

COLOR TERMS IN KAPSIKI

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1. Introduction

The human eye can perceive between 4 and 10 million shades of color (Lenneberg 1967). No language can even approximate this range of variation, so each language has to label groups of color shades with one lexeme. If the choice of these groups of shades would be as arbitrary as linguistic theory has long supposed, the immense amount of possibilities would make any regularity in color terminology an illusion. One justly famous study by Berlin and Kay attacks this problem:

"The prevailing doctrine of American linguists and anthropologists has, in this century, been that of extreme linguistic relativity. Briefly, the doctrine of extreme linguistic relativity holds that each language performs the coding of experience into sound in a unique manner. Hence each language is semantically arbitrary relative to every other language. According to this view, the search for semantic universals is fruitless in principle. The doctrine is chiefly associated in America with the name of Edward Sapir and B. L. Whorf. Proponents of this view frequently offer as a paradigm example the alleged total semantic arbitrariness of the lexical coding of color. We suspect that this allegation of total arbitrariness in the way languages segment the color space is a gross overstatement" (1969:1-2).

So Berlin and Kay's theory of color terminology has wide significance: one of the central issues of linguistic as well as anthropological theory is at stake, i.e. universals in language and culture. In short, their theory states that though different languages use a different number of color terms (counting only basic color terms), there is a very limited and quite universal set of eleven basic color terms that

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cover all the terms used. These basic terms and basic color categories occur in the following sequence: white, black, red, green, yellow, blue, brown, pink, purple, orange, and grey. Most languages use fewer than eleven terms, and one unexpected result of this research has been a fixed sequence in the appearance of color terms. The authors speak of an evolution of color terminology. The regularity they present is striking indeed. Of the 2,048 logically possible types of color terminology (given eleven basic terms), only 22 are found to occur and these can be ordered on a cumulative scale.

In this paper, we shall present some data on the color terminology of one particular language, Kapsiki, in order to make the following points:

- (1) Kapsiki basic color terminology presents a clear exception to the evolutionary sequence as set forth by Berlin and Kay;
- (2) secondary color terms in Kapsiki "fill in" the irregularities of basic terminology, so the total semantic structure is less deviant than would be judged from the basic terminology alone.

## 2. Method

The huge number of possible colors presents some serious difficulties with the method. All colors vary infinitely in brightness and hue, but still other types of variations exist: color of living vs. non-living things (Snow 1971), fresh or non-fresh looking plants (Conklin 1955), bright or faded looking colors (Berlin and Kay 1969). Berlin and Kay's research has tried to limit the total number of color shades and at the same time eliminate some of these other variants by using one standardized test, i.e. the Munsell color chip method. This consists of eliciting basic color terms with these color chips, arranged in a single chart of 329 chips set up in 40 horizontal gradations of hue and 8 vertical gradations of brightness, plus a series of 9 degrees of brightness of neutral shades.

In order to make my data comparable with that of Berlin and Kay, I used the same chart and asked my informants to name the colors, and to map the boundaries of each color term. The shade that represented the

best example of the color was also elicited.

In eliciting, one should look for basic color terms. In order to qualify as a basic color term, a term must have the following characteristics: (a) it must be monolexemic (the meaning of the term should not be inferred from its constituent parts); (b) the semantic range of one term should not be included in that of another term (two color terms should designate different color shades); (c) the term should be applied to all kinds of objects, not just one (e.g. the term "blond" cannot serve as a basic color term because it is only used for hair color and occasionally a type of furniture finish); (d) it must be psychologically salient for informants (it must be a normal, frequently used term by all informants, and occur at the beginning of eliciting lists).

### 3. Terms for color in Kapsiki

Kapsiki informants were from the village of Mogodé, just on the Cameroonian side of the international border. Intervillage variation is considerable but checks with informants from other villages showed the same structural properties in color terminology. All Kapsiki lexemes for color are preceded by the prefix *kwa*, a multipurpose prefix that may be translated in this context with "like".

The basic term for white is *kwatyawtyaw*, a monolexemic term, as the single *tyaw* is not used.

