

# The Euskaro-Caucasian Hypothesis

Current model  
(2017)



A proposed genetic relationship between Basque (Vasconic) and the North Caucasian language family.

# The Euskaro-Caucasian Hypothesis: Current model

- I. History of the hypothesis
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Note: This presentation is a highly abridged summary of the evidence for this hypothesis. For more information please contact the author.

# I.A. The Euskaro-Caucasian hypothesis: from general to specific:

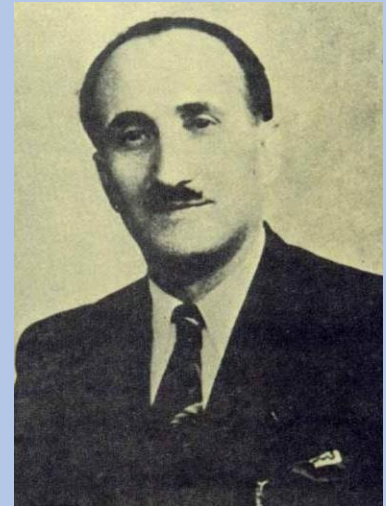
The embryo of *Euskaro-Caucasian* (Basque as a relative of languages in the Caucasus region) was nurtured by several eminent scholars in the nineteenth and twentieth centuries, including Hugo **Schuchardt** (1842-1927), Heinrich **Winkler** (1848–1930), Nikolay Yakovlevich **Marr** (1865-1934), Alfredo **Trombetti** (1866-1929), Christianus Cornelius **Uhlenbeck** (1866-1951), Georges **Dumézil** (1898-1986), René **Lafon** (1899-1974) and Karl **Bouda** (1901-1979).

At the earlier stages, due to the primitive state of Caucasian linguistics, it was unclear whether the Caucasian part of the Euskaro-Caucasian family included all native Caucasian languages, South Caucasian (= Kartvelian) as well as North Caucasian (= Abkhazo-Adyghean + Nakh-Daghestanian), or only some of them. Thus, until about three decades ago, many Euskaro-Caucasian lexical and grammatical comparisons used data from Kartvelian as well as North Caucasian languages.

Some of these authors, especially Schuchardt, Marr, Trombetti, and Bouda, were quite expansive in their comparisons, including Afro-Asiatic, Sino-Tibetan, and other families, while Dumézil and Lafon concentrated on Basque and Caucasian languages.



Schuchardt



Lafon



## I.B. The Euskaro-Caucasian hypothesis: focus on North Caucasian



In this regard it is interesting that as early as Uhlenbeck's (1924) catalog of 65 Basque-Caucasian lexical comparisons only *four* of them involved Basque + Kartvelian exclusively, *nineteen* involved Basque + Kartvelian + (West and/or East) Caucasian, while the great majority - **forty two** - compared Basque words exclusively with North (West and/or East) Caucasian words. <sup>1</sup>



About a decade later, Dumézil, in his comparison of Basque and North Caucasian morphology, remarked that South Caucasian (Kartvelian) hardly figured in the chapter, and hinted that Basque and North Caucasian might have a closer relationship than either does with Kartvelian: "Having, like many others, tried to clarify the structure of Basque by South Caucasian, I had given up: grammatical relationships were too fragmentary. But with North Caucasian the coincidence [with Basque], on all the important points, is almost complete." <sup>2</sup>

## I.C. The Euskaro-Caucasian hypothesis: from the 1980s to present

More than five decades after Dumézil's insight about the special link of Basque to North Caucasian (not Kartvelian), the Abkhazian linguist Viacheslav Chirikba, in a brief paper published in Moscow, compared Basque exclusively with North Caucasian.<sup>3</sup>

Also significantly, this was the first Euskaro-Caucasian publication that made use of the new Proto-East Caucasian reconstructions by Sergei Nikolaev and Sergei Starostin.<sup>4</sup>

Chirikba's paper (mediated by Vitaly Shevoroshkin), stimulated the current author (Bengtson) to take up this issue in a series of articles published in the 1990s.<sup>5</sup>

Linguist R.L. "Larry" Trask of Sussex University wrote a critical review of Chirikba's and Bengtson's articles from a Vasconist perspective,<sup>6</sup> which was published in the first (1995) issue of *Mother Tongue* (journal), together with a response by Bengtson,<sup>7</sup> and discussion articles by eleven other scholars. (Similar debates between Trask and Bengtson were also conducted in the Australian journal *Dhumbadji!* [1994-95]). Discussions continued in the second issue of *Mother Tongue*, now joined by Sergei Starostin of Moscow.<sup>8</sup> Another series of discussions, including Trask, Bengtson, and five others, was featured in the fifth issue of *Mother Tongue* (1999).

These dialogues proved to be beneficial to the development of the Euskaro-Caucasian hypothesis, forcing the elimination of spurious lexical comparisons, more rigorous phonological correspondences, and other improvements and refinements.



R.L.Trask  
(1944-2004)

# I.D. Euskaro-Caucasian: contributions by the Moscow School

Beginning with Sergei Starostin's article in 1996,<sup>8</sup> several members of the "Moscow School" have contributed to the discussion of the Euskaro-Caucasian hypothesis (and the deeper Sino-Caucasian or Dene-Caucasian hypothesis).

Sergei A. Starostin (1953-2005), who discussed the Basque-Dene-Caucasian comparisons in 1996 (see reference 8) included some Basque words in his Sino-Caucasian Glossary (available online).<sup>15</sup> His system of etymological databases, now co-sponsored by the Russian State University of the Humanities (Center of Comparative Linguistics), Moscow Jewish University, Russian Academy of Sciences (Dept. of History and Philology), Santa Fe Institute (New Mexico, USA), City University of Hong Kong, and Leiden University, includes a Basque Etymological Database (2005, revised in 2015) as well as a Sino-Caucasian Etymological Database (revised in 2015) that integrates many Euskaro-Caucasian etymologies.<sup>16</sup>

Sergei Starostin's son, George, has collaborated with Bengtson on the aforementioned databases, and on an essay that discusses Basque in the context of the wider Sino-Caucasian hypothesis.<sup>17</sup> Alexei Kassian has examined and expanded on the Sino-Caucasian hypothesis, incorporating Basque data.<sup>18</sup> (See further below about issues of chronology.) Václav Blažek, a Czech associate of the Moscow School, has made several important contributions to the Euskaro-Caucasian hypothesis.<sup>19, 20, 21</sup> And it is important to mention Vitaly Shevoroshkin, an associate of the Moscow School who operates from Ann Arbor, Michigan, and has promoted the work of the Moscow School in the West, and edited several books that include articles on Euskaro-Caucasian and Sino-Caucasian.<sup>22, 23</sup>



## I.E. The “unrelatedness” or “unrelatability” = isolation of Basque: Michelena and Trask

Laymen, as well as scholars, are met with a near-universal statement when they look for information about the linguistic relatives of Basque, for example, “All hypotheses on the origin of Basque are controversial, and the suggested evidence is not generally accepted by most linguists.” (*Wikipedia*) Or, in the words of the aforementioned R.L. Trask:

“Moreover, not one of [the proposals comparing Basque with other languages] has succeeded in shedding even the tiniest amount of light on the prehistory of Basque. Except that we have now identified the immediate ancestor of the language [Aquitanian], Basque remains today as genetically isolated as it was a hundred years ago.” <sup>9</sup> (p. 415)

Thus, Trask totally discounted the evidence assembled by Dumézil and Lafon, and other scholars named above. Purportedly, Trask’s negative verdict was based on the example of his linguistic hero, Luis Michelena, as if the matter had been settled for all time. But when we look at the acts and words of Michelena himself we find something a bit more nuanced and even optimistic.

