Reconstructing prefixing nominal number marking in East Caucasian

Most East Caucasian (aka Nakh-Daghestanian) languages have an essentially suffixal morphology. However, verbs show gender/number agreement prefixes in all but a few least conservative languages. The agreement system is reconstructed as human masculine (M) v-, human feminine (F) r-, other animates and assimilated things and concepts (A) b-, and other inanimates (N) d-. Plural agreement marking takes up the singular markers by using b- for humans (HPL) and d- for non-humans (NPL). A very similar system is also found in Abkhaz/Abaza (North-Wast Caucasian) third person verbal indexes, representing the strongest morphological argument for a North Caucasian genealogical entity.

In the nominal domain, East Caucasian plural marking is always suffixal, with markers characterized by labial or dental consonants, and nouns are not marked for their own gender. However, frozen 'autogender' (Nichols 2007) prefixes of the African type have long been recognized within the disproportionate number of third-gender nouns showing a labial onset and of fourth-gender nouns with a dental onset, as well as within exceptional series like Avar vac/jac/bac = Dargwa uzi/ruzi/buzi for 'brother' / 'sister' / 'animal sibling'.

In fact, a considerable number of basic vocabulary nouns retain a gender marker in the onset, e.g. 'son' and 'brother' for the first gender, 'daughter' and 'sister' for the second gender, 'tongue', 'eye' and 'moon' for the third gender, and 'year', 'meat' and 'heart' for the fourth gender. Nevertheless, while some nouns, like 'tongue' (A), always appear with this admittedly gender marking prefix, others, like 'brother' (M), 'head' (A) and 'year' (N), show it only in some languages. In others, different nouns, such as 'moon' (A) and 'heart' (N), show it in the nominative but not on the oblique stem. The data are further obscured by a notable degree of allomorphy due to branch-specific or areally determined consonant shifts $(b \to v; d \to r \to j)$ or root-particular nasalization: $b \to m; d \to n$). Finally, Nichols (*ibid.*) rightfully points out the main crux of this irregular state of affairs: some nouns, like 'louse', 'fingernail', 'acorn' or 'nettle', have a labial, i.e. third-gender prefix, in one branch or language, but a dental, i.e. fourthgender prefix, in another (Chechen *meza*, Batsbi *mac*' 'louse' vs . Avar *nac*:', Tsez *noci*, Lak *nac*', Itsari Dargwa *nez*, Aghul *net*:, Khinalug *nimc*').

Focussing on the nouns affected by overt 3rd/4th gender marking and apparent alternation reflected by discrepancies across the languages, we fleshed up the sample and found out that these represent a coherent semantic class of typical mass, group or pair nouns, like 'cloud/fog', 'tear(s)', 'grease', 'acorn', 'oats', 'fingernail', 'honey', 'flour/dough', 'nettle', 'louse', 'dove', 'dream', 'road', and 'cave'.

Other nouns including 'head', 'eye', 'liver/lungs', 'nose/nostrils', 'hair/beard', 'heart', 'wool', 'ashes', 'moon/star/sky', 'sun', 'mouse', 'flea', 'ox', 'yoke', 'needle/awl', 'spindle', 'sickle' are characterized by 3rd/Ø (4th covert) or and 4rd/Ø (3th covert) alternation and can also be interpreted as reflecting frozen number marking morphology.

Such clear traces of a regular consonantal alternation in the onset are easily explained as number marking opposing overt singulative b- (or covert: \emptyset) and (collective) plural (d- or \emptyset). Set against the changing Northern Eurasian typological profile, this submerged inflectional feature of proto-East Caucasian, as opposed to the current state of affairs in attested languages, bears witness to an important morphological shift, probably driven by long-standing contact with exclusively suffixing languages.

Reference: Nichols, Johanna. *Head gender/source gender in Nakh-Daghestanian: Synchrony and typology*. Conference on Languages of the Caucasus, Leipzig, December 8, 2007