Lexical semantics and plural inflection.
Data and reflections from the dialect of K’esab

Andrea Scala
(andrea.scala@unimi.it)
Classical Armenian 1

Great number of inflection classes but very weak link between lexical semantics and inflection. Derived nouns inflected according to formal features:

inflection of abstract nouns in -owtʻiwn = other nouns in –iwn (koriwn, ariwn etc.)

<table>
<thead>
<tr>
<th></th>
<th>singular</th>
<th>plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>nom-(voc)</td>
<td>džowarwtʻiwn &quot;difficulty&quot;/ koriwn &quot;puppy dog&quot;</td>
<td>džowarwtʻiwnkʻ/ koriwnkʻ</td>
</tr>
<tr>
<td>acc</td>
<td>džowarwtʻiwn/koriwn</td>
<td>džowarwtʻiwns/koriwns</td>
</tr>
<tr>
<td>loc</td>
<td>džowarwtʻeän/korean</td>
<td>džowarwtʻeän/koriwns</td>
</tr>
<tr>
<td>gen</td>
<td>džowarwtʻeän/korean</td>
<td>džowarwtʻeancʻ/koreancʻ</td>
</tr>
<tr>
<td>dat</td>
<td>džowarwtʻeän/korean</td>
<td>džowarwtʻeancʻ/koreancʻ</td>
</tr>
<tr>
<td>abl</td>
<td>džowarwtʻeënē/korenē</td>
<td>džowarwtʻeancʻ/koreancʻ</td>
</tr>
<tr>
<td>strum</td>
<td>džowarwtʻeamb/koreamb</td>
<td>džowarwtʻeambkʻ/koreambkʻ</td>
</tr>
</tbody>
</table>
# Classical Armenian 2

Inflection of abstract nouns in \(-ow\text{mn}\) = other nouns in \(-mn\) (atamn, himn etc.)

<table>
<thead>
<tr>
<th>Case</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>nom-(voc)</td>
<td>lowcowmn &quot;solution&quot;/atamn &quot;tooth&quot;</td>
<td>lowcmownk'/atamownk'</td>
</tr>
<tr>
<td>acc</td>
<td>lowcowmn/atamn</td>
<td>lowcmowns/atamowns</td>
</tr>
<tr>
<td>loc</td>
<td>lowcman/ataman</td>
<td>lowcmowns/atamowns</td>
</tr>
<tr>
<td>gen</td>
<td>lowcman/ataman</td>
<td>lowcmanc'/atamanc'</td>
</tr>
<tr>
<td>dat</td>
<td>lowcman/ataman</td>
<td>lowcmanc'/atamanc'</td>
</tr>
<tr>
<td>abl</td>
<td>lowcmanē/atamanē</td>
<td>lowcmanc'/atamanc'</td>
</tr>
<tr>
<td>strum</td>
<td>lowcmamb/atamamb</td>
<td>lowcmambk'/atamambk'</td>
</tr>
</tbody>
</table>

**Note:** The table uses the example words "solution" and "tooth" to illustrate the inflection patterns of abstract nouns ending in -owmn. The other nouns ending in -mn, such as atamn (tooth), follow similar patterns.
A semantically motivated micro-class: *hayr* "father", *mayr" mother" and *ełbayr" brother"

<table>
<thead>
<tr>
<th></th>
<th>singolare</th>
<th>plurale</th>
</tr>
</thead>
<tbody>
<tr>
<td>nom- (voc)</td>
<td><em>hayr, mayr, ełbayr</em></td>
<td><em>hark‘, mark‘, ełbark‘</em></td>
</tr>
<tr>
<td>acc</td>
<td><em>hayr, mayr, ełbayr</em></td>
<td><em>hars, mars, ełbars</em></td>
</tr>
<tr>
<td>loc</td>
<td><em>hawr, mawr, ełbawr</em></td>
<td><em>hars, mars, ełbars</em></td>
</tr>
<tr>
<td>gen</td>
<td><em>hawr, mawr, ełbawr</em></td>
<td><em>harc‘, marc‘, ełbarc‘</em></td>
</tr>
<tr>
<td>dat</td>
<td><em>hawr, mawr, ełbawr</em></td>
<td><em>harc‘, marc‘, ełbarc‘</em></td>
</tr>
<tr>
<td>abl</td>
<td><em>hawrē, mawrē, ełbawrē</em></td>
<td><em>harc‘, marc‘, ełbarc‘</em></td>
</tr>
<tr>
<td>strum</td>
<td><em>harb, marb, ełbarb</em></td>
<td><em>harbk‘, marbk‘, ełbarbk‘</em></td>
</tr>
</tbody>
</table>

