

Iberian *ordumeles*, Paleo-Sardinian *Ortumele*, *Ortarani* and *Araunele*. Cognitive Semantics and Substrata Research

Eduardo Blasco Ferrer
University of Cagliari
Sardinia

Research on the earliest substratum of Sardinia, Paleo-Sardinian, had long come to an impasse before structural and typological models replaced the older historical-comparative method. The typological approach has shed light on the agglutinative organization of toponymic compounds, and at the same time highlighted striking resemblances with Paleo-Basque morphological and lexical material and with Iberian records. In this paper we argue that a careful examination of the structural and semantic properties of some Paleo-Sardinian microtoponyms related to the color of mountain streams and terrains enables us to decipher one Iberian compound, and opens up a new fruitful area of cross-linguistic research between Old Iberia and Neolithic Sardinia.

1. Iberian

Remarkable progress has been made in the structural analysis of Iberian since Gómez-Moreno deciphered the semisyllabic writing system,¹ and Jürgen Untermann, Javier de Hoz and other scholars began applying distributional and typological models to the *corpus* of inscriptions, thus managing to infer linguistic typology,² morphosyntactic patterns and almost a hundred lexical roots.² Still, further advances in semantic interpretation remained blocked by the lack of cross-linguistic correlation with other Mediterranean Indoeuropean languages. Particularly distressing, moreover, was the view that Basque was of no help in deciphering the almost 170 Iberian inscriptions, and that the scanty cognates displayed by the two ancient languages of the Iberian Peninsula were due to centuries of enduring contact (*Sprachbund*).³ One of the most persuasive correlations between Iberian and Paleo-

¹Cf. Gómez Moreno (1949).

²Cf. Siles (1985), Untermann (1990, 2004), Velaza Frías (1991, 1996), Silgo Gauche (1994), de Hoz (2001, 2008).

³Cf. Tovar (1997:47-145), Gorrochategui (2002).

Basque is the adjectival morpheme for the color ‘black’, attested as *beleß* or *beles*,⁴ and also in Latin transcriptions as *meles*,⁵ as *bele(x)* in old Aquitanian anthroponyms,⁶ and as *bel(e)* and *beltz* in Basque lexical items and toponymic designations.⁷ In the bronze inscription of Ascoli (Italy), dated 89 BC, this morpheme occurs several times within the first names, typically epithets, used for Iberian soldiers in the Roman army. As far as this inscription is concerned, we will focus our attention on the sequence *ordumeles*, which neatly reflects the compound *ortu(n)* ‘?’ + *beleß* ‘dark’, and will attempt an acceptable interpretation by means of external comparison with some Paleo-Sardinian toponyms, which we presume to be formally and semantically tightly bound.

2. Brief typology of Paleosardinian

Since the first descriptions of the wild inhabitants (*Ilienses*, *Bàlari*, *Sardi Pelliti*, *Mastrucati Latrunculi*) of Sardinia by Greek and Roman geographers, the island has kept the secret of its primitive Indoeuropean language hidden. Italian scholars of the first half of the last century⁸ launched a thorough exploration of possible analogies within the whole Mediterranean area, from Iberia to Palestine, and with their historical-comparative method managed to isolate a reduced set of lexical roots, still assumed to have been part of a primaeval Mediterranean substratum.⁹ The Swiss scholar Johannes Hubschmid and the Bavarian linguist Max Leopold Wagner, the “Meister” of Sardinian linguistics,¹⁰ also adhered to the principles of a method which gave total priority to homonymic forms within the examined languages, but failed to unearth the very functioning of their structures.¹¹ The situation has rapidly changed since two of the most archaic areas of the island were investigated exhaustively, particularly in their

⁴Cf. Untermann (1990:216-217; 1998:76).

⁵Cf. Velaza Frías (1996:34).

⁶Cf. Cf. Gorrochategui (1984:158-159).

⁷Cf. Michelena (1985:128,222).

⁸From Francesco Ribezzo, Alfredo Trombetti, Vittorio Bertoldi, Giovanni Alessio, Giandomenico Serra, Benvenuto Terracini to Carlo Battisti and Giacomo Devoto. For all of these see the critical assessment by Silvestri (1979-82) and Blasco Ferrer (2010: chapter II).

⁹Pellegrini (1994) has listed these (*CARRA ‘stone’, *MARA ‘mare’, *SALA ‘running water’, *TALA ‘mountain stream’, among others).

¹⁰Cf. Hubschmid (1953, 1963), Wagner (1951, 1960-64).

