

# Correspondences of Basque and Caucasian Final Stem Vowels: *-i/-e, -u/-o*

JOHN D. BENGTON \*

This essay is based on the hypothesis of a genetic relationship of the Basque language with the Caucasian language family, a hypothesis that has been current, in various forms, throughout this century<sup>1</sup>. The present writer is of the opinion that (apart from certain extinct languages, notably Aquitanian) Basque is most closely related to the (North) Caucasian family<sup>2</sup> (Abkhazo-Adygan and Nakho-Dagestanian), and to the Burushic family<sup>3</sup>, and only more remotely with the other Dene-Caucasic languages<sup>4</sup> (Yeni-seian, Sino-Tibetan, Na-Dene).

In my pursuit of lexical studies of the Dene-Caucasic macrophylum, I have been struck by the frequent similarity of Basque final (stem) vowels with those found in presumed cognate words in the Caucasian languages.

\* University of Minnesota, Association for the Study of Language in Prehistory

1. The names Karl Bouda, Georges Dumézil, René Lafon, Alfredo Trombetti, and C.C. Uhlenbeck are prominent in the field of Basque-Caucasic comparison. For references, see J.D. BENGTON, „Notes on Sino-Caucasian,” in *Dene-Sino-Caucasian Languages* (ed. by V. SHEVOROSHKIN), Bochum, 1991, pps. 67-129; R.L. TRASK, *Basque: The Search for Relatives*, Part 1, Dhumbadji! III/1 (1994-95), 3-54.

2. J.C. CATFORD, “The Classification of Caucasian Languages”, in *Sprung from Some Common Source: Investigations into the Prehistory of Languages* (ed. by S.M. LAMB & E.D. MITCHELL), Stanford, 1991, pps. 232-268.

3. The Burushic family, which once extended over a larger part of northwestern (Greater) India, now consists of a single language, Burushaski, with two major dialects: Yasin (=”Werchikwar”) and Hunza-Nagir (“Khajuna”). Cf. D.L.R. LORIMER, *The Burushaski Language* (3 vols.), Oslo, 1935-38; H. BERGER, *Das Yasin Burushaski*, Wiesbaden, 1974; E. TIFFOU & J. PESOT, *Contes du Yasin. Introduction au bourouchaski du Yasin avec grammaire et dictionnaire analytique*, Paris, 1989.

4. V. SHEVOROSHKIN (ed.), *Dene-Sino-Caucasian Languages*, Bochum, 1991 (contributions by S.A. STAROSTIN, S.L. NIKOLAEV, & J.D. BENGTON). “Dene-Basque” is a more inclusive hypothesis, probably reflecting an older unity: cf. W.W. SCHUHMACHER, “Towards “Dene-Basque””, *FLV* 55 (1990), 23-25.

More specifically, the most striking resemblances are found in the Avar-Andian group, and to a lesser extent also in the Tsezian (Dido), group, and the Dargi language. In other Caucasian languages we see varying degrees of apocope of the old final vowels, a reduction which reaches its extreme form in the West Caucasian (Abkhazo-Adygan) tongues.

In the following comparisons, the Basque form is presented first, on the left side of the page, and on the right Caucasian forms that are presumed cognate with the Basque word, and finally the proto-Caucasic form postulated by Nikolaev & Starostin <sup>5</sup>. Note that not all of the Caucasian cognates are cited, just those that share a similar final vowel with Basque.

[Basque -i/-e = Caucasian -i/-e]

1. Basque **mih**i ‘tongue’ <sup>6</sup>: Andi, Akhvarkh, Botlikh **mič’u** ‘tongue’; Tindi, Godoberi **miči**; Dargi (dial.) **lezmi** ~ **limzi**, etc. (\***mēlc’i**) <sup>7</sup>.
2. Basque **begi** [**beγi**] <sup>8</sup>: Dargi **huli-çule** ‘eye’; Tsezian \***ħore**: <\***berγi** ‘eye’ Tsez **ozuri**, Bezhta **häre**, Hunzib **hare**, etc. (\***ʔw iħi**) <sup>9</sup>.
3. Basque \***be-laři** ‘ear’ <sup>10</sup>: Dargi **lihi-laři** ‘ear’; Proto-Nakh \***lari-k** ‘ear’: Chechen **lerg**~(dial.) **lerig**~**larig** (\***lēHle** ~ **lēHli**).
4. Basque **aragi** [**araγi**] : Andi, Akhvaekh, Tindi, Karata, Botlikh ‘meat, flesh’ <sup>11</sup> **riṭ** <sup>12</sup> ‘meat’, ChamaIaI (dial.) **reṭ** <sup>12</sup> (\***rāt**) <sup>12</sup>.