Black is *kwaŋkiri?yi*, but the use of this term exceeds the simple meaning of black. "Dark colored" is a better translation; the Kapsiki call themselves *kwaŋkiri?yi* in comparison with the Europeans (who are not labelled white but red). Of any two colors varying in brightness only, the darker one can be called *kwaŋkiri?yi*. For example, one ritual in the wet season aims at making the millet grow *kwaŋkiri?yi*, dark green. Confronted with the whole array on the color chart, informants consistently choose the darker neutral shades for this term as well as the darkest shades of green, blue, and brown.

Red is an interesting case in Kapsiki. Two terms join hands here to delimitate the field of red and reddish colors, *kwaxɛmɛ* and *kwaxɛmɛ*. The former has the larger distribution, covers the larger

field of shades with the darker reds, and the latter designates more the pink reds. In view of the total system of basic color terms, this differentiation in red colors is remarkable. Though the  $\epsilon$  and  $\text{ə}$  have definite phonemic status, we feel that it is through this difference in phonetic intensity that the visual intensity (a difference in brightness, not hue) is expressed. These two terms are elicited as two separate lexemes and appear in lexicons as separate words. In our view, they can be considered as differentiation of one semantic spot. The fact that for all informants the field of  $\text{kwa}\text{x}\epsilon\text{m}\epsilon$  and  $\text{kwa}\text{x}\text{ə}\text{m}\text{ə}$  are closely joined, without intervening "neutral" space, makes this interpretation the more plausible.

Basic term status presents some more problems for the following two terms, green and blue. The basic color term for green is  $\text{kwa}\text{t}\text{l}\text{ə}\text{k}\text{ə}$ , and for blue  $\text{kwa}\text{x}\text{w}\text{ə}\text{m}\text{ə}$ . The word  $\text{t}\text{l}\text{ə}\text{k}\text{ə}$  means 'leaf' and  $\text{x}\text{w}\text{ə}\text{m}\text{ə}$  has two meanings, 'mountain' and 'sky'. One may question their inclusion in the list of basic color terms, but these terms are elicited easily without any discrepancies between different informants, so their characterization as a basic color term is amply warranted. Moreover, a term like  $\text{kwa}\text{x}\text{w}\text{ə}\text{m}\text{ə}$  is used to indicate all shades of blue, not just the light blue of the sky.

With these five terms we run out of the basic color terms, and this fact is quite astonishing. By all expectations, a basic term for yellow should be present. Berlin and Kay found that "if a language contains five terms, then it contains terms for both yellow and green" (1969:2). Of course the Kapsiki do differentiate and perceive the yellowish colors, and one lexicon gives the term  $\text{kwa}\text{x}\text{a}\text{ŋ}\text{way}\text{ax}\text{a}\text{ŋ}\text{way}\text{a}$  for it. This however is clearly not a monolexemic term ( $\text{x}\text{a}\text{ŋ}\text{way}\text{a}$  means 'corn', lit. 'millet of the Margi') and is not in very common use. Informants give several different terms for yellow, but they are not in agreement about which one is the most common form. Other forms are  $\text{kwa}\text{r}\text{ə}\text{x}\text{w}\text{ur}\text{ə}\text{x}\text{w}\text{u}$  'like the flower of the  $\text{r}\text{ə}\text{x}\text{w}\text{u}$  (a representative of the Leguminosa)',  $\text{kwa}\text{y}\text{ə}\text{m}\text{ug}\text{wa}\text{r}\text{ə}\text{y}\text{ə}\text{m}\text{ug}\text{wa}\text{r}\text{ə}$  'like the water of Gawar', and  $\text{kwa}\text{da}\text{wa}\text{da}\text{wa}$  'like the vomit of jaundice'. They are color terms but have to be considered as secondary terms.

So the basic color terminology of Kapsiki presents a clear exception to the thesis of Berlin and Kay through the absence of yellow and the presence of pink. We shall see, however, that secondary terms function as well as basic ones in color demarcation. For a fairer consideration of color terms, one should therefore not restrict the analysis to basic terms but also include secondary color terms; these are discussed below for Kapsiki.

The first case is that of the terms for yellow as cited above; the shades indicated with these lexemes are quite consistent and the boundary as well as the core of the colors can easily be equated with yellow.