## I.F. Michelena on the genetic relations of Basque



Luis Michelena (Koldo Mitxelena) (1915-1987) was a native speaker of Basque (Gipuzkoan dialect) and is universally acknowledged as the most eminent scholar in Basque linguistics. He was keenly interested in the question of external relationships of Basque, as seen in his collaborative study (with Lafon, Bouda, and three others) on a lexicostatistical comparison of Basque with Caucasian and other languages.<sup>35</sup> He described the Euskaro-Caucasian hypothesis (as it existed ca. 1985) as “the only hypothesis that has been the object of serious and laborious testing ... The suspicion that the two small conservative islands situated at both extremes of the Mediterranean were the only evidence that has come down to us from a formerly very extensive linguistic

family was a perfectly natural one ...” Nevertheless, he concluded that the theory of “Basque-Caucasian linguistic kinship has been shown to be, up to now [ca. 1985], singularly unfruitful.” **But**, he continued,

It is also possible, but not very probable, that such links [that connect Basque and Caucasian languages] exist although we have not been able to recognize them. ... Also it is possible that an improvement in current methods or the discovery of new techniques might put more powerful instruments in our hands. ... We hope that Fortune, always the friend of the bold and persevering, will see fit to smile upon us. <sup>36</sup>

It is our thesis here that new methods and techniques, combined with the traditional Indo-European style methods, have indeed allowed us to finally make this breakthrough. (See the evidence outlined below.)



## II.A. Euskaro-Caucasian: makeup of the current hypothesis

1. **Basque**, with five major dialects: *Western* (= Bizkaian), *Central* (= Gipuzkoan), *Navarro-Lapurdian* (Lapurdian + Low Navarrese), *Navarrese* (= High Navarrese), and *Zuberoan*. Each major dialect has several sub-dialects.<sup>9, 10</sup>
2. Several extinct languages, most clearly *Aquitanian*, in southern France, and *Paleo-Sardinian*; possible traces of extinct Euskaro-Caucasian languages (based on studies of substratum words) are suspected in other areas: southeastern France, the Alps, southern Italy, and the Balkans. Due to scarcity of evidence, the extinct languages are ignored in the rest of this presentation.<sup>11, 12</sup>
3. **The North Caucasian family**,<sup>4</sup> consisting of *West Caucasian* (WC, also known as Northwest Caucasian or Abkhazo-Adyghean)<sup>13</sup> and *East Caucasian* (EC, a.k.a. Northeast Caucasian or Nakh-Daghestanian).<sup>14</sup> The WC languages include Abkhaz, Abaza; Adyghe, Kabardian, and recently extinct Ubykh; EC languages include Batsbi, Chechen, Ingush; Avar; Andi, Akhvakh, Karata, Botlikh, Godoberi, Chamalal, Bagvalal, Tindi; Tsez, Hinukh, Bezhta, Hunzib, Khwarshi; Lak; Dargi; Khinalug; Archi, Tabasaran, Lezgi, Aghul, Udi, Kryts, Budukh, Rutul, Tsakhur. Depending on the source consulted, spellings of the language names may differ.