5. Proto-Caucasic reconstruction by: S.L. NIKOLAEV & S.A. STAROSTIN, North Caucasian Roots (Shevoroshkin, *Op. cit.*, pps. 174-264); S.L. NIKOLAEV & S.A. STAROSTIN, *A Caucasian Etymological Dictionary*, 1992, ms.

6. I exclude the proposed derivation of **mih**i ‘tongue’ from \***bini** (L. MICHELENA, *Fonética Histórica Vasca*, San Sebastián, 1961, p. 412). **mih**i is parallel with **beh**i ‘cow’, just as the same words are parallel in Caucasian (e.g., Botlikh **mič’i** ‘tongue’: **buc’i** ‘cattle’). In Proto-Caucasic both words had an internal resonant (\***mēlc’i**: \***ħarc’wV**) thus I postulate the Basque developments as follows: \***milçi**: \***berçi** (with retroflex **c**, cf. Burushaski **melc** ‘jaw’) > \***mişşi**: \***beşşi** > \***mixi**: \***bexi** (where **x** was a velar fricative = German **ich-laut**) > **mih**i: **beh**i. The Zuberoan nasal in **mih**i is caused by the initial **m**; **beh**i is not nasalized (J. LARRASQUET, *Le Basque de la Basse-Soule orientale*, Paris, 1939). The postulated stage \***mixi**: \***bexi** is verified by forms preserved in the western Basse Navarre dialect: [**miħcja**] ‘the tongue’ and [**beħcja**] ‘the cow’; the same dialect also preserves [**x**] in [**axhwa**] = **ahoa** ‘the mouth’ (N. MOUTARD, ‘Etude phonologique sur les dialectes Basques’, I, *FLV* 19 (1975), 5-42). The development **s** (> **x**) is commonplace in historical phonology (e.g., Spanish, Slavic).

7. The dialectal Dargi forms are by metathesis, the Akusha dialect having also **mez** ‘tongue’.

8. The development was apparently from \***berγi**, where **γ** is the voiced velar fricative still heard in Basque (cf. the corresponding sound in Spanish **vega**, etc.). The correspondence of Basque **b**:-Caucasic **w**- is regular (see below). \***ber**- (cf. Caucasian: Avar **ber** ‘eye’) is supported by the Zuberoan variant **ber-phuru** ‘eyebrow’; cf. Burushaski **-I-pur** ‘eyelash’. (For \***berγi**>**begi**, cf. note 16).

9. **ʔ** is a reconstructed pharyngeal stop, which develops to **ħ** (voiceless pharyngeal fricative) or **ʕ** (voiced pharyngeal fricative) in the Dargi dialects, and ordinary **h** in Tsezian. In other Caucasian languages the labial element predominates: Avar **ber** ‘eye’, Lezgi **vil**, Udi **pul** id.

10. The reconstruction \***be-laři** is based on the postulated fossilized class/gender prefix **be-/bi**, cf. J.D. BENGTON, ‘Postscript I’ (in SHEVOROSHKIN, *Op. cit.*, pps. 150-156). Note that Basque \***-laři** ‘ear’ is virtually identical to Proto-Nakh \***lari**- ‘ear’ > Chechen **larig**~**lerig**~**lerg**. The north-eastern Basque form **beharri** is apparently influenced by **beha**- ‘to listen’.

11. Here the Basque velar fricative [**γ**] appears to correspond to a Caucasian lateral affricate [**t’**], as also with **sagu** ‘mouse’ (no. 17), cf. note 12.

12. The correspondences of lateral affricates [**d’**, **t’**, **t’**] are very complex in Caucasian languages: in some languages they develop to velars (e.g. Lak **dik** ‘meat’, Tabasaran **jik**, khinalug **li-ka** id.) or even uvulars (Ingush **dulX** ‘meat’); and conversely, original velars become laterals, cf. no. 17.