¹¹A substantial evaluation may be read in Craddock (1969).

toponymic configuration.¹² In 1993 we showed that a modern structural analysis of microtoponyms (collected from personal investigation *in loco* or deduced from the place-name inventories of Paulis and Wolf), with a thorough distributional and frequential examination of their segmental morphs, offered a syntactic account of the underlying organization of the Preindoeuropean language of central and eastern Sardinia. Thus, by observing the archaic lexeme *orgosa* and the toponym *Orgosa* (and *Orgòsolo*), ‘well, river’s mouth’, we easily recognize two compounding roots, each generating further derivative forms: *orga* and *orge* [g] ‘well, wet ground’, *Orga*, *Orge*, *Org-ai*, *Org-ei*, *Org-oi*, *Org-osa*, *Org-ose*, *Org-ol-ai*, *Orgose-koro*, *Orgos-ol-ai*, and *Osa* (and *Bosa*, with prosthetic consonant), *Osu*, *Os-oe*, *Flumen-d-osa*, *Os-alla*, *Ós-ana*, *Os-ol-ai*, *Ós-olo*, all terms for ‘wells, rivers, river mouths, wet terrains’. Now, it may easily be assumed that *preie.orga* has been “glossed” by the second root, **osa*, this connected with **aus-a*, *ósa*, a productive Preindoeuropean (Giacomo Devoto) or – less persuasively in Sardinia – Paleoeuropean (Hans Krahe) root.¹³ Our tautologic toponym shares its complex structure with a handful of similar compounds, scattered all over Europe: *Vall d’Aran*, *Chateau-dun*, *Lingua-glossa*, *Mon-gibello*. Basing our research on further structural and typological examination of the microtoponyms of the central and eastern counties of Sardinia we have been able to gather in recent years a vast amount of evidence about the real organization and the origin of the Paleo-Sardinian language. For its “agglutinative” typology we may adduce the following selected examples, all microtoponyms:

- (1) *ard-ai*, *ili-ai*, *iri-ai*, *istil-ai*, *gurri-ai*, *nur-ai*, *ol-ai*, *on-ai*, *org-ai*, *ort-ai*, *sun-ai*, *tal-ai*, *turr-ai*, *ur-ai*; *aran-ake*, *ili-ake*, *iri-ake*, *nur-ake*, *tal-ake*, *ur-ake*, *berr-age*; *ili-ana*, *tal-ana*, *ós-ana*, *óv-ana*, *ártz-ana*; *árd-ara*; *ol-eri*, *tal-eri*; *sun-ele*, *turr-ele*.
- (2) *os-ol-ai*, *ort-ol-ai*, *ov-ol-ai*, *artz-ol-ai*; *bid-on-i*, *mand-on-i*, *ol-on-é*, *ós-on-o*; *tale-turre*, *tala-suni-ai*, *berri-tal-ai*, *berru-nur-ai*; *ort-aran-i*; *orgo-r-isti*, *bid-istil-i*.
- (3) *arau-nele* (< *aran*), *bidu-nele* (< *bide*), *istiu-nele* (< *istil*), *turru-nele* (< *turri*); *org-ose-koro* (< *orga*), *turri-kore*, *talae-kore*; *tal-erthe* (< *tala*).

¹²Cf. Blasco Ferrer (1988), Wolf (1998).

¹³For Devoto’s periindoeuropean/mediterranean **AUS-A* and Krahe’s Paleoindeuropean **AU-SA* see the balanced summary in Silvestri (1985-86).

Subset (1) shows a recurrent use of suffixes (here *-ai*, *-ake/age*, *-ana*, *-ele*, *-eri*, but all stressed/unstressed vowels and almost all kinds of diphthongs are documented) bound to a restricted set of roots: *ard-*, *artz-*, *berri*, *bid-*, *ili*, *iri*, *isti(l)*, *gurr-*, *mand-*, *nur*, *ol-*, *on*, *org-*, *ort-*, *os-*, *ov-*, *sun-*. *tal-*, *turr-*, *ur*.

Subset (2) shows the pertinent capacity of an agglutinative language to make compounds by simply adding roots and suffixes (with derivative and flexional marks): *os-* + *ol-*, *ort-* + *ol-*, *ov-* + *ol-*, *artz-* + *ol-*; *bid-* + *on*, *ol-* + *on*, *os-* + *on*, *mand-* + *on*; *berr-* + *tal-*, *berr-* + *nur*; *tal-* + *turr-*, *tal-* + *sun-*.

