*² *nie*³³ *puu*¹² ‘the shirt is white’
 shirt be-VAL white
- c. *la*² *nie*³³ *tauo*⁴³⁴ ‘the shirt is (dusty) white’
 shirt be-VAL white
- d. *la*² *nie*³³ *woau*²¹² ‘the shirt is the whitest’
 shirt be-VAL white

- e. *la*² *nie*³³ *jlu*⁴ *jlu*⁴ 'the shirt is black'
shirt be-VAL black
- f. *la*² *nie*³³ *keo*⁴² *keo*⁴² 'the shirt is black'
shirt be-VAL black
- g. *la*² *nie*³³ *soo*³²³ 'the shirt is red'
shirt be-VAL red
- h. *la*² *nie*³³ *jlbio*²¹² 'the shirt is red'⁵
shirt be-VAL red

Both */jlu*⁴ *jlu*⁴/ and */keo*⁴² *keo*⁴²/ 'black', seem to only occur in reduplicated form. Like other nouns, nominal color words occur in predicates with the copula */nE*³/ 'to be' or its variant */nie*³/. It is not surprising that sentences such as (21), which contain both a verb and a copula, are unacceptable.

- (21) **la*² *nie*³³ *plu*¹ *'the shirt is be-white'
shirt be be-white

Like the nouns in (14), color nouns occur in associative or compound constructions with the characteristic low tone on the second noun.⁶

- (22) a. *la*² *poo*⁴⁴ 'the white shirt'
shirt white (N)
- b. *la*² *keo*⁴² *keo*⁴² 'the black shirt'
shirt black-black (N)

When they co-occur with auxiliaries such as the negative auxiliary, color nouns, like other nouns, occur in pre-verbal complement position rather than in sentence-final position.

- (23) a. *la*² *nie*³³ *wau*¹³ 'the shirt is very white'
shirt be-VAL white (N)
- b. *la*² *se*³ *wau*¹³ *nE*³ 'the shirt is very white'
shirt NEG white be

⁵Except for */jlbio*²¹²/ 'red' and */soEN*⁴⁴/ (discussed in §5), which were only used by single speakers, all the terms discussed in this paper were used by more than one speaker.

⁶For discussions of tonal changes on the associative construction in different dialects, see Bearth and Link [1980:172-175], Egner [1989:25-33], and Paradis [1984].

Like other nouns, nominal color words co-occur with /ka³/ 'such'.

- (24) *la*² *keo*⁴² *keo*⁴² *ka*³ 'such a black shirt!'
 shirt black-black (N) such

Verbs never occur in this construction.

- (25) **la*² *gbe*³ *ka*³ *'such a black shirt is!'
 shirt be-black (V) such

Although nominal and verbal color words cannot occur in the same syntactic structures, they often occur in similar discourse contexts. For example, the proverb in (26) contains two words for white, the verb /*plu*¹/ and the noun /*poo*⁴⁴/.

- (26) *dEE*³² *plu*¹ *E*³ *si*⁴ *poo*⁴⁴ 'nothing is whiter than white'
 thing-NEG be-white 3ns surpasses white (N)

4.3. Color adjectives. A third class of basic color terms in Krahn are either adjectives or are in the process of becoming adjectives.

- (27) a. *la*² *plu*⁴ 'white shirt' (*'the shirt is white')
 shirt white (A)
- b. *la*² *jle*³ 'black shirt' (*'the shirt is black')
 shirt black (A)
- c. *la*² *saEN*⁴⁴ 'red shirt' (*'the shirt is red')
 shirt red (V)

These color words differ from nouns and verbs in several ways. Unlike color verbs, color adjectives do not occur as predicates for either nouns or pronouns.

- (28) a. **O*³ *plu*⁴ *'it whites'
 3ns/3s white (A)
- b. **O*³ *jle*³ *'it blacks'
 3ns/3s black (A)

If /*jle*³/ were a verb, (28b) could be interpreted as ‘it is black’ or ‘he who is black’. However, the ungrammatical phrase in (28b) can only be translated as *‘black it’.⁷

Adjectives also differ from nouns. Unlike nouns, the Krahn adjectives cannot occur with determiners, nor can they occur in predicate position after the copula /*nE*³/ ‘be’.

