

An outline of Celtiberian grammar

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A. Introduction

The following pages attempt to give a short outline of Celtiberian grammar in a diachronic perspective. They intend to be a summary for quick information and didactic purposes, rather than an in depth discussion of, or a novel approach to specific questions.

The description is based on the grammar and the texts as given in MLH IV, and on the discussion of Celtiberian lexical items in MLH V.1.¹ For the great number of etymological suggestions and different grammatical theories dealt with in those books, bibliographical references will not be repeated here. Interpretations and translations proposed by various authors for single Celtiberian words and forms can all be looked up in the Celtiberian dictionary, MLH V.1, and in a more condensed form in MLH IV (pp. 490ff). The most important alternative approaches to historical Celtiberian grammar are set out in the introductory pages of MLH V.1; short references are also provided in the grammar of MLH IV. Reference to these books is made here once and for all and will not be repeated in connection with individual words, since the alternative would be to quote them again and again for almost every lexical item adduced. The reader who seeks more information, including a wealth of bibliographical data, and a more explicit justification for the grammatical interpretations adopted here, must turn to MLH.

In addition to the material covered by MLH, some recent discoveries and developments are taken into account. However, while the corpus of known Celtiberian texts has fortunately increased steadily, if only limitedly, the years following the publication of MLH IV and V.1 have not seen a major breakthrough on the grammatical or lexical side. The outlines given in MLH are therefore still valid. A number of new inscriptions and interpretations will be mentioned in the overview below. For these, of course, bibliographical references are added. A convenient collection of texts not covered by MLH IV, with short epigraphical and linguistic discussion, is presented by JORDÁN 2001a.

Among the newly found or published inscriptions, which are not yet taken into account in MLH IV or V.1. the most important is the fourth Botorrita bronze (henceforth BB IV), which has been edited by VILLAR, DÍAZ, MEDRANO & JORDÁN 2001 with full archaeological and epigraphical description and extensive linguistic commentary by VILLAR and JORDÁN. A more cautious reading, accompanied by useful photographs, is found in BELTRÁN 2002. The bronze is inscribed on both sides and contains a number of words already known from K.1.1 (such as **tirikantam**, **ios**, **tīdatuđ**, **kustai**). It is unfortunately in a fragmentary state, so that no line is complete at the beginning or the end, which makes it very difficult to establish syntactic structures from the context.

Another very long, and this time complete and excellently readable text is the bronze tablet of Torrijo (henceforth 'Torrijo'), published by VICENTE REDÓN & EZQUERRA LEBRÓN 1999, noted by JORDÁN 2001a, 379ff, and commented on, moreover, by RUBIO 1999. The text contains many words known previously, and in particular shows affinities to K.0.7. Regrettably it has not come to light in the course of regular archaeological excavations, so that its background is not self-evident. This fact, together with the neat appearance of the bronze, and the strong similarities with previously

¹ For a full account differing in some respect s. VILLAR 1997. The *Compendium Linguarum Celticarum* (Ed. MCCONE), containing a Celtiberian grammar by UNTERMANN (written in 1997) has not appeared yet.

known Celtiberian texts, leads to doubts concerning the genuineness of ‘Torrijo’. It will not be used here. Because of its length and additional evidence for words or forms already known from the Celtiberian corpus, ‘Torrijo’, if genuine, would obviously be a very important text. However, as long as doubts remain, it seems more reasonable not to base any hypothesis on it, for this would in many cases affect the interpretation of other texts and may lead in wrong directions. The genuineness of ‘Torrijo’ may of course be proven at any moment, if a word or form only attested here so far, turns up in another, definitely genuine context. Due to the length of the text and the fact that some of the words (such as *ekue* or *ibos*) could be functional words, and thus expected to be of more frequent occurrence, chances for a confirmation of ‘Torrijo’ should not be too slim. If thus confirmed, it would come to hold an important place among the longer Celtiberian inscriptions.

Two other texts of doubtful provenance are the *tesserae* in Celtiberian script published by MARQUES DE FARIA in 1998. The first, for which the reading *kamasiosuei/ikenionke/setantunos* is given, is likewise suspect, since the shape of the *tessera* is exactly identical with K.18.1 (rather than being the counterpart matching this piece). The second text, transcribed as *cailawica car* by MARQUES DE FARIA 1998, has been read **oilaunika kar** by BALLESTER 1999. Cf. also the discussion of these texts by JORDÁN 2001a, 372ff, who accepts BALLESTER’s reading, as does MARQUES DE FARIA 2001.

Of the *tesserae* published by CASTELLANO/GIMENO 1999 the first (beginning with *Ambato*, cf. JORDÁN 2001a, 386f) looks more like an insufficient reading of what may turn out to be a Latin text, than like a Celtiberian inscription. The second, published as CAR AILICA CAR (p. 361) should be read **ARGAILICA CAR**, as is obvious from the photograph (p. 362), cf. BALLESTER 1999, 218, JORDÁN 2001a, 385f.

In addition to the two *tesserae* ‘Turiel’ published by VILLAR/UNTERMANN 1999, 719ff and discussed in MLH V.1, a third *tessera* ‘Turiel’ has been edited by VILLAR 1999 (cf. JORDÁN 2001a, 376f), who gives the text as **lentioko slaniad**. For the first letter an alternative reading r- (**rentioko**) seems possible, but neither reading leads to obvious connections within the onomastic field. TURIEL himself has published a *tessera* with the suggested reading *turatim/n* and alluded to a further piece containing a text *tentiu kotinkai ... n tikoeti* (?) in Complutum 11, p. 308f.

Only a fragment of a family name is preserved in the ‘*titulus pictus*’ published by HERNÁNDEZ VERA/JORDÁN 2001. The bronze tablet published by DE HOZ 1999, 457ff is likewise incomplete (cf. JORDÁN 2001a, 382f). Nothing can be made out of small fragments, graffiti and the like, such as those discussed by BALLESTER 2001.

Moreover a number of texts have been edited and/or discussed anew. The new edition of K.23.2 by GARCÍA MERINO and UNTERMANN (with readings like **boruotureka**, **baisais** already alluded to in MLH V.1) has appeared in vol. 65 of Boletín del Seminario de Estudios de Arte y Arqueología (1999), pp. 133ff.

K.12.1 has been reexamined in detail by ARENAS, DE BERNARDO STEMPEL, GORROCHATEGUI and GONZÁLEZ, Emerita 69 (2001), 307ff. ARENAS dates the text to ca. 150 BC, GORROCHATEGUI thinks that the first sign of the word tentatively read **keltis** may be a symbol rather than a syllabic character, DE BERNARDO STEMPEL interprets **esto** as Impv. < **hes-tōd* ‘shall be’, GONZÁLEZ suggests that **retukeno** could refer to the Numantian noble Πητογέννης mentioned by Appianus.

