The Cognateness of Yuki: Homage to Berlin and Kay

A few years ago I said that I was at best skeptical of the genetic relationship of Wappo and Yuki. In September this year I began field work on Yuki with Shirley Silver. Our first observation was that there was an important and obvious relationship between Wappo and Yuki. The fact that the relationship is not terribly obvious from cognates alone is not the point I want to make here. Indeed I want to deal specifically and in great detail with a system of related forms in the two languages and attempt to exemplify some anomalies which will serve to inform you of the pattern of relationship between the two languages.

Since my examples are the color terms in the languages, I found the Berlin-Kay hypotheses useful in organizing and analyzing the data. Briefly believe Berlin and Kay found that languages seem to acquire color terms in a set sequence first black and white; then red; after red yellow or green; then the leftover whether green or yellow; next blue; then brown; and finally, in a great lump, any of the rather special and rather sophisticated, purples, pinks, oranges and greys. You can find this sequence printed for you in the handout. That this sequence is probably altogether a natural given humans, their environment and their adjustments to it is a point not mentioned however, they did have some exceptions, some difficulties by Berlin and Kay. We will return to one of their difficulties later. Their color technique for determining the sequence is simply to find languages with two basic colors, three basic colors, four basic colors and so on and compare their basic color terms. The criteria for determination of what color terms were basic aimed at excluding items that were not general, unique, monolexemic and psychologically salient terms.
A result of the insertion of this sequence of color terms into language systems that interested me is the fact that if black and white come before red, and red before yellow, and so on, then the first terms in a system that is cognate in a family of languages can be expected to be older, more primitive, and the last terms ought to be younger within the cognate system. Moreover, the more esoteric color terms may be expected to be influenced by or even built upon the more primitive blacks, whites, and reds. This possibility is not suggested by Berlin and Kay who regard the color system, once it is established, only from a synchronic typological point of view. A further possibility is that the earliest colors in sequence will be more stable and more subject to aberration. In such an approach to color terminology we might wish to consider a monomorphemic untranslatable color term as more primitive than a color term obviously derived from the words for blood, grass, or whatever.

With these ideas in mind I began my inspection of the Wappo color terms. (They appear as the items numbered "A" and "B" on p. 3 of the handout. We will look at A first.)
First black and white, cówe and k'áy'el. Both appear simple but neither is really monomorphemic as we might have hoped. However, the -e suffix of cówe 'black' is not segmentable except by reference to other words in which it is segmentable. chípe 'red' for instance, is obviously related to such a form as chípi'ta? 'reddened'. The Wappo word for 'reddened' establishes the existence of a root chíp- with the meaning 'red' and a derivational suffix -e for which no meaning is obvious. The ców- of black doesn't occur in any other words. It's existence as a separate morpheme is determined by comparison with words like 'red' for which evidence of more than one morpheme exists. 'White' k'áy'el is somewhat less recalcitrant in that the -/el/ does occur as a final affix in a number of words which seem to be adjective-like: síwhel 'disorderly of hair', túpel 'stiff', thúpel 'breakable, delicate', and so on. [Wappo words used as examples appear in paragraph three of page three of the handout.] The root morpheme k'áy'- of 'white' like ców- of 'black' does not occur elsewhere in the language. As a matter of fact the chíp- of 'red' occurs only in the word chípi'hole (lit. red stem) 'rust' and its various derivatives. 

But the word for 'rust' looks like a compound derived from the word for 'red', rather than an occurrence of the stem chíp- in a different historical semantic format. Thus far the system looks gratifyingly uncomplicated, With green and yellow the system begins to look predictably more complicated.
'Green', the simpler word, is šik'ă'tĭs. The morphemes are all difficult; there seem to be three: k'ă't'- which probably occurs nowhere else in the language, -is, a noun final derivational suffix which may be related to the causative -is-. The ši- occurs possibly in a word for black bread, ši-šáwo, The form is difficult since šáwo in its meaning 'bread' is borrowed from Nahua. Whatever its difficulties the word for green is patently more complex than the words white, black, and red, hāžel, cówa, chípe.