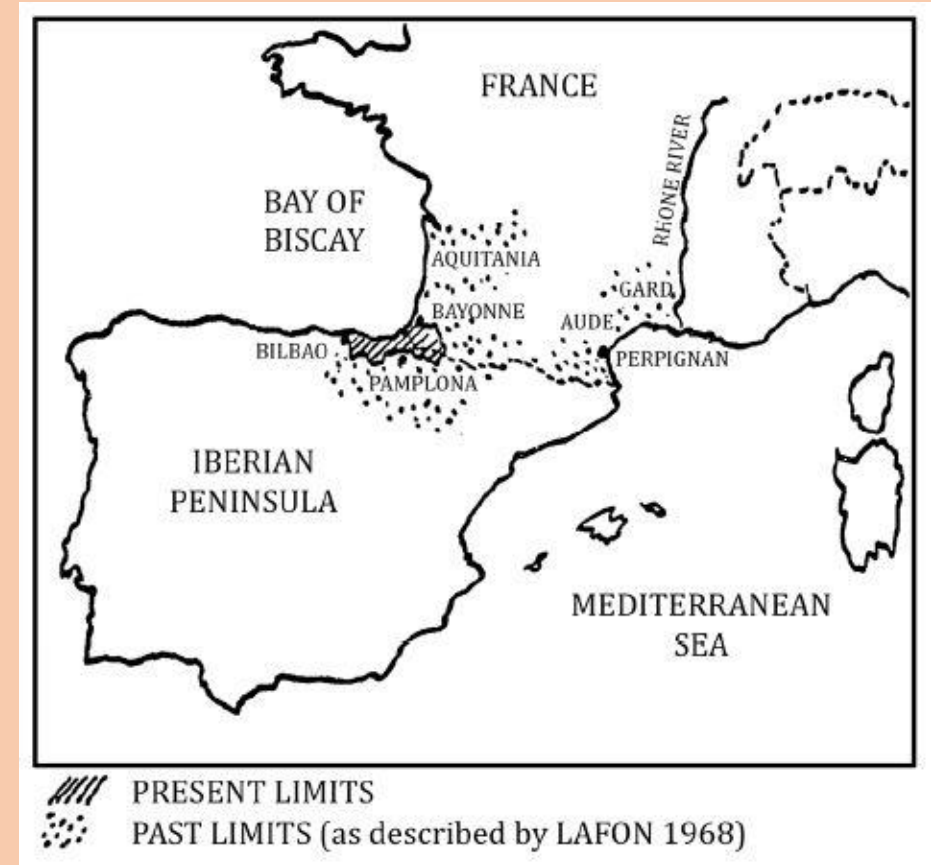
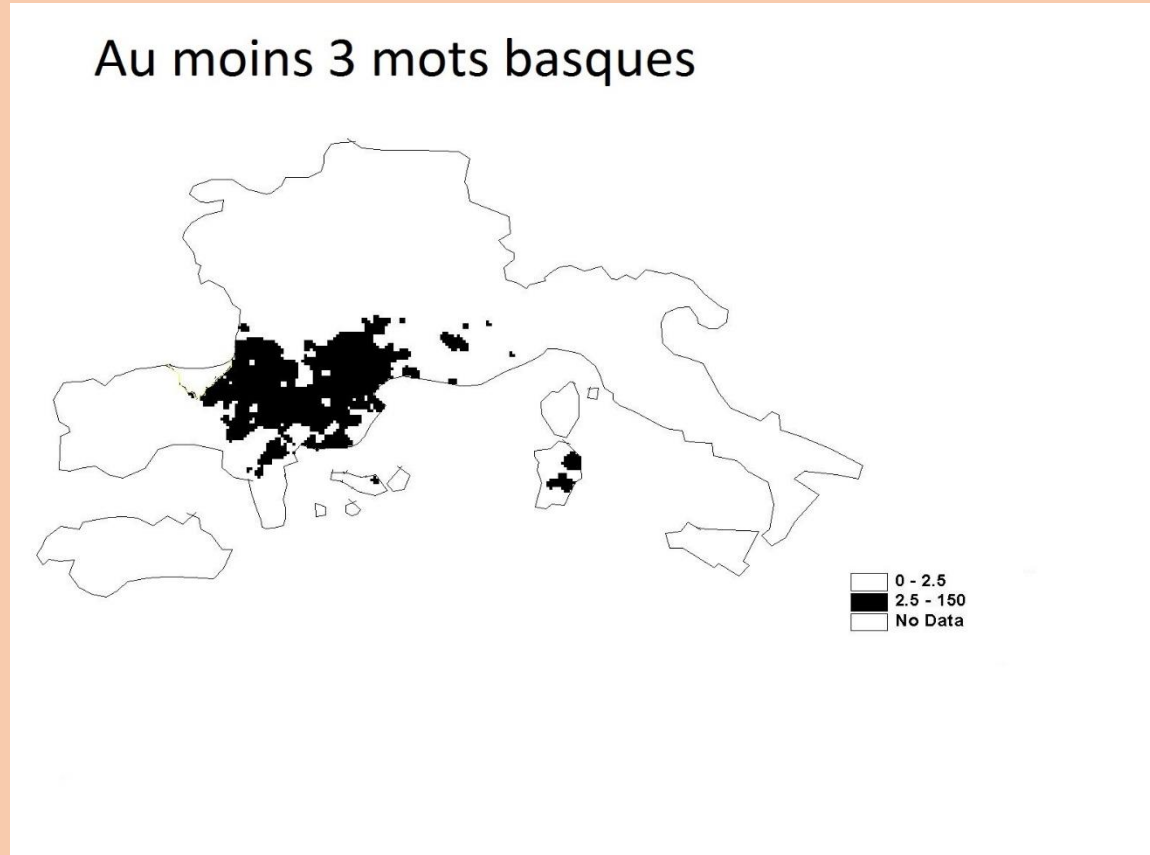
## II.B. Euskaro-Caucasian: makeup of the current hypothesis

### 1. Basque dialects



*Legend:* **A**: Araban; **AN**: High Navarrese; **Azk**: Aezkoan; **BN**: Low Navarrese; **B**: Bizkaian; **Bzt**: Baztanese; **G**: Gipuzkoan; **L**: Lapurdian; **R**: Roncalese; **Sal**: Salazarese; **Z**: Zuberoan. Grey areas represent parts of the traditional Basque provinces where Basque is no longer the dominant language. Colored areas and dialect names in black roman type follow Koldo Zuazo.<sup>10</sup>

## II.C. Euskaro-Caucasian: makeup of the current hypothesis: Extinct Euskaro-Caucasian languages



Map 1: Postulated extent of Vasconic dialects in western Europe ca. 500 CE.<sup>11</sup>

Map 2: Ancient extension of Basque per R. Lafon (1968), as modified by Urreiztieta-Rivera (1980).<sup>26, 27</sup>



## II.D. Euskaro-Caucasian: makeup of the current hypothesis

### 3. North Caucasian languages



#### West Caucasian

- Circassian
- Abkhaz
- Ubykh (extinct)

#### East Caucasian

- Nakh
- Avar-Andi & Tsezic
- Dargin
- Lezgi & Khinalug
- Lak

Abkhaz, Abaza; Adyghe, Kabardian;  
Ubykh; Batsbi, Chechen, Ingush;  
Avar; Andi, Akhvakh, Karata, Botlikh,  
Godoberi, Chamalal, Bagvalal, Tindi;  
Tsez, Hinukh, Bezhta, Hunzib,  
Khwarshi; Lak; Dargi; Khinalug;  
Archi, Tabasaran, Lezgi, Aghul, Udi,  
Kryts, Budukh, Rutul, Tsakhur.

# The Euskaro-Caucasian hypothesis: grammatical evidence

**III.A. Noun morphology:** Some of the postulated Euskaro-Caucasian noun case affixes seem to be quite well-preserved in Basque (EB = Euskara batua = standard Basque; B = Bizkaian; Z = Zuberoan).

## Genitive *\*-n*:

- Basque *\*-en* [genitive], e. g. EB *gizon-a-r-en* ‘the man’s’, *mendi-a-r-en* ‘the mountain’s’, *hitz-e-n* ‘of the words’, etc. Cf. also *\*-n* [locative].
- North Caucasian *\*-nV* [genitive] → [genitive] in Chechen, Ingush, Batsbi, Lezgi, Tabasaran, Agul, Tsakhur, Archi, Udi; shifted to [dative] (Lak), [ablative] (Avar), [ergative] (Ubykh, also [possessive] *-na*), and other functions in some languages. The archaic function [genitive] is indicated by its presence in peripheral languages (Nakh, Lezgian).

## Dative *\*-i*:

- Basque *\*-i*, e. g. EB *gizon-a-r-i* ‘to the man’, *mendi-a-r-i* ‘to the mountain’, *hitz-a-r-i* ‘to the word’, etc. With pronouns: EB *ni-r-i* ‘to me’, (B, Z) *en-i* id.
- North Caucasian: PEC *\*-Hi* [dative] → [dative] (Avar, Andi, Botlikh, Godoberi, Karata, Hunzib); shifted to [ergative], [instrumental], [genitive], [infinitive], and other functions in some languages. E.g., Hunzib [dative] *ož-di-i* ‘to the boy’, Avar [dative] *di-ye* ‘to me’; Khinalug *halám-i* ‘sheep’ [ergative], etc.