PRÓSPER 2002 has attempted a new interpretation of K.3.3, the great rock inscription of Peñalba de Villastar, based mainly on the reading of TOVAR (e.g. 1973), except for

preferring **ERCAIAS** to the alternative **TRECAIAS** (line 3). She translates: “In Orosis and as far as the Tigino reaches, to Lugu we consecrate the fields. In Orosis and in Equeiso, the hills as well as the ploughed fields and the houses are consecrated to Lugu, that is, the houses of the bounded area.” (p. 224, and the English version p. 421). The most important new hypothesis, as compared with earlier interpretations, is the classification of **SISTAT** as 3Pl. athematic verb < **si-sth₂-nti*, with loss of *-i#* and *-A-* for *-ā-*, a nasal vowel developed from *-an-* < **-n-*. ESKA 2002 (pp. 150, 153f), discussing Celtiberian nasals, agrees in principal, but assumes that *-n-* before *-t-* is always written in Celtiberian texts in the Latin alphabet. PRÓSPER also suggests some new etymologies for the difficult words in TIA-, which she takes as deverbal formations containing a preverb *to-* > *t’-* with *o* elided before following *-i-*. **TIATUMEI** (for which PRÓSPER adopts the reading TIATUNEI) is thus derived from **to-yāt-* (root **iet-* ‘to take a firm stand’, cf. LIV² p. 313, or a *t*-extension of **jah₂-* ‘to go’, LIV² pp. 309f) or **to-epi-h₂at-* (cf. **h₂et-* ‘to walk’, LIV² p. 273), **to-epi-pat-* (cf. **peth₂-* ‘to extend’, LIV² pp. 478f.), **TIASO** would be a *to*-formation from the same stem (e.g. **to-epi-at-to-* etc.) with **-t-t-* > *-ss-*, spelled *-S-*.

SCHMIDT 2001 includes a short discussion of the headlines of K.1.3 (K.1.3H) in his review of VILLAR/BELTRÁN 1999. He proposes the tentative translation (p. 262): “Die *risatioka* Furchen, die für **trak^wā* als Neubebautes Ackerland genutzt wurden, und die *tanioka* der Immigranten [und] deren Listen/Auflistung [s. im folgenden]:”.

The most extensive new approach to the Celtiberian lexicon is DE BERNARDO STEMPEL’s (unconvincing) reinterpretation of Celtiberian syllabification, introducing a number of new spelling rules, and, partly dependent on the latter, some new phonological rules (cf. e.g. DE BERNARDO STEMPEL 2001, 2002). As DE BERNARDO STEMPEL’s theory is complex, it cannot be discussed here in any detail.² Among the basic ideas are: the multiple origin of Celtiberian *đ* < PIE **s*, **dj*, or Celtic **đđ*, with context specific developments and some analogical generalizations (cf. 2001, 329f); the indiscriminate use of mute vowels copying either the following or the preceding real vowel in the Celtiberian semisyllabary, e.g. **otanaum** /odnaum/, but **otoni** /otni/ (cf. 2001, 321; 2002, 101 n. 70); the development of **-aK₂V-*, **-ok₂V-* > *-aiKV-*, *-oiKV-*, where *K* is a single not labiovelar consonant or a specific group, as e.g. *-sk-*, but not e.g. a geminate like *-nn-* (cf. 2002, 100). Interpretations are usually based on etymological comparisons with extra-Celtiberian (e.g. Gaulish) material, which are postulated in footnotes (e.g. 2001, 326 n. 51; 2002, 100 n. 61), rather than made explicit with reference to their Celtiberian contexts.³ No systematic attempt is made at a language internal confirmation (as could be done, e.g. with the help of proper names in Celtiberian and Latin/Romance or Greek transmission). Numerous obvious counter-examples must either be given a new phonological interpretation (e.g. **TOGIAS** : **toggias*, 2002, 100), or be classified as Hispano-Celtic dialect forms, not belonging to Celtiberian proper (2002, 101f), or are confined again to footnotes too short to give an explanation of the orthographical interpretation envisaged (cf. 2002, 101 n. 69 on **tamaniu**).

² For a short criticism s. VILLAR/JORDÁN 2001, 136f, WODTKO 2002, 288ff.

³ The misunderstandings of her interpretations by other scholars, lamented by DE BERNARDO STEMPEL (2002, 100 with n. 43), are doubtless due to this lack of reasoning, or discussion of individual examples. This kind of presentation gives an arbitrary and circular impression of the the arguments advanced, and has the taste of relying more on authoritative repetition than on concrete scholarly argumentation.

B. An outline of Celtiberian grammar

I. Phonology

§ 1 Introductory remarks

The sound system of Celtiberian is but inadequately represented in most of the indigenous inscriptions, since the Celtiberian semisyllabary is not always capable of representing consonant clusters; it does moreover not distinguish between voiced and voiceless stops. Phonological interpretations of Celtiberian spellings can receive support from etymological arguments establishing a link with other Celtic and Indo-European languages. There remain, however, gaps in our understanding of the historical phonology and of some synchronic variants.

For Proto-Indo-European the following sound system has been reconstructed (cf. MAYRHOFER 1986)⁴:

PIE SOUND SYSTEM

Short vowels	<i>*a</i>	<i>e</i>	<i>i</i>	<i>o</i>	<i>u</i>		
Long vowels	<i>*ā</i>	<i>ē</i>	<i>ī</i>	<i>ō</i>	<i>ū</i>		
Short diphthongs	<i>*ai</i>	<i>ei</i>	<i>oi</i>	<i>au</i>	<i>eu</i>	<i>ou</i>	
Long diphthongs	<i>(*āi?)</i>	<i>ēi</i>	<i>ōi</i>	<i>(āu?)</i>	<i>ēu</i>	<i>ōu</i>	
Sonants	<i>*m</i>	<i>n</i>	<i>r</i>	<i>l</i>	<i>ǰ</i>	<i>ɥ</i>	
Vowel allophones of sonants (syllabic sonants)	<i>*m̥</i>	<i>n̥</i>	<i>r̥</i>	<i>l̥</i>	<i>i</i>	<i>u</i>	
Stops	<i>*p</i>	<i>b</i>	<i>b^h</i>				
	<i>*t</i>	<i>d</i>	<i>d^h</i>				
	<i>*k̂</i>	<i>ĝ</i>	<i>ĝ^h</i>				
	<i>*k</i>	<i>g</i>	<i>g^h</i>				
	<i>*k^u</i>	<i>g^u</i>	<i>g^{uh}</i>				
Spirants	<i>*s</i> (with allophone <i>*z</i>), (<i>*š</i> , rare allophone of <i>*t</i>)						
Laryngeals	<i>*h₁</i>	<i>h₂</i>	<i>h₃</i>				

The coloring of neighboring **e > *a* by **h₂* and *> *o* by **h₃* occurred already in PIE, the majority of IE languages including Celtic also point to an early change **eh₁ > *ē*, **ah₂ > ā*, **oh₃ > ō* (or rather **aH*, **oH > ā*, *ō* with **H*: any laryngeal) and **H > a* between consonants. Between vowels laryngeals are lost, the resulting hiatus being usually resolved by contraction. Some other effects of laryngeals are of little importance to Celtiberian, note however the development **ǰH > lā* presumably seen in **slaniad** (below § 2).

For Celtiberian the following vowel system can be assumed:

CELTIBERIAN VOWEL SYSTEM

Vowels	<i>a</i>	<i>e</i>	<i>i</i>	<i>o</i>	<i>u</i>		
Diphthongs	<i>ai</i>	<i>ei</i>	<i>oi</i>	<i>ui</i>	<i>au</i>	<i>(eu)</i>	<i>ou</i>

⁴ For the general developments from PIE to Celtic s. SnG pp. 66ff, CSC pp. 37ff, though assumptions made here for Celtiberian will differ in some respects.