- (29) a. **jle*³ *laN*³ *‘this black’
 black (A) this
- b. **la*² *nie*³³ *jle*³ *‘the shirt is black’
 shirt be-VAL black (A)

The ungrammaticality of sentences such as (29b) clearly indicate that these color words are not nouns; since they cannot occur in the predicate slot in subject+be+predicate constructions, they appear to be verbs, and two of them are remarkably similar to the corresponding color verbs.

- (30) a. *l*² *soon*²² *plu*¹² ‘the two shirts are white (verb)’
 shirt-pl two be-white-I (V)
- b. *l*² *plui*⁴⁴ *soon*²² ‘two white (adj) shirts’⁸
 shirt-pl white-pl (A) two
- c. *la*² *saiN*⁴² ‘the shirt is red (verb)’
 shirt be-red-I (V)
- d. *dE*³ *saEN*⁴⁴ ‘red (adj) thing’
 thing red (A)

In fact, in Wobé, they apparently are verbs. In her description of Wobé, Egner [1989:110-112] identifies the color terms corresponding to those in (30b) and (30d) as verbs in relative clauses. She states that in Wobé, relative clauses are sometimes marked only by the presence of low tone.

Les verbes qualificatifs peuvent encore former un syntagme qualificatif avec un nom. Ils apparaissent alors sous leur forme subordonnée et dans une proposition relative. Le pronom relatif de cette dernière n’est cependant présent que par le ton bas au début du verbe... (p.110)

⁷The pronoun /*o*³/ is the third person singular pronoun for one class of humans [Bing 1993a] as well as for one class of non-humans [Bing 1987].

⁸The word /*plui*⁴⁴/ ‘white’ might seem to have an agreement marker, but the /*i*/ in (30b) could also be a plural marker on a noun.

Le ton bas-tombant des pronoms relatifs abaisse le ton de certains verbes ... la présence du pronom relatif peut aussi se manifester par le seul abaissement tonal du verbe ou de la marque de l'aspect inaccompli... (p.212)⁹

Thus, in the Wobé example (31), Egner (p.110) translates the word /*sain*⁴²/ 'red' as if it were a relative clause.

- (31) *tae*³² *saian*⁴²² 'red loin cloth'
 loin-cloth which be-red-subordinator

Egner's analysis is appealing, but does not account for the adjectives in Gborbo Krahn. Although Egner's relative clause hypothesis could be a possible source for /*plu*⁴/ 'white' and /*saEN*⁴⁴/ 'red', in Gborbo, there still remains the verb /*gbe*³/ 'black', which is quite different from the adjective /*jle*³/ 'black'. In addition, there is other evidence showing that the color words in (27) cannot be verbs.

For example, there is evidence from intensification. If the phrase /*la*² *plu*⁴⁴/ 'white shirt' were, in fact, 'shirt which is white', then it should be possible to use the intensifier /*gbain*²¹/ 'very', as it is with the verb in (32a); however, (32b) indicates this is not possible.

- (32) a. *la*² *gbe*³ *gbain*²¹ 'the shirt is very black'
 shirt be-black (V) very
- b. **la*² *jle*³ *gbain*²¹ *'shirt which is very black, very black shirt'
 shirt black very

For the color adjectives, intensity is always expressed by reduplication.

- (33) a. *sain*⁴⁴ 'red'
 red (A)
- b. *sain*⁴⁴ *sain*⁴⁴ 'very red'
 red-red (A)
- c. *la*² *jle*³ *jle*³⁴ 'very black shirt'
 shirt black-black (A)

⁹[My translation]: The attributive verbs may also form an attributive construction with a noun. In these cases they occur in a subordinate marker in a relative clause. The relative pronoun of the latter is marked only by the initial low tone of the verb... (p. 110)

The low falling tone of the relative pronouns lowers the tone of certain verbs... The presence of a relative pronoun may also be marked by only the tonal lowering of the verb or by the imperfect aspect marker... (p. 212)

Further evidence that /*plu*⁴/, /*jle*³/, and /*saEn*⁴⁴/ are adjectives rather than verbs is that, unlike verbs, they occur in phrases with /*ka*³/ ‘such’ as in (34a). Verbs do not, as shown in (34b).

