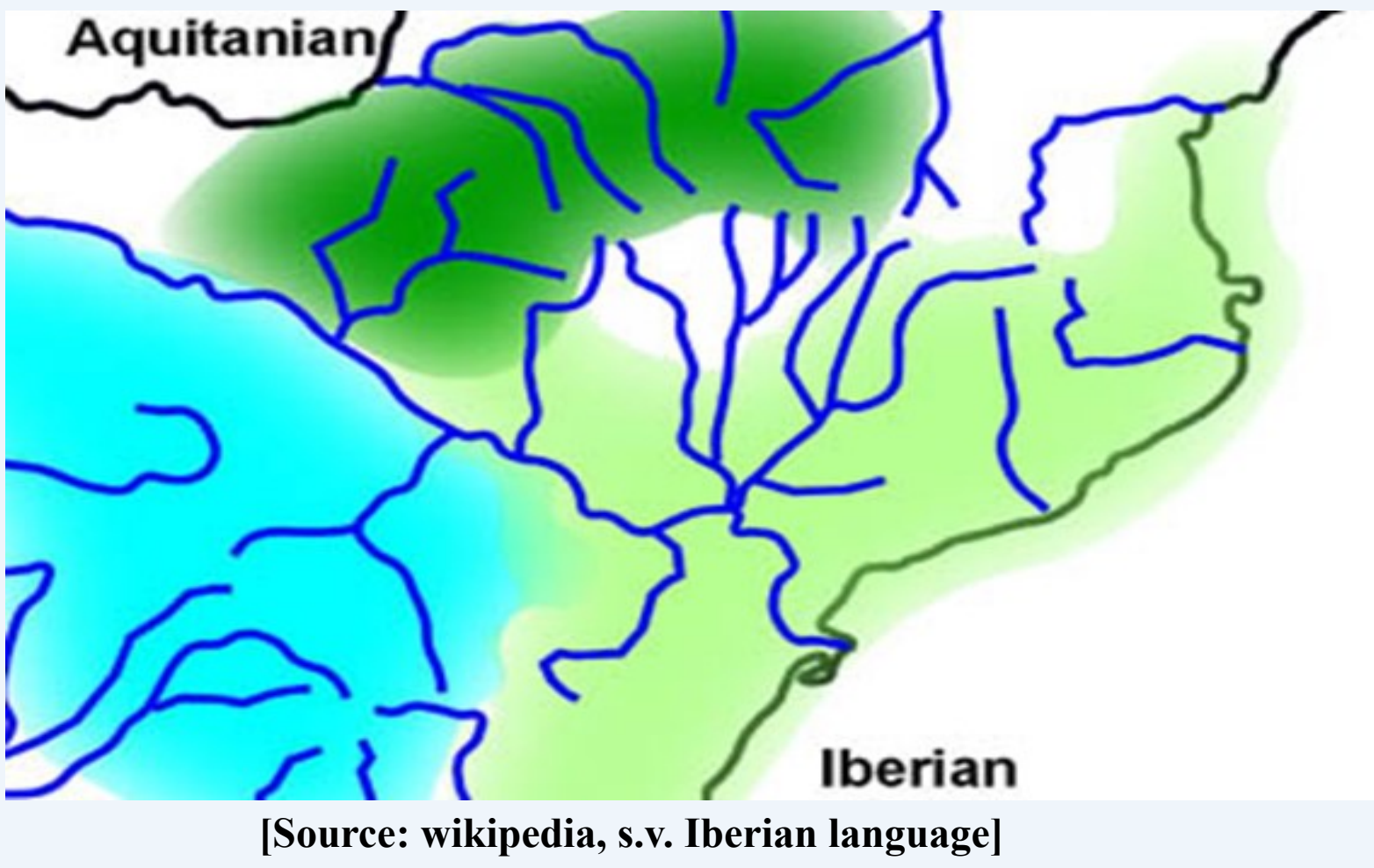# Basque and Iberian numerals. An insoluble problem?

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[Source: wikipedia, s.v. Iberian language]

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 M. Gómez-Moreno deciphered the Ib script, and by the 50s both Antonio Tovar and Koldo 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
  - 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:
  - Aq/Bq has /h, t[h], k[h]/, Ib has no aspiration

- 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-Aq
½ erdi ~ erder	borne out by value markers on bronze coins from the mint of **undikesken** (= Empúries) (13)		erdi (Aq Erdeniako ? PN, Erdae ? DN)	---
1 ban	borne 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)		bi ~ biga	---
3 irur	dubious, only in the complex **oŕge(i)gur** '23', of unclear reading (1)		hirur	*her-bur (?) 'closed X'
4 lau(r)	**oŕgeikelaur** might be the age of the deceased, or the no. of killed foes, on a monument in Huesca; PN **lauŕco** has ? (5)		laur (Aq Laurco PN, Laureia PN)	*la-bur 'short (finger)'
5 bors(te) ~ bos	in **borste:abaŕgeborste** on a lead sheet, repetition makes **borste** a probable numeral (9)		bortz (Aq Borsus PN)	*bor-tz 'rounded (hand)'
6 śei	supported by the value marker **śeŕkir** '1/6' on coins; **śeiar** collective, like **abaŕar** (?) (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 Lliria, might be '16-8-half...' (2)		zortzi	*zorrotz-i 'sharp'
9 ¿tor?	dubious, and, if so, not cognate of Bq bederatzi (10)		bederatzi	*bade-ra(n)tz-i '~ one substructed'
10 (a)baŕ	**ustaigabaŕarban**, on a 420 gr stone weight, 42 g being a common Ib metrical unit (13)		hamar	*han-bor 'big rounded (hand)'
20 o(ŕ)gei	a bare **ogei** on a dolium from Perpinyà seems to indicate capacity, perhaps 20 amphoras (1 = 26 litres), i.e. 520 litres (7)		hogei	*bor-gen-i 'added rounded (hand)'
30 oŕgeiabaŕ	'20-10'; **oŕgei(a)baŕban** '31' has the reliable **-ban** added (2)		hogeita hamar	---

