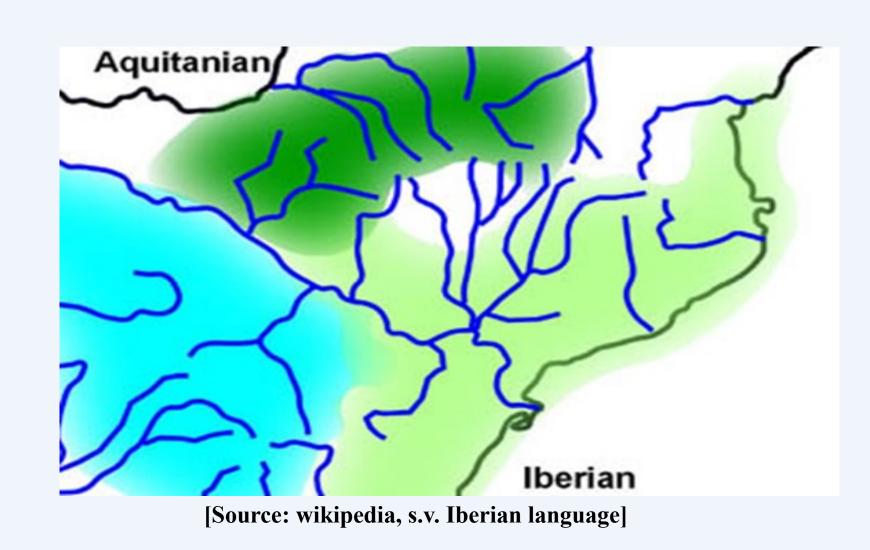
Basque and Iberian numerals. An insoluble problem?

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Iberian, Aquitanian, Basque. Generalities

- . Iberian (= Ib) is a non-IE language attested from the 5th c. BC to the 1st c. AD, stretching along the Levantine area from the Hérault River (France) to Granada (Spain). // Most of the inscriptions found were written in the NE epichoric signary (ca. 2,000), and include lead sheets, *tituli picti* on pottery, legends on coins... // Ib can be read but not understood, although ca. 900 anthroponyms have been identified, and context and formulaic constructions help to figure out at least the semantic realm of many items.
- Aquitanian (= Aq) is a non-IE *Trummersprache* attested in the form of onomastic items alone, engraved in inscriptions of the Early Empire period (1st -3rd centuries AD) written in Latin. // About 50 Aq divinity names and over 400 individuals with an Aq PN have been identified, most of them in the *civitas Convenarum* and vicinity (= High Garonne).
- Basque (= Bq) historical dialects, attested since the 16th century, are believed to have branched out from a common ancestor called Old Common Basque, spoken around 400-600 AD, in the Basin of Pamplona. // Old Common Bq, in turn, must be some kind of offshoot of Aq, perhaps of its Navarrese variant.

The Basque-Iberian theory

- Mythical accounts considered Basque to be the old language of all the Ib Peninsula. In 1821, W. von Humboldt endowed this belief with a scientific basis by comparing the Ib toponyms in ancient sources to Bq words, whence the Basque-Iberian theory.
- However, in 1925 Gómez-Moreno deciphered the Ib script, and by the 50s both A. Tovar and K. Mitxelena came to the conclusion that Ib and Aq/Bq were two different languages. Their structural similarities were best explained by assuming convergence within a common language-pool.
- . Some shared features:
 - ⇒ /i, e, a, o, u/ vowels, with no phonemic length
 - \Rightarrow no phonemic p nor m
 - two sibilants (timbre dubious in Ib)
 - ⇒ two vibrants (timbre dubious in Ib), and no #r-
 - Bq is ergative, Ib seems to be so; the alleged morph **-te**, though, is not cognate of Bq -k
 - ⇒ alternations such as Bq egun / egur- / egu- 'day',

 Ib iśke-iltun / iltur-atin / iltu-beleś
 - shared onomastic elements like **baiser** ~ *Baeser*, **beleś** ~ *Belex*, **iltun/r** ~ Ilun/r, **talsco** ~ *T/Halsco*
- . One important difference:
 - \Rightarrow Aq/Bq has /h, t^h, k^h/, Ib has no aspiration

Unibertsitatea

Since the bulk of Aq appears in the High Garonne, and the structural similarities between Ib and Aq/Bq are undeniable, an emerging view is that the homeland common to both (whether genetically related or not) was the south of France, between the Garonne and the Rhône (Rodríguez-Ramos 2001). // The expansion of Ib from north to south might be correlated with the Urnfield Culture, as, though traditionally associated with the Celts, the peninsular urnfields appear in the Ib region.

