LABIALISATION IN CAUCASIAN LANGUAGES, WITH SPECIAL REFERENCE TO ABKHAZ*

JOHN C. CATFORD

On a recent visit to the Soviet Union I was able, thanks to the very helpful cooperation of Soviet institutions and colleagues, to make observations on the phonetics of a score of Caucasian languages and dialects. As is well known, these languages are so rich in interesting phonetic data that it was not easy to select a suitable restricted topic.

Labialisation is a feature of the consonant-systems of all the Abkhazo-Adyghe (North-West Caucasian) languages, and also occurs sporadically in Daghestanian languages. Among the Kartvelian (South-Caucasian) languages, Svan and Zan (Megrelian dialect) have labialised consonants as a result of the loss of final unstressed /u/, but these are not usually reckoned among the consonant phonemes of these languages.

In North-West Caucasian, however, labialised consonants are well established, and are phonetically interesting because of the variety of different realisations of what we take to be the same phonological category.

Literary Abkhaz has 16 labialized consonant phonemes out of a total inventory of 58; the Bzyb dialect of Abkhaz has 19 labialised consonants out of 67. Figures for the other Northwest Caucasian languages are Abazin, 14 out of 58, Adyghe, 13 out of 53, and Kabardian, 9 out of 48.

In Abkhaz, labialisation takes five principal forms: (1) lip-rounding of [w]-type, (2) labial+palatal approximant [u]-type, (3) labial+palatal fricative [u]-type, (4) labiodental [v]-type and finally, (5) complete inner labial closure, [p]-type.

The first, [w]-type, occurs with velar stops, and uvular stops and fricatives, as in $/a'g^w = -a' \cdot (a'g^w = a') \cdot (a'g^w =$

The second form of labialisation, of [4]-type, occurs with the labialised voiceless

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pharyngal fricative /hw/. This is actually realised as [hu] — that is [h] with simultaneous labial and palatal [y]-like approximant articulation, as in /a'hwəhw/ 'dove' [a'huyhu]. What is traditionally regarded as the voiced counterpart of /hw/, hencein theory to be represented as /Sw/, had absolutely no pharyngal component at all in the pronunciation of five Abkhaz speakers I worked with. The phoneme / \(\gamma \text{w} \) was thus realised as [y] — that is, precisely the French [y] of huit. I am told, however, that there is considerable personal and dialectal variation in the pronunciation of this phoneme, and some Abkhaz speakers may well have a pharyngal, or better, 'sub-pharyngal' component. My single informant for the closely related Abazin language certainly had such a 'sub-pharyngal' sound as the voiced counterpart of Abazin /hw/. This sound is certainly articulated lower down than the pharyngal /h/, hence the name 'sub-pharyngal'. It apparently involves constriction of the upper part of the larynx and some vibration of the ventricular bands. I represent it here, for want of a special symbol, by [S] although articulatorily it is quite distinct from the voiced pharyngal approximant usually represented by this symbol.

Thus in the cognate words, Abkhaz /a Swara/ 'to dry' [ayərə] and Abazin /Swa/ 'dry' [Sua] we have the same labial+palatal [u]-type labialisation.

The third, labial+palatal fricative type of labialisation occurs only with labialised /ʃ/ and /ʒ/. These are strongly palatalised, and labialised, so much so that they give little impression of being [s]-like, but are rather co-articulated labial+palatal fricative, voiceless $[\mathring{\mathbf{q}}^{\perp}]$ and voiced $[\mathring{\mathbf{q}}^{\perp}]$. The voiced one, in other words, is articulatorily identical with French [y] in huit, except that it is a fricative, not an approximant. The voiceless one, $/\mathring{q}^{\perp}$], is simply the corresponding voiceless fricative. Examples:

$$/\alpha \int^{w}/$$
 — 'door' or 'cheese' $[a \cdot \dot{q}^{\perp}]$
 $/\alpha \int^{w}/$ — 'cow' $[a \cdot \dot{q}^{\perp}]$

Because of the existence of both $[q^{\perp}] = /3^{w}$, and $[q] = /5^{w}$. Abkhaz is one of those relatively few languages where there is a phonological opposition of FRICATIVE vs. APPROXIMANT with otherwise identical articulation, as in the morphemes / Sw-/ 'two' = [y-] and 3^{w-} 'nine' [y¹], which, combined with the (non-human) classmarker /-ba/ give the numerals / \S wba/ 'two' = [y'ba] or [y.'ba] and / \S wba/ 'nine' = [μ^{\perp} 'ba]. The two sounds, fricative and approximant, occur in succession in $\sqrt{3}$ wa $\sqrt{8}$ wa/= ['q¹aqə] 'twelve'.