Yellow continues our trend nicely. wici'lo'hēla (lit. meadow-lark front) is an obvious late descriptive term, fitting into our hierarchy both morphemically and semantically. It's a metaphoric quality plus the fact that it contains at least three and possibly more morphemes place it well into the area for which primitive simplicity is not claimed.

**Brown** brings the trend to its logical end. Not only polymorphemic, but apparently polylexemic, chîpe čútu'ku'iš, a variety of 'red', chîpe, plus a largely unanalyzable word that must certainly break into at least three parts čútu-, -ku'-, and -iš of which only the derivational nominal -iš is comprehensible. The occurrence of čútu- in wi'mačute 'mistletoe' is not helpful.

Thus far our prediction that the sequence of color words would recapitulate a genetic progression running from old and primitive to recent and contrived has been exactly lived up to. Only one color remains in Wapo, gray. Logically
gray should be ploymorphemic or even a phase. It might be metaphorical. But what do we find? A simple form, pot'e,
genetically to be placed with chiepe and cówe whose structure it exactly parallels.

For some weeks my failure with the Wappo color system rankled. In the meantime I had been reading Driver's Wappo Ethnography. His principle informant was misty one Mary Elf. Eventually I asked my Wappo informant if she had ever met Mary Elf. With true Indian reserve, her reply came: "Yes, that was my mother." Mary Elf suddenly became especially interesting when I discovered that she had given Driver a word "pot'e" with the meaning yellow. I could rearrange the Wappo system to čowe 'black', či'pe 'red', pot'e 'yellow', šikatís green, blue, and k'ayi 'white'. či'pe čutiku? is brown. Once again the progression from simple to complex, from old to less old was inviolate. By searching through the Ethnography a bit more I found that Driver, had recorded some additional information about color. šikatís for him was not green but blue. A parenthesis refers the first syllable to the word for one of the many clovers, ši'e. But clover is green not blue and the flower while purple doesn't really help. ši'e occurs also in the word for 'grass, weed' ši'e. Green again! Green was described in the system with the phrase pot'e šikatís (lit. yellow blue). He also adds another word for gray or brown k'émích—he writes it "k'émích"—and 'pink' humnás[?] spelled 'humnaças.' The word for pink is completely incomprensible. It simply doesn't look Wappo.

k'émích 'brown or grey' is another story. Although I never found it in this meaning, I did elicit it in the place name k'émích meyén 'gray hair spring', a damp spot on the north edge of Healdsburg only a few hundred feet from hoc'apota 'sweathouse hill.' Since sweathouses should be near springs or
creeks one can only guess that some Indian with a dry wit gave the names to the places. k'émich 'grayhair' in the name was associated with a superstition that if one bathed here one's hair would turn gray. The place, however, is inside Pomo territory and the word doesn't feel right.

From the point of view of our sequence idea Driver's colors, although they are an earlier set may have been given him by a blind woman. Mary Ely was blind from youth. His yellow póte seems correct but green rather than being more simple is more complex than blue and combination of gray with brown while possible is questionable. For one thing it seems to be monomorphemic and polysyllabis monomorphemes may be loans. Moreover it is surrounded in the color sequence by polymorphemic terms.

I was still troubled by the fact that my informant had confused yellow and gray. The fact that her mother was right and she wrong seemed unfortunate but simply true. The rightness of póte for yellow was established in my mind by the fact that póte occurred also in the word for 'ripe' pótepóte. Ripeness and yellowness obviously fit into a group in which 'gray' doesn't fit at all.

I finally decided that Laura must have been confused by the fact that English gray willow was chupe póte (lit. willow yellow) in Wappo.

My picture of the color terms rested here as we began our examination of Yuki.