Arm. *mayr" cedar" has a different inflection (*mayri, mayrē, mayriw* etc.).
A missing bridge between semantics and inflection: gender

- An inherent nominal category which can be partially semantically motivated and can interact in some languages with inflection-classes is gender.

Cfr. in Classical Latin, Late Latin, Romance Languages female human beings belonged mostly to 1st declension (I.-E. ā-stem):

*Lat. nurus* "daughter-in-law" (f. u-stem, originally I.-E. -o stem, cfr. Greek νυός and Arm. նու now, gen. նուոյ nowoy), but Romance outcomes suppose *nura* or *nora* (cfr. also Old Indic *snuṣā, ā-stem*).

- In Armenian gender disappeared already in the prehistory of the language
The dialect of K’esab

Still spoken in North-Western Syria close to the border with Turkey; the dialect of K’esab, described by Č‘olak’e-an (2009²), is a possible continuer of Cilician Middle Armenian.
The dialect of K’esab is very rich in plural markers (29) and there is often overabundance in nominative plural-cell. Formal criteria represents the most common strategy, for example:

Some plural markers are selected on prosodic grounds
- monosyllabic words → -ir, -onk\textsuperscript{h}, -va, -vəna, -vənnir, -vonk\textsuperscript{h}, -irk\textsuperscript{h}, -irk\textsuperscript{h}vun, -vəda, -vədak\textsuperscript{h}, -usda, -udak\textsuperscript{h}, -ɛnnaɛ, -ek, -ek\textsuperscript{h}
- polysyllabic words → -dun, -vun, -ənnir, -nir, -da, -dak\textsuperscript{h}, -əsdun, -na, -ina, -k\textsuperscript{h}, -ɛts\textsuperscript{h}vir, -æk\textsuperscript{h}, -ink\textsuperscript{h}, -un

Polysyllabic words often are inserted in different inflection classes on the basis of segmental criteria: e. g. plurals in -əsdun are restricted to nouns originally ending in -i,
cfr. գաւտի gawti "belt", K’esab kydæ, pl. kydəsdun,
մատանի matani "ring", K. mænnæ, pl. mɛnnəsdun
Semantic-based (micro-)classes (1): pl. -vəda(kʰ)

This plural marker attaches only to 4 words.

\(k^h\)woi`r "sister" (քոյր), pl. \(k^h\)yrvəda(kʰ)

njər "brother's wife, sister-in-law" (ներ), pl. nirvəda(kʰ)

dwol "husband's sister, sister-in-law " (տալ), pl. dalvəda(kʰ)

- High semantic homogeneity (kin-terms for female relatives, same generation of EGO)
- weak formal restriction (monosyllabic words)

The class attracted also lɛlelo "sister", pl. lɛlvəda(kʰ), a polysyllabic word

- In Cilician Armenian k’owrvti "sisters" and -vedi attached mostly to words ending in \(-r\), in K’esab words ending in \(-r\) have \(-dak^h\), (CA -tik’), while the selection of -vəda(kʰ) is semantically motivated
Semantic-based (micro-)classes (2): pl. –\textit{i/yŋk}^h

Only \textit{mær} - \textit{miryŋkh} "mother-s", \textit{murk^hwoir - murk^hərynkh} "mother's sister-s", \textit{xənæmæ} - \textit{xənɛmuŋkh} "father(s)-in-law" and \textit{æɛræ} - \textit{aɛpiyŋkh} "brother(s)"

- the starting points were probably \textit{miryŋkh} e \textit{aɛpiyŋkh}, but the first, cognitively more salient attracted in this inflection class \textit{murk^hərynkh} "mother's sisters", (a compound of \textit{k^hwoir} that should have plural in -\textit{vəda(k^h)}, and \textit{xənɛmuŋkh} "fathers-in-law " (which does not show any form similarity with the other terms)