Neither Celtiberian nor Latin script show a distinction of long and short vowels. There is nothing to suggest as yet that *plene*-writings, such as **koorinau** (K.9.2), **aletueres** (K.14.1) etc., are ever used to mark vowel length. The diphthong *eu* is extremely rare and may be confined to foreign names in Celtiberian. Neither writing system distinguishes between *i* and *j* or *u* and *y*. Since geminates are not written it is possible that e.g. *i*, *u* can stand for *ij*, *yu* etc. *u* is also used to express the second component of a labiovelar *k^u* in Celtiberian script, where in the Latin alphabet *q(u)* would be used.

§ 2 Vowels and diphthongs

Celtiberian *a* < **h₂a* is seen e.g. in the personal name **arkanta** (K.1.3) /arganta/ probably connected with the word for ‘silver’ (OIr. *argat*, W *ariant* etc. < **h₂arg^hntom*). *a* represents **ā* (< **ah₂*) e.g. in inflectional endings of the *ā*-stems, e.g. NSg. **arekorata** (A.52). It may be the reflex of an IE laryngeal in **tatuđ** (K.1.1) < **dh₃-tōd* or **d^hh₁-tōd* (cf. OLat. *datōd*, Gr. *δότηω* resp. *θέτω*); it is the outcome of a syllabic nasal in **tekametinas** (K.1.1) < **de^km-et(o)-* (cf. PIE **de^km* ‘10’, Lat. *decem*, Gr. *δέκα* etc.).

Clear evidence for Celtiberian *a* < **ō* (as in all the other Celtic languages) is as yet lacking. VILLAR/JORDÁN 2001, 113f, tentatively envisage that **ā* < PIE **ah₂* appears as *-o-* in Celtiberian **stoteroi** (BB IV); the Celtic merger of **ā* and **ō* in non-final syllables might have passed through an intermediate stage like long [ɔ] ending up in *ā* in the other Celtic languages but in *o* (*ō*) in Celtiberian. As, however, other explanations seem possible for **stoteroi** (s. below § 38) the question remains open.

If the place name **slaniađ** (Abl.Sg., *tessera* ‘Turiel’ 3, s. VILLAR 1999, 533) is identical with OIr. *sláine* ‘health’ (also a river name), it shows the Celtic development of **IH* > *lā*.

§ 3 Celtiberian *e* preserved < PIE **e* is exemplified by e.g. **ue** (K.1.1) < **ue* ‘or’ (cf. Latin *ue* etc.), by **tekametinas** (s. above § 2) and a number of other instances.

The fate of **ē*, however, remains uncertain. The usual Celtic development to *ī* cannot yet be demonstrated (nor refuted) by any clear Celtiberian example. It is quite unlikely that forms in **-res**, or **teiuoreikis** (K.6.1), often adduced in this connection, are compounds with second member **(h₃)rēg-s* ‘king’ (as in G *-rix*, OIr. *rí* etc.), cf. below § 44. These cannot therefore support a (partial) preservation of **ē* in Celtiberian. On the other hand, proof for **ē* > *ī* is likewise difficult to find; perhaps the best example so far is the place name *Rixama* which might be derived from the word for ‘king’ just mentioned, but is only attested in a Latin source (Martialis), not in an indigenous context. (On **tidaunei** which might contain the preverb **dē-*, OIr. *dí-* etc. s. below § 46). *e* seems to interchange with *ei* on occasions, cf. the fem. adj. **arekoratika** (K.0.11) and the masc. **areikoratikos** (A.52), s. below § 29 on inflectional endings. In most cases an original diphthong **ei* (sometimes **ēi*) may be assumed.

§ 4 Celtiberian *i* from PIE **i* is seen in the NSg. *-is* and ASg. *-im* of *i*-stems. As in other Celtic languages it is also the result of the syllabic sonants **r̥* > *ri*, **l̥* > *li* before stops, cf. the compound place names **SEGOBRIS**, **sekobirikeđ** /segobrigeđ/ (A.89), **nertobis** /nertobrixs/ (A.50) with second member *-brig-* < **b^hr̥g^h* (cf. OIr. *brí* ‘hill’, GSg. *breg*). Examples for **l̥* are not so easy to find but the family name **litanokum** (K.1.3) may be

one, if it is derived from the adj. **p^hth₂-no-* ‘broad’ (cf. OIr. *lethan*, W *llydan*, G *Litana*).

i represents **j* in the forms of the relative pronoun **ios**, **iomui** etc. (s. below § 37) < **(H)ios*, cf. Scr. *yas*, Gr. *ὄς* etc. Examples like **sekobirikea** (K.0.3) and **odeum** (BB IV) indicate a development **-e_i-* or **-i-* > *-e-* before back vowels, but counter-examples are found in e.g. **sikeia**, **aunia** (both K.1.3).

There seem to be no good examples for *i* < **ī*, but it may be seen in the suffix *-ino-* of e.g. the personal name **terkinos** (K.1.3), and the NSg. ending *-i* of **launi** and names like **kari** (K.1.3) are likely to go back to *-ī* < **-ih₂* (for the apparent *n*-inflection of these forms see below §§ 32ff.).

§ 5 Celtiberian *o* < PIE **o* is seen in inflectional endings like NSg. *-os*, ASg. *-om* of the *o*-stems, cf. further the preverb **kom-**, **kon-** e.g. in the place name **konterbia** (A.75) ‘Contrebia’ and the pronominal stems **so-**, **io-** (below § 37).

PIE **ō* has become *ū* in final syllables in all the Celtic languages, cf. the frequent Celtiberian GPL. forms in *-um* from *o*-stems, the ending *-tud* < **-tōd* of the imperative and the NSg. *-u* < **-ō* of the masc. *n*-stems. The fate of **ō* in non-final syllables is unclear (cf. above § 2).

§ 6 PIE **u* is preserved as Celtiberian *u* in the personal names **medukenos**, **retukenos** < **med^hu-ĝenh₁os*, **(h₃)reĝ-tu-ĝenh₁os* (both K.1.1, cf. OIr. *Midgen*), examples for **ū* that do not come from **ō* are lacking. For *u* < PIE **u* cf. **ue** (K.1.1) < **ue* ‘or’. It represents the labial element in a labiovelar e.g. in **kue**, **QUE** < **k^ue* ‘and’ (cf. Lat. *que*, Gr. *τε*, Scr. *ca*, OIr. infixes *-ch-* etc.).

Celtiberian *u* has also been regarded as the outcome of PIE **m* under certain conditions, a process that may be described as lenition (cf. e.g. DE BERNARDO STEMPEL 2001, STIFTER 1997.) In particular *u* < **m* is assumed for the infinitives in *-unei* (s. below § 46), which would then have developed from **-mnei*. Moreover EICHNER’s (1990) comparison of the Celtiberian family name **kounesikum** (K.1.1) with “OIr. *comnessach*” has found rather wide acceptance among Celticists in spite of the fact that †*comnessach* does not exist and is simply due to an oversight of EICHNER’s. The comparison is therefore completely worthless, a fact not improved by postulating **comnessach* as a regular, but accidentally unattested derivative in productive *-ach*, because the base **comness*, on which the derivative would have to be built, is likewise inexistent in OIr. and Celtic, where *comness-* and other forms in *ness-* are confined to defective comparative paradigms such as OIr. *comnessam* ‘neighbor’ and comparative *nessa*, superlative *nessam* (to *ocus* ‘near’), W *nesaf* etc. (to *agos*) and G *neddamon*. Adjectival **comness* may of course be invented as the basis of the comparative forms, but has no more probative value than any other invention that might be compared to **kounesikum**. The strongest candidate for *m* > *u* at the moment would seem to be **SALUANTICA** in the Tesserà de la Mesa del Almendro (cf. REMESAL RODRÍGUEZ 1999, 595ff, s. also BALLESTER 1999, 218ff with a slightly different reasoning), if this is indeed the same place name as *Salmantica* (Salamanca), which is of course uncertain, since a similar name with a different suffix is thinkable. The group *-lm-* appears e.g. in the family name **kalmikum** (K.1.3).