The fourth type of labialisation, the labiodental type, occurs with the apicodentalveolar affricates /dzw//tsw//tsw//, realised as [dzv] [tst] [tst], as in /adzwə/ 'one' (human class) = $[a'dz^vi]$, $/ats^wa/$ 'skin, leather' = $[a'ts^ta]$, $/ats^w'e$ 'stake' = $[a'ts^ti]$.

In the pronunciation of these sounds the apex of the tongue first closes against the backs of the upper teeth, this stop being released into a dentalveolar fricative channel. Simultaneously with the formation of the stop, the lips go into position: upper lip more or less spread and clear of the upper teeth, the lower lip slightly pouting, forming a somewhat V-shaped aperture between its inner part and the edges of the upper teeth.

The fifth type of labialisation occurs with /dw/ /tw/ and /tw'/, and this is complete labial closure of a particular kind. In these sounds there is an apicodental stop, and, simultaneously the lips are pushed slightly forwards, but flat, not squeezed in from the sides, or 'rounded', making a light contact between their inner surfaces. This labial closure is formed and released more or less simultaneously with the apicodental closure. Occasionally, particularly in an energetic pronunciation of the unaspirated, slightly ejective [tw'/ = [tp'], the release is accompanied by a slight bilabial trill. Examples are: --

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= [a't^pa]
/a'twa/ 'hay'
/a'd^w = [a'd^b]
/w't^{w'a} 'sit down' = [u't^{p'a}]
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Corresponding to both $|dz^w| = [dz^v]$ etc., and $|d^w| = [d^b]$ etc., of Abkhaz, Abazin has $\frac{d^w}{t^w}$ tw'/tw'/realised as [du] [tu] [tu'], that is, palatalised and labialised laminopostalveolar stops (resembling the /dw/ and /tw/ of Twi).

In the other Northwest Caucasian languages labialisation is mostly of the common [w]-like type. Outside of this group of languages I have observed 'strong labialisation', involving complete inner labial closure only in Lak, spoken in Central Daghestan, in the words /kw'i/=[kp'i] 'two' and $/tswa\chi/=[tsp\Lambda\chi]$ 'fear'. In both of these there is a flat, loose inner labial closure simultaneous with the stop. In /tswax/ this labial closure is released only momentarily before the alveolar closure, so that the affrication is barely heard.

Again, labio-dentalisation, a somewhat rare phenomenon, is found with a series of [ʃ]-like and [tʃ]-like fricatives and affricates in literary Tabasaran in southern Daghestan, and also in a few dialects of Aghul and Lezgian in the same area.

> Department of Linguistics University of Michigan Ann Arbor

DISCUSSION

CHATTERJI (Calcutta)

In the course of my visits to Georgia, I found that the sound system of Kartvelian (Georgian) was very simple, it did not strike me that there were any of these labialised sounds in that language, although the language did have a large number of consonants forming clusters without any vowel in between. Are these labialised consonants confined only to the Abkhazo-Adyghe Group?

CATFORD

True, the thirty or so consonants of Georgian, Svan and Zan do not include labialised

consonants. Georgian is notorious for its clusters of up to five or six consonants (often somewhat simplified in actual conversational pronunciation).

It is probable that some Daghestanian languages must be regarded as having labialised consonants — one hears them, for instance, occurring in final position in Tsakhur: undoubtedly they are most stable and most fully attested in Abkhazo-Adyghe.

GREGG (Vancouver)

What evidence is there for regarding labialised consonants in Caucasian as unit phonemes and not sequences of consonants?

CATFORD

The monophonematic nature of labialised consonants in some Caucasian languages (e.g., in Daghestan) is in doubt. In Northwest Caucasian languages (Ubykh, Abkhaz, Abazin, Adyghe, Kabardian) there is no doubt of the independent, monophonematic, status of labialised consonants. They occur in all positions in which single consonants occur, including final, they are perceived by native speakers, both naive and linguistically trained, as units, they behave diachronically as units, and, perhaps most convincingly, cases can be found of minimal contrast between labialised consonant, and the sequence, consonant + /w/.