- (34) a. *la*² *jle*³ *ka*³ ‘such a black shirt!’
 shirt black such
- b. *la*² *saEn*⁴⁴ *ka*³ ‘such a red shirt!’
 shirt red such
- c. **la*² *gbe*³ *ka*³ *‘such the shirt is black!, such the/a shirt’
 shirt black such which is black!’

The morphology provides additional evidence. The /*i*/ in /*plui*⁴⁴/ in (35b) might be either an agreement marker on an adjective or a plural marker on a noun.

- (35) a. *la*² *plu*⁴ ‘white shirt’
 shirt white (A)
- b. *l*² *plui*⁴⁴ *soon*²² ‘two white shirts’
 shirt-pl white? (A) two

Although a suffix /*i*/ or /*l*/ does not distinguish between nouns and adjectives (see Bing and Duitsman [1993]), the presence of /*i*/ indicates that /*plui*⁴⁴/ in (35b) cannot be a verb; this high front vowel cannot occur on /*plui*¹¹/ in (36b).

- (36) a. *l*² *soon*²² *plu*¹ ‘the two shirts are white’
 shirt-pl two white(V)
- b. **l*² *soon*²² *plui*¹¹ *‘the two shirts are white’¹⁰
 shirt-pl two white

¹⁰The same pattern was also true for the verbs and adjectives for black and red. Interestingly, although J.D. Slinger indicated that the form /*gbl*³/ is not used in sentences such as (i), he commented, “It should be; it’s the correct form.”

- (i) *l*² *soon*²² *gbe*³/**gbl*³ ‘the two shirts are black’
 shirt-pl two be-black (V)
- (ii) *l*² *jle*³/*jl*³ *soon*²² ‘two black shirts’
 shirt-pl black (A) two

Most importantly, color adjectives differ from *both* nouns and verbs in at least one way. In some contexts, either verbs or noun phrases can be predicates for pronoun subjects with no copula, as shown in (37).

- (37) a. E^3 la^2 jle^3 'it is a black shirt'
 3ns shirt black (A)
- b. E^3 gbe^3 ($gbain^{21}$) 'it's (very) black'
 3ns be-black (V) (very)

If the adjectives were either nouns or verbs, it should be possible to find some contexts in which they occur as predicates in sentences without a copula, but, in fact, they never do.

- (38) a. $*E^3$ jle^3 *'it is black'
 3sn black
- b. $*E^3$ jle^3 $gbain^{21}$ *'it's very black (A), a very black it'
 3ns black (A) very

Thus, on distributional evidence, adjectives are a class separate from either nouns or verbs. Like verbs (but unlike nouns) adjectives cannot co-occur with the copula $/nE^3/$ or the valance marker $/-E^3/$. Like nouns (but unlike verbs) adjectives are intensified by reduplication rather than by adverbials and can occur with the morpheme $/i/$ in plural constructions. Unlike either nouns or verbs, color adjectives cannot be predicates for personal pronoun subjects in sentences with no copula.

It is possible that at least two of the color adjectives have evolved (or are evolving) from relativized stative verbs. Their inability to co-occur with the copula is consistent with this hypothesis. However, consider the data in (39).

(39)	color	stative verbs	adjectives	nouns
a.	white	$/plu^1/$	$/plu^4/$	$/puu^{12}/$
b.	red	$/saiN^{42}/$	$/saEN^{44}/$	$/soo^{323}/$
c.	black	$/gbe^3/$	$/jle^3/$	$/jlu^3 jlu^3/$

The adjectives for 'white' and 'red' are segmentally similar to the corresponding verbs in (39a) and (39b). In these cases, the tonal differences could be the result of a relative marker, as in Wobé. The adjective $/jle^3/$ 'black', in (39c), however, is more similar to the noun $/jlu^3 jlu^3/$ and to the noun $/jlu^1/$

'cobra' than it is to the verb /gbe³/. The phonological differences between the items paired in boxes could be accounted for with current morphology and phonological rules.¹¹

It is also possible that color adjectives may derive from more than one category; the adjective /jle³/ 'black' may have evolved from a noun, but the adjectives /plu⁴/ 'white' and /saen⁴⁴/ 'red' from verbs. Possibly the noun /puu¹²/ in (39a) evolved from the verb /plu¹/. The adjective could have come from either source. Givón [1979:266-267] discusses similar possibilities; for some Bantu languages he proposes that stative verbs are nominalized, then used in possessive patterns, then finally changed morphologically to fit a new syntactic pattern. With so few examples, it is only possible to speculate about the histories of these adjectives.