## Dative or (al)lative *\*-IV*:

- Basque *\*-la* [allative], realized as *-ra* in most dialects (e.g. EB *etxe-ra* ‘to[ward] the house’, *mendi-ra* ‘toward the mountain’), while some northern dialects have the form *-la*, also in the compound locatives *-ra-t* and/or *-la-t*, e.g. (Z) *banuk huila (hu[r]-i-la)* ‘je vais à l’eau (= auprès de l’eau)’; versus *banuk oihanilát (oihan-i-lá-t)* ‘je vais dans la forêt (dedans)’, *jauzi dük huilát (hu[r]-i-lá-t)* ‘il a sauté dans l’eau (dedans)’, i.e. with penetration of the object.
- North Caucasian: PEC *\*-tV* [dative] → Chechen *-l*, *-lla* [translative], Tsez *-r* [dative, (al)lative], Khinalug *-li* [general locative], etc. In Tsezi, for example, the (al)lative *-r* is appended to other case suffixes to indicate multiple parameters, distality, orientation, and direction, e.g. *-t-er* [allative + under + non-distal], *-q-āz-a-r* [allative + on (vertical) + distal], etc. This kind of agglutination of local cases is characteristic of East Caucasian, and to some extent, of Basque. (See below, about Bsque *\*-ra-t* ~ *\*-la-t*; *\*(r)a-n-c*, *-(r)a-ko-c*; *-ca-t*, etc.)

## III.B. Euskaro-Caucasian noun morphology (2)

### Locative \*-d- / \*-t-:

- Basque \*-t- in [essive / translatable ("prolative")] \*-ca-t, e.g. EB *seme-tzat daukat* 'I consider him my son', *ni-re-tzat* 'for me'; Northern Basque [allative] \*-ra-t ~ \*-la-t, e.g. *etxe-rat* ~ *etxe-lat* 'to the house' (see above).
- North Caucasian: Dargwa -ad [elative], Lezgi, Agul -di [lative, allative], Tabasaran -di [directive], etc. < PNC \*-dV [general locative]. Cf. Archi (archaic) *q'arq'i-t:a* 'on the lawn'; (as a part of compound locatives) Lezgi *lam-ra-w-di* 'towards near the donkey', *lam-ra-q-di* 'towards behind the donkey', *lam-ra-k-di* 'towards under the donkey', etc.

### Locative \*-čV = \*-č'V:

- Basque \*-c in compound suffixes \*(r)a-n-c [directional], e.g. EB *mendi-rantz* 'toward the mountain'; probably in other agglutinated case forms, e.g. Northern Basque \*(r)a-ko-c [destinative], \*-ca-t [essive / translatable ("prolative")].
- North Caucasian: PEC \*-čV [locative] > Lak *q:atlu-č'a* 'near the house', Udi *beč'-nu-č'* [allative] 'toward the sun', etc.

### Instrumental/ergative \*-s:

- Basque \*(e)s [instrumental] = orthographic -(e)z, e. g. EB *esku* 'hand', *esku-z* 'by hand, with the hand', *buru-z* 'by the head, from memory', *oin-ez* 'on foot', *zure giltza-z* 'with your key', (B) *itxaso-z ta leorr-ez* 'by sea and by land', etc.
- North Caucasian \*-s: [instrumental animate] > Nakh -s [ergative animate], Archi -s:, Lezgi -z [dative], Tsez, Hunzib -s [genitive], etc.

### Instrumental/ergative \*-kV = \*-k'V:

- Basque \*-k [ergative], e.g. *Jon-ek* 'John' [erg.], *zu-ek* 'you' [erg].
- North Caucasian: West Caucasian \*-kV [instrumental, comitative, etc.], e. g. Circassian (Bzhadygh) *λ<sup>w</sup>aqwa-k'e* 'on foot', *maste-m-k'e* 'with a needle', etc. As seen in the preceding comparison, there is a close typological connection between [instrumental] and [ergative].

### Locative series \*-g-:

- Basque \*-gan- [locative morph] used in western Bsq in forming local cases (locative, ablative, allative) of animate NPs; possibly also Bizkaian -gaz (plural -kaz) [comitative], e.g. *gizonarengan* 'in/on the man' (\**gison-a-r-en-gan*), *gizonagaz* 'with the man' (\**gison-a-gas*), *gizonakaz* 'with the men' (\**gison-a-kas*). Tentatively, the final \*-s of \*-ga-s, \*-ka-s could be related to instrumental \*(e)s (see above).
- North Caucasian: \*-g- / \*-k- [locative series marker], i.e., forming part of a series of agglutinated morphs) > Nakh \*-go [ad series], Avar-Andian \*-g- [elative], [super series], Tsezian \*-k- / \*-g- [proximity series], Lezgian \*-k- [lateral series], Khinalug -ko-li [lative], WC \*-k<sup>w</sup>ə / \*-g<sup>w</sup>ə [preverb super], [preverb ad, close to]; e.g. Batsbi *šu-gu-iñre* 'from (the side of) you (pl.)'; Akhwakh *beča-g-e* 'on the mountain', *beča-g-u* 'from the mountain'; Tabasaran *tsali-k-an* 'from the wall', etc.



### III.C. Noun morphology (3): submerged (fossilized, lexicalized) morphology

Beginning with Uhlenbeck,<sup>24</sup> scholars have remarked on the frequent Basque nominal element *be-* or *bi-*, which in many cases precedes the part of the noun that matches proposed North Caucasian cognates, e.g.:

- Bsq *\*be=laŕi* ‘ear’ ~ Batsbi *lark* ‘ear’ < Proto-Nakh *\*lari-k*, etc. < PNC *\*ləHi* ‘ear’
- Bsq *\*be=egi* ‘(or *\*b=egi*) ‘eye’ ~ Bezhta *=egā-* ‘to see’, etc. < PEC *\*=agwV*
- Bsq *\*be=thaun* / *\*be=thaur-* ‘knee’ ~ Akhwakh *etelo* ‘elbow’, etc. < PEC *\*(Hi)λwilV*
- Bsq *\*bi=hoc* ‘heart’ ~ Dargi *k’ats* ‘spleen’, etc. < PNC *\*kwičE* / *\*čikwE*
- Bsq *\*bi=si* ‘life, alive’ ~ Ubykh *p(=)śá-χ<sup>w</sup>ə-* ‘to breathe’; Lak *s:iñ* ‘breath, vapor’, Chechen *sa* ‘soul’, etc. < PNC *\*sīHwV*
- Bsq *\*be=hac* ‘thumb, toe’ (vs. unprefixated *\*hac* ‘finger, paw’) ~ Avar *kwač* ‘paw’, etc. < PEC *\*kwăčě*
- Bsq (Gipuzkoan) *bilder* ‘drool, saliva’ (vs. unprefixated *[h]elder*, *[h]erde* in other dialects) ~ Karata *hanl’a* ‘sweat’, etc. < PEC *\*hămlă*

The last two examples show that the prefix *\*be=* was, at an earlier time, separable from the noun stem. These look like classic cases of “stage III articles,” as described by Joseph Greenberg,<sup>25</sup> that is, morphemes that formerly marked class distinctions and at some time in the past became degrammaticalized, *i.e.*, lexicalized and fused with the noun stem. Greenberg cited the well-known case of Nilo-Saharan “movable *k*,” which manifests in an analogous way. Semantically, all of these words have to do with body parts or body fluids (saliva), or attributes (‘life’ < ‘breath’) of the body. I have proposed that Basque *\*be=*/*\*bi=* is a fossilized class prefix corresponding to the East Caucasian class marker *\*b=* [III class (inanimate) singular].