The first thing that happened was catastrophic. I began reading Foster's "Summary of Yuki Culture" and there in one of the first pages under designations of other tribes I found the Yuki Uk'ót'ná and it was translated "water gray people" uk- water
-pót- gray
-nóm people

I was back where I started out with póte meaning gray, but no w it was cognate alongside of uk- compare Wappo ?uk'- 'drink' and Wappo nóm- to live in a place, house, is certainly a likely cognate for Yuki nóm 'people.'
The Yuki color terms appear in your handout in two notation systems, Foster's and Sawyer and Silver. The terms from Foster have a paren "f" to mark them.

The Yuki system is disappointing in that it consists with the exception of green entirely of primitive monomorphemic units. But note that green may be a blend of blue plus white. In the more original Wappo system found in Driver [B of the handout] green is also described by taking one color from either side, namely yellow and blue. No other color is so-handled. The obvious cognates in the two systems are yellow, gray, and blue. Cognateness rests rather in what is not there.

The Yuki system is startling in containing two near minimal items among its colors. Yellow and gray differed apparently only in their tone. As we found the Wappo are still confusing yellow and gray. There is no tone in Wappo. Black and blue differ in tone and in initial, "y" in black and "s" in blue, sì·̆ik' and sì·̆k'. The Wappo didn't really try. Black and blue were abandoned, black to be replaced by a primitive from some other system, cò·̆we. Blue disappeared completely in system A, its place taken by green.

Black apparently survives in the first syllable of black bread sì·̆säwo. The first syllable of green, sik'atis, was a problem in Wappo. The sì- seemed to be a variant of the sì·̆ of sì·̆säwo, but why should it have a short vowel.

The Yuki word for blue provides us with our answer. Here apparently the difference in tone was heard. The long vowel of black sì·̆ reflects the tone of Yuki and the short vowel of sì- in green reflects the tone of Yuki blue. One can scarcely miss the double syllable of the tone of sì·̆ik' black. On the other hand the fact that sì·̆k' 'blue' lost its "s" for a 'y' may here be the result of confusion between black sì' and blue sì- or it may be the fate of all 's's' and 'y's' of Yuki. Both sounds are more fricative than the 's' of Wappo. In any case, without Yuki sìk' 'blue' Wappo sik'atis 'green' is not comprehensible.
Apparently the Yuki were embarrassed with their near minimally different colors for gray. In a dialect Foster reported. This has no parallel in Wappo.

White, k'ay'el, may be a match for Yuki č'al but it looks more likely to be matched with the k'i'č'el in hul k'i'č'il (lit. eye-white) the phrase for the white race. k'i'č'il may, however be a borrowing in Yuki, possibly from Wappo. Wappo gray or brown obviously matches Yuki k'ims 'grey hair,' but its use as a color term had to be simply a solution to the Wappo confusion with póte.

Last but not least, Wappo húmnasis [∫] 'pink' is now clear. It consists of some variant of Wappo húm- which occurs in húnis 'over' or húmarah 'away.' The -nasis must be cognate with yuki red, ?a'sic (lit. blood like). Notice, however, that it was lifted as a whole, not as a combination ?a's and -ic. Yuki's suffered its usual fate but the ?a's was heard as an 's. Wappo has a final suffix -is, and no final -ics. Wappo pink is literally 'away from red' or 'over from red.'

It is clear now that the Berlin-Kay extension I proposed to begin with is rather poorly supported by Yuki, but nicely helpful for Wappo. If one looks over the Berlin-Kay discussion of problems, it is not surprising to find "gray" as an element of disruption in every case where they allowed that they had difficulties. From the data here I would suggest that gray be added to the formula in two places, optionally where it is among the pinks and oranges but also immediately after black and white. For some number of the world's languages, gray whether from contrast of black and white or as a derivative of ashes or dirt may occur close to the origins of color terminology.

Certainly a large part of the observations about Wappo and Yuki could only exist on the basis of what Berlin and Kay have contributed.
The Yukian results are fascinating. First of all and perhaps most important Yuki obviously preserves a state of Yukian anterior to Wappo. The fact that wappo has no tones but confuses pairs depending on tone for distinction seems to be an incontrovertible argument. Moreover, tone is a feature that characterizes in one way or another not a form or two but all of the morphemes in a language.