Although there is evidence from color words that a new lexical class of adjectives may be emerging in Gborbo Krahn, the evidence is still not overwhelming. The absence of a syntactic pattern subject-be-adjective suggests that the adjectival color words may not yet be a "true" lexical class. However, color words do seem to be initiating such a class. One indication that this may be a brand new lexical class is its size. Other than color words, the only other clear example of an adjective is the word /sman²²/ 'hot'. The word /sman²²/ may also be a noun meaning 'soup' (the spicy stew eaten over rice) or a verb meaning 'to be hot', as exemplified in (40).

- (40) sE² sman²² 'snake soup' or 'the snake is hot' (verb)
snake -soup (N) or be-hot (V)

In some contexts such as (41), this word is clearly a verb.

- (41) gbaa³¹ sman²² 'the dryer is hot' (verb)
dryer be-hot (V)

However, the fact that the word /sman²²/ can also be used in a noun phrase with /ka³/ 'such' or /-o/ 'what' indicates that in (42) /sman²²/ 'hot' is being used as an adjective, since verbs never occur in this construction.

- (42) a. gbaa³¹ sma-oN²² 'what a hot dryer!'
dryer hot-EMP

¹¹The presence of a subordinating particle /E³/ or /yE³/ plus regular vowel deletion rules in Gborbo would account for the segmental differences between the verb and adjective for 'red' or the noun and adjective for 'black'. Low tone on the adjectives could be accounted for either by a low tone relative marker, or by the low tone which occurs in noun constructions. In normal speech, the segment // is frequently dropped.

- b. *smaN*²² *smaN*²² *ka*³ ‘such hot soup!’
 soup hot such

In this case it seems reasonable to assume that the adjective /*smaN*²²/ developed from the verb rather than from the noun, although anyone who has eaten /*smaN*²²/ would not completely discount the noun as a possible source.

5. The Use of Adjectives in Krahn Descriptions

Although there are few adjectives in Krahn, the color adjectives occur almost as often as nominal and verbal color words in descriptions. The description in (43), which is fairly representative of those collected from various speakers in Liberia, begins and ends with color adjectives. It was given in response to a picture of a Baltimore Oriole in Peterson [1980:258] and the question, “How would you describe this bird to a Krahn person?”

- (43) *Naa*²³ *saEN*⁴⁴ ‘Red bird (adj.)
 bird red (A)
- wE*³ *E*³ *kE*² *plu*¹ *jai*³³ and its beak is whitish (verb),
 and 3ns beak be-white(V) sort of
- wE*³ *E*³ *dru*¹ *gbe*³ and its head is black (verb)
 and 3ns head be-black(V)
- gbaa*³¹ *ku*⁴ *gbe*³ wings are black (verb)
 wings be-black(V)
- wE*³ *dE*³ *pli*³ *pUU*^{12-iN}²² with white (noun) markings on the
 and thing wings white (N)-on wings
- bUI*³³ *jle*³. black (adj) feet.’
 foot-pl. black(A)

Some of the examples above occurred in interviews with Krahn speakers who were asked to describe different birds, animals, and people. In cases where speakers used color words, there were no obvious contexts in which nouns, verbs, or adjectives predominated. The two descriptions of cobras in (44), for example, are from different speakers responding to the request, “Describe /*jlu*¹/ for me.”