- \textit{xənæmæ} and \textit{murk^hwoir} belong to the same generation of \textit{miryŋkh} (one generation before EGO)

- Semantic homogeneity triggered analogy in inflection
Semantic-based (micro-)classes (3): pl. –va

K'esab -va plural marker can be traced back to CA –vi and is used with a small group of words (minor plural? Cfr. Corbett 1996 and 2000, pp. 89-132):

- with double body-parts

vid "foot" (ռուն), pl. vidva
eos "shoulder" (ռուն), pl. ysva
ajk "eye" (աչք), pl. iʃva
pjeʃk "shoulder" (բէջք), pl. pʃʃva
mjef "flank" (մէջ, մէջք), pl. mʃʃva

guʁ "flank" (ղղու), pl. guʁva
tsar "hand" (ձեռ), pl. tsarva
dzedz "breast" (ծիծ), pl. dzidzva
fʃrt "lip" (շուրթն), pl. fʃrtva
vendregion="302" vendregion="303" vendregion="304" vendregion="305" vendregion="306" vendregion="307" vendregion="308" vendregion="309" vendregion="310" vendregion="311" vendregion="312" vendregion="313" vendregion="314" vendregion="315" vendregion="316" vendregion="317" vendregion="318" vendregion="319" vendregion="320" vendregion="321" vendregion="322" vendregion="323" vendregion="324" vendregion="325" vendregion="326" vendregion="327" vendregion="328" vendregion="329" vendregion="330" vendregion="331" vendregion="332" vendregion="333" vendregion="334" vendregion="335" vendregion="336" vendregion="337" vendregion="338" vendregion="339" vendregion="340" vendregion="341" vendregion="342" vendregion="343" vendregion="344" vendregion="345" vendregion="346" vendregion="347" vendregion="348" vendregion="349" vendregion="350" vendregion="351" vendregion="352" vendregion="353" vendregion="354" vendregion="355" vendregion="356" vendregion="357" vendregion="358" vendregion="359" vendregion="360" vendregion="361" vendregion="362" vendregion="363" vendregion="364" vendregion="365" vendregion="366" vendregion="367" vendregion="368" vendregion="369" vendregion="370" vregione
Semantic-based (micro-)classes (3.1): pl. –va

- with few other words

*tor* "door" (դուռ), pl. *tərva* (two shutters?)

*beong* "nail (of hands and feet)" (եղունգ), pl. *ɓəŋva* (inserted in this class as body-part?)

*tsæn* "voice" (ձայն), pl. *tsinva*

*hid* "footstep" (հետ, հետք), pl. *hitva*

*hurtʰ* "calf" (հորթ), pl. *hurtʰva*

*jef* "donkey" (էշ), *jɪ̞va*

All these words can form the plural also with -*ir* e -*irkʰ*, the most frequent suffixes of monosyllabic words, but only this words can receive the plural marker –*va*. 
Semantic-based (micro-)classes (3.2): pl. –vəna

These same words can have a second plural in –vəna (< vi+ni), unknown to CA

This plural marker conveys a different meaning:

e.g. *vidvəna* "their feet", "feet not belonging to just one person"

*tsarvəna* "their hands", "hands not belonging to just one person"
Some remarks about -va (< -vi)

- the first attestation of -vi is with an animal-name (գպիր "dogs"), where it was pure plural marker and dates to Old Armenian (in the Armenian Translation of Eusebius’ Chronikon, but cfr. Ačařyan 1957, LHLK 3, 709 who considers գպիր a late insertion)
- in Cilician Armenian -vi was restricted to monosyllabic words mostly indicating double body-parts
- in the dialect of K’esab the semantic core of this inflection class remains the same, i.e. double body-parts, and the nouns belonging to this inflection class have increased and now it contains also non double body parts as "nails" (cfr. keong "nail", pl. keongva)
- new animal names have entered the class perhaps via analogy with գպիր
-va and -vęna; why two plurals?

The primary semantic core might have been the starting point for the double inflection of these group of words.