I think it is likely that the Yuki color system is prior in most respects to the Wappo. The Wappo system demonstrates serious problems in digesting a system it obviously tried very hard to encompass.

But there are some problems I would like to consider. Black should be as basic as any color term can be. Sounds of black permeate the entire Yukian system. Yet Wappo replaced black and apparently kept blue, the competing color form. Moreover the three central color terms in Wappo, black, red and possibly white seem not to be Yukian.

Moreover in the development of a Proto-Yukian language one does not expect the distinctions made by the tones to remain forever indeterminate. Yet Wappo in 1926 could produce a mother and daughter one with one form for yellow, the other the same form for gray. Still we say that Wappo and Yuki have been separated more than 2000 years.

Although Wappo 'pink' is partly reconstructed, humnasis [?] doesn't look like a Wappo word. It looks like a word that was heard and poorly imitated.

Consider it in some detail. Why should a language with a well-established word for red have a polymorphic word for pink coming from another language and over one of that language's words formed. If Wappo is ckygiate with Yuki why would they hot have settled the pink problem a thousand years ago. Moreover there is no ckygiate for Yuki ò'sic 'blood' in Wappo. Wappo blood is néph. Therefore the form ò'sic was lifted entire. The -ic may indeed be ckygiate with the Wappo suffix -is but it is not ckygiate with the Wappo suffix -is, the case which appears in humnasis [?]. Moreover the appearance of a native Wappo hum- away, from, over from together with a resumptive term does not suggest any usual ckygiate. But notice...
something else. If you say "pink" is "away from red" then "red" must be in your language. But while the Wappo knew and could use a form like "pink" their word for red was neither ?aq'isi'c nor cognate with any other Yukian form for red. The fact that humnasis is not in the recent Wappo vocabulary argues that it was a term recognized by the natives as peripheral and somehow wrong. It may have existed like gray and yellow in the system for hundreds of years but never resolved, never really incorporated into the bone and body of the language.

Other than the basic black, red, white the Wappo system is either translated as in the case of green in the system (B) or made up by replacements from other parts of the lexicon as in k'enich and humnasis which looks like plain borrowings from Yuki or wici'lohe'la which looks like councils of desperation. The entire aura is as if Wappo abruptly faced the problem of the whole system with blue and black and yellow and gray all sounding alike. Their solutions appear to be reactions acted out in one brief cataclysmic moment in time with the expected catastrophic results. The most basic terms owe 'black,' chipe 'red,' and possibly hayel 'white' may not be Yuki at all. Yet it is also true that the entire Wappo system has been affected in its every feature and remotest corner by Yukian.

My conclusion is that sometime between 500 years ago and 1000 years ago a group of Yuki, perhaps from Round Valley, came down into the Napa Valley, to sample the good life in the south. Remember that one of their villages was later to be called kalthedmanokw more or less literally "our grape woods friends". They conquered a small area and colonized it enslaving the local population of non-Pomo Indians, principally the peaceful people who called themselves the "plain speakers and tharth tellers," the ?ona?catis, sometime later known as the Wappo. The Yuki group spread themselves out to the extremes occupied by this tribe and managed to control the situation for a generation or two.
Then they died out leaving as their mark a creolized Yuki-Wappo language which, of course, survives until today. The theory accounts nicely for the fact that it was the Napa Valley Wappo who were so hard on the Spanish. It may also be why Driver found the Wappo culture the most impoverished of any in America. They were literally a nation of slaves whose masters had disappeared. The theory also accounts nicely for a genetic Yukian element in Wappo for which no phonological reconstruction seems likely to succeed. It certainly accounts for the possibility that Yuki may have borrowed the words for gray and white from Wappo.

Take the map. Color Yuki red. Color Wappo blue.