### III.D. Noun morphology (4): submerged (fossilized, lexicalized) morphology

In some NC languages this  $*b=$  may alternate with other class markers, e.g. Dargi  $b=a\tilde{h}$  'face (of an animal)' vs.  $w=a\tilde{h}$  'face (of a man)',  $r=a\tilde{h}$  'face (of a woman)'; Avar  $b=as$  'young (of animal)' /  $w=as$  'son' /  $y=as$  'daughter'. In some NC languages, including those that have lost class marking (Lezgi, Agul, Udi),  $*b=$ , as well as other class prefixes (PEC  $*\underline{u}=$ ,  $*r=$ ), can be lexicalized, in a way that is analogous to what I have postulated for Basque, e.g.:

- Tindi  $b(=)et\tilde{t}':u$  'stomach', Bezhta  $b(=)et\tilde{t}$  'rennet, abomasum', etc. < PEC  $*=\bar{r}(a)\underline{t} V$  (cf. Bsq  $*urda-il$  or  $*u=rda-il$  'stomach, abomasum, womb')
- Godoberi  $b=ut\tilde{t}':ir$  'heat' vs. Chamali  $=ut\tilde{t}':-$  'to burn, be hot', etc. < PEC  $*=i\underline{t} Vr$  'to be hot, bitter' (cf. Bsq  $*i=dor$  'dry, arid' <  $*i=rdor$ )
- Tsakhur  $wu(=)xun$  'belly', Rutul  $u(=)xun$  id.; Avar  $maxá$  'abomasum' <  $*bV=x^wVn$ ; (with a different class prefix) Lezgi  $ru(=)fun$  'belly'; vs. unprefixes Agul  $fun$ , Dargi  $k^{(w)}ani$  'belly', etc. < PEC  $*\lambda w\tilde{h}n?i$
- Godoberi  $re(=)kil$  'leg', Botlikh  $re(=)kil$  'thigh', etc., vs. unprefixes Tsakhur  $q:el$  'foot, leg', etc. < PEC  $*g\tilde{e}tu$
- Ubykh  $p(=)\acute{c}'a$  'guest' ( $p-$  <  $*b=$ ); Godoberi  $ts:eyi$  'guest'; Chechen  $\tilde{h}\tilde{a}\tilde{s}\tilde{a}$  'guest'; cf. Basque  $*\tilde{h}auso$  'neighbor'

Besides the alternations of Bsq  $*\tilde{h}erde/*\tilde{h}elde-\tilde{r}/*bi=\tilde{h}elde-\tilde{r}$  and  $*\tilde{h}ac/*be=\tilde{h}ac$  (see above), other postulated fossilized class prefixes alternate in a similar 'capricious manner' (Greenberg's term), e.g.: Bsq  $*k\tilde{e} / *e=k\tilde{e}$  'smoke' (the first is general, e.g. EB  $ke$ , the latter mainly Pyrenean; cf. Avar  $k':uy$  'smoke', etc.); Bsq  $*gai / *e=kai$  'thing, material' (EB  $gai$ , Northern Bsq  $ekhei$ ; cf. Lak  $q'ay$  'thing(s), ware(s)', etc.). All of this points to a former class-marking system, which later became unproductive, and the former markers were lexicalized, or not, in an unpredictable (capricious) manner. For the typology cf. Haitian Creole  $lalin$  'moon' (French  $la lune$ ), but  $sol\grave{e}y$  'sun' (French  $soleil$ ).

# IV.A. Euskaro-Caucasian lexical evidence: Basque words from the 35 most stable meanings, with exact semantic matches in representative North Caucasian languages.

(gloss)	Basque	Chechen	Avar	Lak / Dargi	Lezgi	Proto-West Caucasian	Proto- North Caucasian
die	*hil	=al-	=al'-	L =i=č'a D =ibk'-	q'i-	* λə- / *λa-	*=iwλĒ
dog	*hor	pħu 'male dog'	hoy	D xa	χor (Budukh)	*λl <sup>w</sup> a	*χHwěy-rV-
ear	*be=laři	ler-g		D lihi		*λA-	*tĕHi
fire	*śu	ts'e	ts'a	L ts'u D ts'a	ts'ay	*mA=ç <sup>w</sup> a	*çăyĭ
horn	*a=dař	kur	t̪:ar		firi 'mane'		PEC *λwřV
I	*ni			L na D nu			PEC *nř
know	*e=akin	χ-aʔa	=eq'- (Akhwakh)	L =aya- 'hear' D =aq'- / =iq'- 'hear'		*q:l <sup>w</sup> A 'to hear; to be heard'	*=iċĒ
thou	*hi	ħo		D ħu	(Nidzh Udi) hu-n		PEC *bwV̄
tongue	*minhi	mott	matš:	L maz D mez	mez	*bəžA	*mĕlcĭ
tooth	*horc		gožó 'tooth, fang, beak'	L k:arč:i 'tooth' D k:anži 'fang, canine tooth'	(Agul) g <sup>w</sup> arž 'prong (of rake)'		PEC *gə[l]žwē
two	*bi		k'i-go	L k'i-a D k' <sup>w</sup> i	q' <sup>w</sup> e-d (Udi) p:ḁ	*tql:l <sup>w</sup> A	*(t)qHwā
what?	*se-r	stē-(n)-	s:u-n-	L s:a- D s:e		*sA	*sāy



**III.B. Euskaro-Caucasian lexical evidence:** External comparison lends itself to new solutions of ancient Basque compounds like (EB) *giltzurri* ‘kidney’, *erbinude* ‘weasel’, *masusta* ‘blackberry’, *etxidamu* ‘three days from today’. (EB = Euskara batua = standard Basque.)