Double body-parts are cognitively very important parts in human body and in the speech the use of a plural of body-parts indicates almost always a natural pair (of hands, of feet, of shoulders, of eyes), we could speak of a pairal semantics rather than a dual semantics. These pairs of body parts belong of course to the same person. This is the most common situation in concrete speech acts. This frequent association between plural form and pairal semantics in the speech could have changed these plurals in -vi in restricted plurals or set-plurals (Gil 1996), i.e. plurals referring to a natural and stable quantity of items to be considered as an unity, as a set, in this case hands, feet, shoulders, breasts etc. belonging to the same individual (Corbett 2000, 117-120). Hence the extension of -va plural to the word for "nail".
Restricted (set) vs non-restricted (analytical) plural (Budugh)

Something very similar can be observed for example in budugh, a North-Eastern Caucasian language spoken in Azerbaijan. In budugh we find:

\[t't'il-iber \text{ "fingers of one hand"} \quad \text{vs} \quad t't'il-imber \text{ "fingers of several hands"}\]

\[\text{ʕūl-über \text{ "eyes (of one person)"}} \quad \text{vs} \quad \text{ʕūl-ümber \text{ "eyes (of several people)"}}\]

\[ibr-imer \text{ "ears (of one person)"} \quad \text{vs} \quad ibr-imber \text{ "ears (of several people)"}\]

\[č'er-iber \text{ "hair (of one person)"} \quad \text{vs} \quad č'er-imber \text{ "hair (of several people)"}\]

\[čärx-imer \text{ "wheels (of one car)"} \quad \text{vs} \quad čärx-imber \text{ "wheels (in general)"}\]
(More or less) Restricted plural vs non-restricted (analytical, individual) plural in Italian

*pugno* "fist", pl. *pugna* (old Italian) "fists belonging to one person", *pugni* "fists belonging to many people"

*ginocchio* "knee", pl. *ginocchia* "knees belonging to one person ", *ginocchi* "knees belonging to many persons"

*sopracciglio* "eyebrow", pl. *sopracciglia* "eyebrows belonging to one person ", *sopraccigli* "eyebrows belonging to different persons"

*lenzuolo* "bed sheet", pl. *lenzuola* "bed sheets belonging to one bed", *lenzuoli* "bed sheets belonging to different beds"

*corno* "horn", pl. *corna* "horns belonging to one animal", *corni* "horns belonging to several animals"

-*a* < Latin plural marker –*a* specific for neuter nouns (Corbett 1996, about semantics cfr. Thornton 2010-2011)
The plural marker –վի in Cilician Armenian

with double body-parts

աչք / աչվի "eye/eyes", ձեռ / ձեռվի "hand/hands", ուտ / ուտվի "foot/feet", մէջք / մէջվի "flank/flanks"

With some entities that sometimes are double:

դոռ / դռվի "door/doors" (the two shutters?)

But also with entities that are not double at all:

իր / իրվի "thing/things", մտ / մտվի "thought/thoughts", տուն / տնվի "house/houses", շուն / շնվի "dog/dogs"
Karst (1901, 191-192) saw in this morpheme -vi a continuer of -ow, we find also in erkow "two" and regarded the v of -vi as a survival of an ancient I.-E. dual morpheme *-ō. This hypothesis is rather problematic.

Pedersen (1906, p. 476) and Greppin (1975, 146) notice that -vi was not widespread until to Middle Armenian and resembles more an innovative feature that a conservative one.

More problematic seems the final -i that is very difficult to explain. Karst maintains that -ow would be a survival of dual that "durch nachträgliche Verbindung mit Suffix -i sich zum Kollektivsingular umgestaltete, welcher schließlich als neue Pluralform auch auf andere, meist einsilbige Nomina überging".
The CA plural marker –vi: an original dual marker? (2)

Pedersen (1906, 476) quotes the hypothesis of Karst about an origin of -vi < -ow + -i < *-ō + *-iiā (or *-iiō), but evaluates it as untenable and prefers to trace back -v- to the final -ow we find in adjectives like arow "male". This hypothesis results highly problematic as well and does not give a solution to the enigmatic final -i. The idea of Meillet (1903, 147-148) that -vi might have been generalized from an ancient plural *cnowi "knees" (-i collective marker), is highly uncertain. Meillet considered -vi as an original plural marker and not as the outcome of an ancient dual marker, as proposed by Karst, Ačeřyan (1957, LHLK 3, 454 and 709) and, although dubitatively, by Jahowkyan (1987, 375).
Semantics-based (micro-)classes (4): pl. –ənnir

In the dialect of K’esab we find that diminutives formed with -Vg (-eg, -eog/-og < -ik, -owk) select a plural marker -ənnir (< an+ni+ear), while other words ending in -Vg without any diminutive suffix select -ina/-əna (< -eni), cfr.