Subset (3) is the most relevant for us, because it illustrates the ability to derive a suffix from a root, an outstanding feature of agglutinative languages: *-gor/kor* (+ paragogic vowel) is an offshoot of Basque *gorri* 'red', a formal development well attested in Iberia and Aquitaine,¹⁴ *-erthe* reflects neatly the bsq. root *ertze* 'wedge, edge', which also matches the denotatum it specifies (*tala* + *erthe* = 'mountain river bank'), and finally *nele*, which is the adjectival unit for 'dark', on which we shall focus our attention next.

The typological organization of Paleo-Sardinian completely coincides with that of Basque. The majority of the extracted lexical roots have an exact correspondence in present-day Basque, and in some cases in reconstructed Basque and Iberian: *ardi* 'ox' (and cf. *ardiule*, *artule* 'wool' and sd. *Ardule*, *Ardauli* in Sardinia), *hartze* 'rock, stone' (and cf. *Artzu*, cognomen, and *Ártzana*, a mountain town on a rocky field), *aran* 'valley', *berri* 'new', Iberian *ili* and Basque *iri* 'settlement', *istil* 'marsh', *gorr(i)* 'red' (and *gurri*: *Gurriaran*), *mando* 'equus asinus', *ola* 'primitive hut', *obi* (> sd. *ov-*) 'cave', (*i*)*turri* 'spring, well', *ur* 'water'. Some other roots are still opaque, and we cannot dwell on their structures and possible correlations in this paper, but only stress the fact that they cannot be dismissed out of hand as potential Basque or Iberian units (so **tala* 'mountain river', **nur*, well represented in *nurake* 'megalithic monument', for us a plural form of 'stone').

From a morphophonemic point of view it is important to point out that in Paleo-Sardinian compounds the final vowel of the first unit is subject to many qualitative variations (raising of mid-vowels, dissimilation), as in *berri* + *nur-* > *berru-*. In derivatives (1) dropping of the final vowel is the general rule (*tala*

¹⁴Cf. Coromines (1981, I:111): "Que *-corr* soit le Basque *gorri* 'rouge', cela va sans difficulté"; Orpustan (1991:128,160).

+ *-eri* > *taleri*), but the ending *-i* turns out to be more resistant (*ili* + *-ai* > *iliai* compared to *tala* + *-ai* > *tal-ai*).

Before going on to interpret the Iberian compound **ortubeleß* with the support of Paleosd. roots, let us briefly recall that recent archaeological, historical and even genetic contributions¹⁵ all point unequivocally to one or more migrations from neolithic Iberia to the island of Sardinia. We have argued in our recent *History of the Sardinian language*¹⁶ that the earliest inhabitants of neolithic Sardinia, the *Ilienses* and the *Bàlari* (with *bal-* linking Sardinia closely to the Balears), are the result of Iberian and Paleo-Basque colonization in search of obsidian, a 'dark volcanic mineral' which is only to be found along the eastern coast of the south of France and Catalonia.

3 Semantics and reconstruction of **ortubeleß*

Along with structural and typological approaches to isolated languages of the Mediterranean (Etruscan, Iberian, Minoan),¹⁷ cognitive semantics has played an important role in the recent debate about diachronic reconstruction.¹⁸ A vast amount of toponymic material widespread over Europe and Asia has clearly revealed that 'black' and 'red' were (and are!) the usual adjectival qualities used to encode a rich variation of color tones concerning 'earth' and 'water', and that color names commonly drew on metaphoric and metonymic transfers ('blood', 'fire' > 'red color').¹⁹ We will now undertake a thorough discussion of the semantic values of **ORTU* based on this assumption. The following list records all the place-names in central and eastern Sardinia which are allegedly derived or compounded with the root **ORTU*: *ort-ai*, *ort-ana*, *ort-aran-i*, *ort-ei*, *ort-eni*, *ort-iai*, *ort-il-o*, *ort-il-á*, *ort-il-ai*, *ort-ol-ai*, *ort-ol-i*, *ort-ol-o*, *ort-or-ai*, *orto-koro*, *ort-orgo*, *ort-os-ai*, *ort-ui*, *ortu-ene*, *ortu-eri*, *ortu-eria*, *ortu-mele*.

Particularly relevant in this context are the four compounds: *Ort-aran-i*,²⁰ *Ort-orgo*, and above all *Orto-koro* and *Ortu-mele*,

¹⁵Cf. Rowland (2001:13,31), Mastino (2005, chapter I and II), Francalacci (2003 with previous literature).

¹⁶Cf. Blasco Ferrer (2009); further detailed examination in Blasco Ferrer i.p.

¹⁷Cf. Agostiniani (1993, 2000) for Etruscan, Velaza Frías (1996) for Iberian, Facchetti (2002) for Minoan.