The first speaker begins with the verb for black; the second speaker uses an adjective and noun.¹²

(44) a. **Speaker 1**

*jlu*¹ *gbe*³ 'Cobra is black (verb).
cobra be-black (V)

*U*³ *gbe*³ *U*³ *teiN*³³ *U*³ *waiN*⁴² It's black (verb), it's
3ns be-black(V) 3ns be-long 3ns be-small long, it's small.'

b. **Speaker 2**

*sE*² *jle*³ *nea*³³ *jlu*³ *jlu*³ *wE*³ 'This black (adj) snake is
snake black (A) being black-black (N) ?EMP very black (noun)

*wEE*³³ *teN*² and it's long.'
and-3ns be-long(V)

The excerpts in (43) and (44) are representative and illustrate that color adjectives are not rare in descriptions. Color adjectives are also salient in another sense. When first asked to point out the Gborbo colors on the color chart which accompanies Berlin and Kay [1969], the consultant, J.D. Slanger, designated and labeled the areas as shown on Figure 1.

Figure 1

One interesting aspect of Figure 1 is that the words chosen for 'red', 'black', and 'white' are all adjectives. At first, I suspected that the noun /*soEN*²⁴/ 'yellow'

¹²Speaker 1 is from Liberia and Speaker 2 from Côte d'Ivoire. The different pronoun reflects a dialect difference. Unlike Wobé speakers, Gborbo speakers use three different third person nonhuman pronouns, as described in Bing [1987].

might be emerging as a fourth basic color, but it apparently is not. Despite my early hopes, the fourth color in Figure 1, /soEN²⁴/ does not meet the definition of a basic color; it is the name of a yellow wood. In Liberia, it was not used by any speaker other than Mr. Slanger. All of the Krahn speakers I recorded were bilingual to some extent. When pressed to describe the color of some particular bird, animal, or object, speakers used either a French or English word and, except for Mr. Slanger, did not use or recognize the word /soEN²⁴/. Gborbo not only lacks words for basic colors other than 'black', 'white', and 'red'; it also seems to lack words for any secondary or derived color terms, with the possible exception of /soEN²⁴/.

6. Adjectives as Pioneers

Having shown that Gborbo Krahn seems to be initiating a small class of adjectives, I would like to comment briefly on color terms as early members in this new lexical category. Citing work by Dixon, Givón [1979, 1984] observes that, universally, color terms are likely to "pioneer" the class of adjectives because they name permanent-inherent states. In a discussion of Bantu languages, Givón [1979:266] notes that entities which do not change over time tend to be lexicalized as nouns, but phenomena which change rapidly over time tend to be verbs. Those which change at an intermediate rate are potentially adjectives. He observes:

Among states, more *permanent-inherent* states (size, shape, color, goodness-badness, taste, smell, texture) are more likely to pioneer the class "adjective" while the more *temporary-contingent* states (hot, cold, angry, sad, sick, broken, bent, etc.) may either remain (stative) verbs or are late to move into the "adjective" class.

Givón's observation about color terms initiating the category of adjectives holds for Gborbo, since color terms fit his definition of permanent-inherent state. It is worth noting that for West Africans, color is a permanent-inherent state in a more profound sense than it is for Americans or Europeans. Philip Bartle [1983:85] explains how the three basic colors in Twi are symbols for an entire belief system. For the Akan, the three basic colors—black, white, and red—represent "the three fundamental elements of the physical universe and the spirits which animate it, the three fundamental elements of the physical individual, and the three souls which animate each human being." Red is the symbol for woman, the earth, the body, fecundity, provision, inheritance, property, food, danger, and many other aspects of the culture, the religion and the economy. White is the color for man, rain, semen, victory, morality, purity and fertility. Black is the color for the Supreme Diety, the Ancestors, wind, fire, power, energy, and time. Bartle argues convincingly that the colors have symbolic power at every level of the society, and, for important symbolic reasons, are not mixed.

Bartle's description of the importance of color and its close relationship to the West African conception of the universe suggests that color may indeed be a "permanent-inherent" state for Krahn speakers. Givón is probably correct in assuming that this would be a relevant factor in the change from verb to adjective. Once the lexical category is established, it would then be possible for a temporary-contingent physical property like /smaN²²/ 'hot' to also be re-analysed as an adjective. Admittedly, there are probably multiple factors involved, but the evidence from Gborbo Krahn supports Givón's [1979, 1984] hypothesis about the emergence of a new lexical category, adjective.

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