The question of numerals

- . Orduña (2005) and Ferrer (2009) came up with a revision of the problem. On the basis of value markers on coins, capacity markers on dolia, recurrent elements in sale/purchase documents on lead sheets, etc, they identify the elements in Table 1 as numerals. // The systematic correspondence, which would include a vigesimal counting system, can hardly be explained other than by assuming a genetic relationship, according to them.
- . In the ensuing debate, Lakarra (2010) objected that the Bq numerals are best analysed in terms of internal reconstruction. His proposals and those of some previous scholars are gathered in Table 1.

	alleged Ib numeral	why a/that numeral? (no. of possible attestations)	photograph of one example	in Bq (and Aq)	form trad. reconstructed for pre-Ac
1/2	erdi ~ erder	born out by value markers on bronze coins from the mint of undikesken (= Empúries) (13)		erdi (Aq Erde- nius ? pn, Er- dae ? Dn)	
1	ban	born out by value markers on bronze coins from the mint of undikesken (= Empúries) (14)		bat	*bade
2	bi(n)	besides the complex abaŕkebi '12', we might have it in a fractional: sisbibeiabin '2/7'? (10)	DM	bi ∼ biga	
3	<u>ir</u> u <u>r</u>	dubious, only in the complex orge(i)rur '23', of unclear reading (1)	NDYD	hirur	*her-bur (?) 'closed X'
4	lau(r)	orgeikelaur might be the age of the deceased, or the no. of killed foes, on a monument in Huesca; PN laurco has r! (5)	下2个0	laur (Aq Laur- co PN, Laureia PN)	*la-bur 'short (finger)'
5	bors(te) ~ bos	in borste:aba<u>ř</u>geborste on a lead sheet, repetition makes borste a probable numeral (9)	* 13/E	bortz (Aq Borsus PN)	*bor-tz 'rounded (hand)'
6	śei	supported by the value marker śeńkir '1/6' on coins; śeiar col- lective, like abańar (?) (8)		sei	*sen-i 'child, peer'
7	sisbi	katubaŕeka:sisbi:baŕkeike, on a lead sheet from Ensérune, might be [PN-ka + numeral + quantified metrological unit], a construction with parallels (2)		zazpi	*bor(t)zaz-bi '2 beyond 5', or '5 + 2'
8	sorse	abaŕśei:sorse:erdiketor, on a lead sheet from Llíria, might be '16-8-half' (2)	HOLA	zortzi	*zorrotz-i 'sharp'
9	¿tor?	dubious, and, if so, not cognate of Bq bederatzi (10)	DAT	bederatzi	*bade-ra(n)tz-i '~ one substructed'
10	(a)baŕ	ustainabararban, on a 420 gr stone weight, 42 gr being a common Ib weight unit (13)	PIRA	hamar	*han-bor 'big rounded (hand)'
20	o(ŕ)gei	a bare ogei on a dolium from Perpinyà seems to indicate ca- pacity, perhaps 20 amphoras (1 = 26 litres), i.e. 520 litres (7)	HTIN	hogei	*bor-gen-i 'added rounded (hand)'
30	oŕgeiabaŕ	'20-10'; orgei(a)barban '31' has the reliable -ban added (2)	A DIC	hogeita hamar	

- Only the Bq column contains factual data. The pre-Aq reconstructions have a varying degree of reliability, but at least the one for 7 is close to certain.
- . As for the alleged Ib numerals, Orduña and Ferrer's proposal has at least three advantages:
 - Ib s matches Bq z (dorsal), Ib $\dot{s} >$ Bq s (apical), Ib $\mathbf{r} >$ Bq r (simple), and Ib $\dot{r} >$ Bq rr (multiple), exactly as expected.
 - their numerals appear most frequently in contexts where they are expected, and combined with items to be quantified like **śalir** 'silver (coin)', metrological units like **ota**, **kita**, etc.
 - Though not included in Table 1, there is a number of complex numerals which show that

the postulated bases (10, 20...) and units tend towards mutual combination. This provides the proposed system with internal coherence, as shown in Diagram 1, made by Ferrer (2022).

