During recent fieldwork on Yurok, I collected several examples of a sound-symbolic process we may call 'retroflection', by which the vowels of stems—and optionally the accompanying inflectional elements—are pronounced with retroflection of the tongue. The effect is most noticeable on open vowels, which merge to e ([er]). There are many retroflexed stems lacking unretroflexed counterparts, and falling into no obvious semantic class. Where minimal pairs have been found, however, the retroflexed form generally has diminutive meaning.

(1) ceyohpinek' 'I hide it'
cyehpinek' 'I hide food or drink'
(2) hahkwse'we'y 'a smiling face'
hahkwsu'we'y 'the smiling face of a baby or pet animal'
(3) ūmeyowok' 'I'm mean'
ūmeyewek' 'I'm touchy'
(4) ūoypeyok' 'I taste it (e.g., a spoonful)'
ūoypayek' 'I barely taste it (e.g., by touching it and putting my finger to my tongue)'
(5) megesik' 'mink'
megešik' 'ermine, weasel'
(6) mesik' 'it's slender'
mesik' 'it's thread-like'
(7) pahtekws 'large storage basket (for grain, etc.)'
pheckws 'small fancy basket (for valuables, etc.)'
(8) pewahtewe'm 'you wash your face'
pewahtewe'm 'you sprinkle your face'
(9) swo:'metek' 'I smell it'
swe:'metek' 'I get a whiff of it'

In all cases the unretroflexed form of the stem contains an e, so the process may be thought of as an alternation of e to e plus regular vowel harmony. This finding has implications for the reconstruction of Proto-Algic (Algonquian-Wiyot-Yurok).

It seems clear that Y e and e respectively correspond to Proto-

Algonquian (PA) *e and *a, as in Y pemey/PA *pemyi 'oil' and Y weey 'land-animal's tail'/PA *wasyari 'bird's tail'. Moreover, Frank Siebert (1967 nos. 8,13,48; and 1975 nos. 11,51,52,59,101,130,170,184, 114) has reconstructed several *e/*a doublets for PA, which he describes as the product of an 'ancient variation of PA *e and *a.' These alternations suggest we can expect to find the following correspondences:

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PA    Y
*e     *a
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However, there are some losses of *e in both Yurok and PA: Y *kenw-'/PA *kenw- 'long' (presumably from **kenew-). Consequently, zero can no doubt replace either e in the above schema (in at least some environments). For example, PA doublets such as *natw-/*nawaw- 'seek' likely reflect the regular loss of *e before *w attested in 'long' above.

Wiyot seems to have schwa corresponding to both the vowels of Yurok and PA: Y *kwen/PA *nwen 'chest (body part)', PA *me8eni/W basad 'nipple', and Y *we8kani/W wetkeda 'bone' (with vowel harmony in Yurok). Hence, the alternation cannot be found in that language except where one of the vowels—likely *e—has dropped before the merger. This gives us the following schema:

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PA    W    Y
*e    *a  *e
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There are at least two examples of a Wiyot alternation between e and zero: the medial -apall-/*p -'eat', and mikhwal-/*mikw- 'weep' (where W devoices in a cluster, and an aspirated stop becomes simple before an obstruent). Thus, kitépal- 'finish eating', but túp- 'eat' and kópi- 'begin to eat' (kit- 'finish', tü- 'so', ko- 'begin'). Similarly, bikwel 'tear', but bikwel 'go to a funeral' and deverbal -ikw- in kitikwil- 'stop crying.'