§ 7 The diphthong *ai* is likely to represent **ai* and **āi*, but in spite of the relative frequency of Celtiberian *ai* clear etymologies are hard to find. At least the case endings in *-ai* of *ā*-stems can be traced to DSg. **-āi* < **-ah₂-ai*, LSg. **-ai* < **-ah₂-i* (cf. below § 27). PIE **ai* may occur in the family name **mailikum** (K.1.3), if this is to be connected with OIr. *maél*, W *moel* ‘bald’.

§ 8 The problem of *ei* interchanging with *e* has already been alluded to (above § 3). In other Celtic languages PIE **ei* has been monophthongized > **ē*; in Celtiberian however, it appears often preserved, particularly in root syllables. If there was a tendency towards monophthongization, it was perhaps not far advanced. A clear example of PIE **ei* is to be seen in **ueidos** (K.0.11) derived from the root **ueid-* ‘to see, look’ and probably meaning something like ‘witness’; cf. also the family name **teiuantikum** (K.1.3), ultimately derived from **deiyos* ‘god’ (OIr. *día*, Scr. *devá-* etc.). In inflectional endings the LSg. in *-ei* of *o*-stems goes back to **-ei*. Consonantal stems and *i*-stems show an ending *-ei* which seems to be dative or locative, e.g. in **tokoitei** (K.1.1), **kenei** (with NSg. **kenis**, both K.6.1). However, there are also case forms in *-e*, as in **GENTE** (K.11.1) with NSg. **kentis** /*gentis*/ (K.1.3), **STENIONTE** (K.11.1) from a stem in *-nt-* (cf. § 29). It seems, therefore, that *ei* at least in non-initial syllables was sometimes monophthongized.

§ 9 For Celtiberian *oi* < PIE **oi* cf. the pronominal NPl. ending *-oi* and the stem vocalism of the pronoun **soisum** (< **soisōm*, cf. Scr. *teṣām*, OCS *těxъ*, s. below § 38 on **stoteroi**). **ōi* has become *-ui* in final syllables as can be seen from the DSg. of *o*-stems (below § 25). In inlaut, as e.g. in **tuiniku-** (K.0.13) one may also reckon with *ui* for *-ui-*.

§ 10 *au* is quite frequent, but again clear etymologies are hard to find. Perhaps the verb **audeti** reflects PIE **(h₂)au-*. *eu* occurs only in **iteulases** (K.18.3) of uncertain reading, in the personal name **teudesi** (K.1.3), which may be of foreign origin, and in **odeum** (BB IV), where a secondary development from **-iu-* (< **-iō-*) has been considered (cf. VILLAR/JORDÁN 2001, 109f). **eu* seems to have regularly fallen together with **ou* in Celtiberian as in the rest of Celtic, which makes it difficult to decide on the original diphthong of forms like **kolounioku** /*klounioku*/ (A.67, place name) or **koloutios** /*kloutios*/ (K.1.3, personal name). The best evidence for **eu* > *ou* is seen in forms going back to **teutā* ‘people’ (OIr. *túath*, W, B *tud*), cf. the family name **toutinikum** (K.1.3) and perhaps **toutam**[(BB IV). There is no evidence for long *u*-diphthongs.

§ 11 Consonants

Celtiberian seems to have had the following consonantal phonemes

CELTIBERIAN CONSONANT SYSTEM

Voiceless stops	<i>k</i>	<i>k^u</i>	<i>t</i>	
Voiced stops	<i>b</i>	<i>g</i>	<i>g^u?</i>	see below on <i>ḍ</i>
Spirants			<i>s</i>	see below on <i>χ</i>
Semivowels	<i>ī</i>	<i>ū</i>		
Liquids	<i>r</i>	<i>l</i>		
Nasals	<i>m</i>	<i>n</i>		

§ 12 PIE **p* was lost between vowels and at the beginning of a word as is shown by **ro-** < **pro-* (cf. Gr. *πρό* etc.), **uer-** < **uper-* (cf. Gr. *ὑπέρ* etc). P occurs in only one word in Latin script, the unexplained **PANTR**[(K.3.12). In the Iberian script *p*, when necessary, is written by the archigraphemes here transcribed *b-*, as in the personal name **bistiros** (K.0.11), well attested as *Pistiros* in Latin inscriptions. The Celtiberian town called *Complutum* by the Romans shows up as **konbouto** in indigenous coins (A.74). Perhaps this is an indication of **-pl-* > *-bl-*, so that **konbouto** is to be read /komblouto/.

§ 13 As Celtic belongs to the Centum-branch of Indo-European, the guttural sounds **k* and **k̂*, **g*, and **ǵ* have merged into *k* and *g* respectively, cf. **tekamētinās** < **dekm̄-et(o)-* and **-kenos** < **-ǵenh₁-*. Moreover, Celtic shares in the merger of voiced and aspirated stops with the exception of the labiovelars, cf. **seko-** /sego-/ < **seǵh₂o-*, **-birik-** /brig/ < **-b_hǵh₂* in **sekobirikēd** (A.89) etc. The voiceless labiovelar PIE **kʷ* is clearly preserved in Celtiberian, cf. **kuē**, **QUE** ‘and’ (above § 1). The group **k̂u* regularly behaves like **kʷ* in Celtic, and the same is expected for Celtiberian, where it has often been assumed that words like **ekualakos** (A.63) and **EQUOISUI** (K.3.3) are derived from **h₁ek₂u₃os* ‘horse’.⁵

The voiced and voiced aspirate labiovelar are more difficult to trace in Celtiberian. **gʷ* > *b* is evident in the other Celtic languages and usually seen in Celtiberian **boustrom** (K.1.1) and **bouitos** (BB IV) < **gʷou-* ‘cow’, although the meaning cannot be ascertained from the context. Spellings like GU in Latin script appear in **GUANDOS** (K.3.13), probably a personal name, but without further etymology. The family name **kuēdōntikum** (K.1.3) has been compared with **gʷhed₂h₂* ‘ask, beseech’ (OIr. *guidid*, W *gweddi*) which would indicate **gʷh* > *gʷ*.

Loss of intervocalic *-g-* is to be postulated only for **tuater-** ‘daughter’ (< **d₂hugh₂ter-*, cf. G *duxtir*), while it is preserved in many other examples as e.g. **sekobirikēd** (s. above). There may be some specific condition, but this has not yet been confirmed.

§ 14 As an example for **b^h* > *b* /-brig-/ has already been mentioned (above § 13), PIE **b* can be seen in the place name **konterbia** (A.75) ‘Contrebia’ from PIE **treb-* ‘to dwell, inhabit’ (cf. OIr. *treb*, W *tref* ‘dwelling’).

§ 15 As VILLAR 1995 has shown, Celtic **d* comes up with two allophones in Celtiberian [d] and [d̥]. [d] appears in anlaut (written with archigraphemes transcribed as t- in the Iberian script), but [d̥] in auslaut, intervocalic position, and certain groups like *-nd-*, *-rd-*. Examples are **tekam-** (K.1.1) < **dekm̄-*, **tuater-** (K.1.3) < **d₂hugh₂ter-* on the one hand, **među-** < **med₂h₂u-*, **ueido-** (e.g. K.0.11) < **ueido-*, and the Abl.Sg. and imperative endings **-uđ**, **-tuđ** on the other (cf. §§ 25, 40 below).