5. Basque **behi** “cow”<sup>13</sup>: Avar **boč’i** “cattle”, Andi **buč’i-r**, Botlikh **buč’i**, Godoberi **purčī** (\***bħarc’wV**).
6. Basque **azegari** “fox”<sup>14</sup>: Akvakh **šari** “fox”, Tindi, Botlikh, Godoberi **sari**, Karata **sare** (\***cEHwōlē**)<sup>15</sup>.
7. Basque **txori** [čori] : Tindi čuri-γaγa “quail”, cf. Chamalal čor  
~xori [šori] “bird” “bird” (\*č’Hwī1V).
8. Basque **sasi** “thorn, : Dargi **zanzi-čāncī-čācē** “prickle, prickly  
bramble, thicket” plant, bramble” (\***zāce** or \***cāce**).
9. Basque **hegi** “summit, : Avar **čorqı** “border”; Dargi **šurqi**  
peak, corner, edge, “mountains” (\***čerqwē**).  
border”<sup>16</sup>
10. Basque **erdi** “half, : Akhvakh **b-at’i-s** “half”, Karata **b-at’i**  
middle”<sup>17</sup> “between”, Tindi **b-at’i** “amidst”; Lak  
-ač’i “half” (\*-et’i “half, middle”).
11. Basque **txiki** [čiki] : Tabasaran **šiqi** “short” (\***šī/k’wV**).  
“small, little”
12. Basque **guti** “few, : Archi **kut’i-tut** “short” (\***kot’V**).  
little”
13. Basque **ondi-** in : Avar **únti** “sickness, defect” (\* **žuntV** ~  
**ondi-ko** “misfortune, \* **žuntV**).  
misery”
14. Basque \***i-linti** : Andi **łudi** “firewood”; Chamalal **łunni**  
“firebrand, ember”<sup>19</sup> (\***łwindV**).
15. Basque **gose** “hunger, : Lak **kaši** “hunger”; Dargi **gaši-kiše** (\***gaši-**  
hungry” \***gaši**)<sup>20</sup>
16. Basque **habe** “pillar, : Avar **ħubi** ‘pillar, pole, trunk, stem’  
beam, rafter” (\***ħwVbV-ħwVwV**).

13. For phonology, cf. note 6.

14. A Bizkaian form, **azegari**, seems to be very archaic, reflecting earlier \***ašeyali**, which is very close to the Caucasian \***ceHwōlē** (where E represents an unspecified front vowel, and H a laryngeal of uncertain quality). The derivation from the name **Acenari** (MICHELENA, *Op. cit.*, ps. 119) is declined as both semantically and phonetically implausible. There is no evidence for -n-, since Zuberoan **axeri** [ašéy] “fox” has no nasal vowel (LARRASQUET, *Op. cit.*). A stem variant, **azel-**, is evidence that -l- is original. On the other hand, the Caucasian parallel is semantically exact, and phonetically plausible.

15. Other Caucasian forms retain 1 (e.g., Ingush **cogal**, Tabasaran **sul**, Khinalug **pšlä** “fox”).

16. The development was probably **hegi** < \***heryi**, parallel with no. 2 (**begi** < \***beryi**) and no. 17 (**sagu** < \***šaryu**). The same r-elision takes place in some Caucasian languages (e.g., Tsakhur **sok** “weasel” < \***cārgwī**; cf. Basque **sagu**).

17. The correspondence of Basque -rd- to Caucasian lateral affricates (cf. note 11) is well documented: e. g., Basque **adar** (< \***ardar**) “horn” corresponding to Avar **t’ar** “horn” (cf. Burushaski **-ltur** “horn”).

18. This expressive word, cited from western Basque, also has the eastern variants **txipi-ttipi** “small”, so this example may be doubtful.

19. \***i-linti**\* is based on the Zuberoan form, which seems the most archaic. Other Basque meanings, e.g., “spark; dead stalk of wheat; blight”, are probably related to an old fire-making complex (spark, tinder, ember), which is confirmed by more remote comparisons (e.g., in Na-Dene, Eyak **ħid** “deadwood, firewood”). Cf. V. BLAŽEK & J.D. BENGTSON, “Lexica Dene-Caucasica” (to appear in *Central Asiatic Journal*).