The meanings of the Algonquian and Wiyot alternations are elusive, but it seems certain we are dealing with a common alternation that dates back to Proto-Algon in all three branches of the family—whether or not its original function was diminutive symbolism as in Yurok. Hence, we can reconstruct the following doublets:7

*tekw- / *takw- 'pound': Y tekw(onur) 'hammer', PA *takw- 'pound, grind' S228.
*-ekws, *-akws 'wind': PA *-egê (M -con as in paka:meqnen 'a gust of wind comes on'), and papa:meqnen 'it's blown about in the wind'), Y -akws (as in knak'ws 'the wind dies down', and he:lek'ws 'the wind blows around'). The roots are: M paka:m- 'strike', M papa:m- (reduplication of pem- 'along'), Y kn- 'motionless', and Y he:l- (ho:l- 'around' with vowel harmony). The glottal catch in Yurok is the inflection for the third person, and M -en is a common II final. The consonant correspondences have been discussed elsewhere (Proulx 1980:79-82).

*-ek'ey-, *ek'ay- 'conceal': PA *ry- (in kya:ee:wa 'she hides her' A1142, and kya:ta:wa 'she hides it' A1137), Y sk'ey-. The segmentation in PA is supported by -a:N (TA) and -a:tam (TI) in Menominee (Bloomfield 1962 sec. 16.83), and corresponding -al and -at'm in Micmac (which are very productive). Algonquian *e drops before *y and evidently in word-initial position in an open syllable. Y k' corresponds to PA *k (as in the prefix *k'- 'second person': PA *k-, Y k'-). Yurok has vowel harmony: an original *a would presumably have dropped in word-initial position in that language, as it does in Y tkek'w(e'l) 'pot' (beside PA *axkehkwa 'kettle' A223). The importance of recognizing doublets is that it is a crucial step toward the reconstruction of the vowel system of Proto-Algic; reconstruction of the vowel system is a key element in a full reconstruction of the phonology; and only with a full reconstruction can secure etymologies be established, and real progress made on the protogrammar. As the *e/*a alternation shows, the phonology cannot be reconstructed in isolation—grammatical systems such as the neutral/diminutive opposition must also be taken into account.

NOTES

1 From January to April, 1980, at Requoi, Del Norte County, California. The trip was supported in part by the Survey of California Indian Languages (Berkeley), and by the Melville and Elizabeth Jacobs Research Fund, Whatcom Museum Foundation, Bellingham, Washington. The principle informant was Mrs. Florence Shaughnessy of Requoi (who also served as principle informant to R.H. Robins in the 1950's, and to Howard Berman in the early 1970's). My first clue as to the function of Yurok retroflection came when she volunteered a minimal pair.

2 Rarely, the retroflection is limited to the root: kemetew 'little finger' (-etew 'finger').

3 The open vowels (e a o) are replaced by a in vowel harmony
The replacement is optional in inflectional affixes, and sometimes limited to a single morphological element.

4 Abbreviations used in this paper are: C (Cree), M (Menominee), PA (Proto-Algonquian), W (Wiyot), Y (Yurok); TA (transitive animate), TI (transitive inanimate), AI (animate intransitive), and II (inanimate intransitive).

5 W a e respectively replace o a in transcription to conform to general transcriptional norms. W b alternates with m and W d with n (Teeter 1964 sec. 2.25). The correspondence PA *θ/\w 'w t/Y 1 before a consonant is also attested by PA *we\kweni/w w\twod/Y 'we\kun 'liver'. The sequence tk-w regularly gives tw in Wiyot (see Goddard 1966:399).

6 Some of the examples are from Teeter's manuscript Wiyot lexicon, which he very kindly allowed be to copy. Deverbals are roots used as medials with the loss of an initial sonorant: C -askisin 'shoe' in napakaskisin 'flat shoe' (deverbal from PA *maxkeseni 'shoe' S184), Y -ekoyo' in knekoyo' 'the water gets calm' (deverbal from Y lekoyo' 'the water flows', with root kn- 'motionless').

7 These reconstructions are tentative, and can only be confirmed by a full reconstruction of Proto-Algic phonology.

8 Abbreviations identifying reconstructions are: S (Siebert 1975), and A (Aubin 1975), plus the item number.

REFERENCES


Teeter, Karl. 1964. The Wiyot Language. UCPL 37, Berkeley.