For Celtiberian *đ* a number of other origins have been proposed, sometimes to the exclusion of Celtic **d* (< PIE **d* and **d^h*). In particular many scholars (including VILLAR

⁵ However, the Celtiberian personal name **uiroku** (K.1.3) cannot be used to demonstrate a development of **k̂uō* ‘dog’ → Celtic **kū*, even if it should contain a second element **-ku** < **k̂(u)ō*, since the inscription makes no use of geminate spellings. This is to say the only way to spell /-kūū/ in K.1.3 would have been exactly **-ku**.

1995, cf. also 1997, 908f; recently ISAAC 2002) derive \bar{d} < PIE $*s$ at least in some cases. \bar{d} < $*d̥j$ or $*j̥(j)$ has also been suggested, cf. DE BERNARDO STEMPEL 2001, 329, MCCONE 2001, 485f. Thus for adherents of these views, \bar{d} is of multiple origin and therefore in certain contexts ambiguous.

§ 16 s < PIE $*s$ is well attested in endings and lexical elements like **seko-** /sego-/ < $*seḡho-$. Intervocalic $*-s-$ appears preserved in the pronoun **soisum** (GPL., cf. below § 37).

§ 17 Examples for the semivowels have already been mentioned (above §§ 4, 6), cf. **ios** and **ue** respectively.

§ 18 In many etymologically obvious cases PIE nasals appear unchanged, cf. e.g. the negatives **ne-** < $*ne$ and **nekue** < $*nek^ue$ (both in K.1.1), **među-** < $*med^hu-$ and the ASg. ending $-m$ < $*-m$. It thus appears that m and n are generally preserved, though not always expressed in writing in the Celtiberian script, where nasals before stops may be suppressed, cf. e.g. the place name **sekotiād** (A.77) containing the same /segont-/ as the personal name **sekontios** (K.1.3). From this fact and from unexpected spellings like **kinbiria** (K.1.3, personal name, with $-nb-$ rather than assimilated $-mb-$), ESKA 2002 has concluded that Celtiberian nasals before stops show a tendency to become weakened to a nasalization of the preceding vowel. A similar point is made, independently, by PRÓSPER 2002, 216ff. Both authors stress, however, that nasals were not completely lost, judging by the development of e.g. the place name *Segontia*, **sekotiād** > mod. *Sigüenza*, still displaying $-n-$.

Single texts tend to use a consistent spelling with regard to the writing of nasals and other groups, cf. MLH V.1 p. XXV. The only probable exception seems to be K.0.7, where perhaps a fixed orthographic convention applies to a personal name. This should lead researches to handle etymological suggestions implying a breach of the ‘spelling rule’ within a single text with care. Of course this ‘rule’ of consistency cannot be proven, but could be disproven, should an inscription with obvious spelling variants turn up.

§ 19 r and l are likewise preserved, cf. e.g. **ro-** < $*pro-$, **ner-to-** (in the place name **ner-tobis** A.50) < $*ner-to-$ (OIr. *ner-t* ‘strength, power’, W *nerth*, G *Nerto-* in personal names); for l cf. the personal names **koloutios** /kloutios/ (K.1.3), **loukio** (K.18.2) which may be derived from PIE $*k̑ley-$ ‘hear’ and $*leuk-$ ‘shine’ respectively; cf. also the place name **letaisama** (A.68) from $*pleth_2-$ ‘spread’.

§ 20 The development of $*r̥$ and $*l̥$ > ri and li before stop has already been indicated above (§ 4). In other positions, e.g. before vowel or s , ar and al may be expected in accordance with the outcome in other Celtic languages, but clear examples are lacking. $*m̥$ and $*n̥$ developed into am and an (cf. above § 2), cf. **tekametinas** (K.1.1), **arkanta** (K.1.3) above § 2.

§ 21 Consonant clusters and combinatory sound changes

Evidence for the development of consonant clusters is complicated by the use of the semisyllabic script, but the following observations may be made: $*st$ is preserved in anlaut and inlaut, cf. the personal names **statulu** (K.1.3), **steniotes** (K.17.1), the family

name **austunikum** (K.1.3) and the verb **SISTAT** (K.3.3; from **stah₂-*, cf. Lat. *stāre*, OIr. *-sissedar* etc.). In contrast to other Celtic languages, Celtiberian shows no signs of a tendency to assimilate **st*-clusters. *st* may also be the result of PIE dental stop + **t*, but good examples are lacking. (A connection between the family name **austikum** < **aud-t(o)-* and the verb **audeti** is thinkable, but cannot be confirmed.)

A guttural or labial followed by *-s-* developed into Celtic *-χs-*. In Celtiberian script only *-s-* is written, in Latin script *-x-* is used, cf. **usama** (K.23.2), in Latin transmission *Uxama* (< **ups-*, cf. Gr. *ὕψ-ί* etc.), cf. also **es-** (z.B. K.1.1; cf. Lat. *ex-*, OIr. *ess-* etc.). However, while **nertobis** (A.50) may stand for /nertobriχs/, the spelling **SEGOBRIS** in the Latin alphabet seems to indicate that the group was in the process of becoming simplified.

-pt-* and **-kt-* fall together as *-χt-* in Celtic. It is probable that spellings like **retu- in Celtiberian, *rectu-* in Latin script both represent /reχtu-/ (< **(h₃)reġ-tu-*, cf. OIr. *recht*, W *reith*), where the spirant was left unexpressed in the Celtiberian script simply because no sign was found in the Iberian model that could be used. Examples for **-pt-* are lacking.

-sm-* in inlaut seems to have become assimilated to *-m(m)-* in the pronominal DSg. **iomui and **somui** (**iosmōi* etc., cf. § 37; differently SCHRIJVER 1997, 12ff, s. also VILLAR/JORDÁN 2001, 115). On possible **-pl-* > *-bl-* s. above § 12; there is no example for **-pr-*.

In auslaut **-n-* has apparently disappeared before **-s#* in the APl. ending **-us** < **-ons* of the *o*-stems with compensatory lengthening of **-o-* > *-ō-* > *-ū-*. It is true that examples depend on the syntactical interpretation and that *-u-* is probably of analogical origin in the DAbl.Pl. of *o*-stems in **-ubos** (s. below §§ 26f), but a parallel development is known from other Celtic languages and the APl., together with the GPl. *-um* < **-ōm*, may have triggered *-u-* in the DAbl.Pl. In inlaut, *-ns-* is preserved in the well attested family name **ensikum** (K.1.3) and at the morpheme boundary in **konskilitom** (K.1.1, cf. § 54).

The GSg. **abulos** < **abulnos* seems to show an assimilation **-ln-* > *-l(l)-*, s. § 33.

UORAMOS (K.3.7) beside **UERAMOS** (K.3.18) and perhaps **sugstunos** beside **sues** (both K.1.1) may indicate a tendency of *ue* to become *uo*, but for the first example analogical influence cannot be excluded (cf. OIr. *for* < **u(p)er*, after its opposite *fo* < **u(p)o*; **uō* < *upo* is as yet unattested in Celtiberian but this could be accidental); for the second the connection is not fully clear.