*kʰɛɾeog* (քար-ուկ) "small stone" → pl. *kʰɛɾənnir

təkɛlɛg (դգալ-իկ) "little spoon" → pl. təkɛlənnir etc.

but

səndeog (սնտուկ) "box" → pl. səngina (< səndgina

tɛnvog (դանակ) "knife" → pl. tɛngəna

dzæɾeog (ծաղիկ) "flower" → pl. dzæɾəna etc.
Diminutive plurals with and without –Vg-

A word like hɛv-eog (հավ-ուկ) "little chicken" pl. hɛv-g-ənnir shows a clearly identifiable diminutive morpheme in the plural, while a word as gyv-og (կով-ուկ) "little cow" has a pl. gyv-ənnir which is diminutive as well but without a dedicate morpheme.

- more fusion: the derivational semantic feature [+diminutive] is fused together with an inflectional content as [plural] is.

The situation recalls the Bantu-class n. 13. Cfr. in Chindamba (Tanzania)

li-piki ‘tree’ (class 5) pl. ma-piki ‘trees’ (class 6)

ka-piki ‘small tree’ (class 12) pl. tu-piki ‘small trees’ (class 13)

- tu- cumulates the feature [+plural] and [+diminutive]
A morphological change triggered by semantics?

As for the diminutive plural marker -ənnir in K'esab we might simply think that the multiple expression of the same feature [+diminutive] may have triggered or tolerated a morphological restructuration of the plurals in -ənnir:

sing. gyv-og     >     pl. gyv-g-ənnir     >     gyv-ənnir
            cow-[+small]       cow-[+small]-PL[+small]       cow-PL[+small]
Diminutives without -g- in the plural

Lexical semantics can have played a role. In the dialect of K'esab some diminutives in - *eg*, -*eog* without diminutive morpheme -g- in the plural are nouns indicating small (and nice) animals such as *tsėkeog* (<ձագ-ուկ, ձագ "chik") pl. *tsėkənniɾ, ʧʰədddeg (< ծիտ-իկ, ծիտ "sparrow"), ʧʰəddenniɾ. Can we imagine an interplay between this plurals of "small (and nice) animals" and the deletion of -g-? Cfr.

sing.  
*tsėk-eog*

chik[+small (& nice)]-DIM[+small (& nice)]

pl.  
*tsėk-(g)-ənnir*

chik[+small (& nice)]-DIM[+small (& nice)]- ənnir (→ noun [+small])

variant pl.  
*tsėk-ənnir*

chik[+small (& nice)] - ənnir (→ noun [+small])
The morpheme -ənnir as an index

- Plural in -ənnir in K'esab has become a strong index. Its indexicality consists in the fact that it attaches only to diminutives i.e. to stems having the feature [+small (& nice)]
- in nouns denoting small animals semantic, redundancy of the feature [+small] is very high and a plural formation without diminutive morpheme seems fully compatible with the indexical value of -ənnir,
- so -ənnir might have begun to attach to nouns having the feature [+small] irrespective of their being derived nouns or root nouns, as in the case of "chik" and "sparrow". Perhaps the innovative plural diminutives without -g- spread from here.
Thank you for your attention!
Bibliography

Ačar’yan, H., 1957, Liakatar k’erakanowt’yown Hayoc’ lezvi, hator 3, Erevan, Haykakan SSŘ GA hrataракč’owt’yown.
Č’olak’eant, Y. 20092, Kesapi barařa, Erevan, EPH Hrataракč’owt’yown - «Hayastan» Hrataракč’owt’yown.
Corbett, G. 2000, Number, Cambridge, CUP.
Łaribyan, A.,1953, Hay barbaragitowt’yown, Erevan, Haykakan SSŘ Petakan Heraka mammavaržakan institowti tparan.
Meillet, A. 1903, De quelques arcaïsmes remarquables de la déclinaison arménienne, in "Zeitschrift der Armenischen Philologie" 1, pp. 139-148.