- EB *giltzurri* ‘kidney’ (Baztanese *gultxurri*, etc.) can be analyzed as *\*gult-* ‘internal organ’ (= PEC *\*kwiltV* ‘internal organ [kidney, bladder, stomach]’) + *\*surin* (= PEC *\*ǰwěre* ‘urine’), i.e. ‘urinary organ’. The Lezgian language Rutul preserves both elements as independent words: *k’ut’un* ‘kidney’ and *zur* ‘urine’.
- EB *erbinude* ‘weasel’: The first element is indeed identical with *\*erbi* ‘hare’ (= PNC *\*riǰwA* ‘weasel, squirrel, mouse’), but the second part has nothing to do with (EB) *inude*, (Northern Bsq) *unhide* ‘wetnurse’ (a secondary formation by folk-etymology). More archaic forms like *ergunedi* ‘weasel’ (dated 1562), (Gipuzkoan) *ergaiñude*, *ergonei*, give the clues to the origin proposed here: a compound *\*ergu(i)-nedi*, with the same elements as NC forms such as Godoberi *ǰandi-rut*:*i* ‘weasel’ (< Proto-Andian *\*handā-riǰ:u*), but in reversed order. (This reversal is expected, since Basque is SOV/NA and Andian languages are SVO/AN. PNC tense *\*ǰw* regularly has lateral reflexes in Andian; PNC *\*ǰw* and *\*gw* often match Basque *\*b* in the vicinity of high vowels: cf. Bsq *\*but̪ha-r̪* ‘breast, chest’ ~ PEC *\*gwǎlhē* ‘udder, breast’.)
- EB *masusta* ‘blackberry’: More conservative forms are (Lapuradian) *marzusta* ‘blackberry, mulberry’, (Roncalese) *marzuza*, indicating a likely compound of Bsq *\*mar-* (= PEC *\*mer(?)V*) + *\*susa* (= PEC *\*ǰimǰV*); some Bsq dialects add the diminutive suffix *\*-ta*; the Lezgian language Tabasaran retains both elements as distinct words: *mer-er* ‘blackberry’, *zimz-ar* ‘raspberry’ (cf. Agul *ziwz-ar* ‘strawberry’).
- EB *etxidamu* ‘three days from today’: Cf. archaic forms like (Bizkaian) *etzi-limo*, *etzi-lume*, which give a clue to NC forms like Batsbi *lamo* ‘the day after tomorrow’ (PEC *\*ǰVmV*); the Bsq element *etzi*, by itself, means ‘day after tomorrow’: cf. NC forms like Dargi Chiragh *ǰa-ǰle* ‘tomorrow’ (PNC *\*ǰwe* ‘today, now’).

**V.A. Euskaro-Caucasian Phonology:** This topic has been extensively developed in the current model, covering some 140 pages in the forthcoming monograph. Shorter summaries have already been published.<sup>28, 29, 30</sup> Only some selected features are discussed here.

Nikolaev & Starostin proposed three lateral affricates in Proto-North Caucasian, voiceless (aspirate) [tʰ], glottalized [tʰʼ], and voiced [dʒ], in their notation \*ł, \*ł, \*ł, respectively.<sup>4</sup> This also seems to have been the case in proto-Euskaro-Caucasian. However, in Basque the reflexes of all three lateral affricates fall together, though patterned in an interesting and non-trivial way:

- In initial (and final) position all PEuC lateral affricates \*ł, \*ł, \*ł converge in Basque as the ordinary lateral resonant \*l.
- In medial position all PEuC lateral affricates \*ł, \*ł, \*ł converge in Basque as rhotic-coronal clusters \*-**rd**- ~ \*-**rt**- (a variation probably conditioned by position of the PEuC accent).

Some examples (initial):

- Bsq \**lahar* ‘thorn, bramble’ ~ PEC \*ł*wřrʔV* ‘leaf’ (Karata *tʰ’ale* id.)
- Bsq \**lai[h]a* ‘two-pronged fork’ < \**laʸHa* ~ PEC \*ł*VχwV* / \*ł*VχwV* ‘rake’ (Avar *tʰ’:ox:-órχ:o* id.)
- Bsq \**lařain* ‘threshing floor’ < PEuC \*ł*VrV* ‘to thresh’ ~ PEC \*=*ṼrłV* ‘to thresh’ (Archi *tʰorom* ‘threshing board’)
- Bsq \**lařu* ‘skin, hide, leather’ ~ PNC \*ł*ǒli* ‘skin, color’ (Avar *tʰ’:er* ‘color’ < \*‘skin’)
- Bsq \**leřo* ‘line, row’ ~ PEC \*ł*wăř(h)ǎ* ‘boundary, line, row’ (Avar *tʰ’:er* ‘garden-bed; terrace; row, rank’)
- Bsq \**lincu-ra* ‘marsh, bog’, \**lisun* ‘mold, mildew; moldy, musty’ (< \**lincu-n*) ~ PEC \*ł*wilłwV* ‘bog, marsh’

## V.B. Euskaro-Caucasian Phonology (2) (lateral affricates, continued)

PEuC \*ɭ, \*ɭ̥, \*ɭ̥ > Basque medial **\*-rd-**; also with clusters of **resonant + \*ɭ, \*ɭ̥, \*ɭ̥**:

- Bsq \**ard-ac* ‘axle, spindle’ ~ PEC \**ʕǎnɭV* ‘(part of) a spindle’ (Bezhta *atʰ* ‘spindle’)
- Bsq \**barda* ‘belly, bowels’ ~ PEC \**bħǎɭV* ‘(large) intestine’ (Bezhta *batʰa* id.)
- Bsq \**b=ardin* ‘same, even, flat’ ~ PEC \**=ǎɭwVn* ‘similar, to resemble’ (Avar *r=étʰ:-in-* id.)
- Bsq \**erdi* ‘middle, half’ ~ PNC \**=ǎɭE* ‘middle, half’ (Karata *b=atʰ:i* ‘in the middle, between’)
- Bsq \**ħerde* (~ \**ħelde-r̥*, \**bi=ħelde-r̥*) ‘spittle, drool’ ~ PNC \**ħǎmɭǎ* ‘sweat’ (Karata *hantʰa* id.)
- Bsq \**i=serdi* ‘sweat; sap’ ~ PEC \**ʕǎɭwV* ‘blood; life’ (Chechen *ts’iy* ‘blood’, etc.)
- Bsq \**mordo* ‘bunch, group’ ~ PEC \**mǎɭ[ɭ]o* ‘handful, armful’ (Hinukh *metʰu* ‘handful’)
- Bsq \**urde* ‘swine, pig’, \**ord-oc̣* ‘boar’ ~ PNC \**wHǎɭwə* ‘pig, boar’ (Hunzib *butʰu* id.)

As mentioned, in a smaller number of cases the Basque medial reflex is **\*-rt-** rather than **\*-rd-**. There are reasons to suppose that the variation was caused by original differences in placement of accent.

- Bsq \**arte* ‘space, interval; between, among’ (beside \**erdi* ‘middle, half’) ~ PNC \**=ǎɭE* ‘middle, half’
- Bsq \**arto* ‘millet > maize’ ~ Chechen *yalta* ‘grain’, etc. < PEC \**ɭədwi* / \**ɭəɭədwi* ‘grain’
- Bsq \**e=aurti* ‘to throw, hurl, launch’ ~ PNC \**=ǎɭǎw* ‘to lie; to put; to lead’
- Bsq \**e=urte-n* ‘to go out, leave’ ~ PEC \**=VmɭV* ‘to go, to come’ (Andi *=ulon-* ‘to go’)
- Bsq \**ortú-ć-* ‘take off (shoes, stockings); barefoot’ ~ PEC \**=ōmɭV* ‘to put on (trousers, shoes)’
- Bsq \**urte* ‘year’ ~ PEC \**ʔVɭwV* ‘last year’ (Avar *utʰi-sa* ‘last year’)



**V.C. Euskaro-Caucasian Phonology (3):** Vowels. Many Euskaro-Caucasian vowel correspondences are quite striking, with Basque often retaining some archaic features. Here is a small sample.