§ 22 The nature and position of the Celtiberian accent are unknown. The frequent lack of word division with the conjunctions **kue** and **ue** points, however, to enclisis, the negative **ne-** shows corresponding proclisis (cf. § 49f).

II. Morphology

§ 23 Morphology is the realm in which comparative linguistics has most to offer for the understanding of Celtiberian grammar. Many nominal and pronominal and some verbal endings and suffixes correspond formally and functionally to those of other IE languages.

§ 24 Nominal inflection

Nouns inflect according to several stem classes, the majority of which are easily compatible with stem classes in the sister languages. Cases established with certainty are: nominative, accusative, genitive, dative, ablative and locative; whether the instrumental and vocative were still distinguished as separate cases is unclear. The three genders, masc., fem. and neutr., are preserved as is evident from the adjectival endings *-os*, *-a* and *-om*. It may be assumed, though it cannot be definitely proven, that *o*-stems are masc. or neutr. and *ā*-stems are fem. Of the numbers singular and plural are found.

§ 25 The best attested paradigm is that of the *o*-stems. Masc. nouns show NSg. in *-os*, neuters in *-om*, which is also the masc. and neutr. ASg. ending. Among the certain ASg. forms are **boustom** and **koruinom** (both K.1.1), their gender, however, is unknown.

SINGULAR PARADIGM OF *o*-STEMS

Nom.	<i>-os</i> < * <i>-o-s</i>	(cf. Gr. -ος)	e.g. ueiđos (K.0.11)
Acc.	<i>-om</i> < * <i>-o-m</i>	(cf. Gr. -ον)	e.g. boustom (K.1.1)
Gen.	<i>-o</i> < ?		e.g. sarnikio (K.1.1)
Dat.	<i>-ui</i> < * <i>-ōi</i>	(cf. Gr. -οι)	e.g. ueiđui (K.6.1)
Abl.	<i>-uđ</i> < * <i>-ōd</i>	(cf. OLat. -ōd)	e.g. usamuđ (A.72)
Loc.	<i>-ei</i> < * <i>-ei</i>	(cf. Gr. dor. πει)	e.g. sarnikiei (K.1.1)

The origin of the GSg. ending *-o* is unclear, other Celtic languages use *-ī*, like Latin, which is lacking in Celtiberian. Earlier attempts to derive *-o* from the inherited Abl.Sg. ending **-ōd* must be given up not only because of **ō* > *u* in final syllables (above § 5), but also because the Abl. in **-ōd* is now known to be preserved in the Celtiberian Abl.Sg. ending *-uđ*.⁶

If there was an instrumental, its Sg. may be sought in words ending in *-u* (< **-oh₁*), cf. VILLAR 1993-95. However, other interpretations remain possible for such forms, e.g. NASg. of neuter *u*-stems, cf. § 31 below.

§ 26 Plural endings are on the whole less well attested. For the neuters a NAPI. in *-a* is expected, but examples are dependent on the syntactical interpretation.

PLURAL PARADIGM OF *o*-STEMS

Nom.	? <i>-us</i> < * <i>-ōs</i>	(cf. Scr. -ās) or ? <i>-oi</i> < * <i>-oi</i>	(see below)
Acc.	? <i>-us</i> < * <i>-ōs</i> < * <i>-ons</i>	(cf. Gr. -ους)	
Gen.	<i>-um</i> < * <i>-ōm</i>	(cf. Gr. -ων)	e.g. alidokum (K.0.2)
Dat.	<i>-ubos</i> < <i>-u-</i> + * <i>-b^hos</i>	(cf. Lat. -bus)	e.g. uetikubos (K.5.1)
Abl.	<i>-ubos</i> < <i>-u-</i> + * <i>-b^hos</i>	(cf. Lat. -bus)	e.g. nouantubos (K.1.1)
Loc.	?		

The NPI. of *o*-stems has not yet been identified with certainty. One may expect either *-us* < **-ōs* (cf. OIr. VPl. *firu*) or the pronominal ending *-oi* used in the nominal plural of nouns in other Celtic languages (cf. OIr. *fir^L*, W *beirdd* < **bardoi* etc.) as well as in e.g. Latin and Greek. Candidates for *-oi* are **alaboī** and **oboī** (both K.0.7) but the

⁶ Attempts at a historical explanation of the GSg. taking account of this situation are found in ESKA 1995, UNTERMANN 1995[2000], 137ff, and MCCONE 2001, 489 (with references).

context is unclear and the forms might be taken as LSg. with the ablauting ending *-oi* besides *-ei* (cf. ablauting forms of the cons. stem GSg. ending below § 33). The alternative ending *-us* in words like **matus** (K.1.1) may on the other hand represent rather the APl. of *o*-stems (cf. above § 21) or perhaps a *u*-stem ending (cf. below § 31). The case for NPl. m. *-oi* in *o*-stems has now been somewhat strengthened by the appearance of **stoterōi** in BB IV. Yet the context is fragmentary and if the form can be explained as derived from a pronominal stem (s. below § 38) it may show a pronominal ending that need not necessarily have been carried over to the nouns.

The GPI. in *-um* is amply attested due to its use in family names. (Earlier assumptions of GPI. forms in *-om* beside *-um* have been successfully refuted by VILLAR 1995.)

DPl. and Abl.Pl. have been identical in form since PIE times and are therefore only to be distinguished on syntactic grounds. A certain example for the Abl.Pl. can be seen in **nouantubos**, occupying a parallel position to Abl.Sg. forms like **lubinaḏ**, **akainaḏ** in K.1.1, B.⁷ The ending *-bos* finds its closest equivalent in Lepontic (and furthermore in Latin and Venetic), while G shows *-bo*, e.g. in DPl. $\mu\alpha\tau\rho\epsilon\beta\omicron$ ‘to the Mothers’.

Cf. also OIr. DPl. in *-aib*, e.g. *feraiḃ*, non-leniting, therefore < *(-*o*)-*b^his* (with the instrumental plural ending **-b^his*) vs. G *-bi* as in *mesamobi* (RIG L-66). As indicated above (§ 24f.) Celtiberian has not yet come up with a clearly identifiable instrumental.

The vowel *-u-* rather than *-o-* of the *o*-stems before the ending *-bos* is probably to be explained analogically after the GPI. *-um* and perhaps APl. *-us*, as it cannot be due to mere sound change **o* > *u* /- *b* (contr. **oboi**, **sekobiriked**).

§ 27 *ā*-stems

SINGULAR PARADIGM OF *ā*-STEMS

Nom.	<i>-a</i> < * <i>-ā</i> (< * <i>-ah₂</i>) (cf. Gr. <i>-ᾱ</i> , <i>-ῆ</i>)	e.g. arekorata (A.52)
Acc.	<i>-am</i> < * <i>-ām</i> (< * <i>-ah₂-m</i>) (cf. Gr. <i>-ᾶν</i> , <i>-ῆν</i>)	e.g. ailam (K.1.1)
Gen.	<i>-as</i> < * <i>-ās</i> (< * <i>-ah₂-as</i>) (cf. Gr. <i>-ᾶς</i> , <i>-ῆς</i>)	e.g. ardnas ? (K.1.1)
Dat.	<i>-ai</i> < * <i>-āi</i> (< * <i>-ah₂-ai</i>) (cf. Gr. <i>-ᾶ</i> , <i>-ῆ</i>)	e.g. ailai ? (K.0.14)
Abl.	<i>-aḏ</i> (anal. replacement of * <i>-ās</i> , cf. OLat. <i>-ād</i>)	e.g. arekorataḏ (A.52)
Loc.	<i>-ai</i> < * <i>-ai</i> (< * <i>-ah₂-i</i>) (cf. OLat. <i>-ai</i>)	e.g. tamai ? (K.1.1)

As mentioned above (§ 1) it is not clear whether *ā* and *ā*, *āi* and *āi* were still distinguished in Celtiberian, but there are at least no arguments to the contrary. Most case forms of the *ā*-stems retain the inherited endings, only the Abl.Sg. has been differentiated from the GSg. in *-as* by analogically introducing *-ḏ* from the *o*-stems. This analogy, which finds its corollary in Latin and Late Avestan, took place in all the nominal stem classes in Celtiberian. DSg. and Abl.Sg. are identical at least in writing. The ending *-as* of the GSg. would be the expected outcome of the NPl. and APl. as well. Because of this ambiguity, examples are given with question marks.