Table 1. Numerals in Ib and Bq. [Photographs screenshot from Ferrer (2022)]

- 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 compelling points:
  - Ib **s** matches Bq *z* (dorsal), Ib **ś** > Bq *s* (apical), Ib **r** > Bq *r* (simple), and Ib **ŕ** > 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

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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).
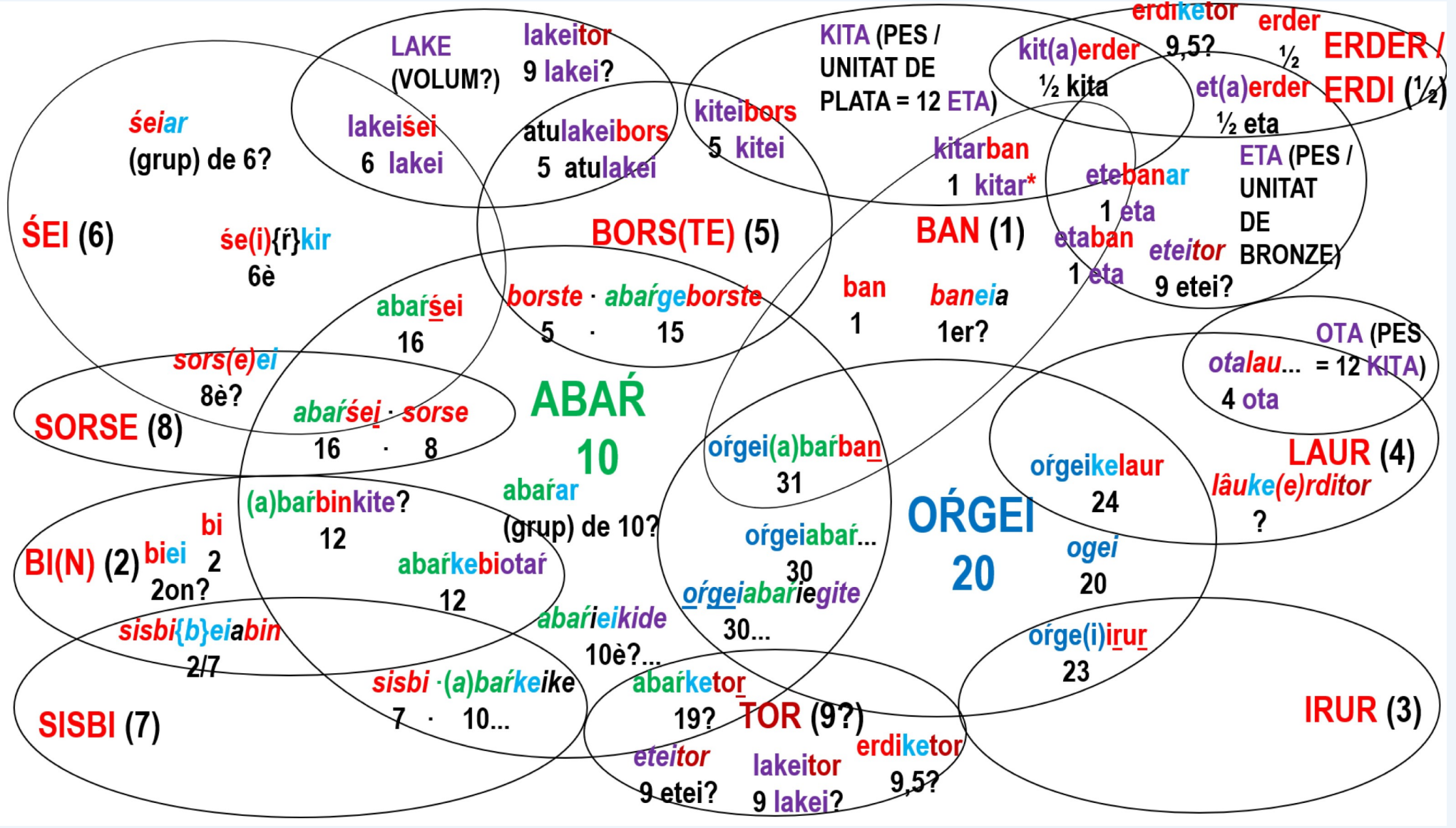

Diagram 1. Ib complex numerals [from Ferrer (2022)]

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 at least in most cases an interpretation as a person name or a common noun is likewise 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 the fact 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. // It entails 3 subpossibilities:
  - from a third language to Aq and Ib
  - from Ib to Aq // This would be 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 → 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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