20. This must be admitted to be one of the most straightforward Vasco-Caucasic comparisons: semantically and phonetically perfect.

[Basque -u/-o = Caucasian -u/-o]

17. Basque **sagu-sat**-<sup>21</sup> : Avar **caṭ**<sup>1</sup>**ú** “weasel”, Andi **sarṭ**<sup>1</sup>**u**,  
“mouse” Karata **sat**<sup>1</sup>**u** (\***cārgwṭ**)<sup>22</sup>.  
18. Basque **gartxu** [garču]<sup>23</sup>: Andi **q’erč’u** “girder” (\***Gwěrc’V** ~  
“long pole” \***qwěrc’V**)<sup>24</sup>.  
19. Basque **beso** “arm”: Bezhta **bico** “arm”, Hunzib **bicu**, Tsez,  
Hinukh **mecu** “arm” (\***bīmc’wV**).  
20. Basque **ukondo** : Tsez **q’ontu** “knee”, Khwarshi, Hinukh  
“elbow”<sup>25</sup> **q’ontu** “knee”; Lezgi **q’ünt**, (oblique base)  
**q’üntü-** “elbow” (\***q’HwṛntV**).  
21. Basque **otso** “wolf”: Bezhta **bac’o** “wolf”; Andi **boc’o**  
(\***bḥěrc’ı~\*bḥěrc’ě**)<sup>26</sup>.  
22. Basque **baso** “forest”: Bezhta **bizo** “mountain”, Hunzib **bizu** (\***wṣe**).  
23. Basque **bero** “hot”: Tsez **boboru** “hot”, Khwarshi **bobolu**<sup>27</sup>.

Of these comparisons, note that the first four (and below, nos. 19, 20) have to do with parts of the body, one of the primary fields of basic and historically stable vocabulary. In Dolgopolsky’s<sup>28</sup> hierarchy of stability, “tongue”, is fifth, “eye” is seventh, and “ear” is twenty-fourth. “Meat, flesh” is also very basic. Comparisons 6, 7, 17, 21 denote wild creatures (fox, bird, mouse, wolf), all quite basic. Sets 8, 9, 22 have to do with natural phenomena (thorn, mountain, forest), also very basic. Only three sets (14, 16, 18) involve cultural vocabulary, but only of the most basic kind (firewood, and other simple artifacts made of wood). The rest are mainly basic descriptives (half/middle, small, hungry, hot).

So *if* one is considering the possibility of languages being related several thousand years back, and searching for residues of that relationship, this is exactly the kind of vocabulary one would be looking at for the maximum stability.

21. See notes 11, 12, and 16 for phonology. There is also a stem variant **sat-** (as in **sat-(h)or** “mole”, lit. “mouse-dog”) which is reminiscent of Chechen **šat’q’a** “weasel” (cf. note 22). Note also western Basque **sagu-zarra** “bat”, lit. “mouse-old”.

22. The meanings “marten, mouse” are found in West Caucasian (e.g., Adyge **cəγwa**). Cf. also Burushaski **čcharge** “flying squirrel”.

23. This is a Bizkaian form, another meaning of which is “a shrub that resembles the juniper” (homonym? cf. R. M. de AZKUE, *Diccionario Vasco-Español-Francés*, Bilbao, 1905).

24. Other meanings include “beam” (Avar **çarč**) and “stick” (Batsbi **γoč**); cf. Burushaski **gaçhe** “twig, withe” (BLAŽEK & BENGTON, *Op. cit.*).

25. Analyzed as **u-k(h) ondo**, **u-** being another fossilized class/gender prefix (cf. note 10). The analysis as **uk(h)o-ondo** or **uk(h)al-ondo** (TRASK, *Op. cit.*, ps 45) is set aside, since \***ukho-** is only hypothetical, and **ukalondo** is a central Basque innovation, not a relic. The Basque-Caucasian comparison is semantically and phonetically precise.

26. Here NIKOLAEV & STAROSTIN (*Op. cit.*, 1992) reconstruct a final front vowel. If so, the development to **-o** on both sides of the equation could be convergent, due to the influence of initial \***b-**.