The terms *kwagəlagəla* and *kwapsədəpsədə* indicate the neutral shades of brightness except black, i.e. grey. The former means 'like rock', the latter 'like ash'.

Two shades of brown are represented by *kwəŋkwətłəŋkwətłə* 'like the calabash' or *kwandərəməndərəmə* 'like the fruit of the *ndərəmə* (*Carissa edulis* L.)', both incorporating brown and light brown, and *kwaredərəda* 'like dirt', which is dark brown.

The term *kwaksəŋuksəŋu* 'like the *ksəŋu* (*Dactyloctenium Aegyptium* L.)' covers the area we call purple. Darker shades of the same hue are sometimes called *kwadzərəgəmadzərəgəma* 'like a millet parasite with purple flowers'.

One other color indicated with a secondary term is *kwamədəmədə* to mean beige (why do Berlin and Kay exclude this from the English basic color terms?); it literally means 'like the color of the baobab tree'.

A few informants distinguish between different shades of green, mainly varying in brightness: *kwagwəzu* 'like grass', indicating the lighter zone, and *kwəŋgərəxəŋgərəxə* 'like a bird species', used for the darker part of the field for which *kwatləkə* is the basic cover term.

One peculiar term fills in all remaining niches, *kwawaləwələ*, by which the color of water is indicated. No specific shade or hue is meant with *kwawaləwələ*, but some informants simply use it for all remaining shades and hues not named by other terms. It is a filler term: as water can be of any color, any color falling outside the range of easily named colors may be labelled with it. Such a term, interesting

as a phenomenon in itself, may be to a considerable degree an artifact of method. Still it would be interesting to compare the presence of such terms in other languages.

#### 4. Discussion

For an overview of our findings, we list the Kapsiki terms against the order in which Berlin and Kay have found the basic terminology to appear (1 = basic color term; 2 = secondary color term; the upper lexeme indicates the lighter color; the bracket indicates the possibility of alternative sequences).

1	kwatyawtyaw	white	
1	kwaŋkiri?yi	black	
1	kwaxɛmɛ	red	
1	kwatlɛku	green	]
	kwagwɛzu		
	kwangɛrɛxɛngɛrɛxɛ		
2	kwaxaŋwayaxaŋwaya	yellow	]
1	kwaxwɛmɛ	blue	
2	kwɛŋkwɛtlɛŋkwɛtlɛ / kwandɛrɛmɛndɛrɛmɛ	brown	
	kwarɛdɛrɛdɛ		
1	kwaxɛmɛ	pink	]
2	kwaksɛŋuksɛŋu	purple	
	kwadzɛrɛgɛmadzɛrɛgɛma		
	---	orange	
2	kwagɛlagɛla / kwapsɛdɛpsɛdɛ	grey	]

If only basic terms are considered, Kapsiki terminology is quite irregular. The only way out would be to assign the status of basic term only to the Kapsiki equivalents of white, black, and red, with the less intensive form of pink as a complication. But as we have argued before, the other terms labelled (1) amply fulfill the criteria of being basic

terms.

Any exception to a theory is important enough, but the way in which secondary color terms fill in the "gaps" of the basic terminology is very interesting. The Kapsiki evidence suggests that overall naming of colors is even more regular than Berlin and Kay suppose, if secondary as well as basic color terms are considered. The absence of a term for orange presents no problem, as a terminology without it is quite regular in the Berlin and Kay theory. Given the evolution of basic color terminology, this is very important for theories of human perception.

A last thought concerns the basic/secondary dichotomy. One is tempted, in the case of Kapsiki terminology, to do away with this distinction. However, Berlin and Kay's arguments delimiting and using basic terms are very clear: with this definition of basic terms, they can predict on a high level of probability the colors that are named for any terminology with a given number of terms. The quite obvious fact that the general level of techno-economic evolution may be an important factor in lexical proliferation does not detract from that. Nevertheless, we would argue that secondary terms should be included in the study of color terms. In the case of Kapsiki, the terminology is "straightened out" by them. The total range of semantic structuring is as interesting as the evolution Berlin and Kay show and, as our presentation of Kapsiki terminology suggests, may even be bigger than previously supposed.

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