Basque **\*-e** = PNC **\*e** (*\*ě, ē*), as final vowel; EC languages frequently have the reflex *-i*:

- Bsq *\*bene* ‘power, authority’ ~ PNC *\*wēnlwē* ‘luck, good’ (Avar *baxi* ‘luck’)
- Bsq *\*e=rece* ‘corner, edge, side’, etc. ~ PEC *\*ʔrəyɔwē* ‘hind, bottom’ (Andi *rus:i* ‘anus, behind, bottom’, )
- Bsq *\*ga[ś]te* ‘young (person), youth’ ~ PNC *\*kwirčĒ* ‘young (of animals, birds)’ (Khwarshi *k’uč’i* ‘puppy’)
- Bsq *\*gośe* ‘hunger, hungry’ ~ PNC *\*gašē* ‘hunger’ (Dargi *gaši*, Lak *k:aši* ‘hunger’)
- Bsq *\*habe* ‘beam, rafter, pillar’ ~ PNC *\*hwēbē* ‘post, pole; tower’ (Avar *ħubí* ‘post, pole, stem’)
- Bsq *\*Hace* ‘back part; track’ ~ PNC *\*hāmçĒ* ‘half, middle’ (Inkhokwari *hĩts’ts’e* ‘waist’, Khwarshi *hits’i*-I id; for semantics cf. the Ubykh cognate *ǰa* ‘back part’ )
- Bsq *\*haice* ‘tree’ (Roncalese *atze* id.) ~ PNC *\*Hă(r)žwē* ‘a kind of tree’ (Hinukh *aže* ‘tree’, Karata *eže-la* ‘pine tree’)
- Bsq *\*Hunce* ‘rabbit’, (EB) *untxi* [unči] id. ~ PNC *\*hwVlžĒ* ‘marten, weasel, hedgehog’ (Andi *onži* ‘hedgehog’)
- Bsq *\*śale* ‘net, grill’, (EB) *sare* ‘net, network’ ~ PEC *\*čhatē* ‘enclosure, fence’ (Avar *čali*, Dargi *čali* ‘fence’)

In verbal roots, however, we often find Basque **\*-i** = PNC **\*e**:

- Bsq *\*aci-tu* ‘to catch, take, seize, steal’ ~ PNC *\*=ācĒ(n)* ‘to catch, take’ (Lak *=atsi-n* ‘to steal’)
- Bsq *\*e=aki-n* ‘to know (fact)’ ~ PNC *\*=ĩqĒ* ‘to know, to hear’
- Bsq *\*e=aući* ‘to go down, descend’ ~ PNC *\*=ićwĒ* ‘to come; to return’ (Lak *=u=č’a-n-* ‘to go down’)
- Bsq *\*e=gi-n* ‘to do, to make’ ~ PNC *\*=HōğĒ* ‘to do, make; to be, become’ (Khinalug *q’i* ‘to be, become’)
- Bsq *\*e=henśi* ‘fleeing, to flee’ ~ PNC *\*hilčwĒ* ‘to run’ (Agul *hiš-* ‘to run (away)’)
- Bsq *\*e=ośi* ‘to sew’ ~ PNC *\*=irśĒ* ‘to weave’
- Bsq *\*e=rori* ‘to fall’ ~ PNC *\*HraλwĒ* ‘to fall, go down’
- Bsq *\*e=ući* ‘to consider, think’ ~ PNC *\*=ičwĒ* ‘to count; to understand’ (Lak *=u=č’i-n-* ‘to understand’)

## VI.A. Chronology of Euskaro-Caucasian (1)

Some anthropologists and linguists seem to operate from this assumption: “*The Basque language is a direct descendant of the language of the original Cro-Magnon population of the region, some 35,000 years ago, so by definition it is impossible to recover any linguistic relatives the Basque language may have had. This vast time span surpasses the capacity of historical linguistics.*”

While many lay people probably believe in this assertion, and it may be, for some, a source of nationalistic pride, one wonders how many serious linguists and anthropologists accept this assumption, and perhaps rely on it to justify their agnostic approach to the linguistic affinities of Basque.

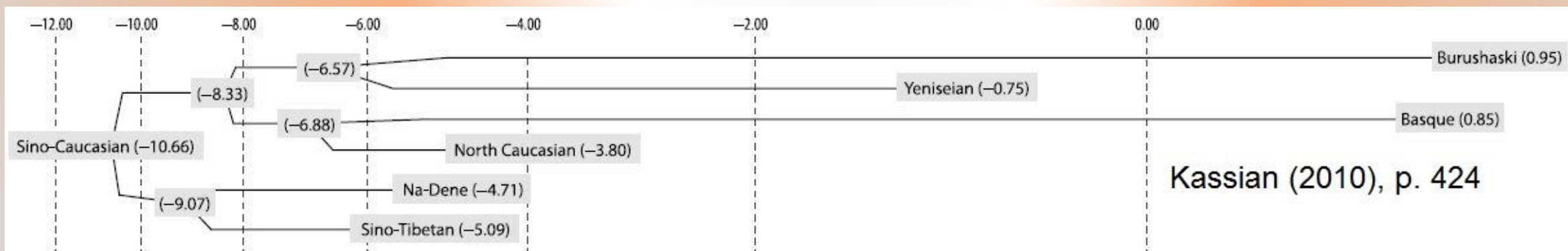
But to the historical linguist it should be clear that the above assumption is highly questionable, given the widespread prevalence of language replacement, i.e., the adoption of a new language, often due to the arrival of a new political, religious, or cultural regime (e.g., Roman Empire, Islam, Neolithic).

René Lafon, the eminent proponent of Euskaro-Caucasian mentioned above, explicitly proposed that the Basque language was not autochthonous, but a foreign language adopted by the natives of the Basque Country and Aquitania, and he identified this foreign culture with copper-using, megalith-building immigrants near the end of the third millennium BCE.<sup>31</sup>

## VI.B. Chronology of Euskaro-Caucasian (2)

In the current model Lafon's date has been pushed back to several millennia earlier, *i.e.*, coinciding instead with the "Impressa" (Cardial) culture that arrived on the coasts of Spain ca. 5500-5800 BCE. This model is still evolving, but at this point it seems, based on recent human genetic studies, that the present-day Basques represent an amalgam of native hunter-gatherers and the later-arriving farmers, a mix later modified by genetic drift and cultural and linguistic isolation. Within this narrower time frame, which is about one quarter of the supposed Paleolithic scenario, it is entirely conceivable that linguistic relatives of Basque could be identified. After all, Afro-Asiatic, a macrofamily universally accepted by specialists in African linguistics and anthropology, is possibly *twice as old* as the putative Euskaro-Caucasian.