27. E.A. BOKAREV, *Cezskie (Didojskie) Jazyki Dagestana*, Moscow, 1959, ps. 241. Cf. also Burushaski **babar-um** “hot (of taste, temper)”.

28. A.B. DOLGOPOLSKY, “A Probabilistic Hypothesis Concerning the Oldest Relationships among the Language Families of Northern Eurasia”, in *Typology, Relationship, and Time* (ed. by V. SHEVOROSHKIN & T.L. MARKEY), Ann Arbor, 1986, pps. 27-50.

The basic nature of these 23 comparisons disposes of the possibility that these resemblances could be the result of borrowing or diffusion. The remaining explanations are *accidental resemblance* or *genetic inheritance*. Regarding the first possibility, is it plausible that these many coincidences of sound and meaning, extending even to the same (or similar) *stem vowel*, could be accidental?

If this possibility of accidental resemblance is still entertained, consider that there are also regular sound correspondences running through these comparisons. Here I shall only point out a few of the most interesting non-trivial correspondences:

Basque **-r-** corresponds to Proto-Caucasic **-l-**:

- (2) Basque \*beryi = Caucasian \*ʔwɪlʔi
- (6) Basque \*-s̄eɣari = Caucasian \*chwōlē
- (7) Basque [čori] = Caucasian \*č'HwɪV
- (23) Basque **bero** = Caucasian (Khwarshi) **bobolu**

These four are not the only examples of this correspondence. Consider also:

- 24. Basque **ahur** (\*a-xur) : Khinalug, Archi, Udi **kul** “hand”; Avar **kwer** “hollow of the hand” “hand”; Hunzib **koro**, etc. (\*kwɪlʔi).
- 25. Basque **gari** “wheat” : Lezgi **q̄ül** “wheat”, Kryts **q̄ul**; Andi **q'ir**, (gal- in compound words) Akhvakh **q'iru**, etc. (\*C̄ɪ1ʔV).

It is obvious from these comparisons that the Basque development (\*l>r) is parallel to developments within the Caucasian family: the Avar-Andi-Tsez languages have **-r-**, while Nakh, Lezgian, Dargi and Lak preserve **-l-**.

Another correspondence is that of Basque **b** to Proto-Caucasic \*w:

- (2) Basque \*beryi = Caucasian \*ʔwɪlʔi
- (22) Basque **baso** = Caucasian \*wɪce

and possibly also:

- (16) Basque **habe** = Caucasian \*hwVwV

though here Nikolaev and Starostin allow for the alternative reconstruction \*hwVbV. Here again, the Basque development (\*w > b) is shared with most of the Caucasian family. Only some Lezgian languages preserve w or v (cf. Lezgi **vil** “eye”, cognate with no. 2).

A further example of Basque **b** = Caucasian \*w is probably the frequent Basque prefix **be-/bi-**, which appears to be cognate with the Caucasian gender marker \*w- (third class singular, first and second class plural). One example is given above:

- (3) Basque \*be-laři = Caucasian \*(w-)l̄čHli

Additional examples include:

- 26. Basque \*be-xač̄> : Caucasian \*(w-)kwăč'ě “paw”: Avar **kwăč'** **behatz-beatz** “toe ~ “paw”; Dargi **k'ăč'a** “paw”; Hunzib **k'č̄'u** “hoof ~ paw ~ thumb” “distance between thumb and forefinger”.

27. Basque **\*be-ašum**: “bile, gall” (Vizc. **beaztun**)      Caucasian **\*(w-)cwäjme** “gall, anger”: Avar **čīn**, Tindi, Botlikh, Godoberi **šimi**; Dargi **sumi ~ himi time**; Chechen **stim** “gall”.  
 28. Basque **bi-zi [biši]** : “life, alive”      Caucasian **\*(w-)siḥwV**: Chechen **sa** “soul, breath”; Lak **ših** “breath, vapor”, West Caucasian **\*p-sV** “soul, breath”.