Celtiberian shows no trace of the influence of other stem classes on the *ā*-stems, that can be seen in OIr. (GSg. *túaithe* etc.) and G (e.g. ASg. *seuerim* to NSg. *seuera*, RIG L-98)

⁷ A number of scholars have preferred to read *nouantutas* which would be enigmatic in the context. However, the crossbar distinguishing *bo* from *ta* is definitely visible on the bronze, though not quite horizontal and perhaps not as deeply scratched as the other *hastae* of the sign.

§ 28 Plural

PLURAL PARADIGM OF *ā*-STEMS

Nom.	-as ? < * <i>-ās</i> (< * <i>-ah₂-as</i>) (cf. Scr. <i>-ās</i>)	e.g. listas , titas ? (both K.1.1)
Acc.	-as ? < * <i>-ās</i> (< * <i>-ah₂-ns</i>) (cf. Lat. <i>-ās</i> etc.)	e.g. listas , titas ?
Gen.	?	
Dat.	?	
Abl.	?	
Loc.	?	

As with the *o*-stems plural forms are more sparsely attested and in the N and A only identifiable syntactically. **listas** and **titas** could be GSg., NPl. or APl. or **listas** could be e.g. GSg. and **titas** APl. The ending of the GPI. has sometimes been seen in *-aum* of **saum** and **otanaum** (both K.1.1), but this cannot be proven. Both might be GPI. of *o*-stems **sau-um* etc. For the DAbl.Pl. an ending *-abos* (< **-ah₂-b^hos*) would be predicted, but is unattested as yet.

§ 29 *i*-stems are not very frequently found. Only a few case forms can be identified with certainty; among them are no neuters.

SINGULAR PARADIGM OF *i*-STEMS

Nom.	<i>-is</i> < * <i>-i-s</i> (cf. Gr. <i>-ις</i>)	e.g. kentis (K.1.3)
Acc.	<i>-im</i> < * <i>-i-m</i> (cf. Scr. <i>-im</i>)	e.g. aratim (K.1.1)
Gen.	?	
Dat.	<i>-ei</i> , <i>-E</i> < ? (cf. Lat. <i>-ī</i> , Gr. <i>-ει</i> ?)	e.g. GENTE (K.11.1)
Abl.	<i>-iđ</i> (analogically, s. above § 27)	e.g. bilbilid (A.73)
Loc.	<i>-ei</i> ? < ?	

There are no clear examples for the GSg. **kete**[(K.18.2) could be restored to */*genteis*/, but this remains uncertain. The DSg. (to NSg. **kentis** /*gentis*/) is seen in **GENTE**, where *-E* may have developed < **-ei* (cf. above §§ 3, 8). If **kenei** is DSg. of **kenis** (both K.6.1), it shows *-ei* preserved. **ENIOROSEI** (K.3.3) must be DSg. since it is connected by **-QUE** with the *o*-stem DSg. **EQUQISUI**, but for **kenei** a LSg. cannot be excluded; the stem formation of **ENIOROSEI** (*i*-stem or consonantal stem?) has not been ascertained beyond doubt.

A reflex of **-ei* as DSg. of *i*-stems would account for the endings attested in other languages as well. It has itself probably been simplified from **-eī-ei*. For the LSg. original **-ēi* might be considered. The Celtiberian forms do not allow any conclusions so far. It is to be kept in mind that *-ei* is also the ending of the LSg. of *o*-stems and the DSg. of cons. stems (s. below § 33). Since the phonological development of **ei* and **ēi* in Celtiberian is not entirely clear, and case syncretism cannot be ruled out, the forms remain ambiguous.

§ 30 The only probable plural form of an *i*-stem so far seems to be **kentisum** (K.1.3), the GPI. of **kentis**. The ending *-sum* < **-sōm* would then have been taken over from the pronominal inflection (cf. **soisum** § 37, also pronominal **-sōm* in Lat. *-ōrum*, Gr. *-άων*).

§ 31 *u*-stems are sparsely attested as well. The best example would seem to be **LUGUEI** (K.3.3), if it is correctly taken as DSg. of the Celtic divine name **Lugus* (s. § 62,7). The other instance in K.3.3 is perhaps to be read **LUGUES**, and would then be GSg. of the same word. The endings **-UEI** and **-UES** can be immediately trace back to PIE **-u-ei* and **-u-es*, but may also be graphic for *-uuei* and *-uues*, and an analogical creation on the model of the consonant stems cannot be excluded. If *u*-stems behave like consonantal *u*-stems, their Abl.Sg. may be seen in **oskued** (K.1.1) and **karaued** (A.66). On the other hand, **oskued** may be a true consonant stem /osk^u-eđ/ or even a verb (s. below § 45). Definite conclusions cannot be drawn.

matu (K.1.1) mentioned in connection with the *o*-stems above (§ 26) has often been interpreted as *u*-stem.

More specifically it has been taken as an adjective related to G *matu* and perhaps W *mad*, ‘good’ (cf. W *madws* ‘right time’), both apparently formed with a suffix **-tu-* as opposed to OIr. *maith* ‘good’ with suffix **-ti-*. Why the Celtic adjective for ‘good’ should appear in two different forms, both, according to the standard etymology, with prominent verbal abstract suffixes **-ti-* and **-tu-* respectively, while evidence for formations like *mata* (possibly showing the well known adjectival suffix **-to-*) is confined to Continental Celtic onomastic material, is a mystery yet to be solved. DE BERNARDO STEMPEL’s (e.g. 2003, 33) suggestion that **mati-* means ‘good’, but **matu-* (in Celtiberian and Gaulish) means ~ ‘favorable (günstig)’ cannot, of course, be confirmed by the Continental Celtic evidence, which does not allow to discern this kind of distinctions, and, moreover, does not answer the question of the use of two abstract suffixes in one adjective. Cf. also the discussion in IRSLINGER 2002, 150f, 207f.

For the Abl.Sg. **-uđ** would be a feasible alternative to **-ued**, the D Abl.Pl. should end in **-ubos**, thus coalescing at least graphically with the *o*-stems forms. Words like **auku** (K.1.1 after the neuter pronoun **sod**) and **loutu** (K.0.7 next to **arkatobedom**) could be neuter *u*-stems but this remains uncertain.

§ 32 Stems in *-ī* (< **-ih₂*) or *-ū* are not securely established, but fem. *ī*-stems are the most likely interpretation of NSg. forms in *-i* like **launi** (K.1.3, cf. § 62,2). Oblique cases should end in e.g. GSg. *-ias*, ASg. *-im*, but forms with these endings might as well belong to a NSg. in *-ia* or *-is* respectively. No paradigm can be set up. On GSg. in *-inos* s. below § 33.