¹⁸Cf. Taylor (1995), Geeraerts (1997), Blank/Koch (1999).

¹⁹Cf. Bach (1953, 272-299), Rohlf's (1960), Tischler (1977, 155-161).

²⁰The original correct spelling of this microtoponym (a valley!) was confirmed by Dr. G. Cabras of Urzulei; as a result of assimilation it has been quoted as **ort-orani* in the latest administrative records. Also several denominations of

non official toponyms (*lieux-dits*) of the Nuoro region (Bono) and High Ogliastra (Urzulei). We will begin by examining the recorded compounds with *-koro* and *-nele*, thus attempting to ascertain their semantic fields.

3.1. *-koro*. As said before, ['kore, -o] is an allomorph of the Paleo-Basque root *GOR- (bsq. *gorri* 'red'), used in nominal syntagmas to denote waters (*Iturrigorri* 'red spring') or qualities of ground (*Mendigorri* 'red mountain', *Gurriaran* 'red valley'). Indeed *gorri* is also documented in Sardinia, once in an exactly equivalent hybrid compound, *Funtana gorru* (lat. FONTANA, from FONTS, FONTIS 'spring'), as a derivative in another oronymic designation, *Nodu gurr-ai* (lat. NŌDUM 'knot' and metaphorically 'peak of rocky mountain'), and in other more complex toponyms: *gurri-thókinu*, *gorro-ispera*, *gorr-osp-ai*. A much more productive suffix would seem to be *-gor, kor* + Vowel: *orgose-koro*, *orgose-kore* (with *orgose* 'well, spring'), *ili-kore* (Iberian *ili* 'settlement'), *iste-kor-í* (bsq. *istil* 'marsh, mare'), *turri-kore* (bsq. *iturri* 'spring'), *nur-koro* and *nura-koro* (palsd. *nur* 'stone'), *talae-kore* (palsd. *tala* 'stream, mountain river'), *enale-kore* (lat. VĒNA, -ĀLIS 'spring', already in classical Latin *vena fontis*). There is little we can say about *Funtana bar-kori*, which displays a common root *bar-* (as in *barí*, *bar-úmini* and *baru-nele*) of unknown meaning. A quick examination of our records confirms that except for *Nodu gurriai*, *ilikore* and *nurkoro*, all the remaining compounds have a deep meaning of 'water' ('springs, wells, running water in mountain rivers and valleys'). If we now briefly go through the general Sardinian (i.e. Romance) toponymic compounds which exhibit the term 'red' (RUBEUM > *rúviu*, *ruju*, *orrúbiu*), we notice that except for *Nuraghe rúviu*, related to the reddish color of the typical stones of megalithic monuments, *Monte* (MONS, MONTEM 'mountain') *ruju*, *Terra orrúbia*, and *Perda* (PETRAM 'stone, rock') *rúvia*, the most frequent composition is with lexemes denoting 'water': *Abba rúvia*, *ruja* (AQUA 'spring, well'), *Funtana rúvia*, *Ludu* (LŪTUM 'mud') *ruju*.

Interesting, too, is the metaphoric use of 'blood' for 'red', which we have found in derivatives with the Paleo-Basque root

ortumele are subject to changes in their local forms, due to dissimilation/assimilation (*ortunele*, *ortunuli*) or to the influence of MONS, MONTEM (*mont'ortumele* > *mortumele*, *morturumele*, *murtumele*).

*DOL (DO-DOL > *odol* 'blood').²¹ The survival of the iterative reconstructed protobase in High Ogliastra is striking, as well as the subsequent result: *Do-dol-iai* and *Dol-ai*, for 'red granitic, calcareous rocks and mountains', alongside the more common *Rivu* (RĪVUS, -UM) *dol-ia*, *Bruncu* ('summit, highest rocky point') *dol-au* (and cf. *Bruncu riviū*), the plural *doli-ake*, with reference to 'springs', and the compounds *artz-ana-dolu* 'red rocky settlement' and *isti-dul-é*, *iste-dol-i* (bsq. *istil*).