We have seen that these lexical parallels between Basque and Caucasian are far more than mere “look-alikes”. There are several recurrent sound correspondences, and the words even agree in their final (stem) vowels. I suggest that resemblances such as:

- |                        |   |                           |
|------------------------|---|---------------------------|
| (1) Basque <b>mihi</b> | : | Andi <b>mič'i</b>         |
| (4) <b>aragi</b>       | : | <b>rit<sup>1</sup>'i</b>  |
| (14) <b>ilhinti</b>    | : | <b>ludi</b>               |
| (17) <b>sagu</b>       | : | <b>sart<sup>1</sup>'u</b> |
| (18) <b>[garču]</b>    | : | <b>q'erč'u</b>            |

are every bit as significant as those between Latin **poti-**, **pecu**, and Sanskrit **pāti-**, **pásu**, respectively. These are cognate words of a language family that should, however belatedly, be recognized as valid.

These close correspondences could even give us some clues about the time depth of this family, Macro-Caucasic (or Vasco-Caucasic). This evidence suggests to me that the differences between Basque and Caucasian are comparable to those between different subgroups of Indo-European, especially those that have developed at some distance from one another, say Germanic and Armenian. The etymologies (5) “cow, cattle” and (25) “wheat” imply that the pre-Basques and the pre-Caucasics shared a simple Neolithic farming and herding culture before their dispersal. This is completely in accord with René Lafon’s<sup>29</sup> conclusion that the Basque language was brought to Iberia by immigrants from northern Anatolia, around the end of the Third Millennium B. C.

The linguistic evidence supports the conclusion that the relationship between Basque and Caucasian is *not* “extremely remote”, as some scholars even among those who accept the relationship have assumed. To be sure, much that the languages once held in common has long since been swept away by millennia of attrition, but many clear traces still remain, as has been shown in this essay.

#### TRANSCRIPTION GUIDE:

- ā, ē, etc. nasalized vowel
- ᶗ, ᶘ, etc. pharyngalized vowel
- ᶑ, ᶒ, etc. prosodic condition of vowel (tense voice?)
- c, c', ʒ= [ts, ts', dz] dentalveolar affricates
- č = [tš] Basque dorso-alveolar affricate (orthographic **tz**)
- č' = [tš'] Basque apico-alveolar affricate (orth. **ts**)

29. R. LAFON, “Sur les origines des Basques et de leur langue”, *Les Cahiers d'Outre-Mer* 7 (1949), 193-207.

- ċ = [tʃ] Basque prepalatal affricate (orth. **tx**)  
 ɟ retroflex affricate (Burushaski)  
 G = ɠ voiced uvular stop  
 ɣ (Basque) voiced velar fricative; (Caucasic and Burushaski) voiced uvular fricative  
 h glottal fricative (audible in “French” Basque, silent in “Spanish” Basque)  
 ħ = ʕ voiceless pharyngeal fricative  
 ʔ = ‘ glottal stop  
 ʕ pharyngeal stop  
 ɕ voiced pharyngeal fricative  
 H “laryngeal” of undetermined quality  
 i high mid vowel  
 l lateral sonant (possible velar or “dark” l)  
 l̥ voiceless lateral fricative (hl)  
 dʰ = λ̣ voiced lateral affricate  
 tʰ, tʰʷ = λ̣, λ̣ʷ voiceless lateral affricates  
 p̄, t̄, k̄, s̄, etc. = p:, t:, etc. fortis (“emphatic”) consonants  
 pʷ, tʷ, kʷ, etc. glottalized consonants  
 q, qʷ voiceless uvular stops  
 r̄ Basque trilled resonant (orth. **rr**)  
 s̄ Basque dorso-alveolar fricative (orth. **z**)  
 s̄ Basque apico-alveolar fricative (orth. **s**)  
 ʃ prepalatal (postalveolar) fricative (Basque orth **x**)  
 ʂ retroflex fricative (Burushaski)  
 x (Basque) voiceless velar fricative; (Burushaski) voiceless uvular fricative  
 X voiceless uvular fricative (= Burushaski x)  
 ü “French” Basque (and Chechen, Lezgi) fronted u  
 V reconstructed vowel of undetermined quality