This scenario is consistent with the glottochronological date calculated by G. Starostin (quoted by A. Kassian): “The split of the Basque–NCauc. [= Euskaro-Caucasian] proto-language into the Basque and NCauc. branches glottochronologically occurred in the first half of the 7th millennium BC.”<sup>18</sup> This allows about a thousand years of separate development, probably in Anatolia, before migration of the farmers to western Europe.





## VII.A. Anthropological Scenario of Euskaro-Caucasian: Anatolian colonists bringing agriculture and a Euskaro-Caucasian language to the western Mediterranean coast.

The story that emerges from the coordination of linguistic, archaeological, and genetic evidence involves farming colonies, spurred by the increase in population that results from agriculture, migrating in boats from Anatolia in search of new farming lands along the Mediterranean. These Neolithic farmers were acquainted with the cultivation of grain and pulse crops, kept small and large cattle and swine, and practiced dairying. They, or their descendants elsewhere along the Mediterranean coast, reached the coasts of France and Spain some 7500 - 7700 years ago.<sup>32</sup> As they worked their way inland the colonists eventually mixed with the hunter-gatherer populations they encountered, many of whom they converted to the agricultural way of life; this is confirmed by recent genetic studies.<sup>33</sup> “So who were the peoples who brought food production to western Europe in the seventh and sixth millennia BCE? The Basque language is the most likely candidate for a surviving descendant of the languages spoken by those early farmers.”<sup>34</sup> This is confirmed by Euskaro-Caucasian cognates involving agriculture and dairy practices:

- Basque *\*behi* ‘cow’: EB *behi* = NC: Avar *bóts:i* ‘cattle’, Andi *buts’:ir* ‘cattle’, etc. < PEC *\*bħərçwV*
- Basque *\*oroć* ‘male animal’ (dial. ‘calf’) = NC: Agul *urč* ‘calf’, Lak *bərč* id., etc. < PEC *\*wHilćV*
- Basque *\*ur[i]śja* ‘female animal’ (dial. ‘sow’) = NC: Akhwakh *reša* ‘heifer’, Hunzib *riže* id., etc. PEC *\*r=ĩšwE*
- Basque *\*a=hune* ‘kid’, *\*a=hun-c* ‘goat’ = NC: Andi *kun* ‘ram’, Tsakhur *kuwa-r* ‘young goat’, etc. < PEC *\*kwĩʔnĩ*
- Basque: *\*bil-oć* ‘lamb (that has begun to feed itself), yearling’ = NC: Bezhta *bitʔ* ‘sheep’, etc. < PNC *\*bhǎļwĩ*

## VII.B. Euskaro-Caucasian cognates involving agriculture and dairy practices (continued):

- Basque *\*e=sene* ‘milk’: EB *esne* = NC: Godoberi *š:ĩwu* ‘milk’, Chechen *šin* ‘udder’, etc. < PNC *\*šǎmʔV* or *\*šǎñʔu*
- Basque *\*holaic* ‘beestings, first milk’: EB *oritz* = NC: Andi *=erč’:-* ‘to milk’, Tindi *č:al-* id., etc. < PNC *\*=HožǎI / \*=Holžǎ*
- Basque *\*e=aici* ‘to milk’: (G, AN, Z) *jetzi* = NC: Lezgi *ats:a-* ‘to milk’, Dargi *=iz-es* id., etc. < PNC *\*=āmɜU* ‘to milk’
- Basque *\*gurhi* ‘butter, fat, grease’, EB *gurin* = NC: Lezgi *beri* ‘butter’, Tsez *χuri* ‘piece of dry cheese’, etc. < PEC *\*χərHV*
- Basque *\*sen-(-bera)* ‘soft cheese, cottage cheese’ = NC: Hinukh *tšen* ‘curds’; Udi *č:äin* ‘butter’, etc. < PEC *\*Hžěmř*
- Basque *\*koipe* ‘butter, animal fat’ = NC: Akhwakh, Tindi *kʷabi* ‘sour cream’, Dargi *k’ema* ‘butter’, etc. < PEC *\*ḱāmpə̃*

### Grain and pulse crops, and milling:

- Basque *\*gali* ‘wheat’: EB *gari* = NC: Tindi *q’:eru*, Lezgi *q:ül* ‘wheat’, etc. < PEC *\*gōlʔe*
- Basque *\*(gara-)gar* ‘barley’ = NC: Rutul *q’ir* ‘winter wheat’, Agul *q’ir ~ q’ur* ‘grain’, etc. < PEC *\*q[ā]rV*
- Basque *\*bihi* ‘grain, seed, kernel’ = NC: Godoberi *beč’in* ‘rye’, Tindi *beč’in* ‘barley’, etc. < PEC *\*bḥe[r]ḱi-nV*
- Basque (Pyrenean) *\*aiñegu* ‘rye’ = NC: Lak *nīqa* ‘oats’, Lezgi *nexʷ* ‘spelt’, etc. < PNC *\*ḥnārqwE*
- Basque *\*arto* ‘maize’ (earlier ‘millet’) = NC: Chechen *yalta* ‘grain’, Karata *θ’:elt’u* ‘seed, flax’, etc. < PEC *\*Łə(Łə)dwi*
- Basque *\*ogi* ‘bread, wheat’ = NC: Avar *ogób* ‘rye’, Akhwakh *hagi* id., etc. < PNC *\*ḥwVgəbV̄ / \*ḥwVbəgV̄*
- Basque *\*iḥha-ř* ‘vetch, peas, beans’, EB *ilar* = NC: Tsez *hil* ‘pea(s)’, Avar *holó* ‘bean(s)’, etc. < PEC *\*hōwḥ[ā]*
- Basque *\*eiho* ‘to grind’ / *\*eihera* ‘mill’ = NC: Chechen *aḥ-* ‘to grind’ / *ḥer* ‘mill’, Ingush *aḥ-* ‘to grind’ / *ḥayra* ‘mill’, Lak *ha=a-* ‘to grind’ / *hara-qalu* ‘mill’, etc. < PEC *\*HěmχwV* ‘to grind’, *\*HěmχwV-rV* ‘mill, millstone’

These and other cultural words indicate a well-developed agricultural economy among the proto-Euskaro-Caucasian speakers in the 7<sup>th</sup> millennium BCE.<sup>12</sup> “... Sardinians and Basques are the two modern populations with the highest genetic proportion of early farmer ancestry. ... This suggests the Basque might be the remnant of a much larger Vasconic speaking area, suggesting a possibility that language family spread along with the first farmers.”<sup>33</sup>

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