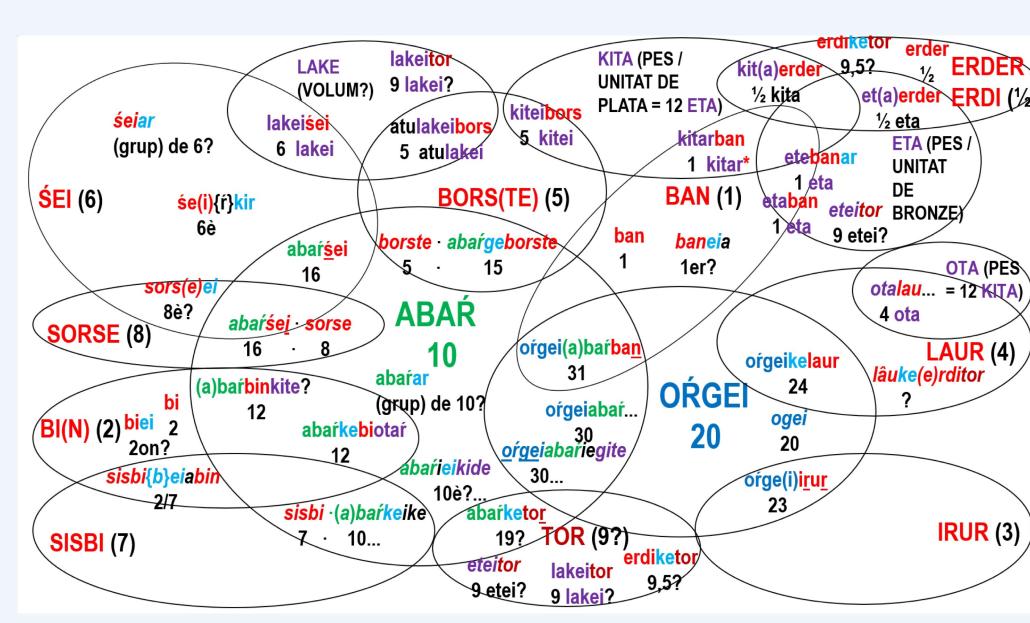


Diagram 1. Ib complex numerals [from Ferrer (2022)]

Conclusion. Possibilities to consider

- Possibility No. 1: they are not numerals, and hence the similarity is a delusion. // This is Gorrotxategi's (2021) view, who argues that in most cases an interpretation as a PN or a common noun is also possible.
- Possibility No. 2: they are numerals, but the similarity is due to chance. // This is virtually impossible.
- Possibility No. 3: they are numerals, and they prove that Aq and Ib are genetically related. // This may account for the numerals, but renders unexplained that Bq does not help to understand long Ib texts.
- Possibility No. 4: they are numerals, but they may have been borrowed. // Yet replication of numerals below 10 seldom occurs (Matras 2007), much less of the whole set. Cases like the On reading (< Chinese) of Japanese numerals are exceptional, and coexist with native numerals. // 3 subpossibilities:
 - ⇒ from a third language to Aq and Ib
 - from Ib to Aq // It is the logical direction, as Ib was the more maritime, commercial language.
 - from Aq to Ib // This would make a pre-Aq rise of *(bor)zaz-bi > zazpi '7' (later \rightarrow Ib sisbi) somewhat less abrupt, but it would be the illogical direction according to the previous reasoning.
- In fact, neither possibility 3 nor 4 are easy to reconcile with a pre-Aq rise of Bq numerals.

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del País Vasco



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