## DEFINITIONS:

- Burushic = a small family in the far northwest of greater India, now represented by the Hunza-Nagir and Yasin dialects of Burushaski. A Burushic substratum can also be traced in certain Indo-European languages, e.g. Khowar and Shina.
- Caucasian = native languages of the Caucasus region, exclusive of Indo-European, Altaic (Turkic, Mongolic), Semitic, and *Kartvelian* languages. They can be positively described as (North) Caucasian, i.e. Abkhazo-Adygan and Nakho-Dagestanian, as well as the extinct Hurrian, Urartian, and Hatti.
- Dene-Caucasic = a macrophylum consisting of the Vasco-Caucasic (see below), Sino-Tibetan, Yeniseian, and Na-Dene phyla or families. The possible inclusion of Sumerian and Kusunda is less certain. (= Dene-Caucasian, Sino-Caucasian)
- Vasco-Caucasic (= Macro-Caucasic, Macro-Caucasian) = a phylum level subdivision of Dene-Caucasic, consisting mainly of Basque, Caucasian, and Burushic, as well as extinct languages such as Aquitanian, and possibly Iberian.

## LABURPENA

Euskal-kaukasiar (Euskera + (Ipar) kaukasiar hizkuntza + Burushic hizkuntza) hipotesiari buruzko ikerketa berri batek kidetasun lexikoak,

erro-bukaerako bokalak motako egokitzapen zehatzak euskera eta kaukasiar hizkuntzaren artean azaltzen dituztenak, erakutsi ditu. Adibidez:

- mihi (euskera) : Botlikh mič'i "mihi"
- behi (euskera) : Botlikh buč'i "abere"
- beso (euskera) : Bezhta bico "beso"
- baso (euskera) : Bezhta bizo "mendi"

Egokitzapen hauek Euskera, Kaukasiar hizkuntza eta Burushic hizkuntza Neolitiko (8.000-10.000 urte K.A.) Aroan kokatzen den aurrehizkuntza amankomun batetik datozelako teoriari ematen diote sostengu.

## RESUMEN

Un reciente estudio sobre la hipótesis Vasco-Caucásica (Vascuence + Cáucaso (Septentrional) + Burushic) reveló afinidades léxicas que dan fe de correspondencias precisas de raíz-vocales finales entre el Vascuence y el Caucásico. Por ejemplo:

- Vasco mihi (vascuence) "lengua": Botlikh mič'i "lengua"
- Vasco behi (vascuence) "vaca": Botlikh buč'i "ganado"
- Vasco beso (vascuence) "brazo": Bezhta bico "brazo"
- Vasco baso (vascuence) "bosque": Bezhta bizo "montaña"

Estas correspondencias apoyan la teoría de que el Vascuence, el Caucásico y el Burushic proceden de un protolenguaje común fechado en el Neolítico (edad cronológica 8.000-10.000 antes del presente).

## RÉSUMÉ

Une étude récente sur l'hypothèse Basque-Caucasienne (Basque + (Nord) Caucasien + Burushic) a révélé des affinités lexiques qui font foi de correspondances précises de racines-voyelles finales entre le Basque et le Caucasien. Par exemple:

- mihi (basque) "langue": Botlikh mič'i "langue"
- behi (basque) "vache": Botlikh buč'i "bétail"
- beso (basque) "bras": Bezhta bico "bras"
- baso (basque) "forêt": Bezhta bizo "montagne"

Ces correspondances confirment la théorie sur quoi le Basque, le Caucasien et le Burushic proviennent d'un proto-langage commun daté du Néolithique (entre 8.000 et 10.000 ans avant J.C.) 2.º

## ABSTRACT

Recent research on the Vasco-Caucasic hypothesis (Basque + [North] Caucasic + Burushic) has revealed lexical cognates which attest to precise correspondences of stem-final vowels between Basque and Caucasic, e.g.

- Basque mihi "tongue": Botlikh mič'i "tongue"
- Basque behi "cow": Botlikh buč'i "cattle"
- Basque beso "arm": Bezhta bico "arm"
- Basque baso "forest": Bezhta bizo "mountain"

CORRESPONDENCES OF BASQUE AND CAUCASIC FINAL STEM VOWELS

These correspondences support a hypothesis that Basque, Caucasian, and Burushic derive from a common proto-language dated in the Neolithic (ca. 8,000-10,000 years B.P.).