3.2. *-nele*. One astonishing link with Old Iberia is the survival of the root *ib. beleß, meles*, bsq. *bele, bel-tz* 'dark', applied to geomorphologic denotata all over Sardinia. Again we find two successive stages of the root: *mele* and *nele*. The first is still maintained in a few toponyms, such as: *mara-mele* (mediterranean *MARA 'mare'), *Macu-mele* 'Macomer', a town in west Sardinia built on basaltic, dark terrain, with semitic *maqóm* 'settlement' in its first segment, *Arriu* (RĪVUS, -UM) *meli* 'river with slimy waters', *tavara-mele* (sd. *túvara* 'heather'), *kili-melis* and *keru-mele, keré-mule*, towns and terrains, designations where we recognize the typical Iberian segments *kelti-* (*kelti-beleß* is recorded 7 times; in the Iberian writing system *lt* stands for = [l]) and *kertu-* (*ib. rt* = [r], as in *ilti-* = *ili*). This first root has evolved through dissimilation to the typical Paleo-Sardinian root/suffix *nele*, and some double results confirm this evolution: *keru-mele* and *keru-nele, bidu-mele* and *bidu-nele* (bsq. *bide* 'way'), *mortu-mele* and *mortu-nele*. The following compounds, scattered abundantly in the central and eastern regions of the island, turn out to be most instructive in guiding us to the deep denotation: *turri-nele* and *turru-nele* (bsq. *iturri* 'spring'), *istiu-nele* (bsq. *istil*), *orro-nele* (bsq. *orri* 'leaves'), *aran-nulu, arau-nele* and *g-arau-nele* (bsq. *aran* 'valley'),²² *risu-nele* (RĪVUS, -UM, with normal development of *-[v]-* in central nuorese), *Funtana thiku-nele* (FĪCUS),²³ *gutturu-nele* (GUTTUR

²¹ Cf. Lakarra (1995, 2004).

²² Prothesis of non-etymological consonants seems to be a very productive rule in toponyms, and is triggered of course by the general tendency of Sardinian to add a consonant at the beginning of initial syllables under certain conditions (i.e. after prepositions: IENUĀRIUM > *ennarzu* > *bennarzu*, and so *Iriai* but in *Biriai*).

²³ In the Barbagia F- deletes, so that FĪCUM > ['i□u] (with *Knacklaut* or glottal stop instead of [k]). Nonetheless, prothesis of interdental [y] = *th* is not unusual, as *orgosa, urgusa* and *thurgusa* show. So, we can safely argue that [yi□u'nele] reflects FĪCUS + *nele*, a compound which is recurrent in Romance composition:

> sd. *gútturu* ‘gorge, deep ravine’). A quick survey of lexical compounds based on solely Latin roots lends further support to our equivalences: *Badde* (VALLIS,-EM), *Sa vena* (VĒNAM), *Littu* (*ELĪCTUM, ‘oak forest’, as SALICTUM), *Rivu* (RĪVUS, -UM), *Ficu* (FĪCUS.-UM), *Funtana* (FONTĀNAM) + *nieddu*, *niedda*, lat. NIGELLUM,-AM ‘dark’. We can also observe the exact correspondences with present-day Basque toponyms, such as *Aran-beltza* < *aran* + *bel(tz)* and *Beltz-iturri* < *bel-tz* + *iturri* ‘black spring’. We can now turn our attention to Iberian **ortubeleß*, completing our analysis with the Sardinian compounds of *ORTU.

3.4. **ortubeleß*, *ordumeles*

In the most archaic region of Sardinia we come across two compounds with *ORTU, which may help to make clear the real meaning of the Basque root *orto-koro* and *ortu-mele*, once with ‘red’ and once with ‘black’. But we have also mentioned *ort-orgo*, with *ORG (sd. *orga,-e*) ‘spring, wet ground’ and *ort-aran-i*, with bsq. *aran* ‘valley’, where both combinations point at precise geomorphologic features with creeks, depressions, and flowing water. The latter compound is, we believe, the solution of this puzzle: like *org-osa*, *ort-aran* conceals a tautologic designation, ‘valley’ in Iberian and ‘valley’ in Paleo-Basque; both roots are widespread in Sardinia, as are *ili* and *iri* and derivatives of *beleß* and *bele*.

4. Conclusions and Desiderata

In this short article we have attempted a new, interdisciplinary examination of Iberian, Basque and Paleo-Sardinian microtoponyms, bolstering the comparative approach with typological and semantic tools. Recent archaeological, historical and genetic evidence suggests that Sardinia received one or more migrations from Old Iberia during the Neolithic Age. Our discovery of the agglutinative typology of Sardinian toponymy, and the structural affinities we have identified between toponymic data and Iberian and Paleo-Basque roots, lead us to argue that behind the mysterious compound **ortubeleß*, *ordumeles* lies an exact correspondence with Paleo-Sardinian *ortu-mele*, with the root *ortu* sharing the common primary denotation of ‘valley’. Further research should aim at collecting new material displaying a cohesive structural and semantic interpretation for common roots

Ficu niedda.

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in Iberian and Paleo-Sardinian. This lengthy process has just got underway.

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