§ 33 Consonant stems

Of consonantal stem classes masc. *n*-stems are amply attested since they are current in personal names. There are moreover some stems in stops and at least one in *-r*. The only clear evidence for a *s*-stem so far is the Gr. personal name Διογενής, attested in K.1.3 as **tiokenes** with a GSg. **tiokenesos** adapted to the Celtiberian consonantal inflection. Good examples for neuters are lacking.

SINGULAR PARADIGM OF CONSONANTAL STEMS

Nom.	<i>-s, ∅</i> < * <i>-s, ∅</i>	e.g. nertobis (A.50), letontu (e.g. K.1.1)
Acc.	<i>-am ?</i> < * <i>-m</i>	(s. below)
Gen.	<i>-os, -es</i> < * <i>-os, -es</i>	e.g. tokoitos (K.1.1), steniotes (K.17.1)
Dat.	<i>-ei ?</i> , <i>-E</i> < * <i>-ei</i>	e.g. STENIONTE (K.11.1)
Abl.	<i>-eđ</i> (analogically, s. above § 27)	e.g. sekobiriked (A.89)
Loc.	<i>-ei ?</i>	e.g. tokoitei ? (K.1.1)

Stems in stops, attested less frequently, show the sigmatic NSg. ending. The asigmatic NSg. with the lengthened grade of the suffix is well documented with *n*-stems like **letontu** (cf. Lat. *n*-stems like *homō* etc.; a thorough discussion of Celtiberian *n*-stems is found in STÜBER 1998). The lengthened grade has been generalized throughout the paradigm in most instances, thus e.g. GSg. **letont-un-os** (e.g. K.1.1), but an exception is the type **abulu**, GSg. **abulos** with ablauting suffix *-u(n)/-n-*. The zero grade *-n-* of oblique cases appears assimilated to preceding *-l-*, thus **abulos** < **abul-n-os*, cf. § 21. The same ablaut seems to be displayed by **oilauunu**, Abl.Sg. **oilauuned** (A.56) < **oilauun-u(n)*, **oilauun-n-eđ*.

In addition to masc. *n*-stems in *-u*, *-unos* there was possibly a fem. type in *-i*, *-inos*; at least personal names like NSg. **kari**, **raieni** on the one hand, and GSg. like **atinos**, **lukinos** (all in K.1.3) on the other, could be interpreted in that way. Attestations are, however, few, and the GSg. forms are confined to personal names. A number of historical explanations are thinkable: in the onomastic field the type may have arisen by simple analogical remodeling of fem. **-ī/-īā*-stems (< **-īh₂-īah₂s*, cf. § 32) after the frequent masc. names in *-u*, *-unos*. If **ē* became *ī* in Celtiberian (as is to be expected, cf. § 3 above), one may imagine influence from a *n*-stem type in **-ē(n)*, which could have generalized the lengthened grade of the NSg. again by analogy with masc. **-ō(n)* (> *-u*, *-unos*). A very important suggestion concerning the origin of the type has been made by JORDÁN 2001b, who considers the forms in *-inos* to be GSg. of nominatives in *-iu*. A place name like **tamaniu** (A.79) would then have had a GSg. **tamaninos*, the NSg. of **lukinos** would be **lukiu*. This inflection could be ultimately based on secondary *n*-stems derived from stems in **-iH-*, with ablauting forms like NSg. **-iHō(n)*, GSg. *-iHn-os* etc. (cf. also the Lat. type *legiō* with generalized lengthened grade of the suffix in *legiōnis* etc. as opposed to Oscan DSg. *leginei* etc.). As reliable paradigmatic connections between Celtiberian words in *-iu* on the one hand, and *-inos* on the other are as yet lacking, JORDÁN's hypothesis cannot be regarded as definitely proven, but it is surely the most attractive explanation to date.

For the masc. and fem. ASg. of consonantal stems the expected ending would be *-am*, identical at least graphically with *-am* of the *ā*-stems (above § 27). Conclusive evidence is lacking, as **tirikantam** (K.1.1), which must be a fem. ASg. agreeing with the following adj. **berkunetakam**, might be a stem in *-ā* rather than *-nt-*, for which fem. **-ntī* would be appropriate (well attested in other Celtic languages, cf. below § 47). However, if **tirikantōs** is to be read in BB IV, this would point either to an adjectival inflection *tirikanto/ā-* or to a consonantal paradigm *tirikant-* with GSg. **tirikantōs** and ASg. **tirikantam** (< **-m̄*) after all (cf. VILLAR/JORDÁN 2001, 104f; a *nt*-stem had already been suggested by ESKA 1996).

The GSg. usually ends in *-os*, *-es* being of rather sporadic appearance. For the DSg. *-ei* would be expected, from which attested *-E* may have been monophthongized (cf. §§ 3, 8). **tokoitei** in K.1.1, A-10, can be DSg. or LSg., but a LSg. is probable in A-4 where it is followed by the postposition **eni**. In the LSg., however, *-ei* would have to be analogical, replacing inherited **-i* (cf. also § 29). Petrified DSg. forms in *-ei* may be seen in the infinitives in *-unei* (s. below § 46). The Abl.Sg. has, again, been remodeled in analogy with the *o*-stems.

§ 34 Plural

Only the NPl. of a fem. consonant stem is attested in **tuateres** 'daughters' (K.1.3), displaying the inherited ending *-es* < **-es* (cf. Gr. *-ες* etc.).

§ 35 The classification of a number of forms remains uncertain, phonological or graphical identity of endings has to be taken into account. This includes the classification of words as nouns or verbs, which is difficult in particular for words ending in *-eđ* or *-res*. They may be case forms of consonant stems, and have been interpreted in that way, cf. e.g. **tekeđ** (K.6.1), **kombalked** (K.1.1) on the one hand, and **audares** (K.0.14), **kombalkores** (K.1.1) on the other; they may, however, also be part of the verbal system, though their exact paradigmatical integration remains open to debate (cf. below § 44).

For the words ending in *-res* it has already been stressed (above § 3) that there is nothing speaking in favor of the traditional assumption of regarding them as compounds with **(h₃)rēg-s* ‘king’. Such compounds are very frequent in G personal names, but completely lacking in Celtiberian onomastics, in spite of the ample attestation of personal names in indigenous and Latin inscriptions. None of the words in *-res* occurs in a Celtiberian name formula, and compounding in general plays a very minor role in Celtiberian personal names, even in the higher classes of society, as is clear e.g. from the names in K.1.1 and the Tabula Contrebiensis. These observations, which pertain also to **teiuoreikis** (K.6.1), give room to alternative interpretations of forms ending in *-res*, on which see below § 44.

§ 36 Mysteriously structured forms, not yet classifiable, are moreover **tikerdebođ** (K.6.1), **iteulases** or **irulases** (K.18.3), **uameiste** (K.0.14) and **silabur** (K.1.1). The latter is usually taken as a loanword ‘silver’ but its function besides inherited **argant-* (in the personal name **arkanta** K.1.3 and probably in **arkatobedom** K.0.7) remains unclear.

§ 37 Pronouns

A number of pronominal forms can be identified clearly as continuing PIE pronominal stems. The stem *so-* is found in anaphorical and / or demonstrative use. It has been extended to oblique cases like DSg. **somui** and to the neutr. NASg. **sođ**, to the exclusion of the oblique stem in *to-* (cf. Scr. *tad*, DSg. *tasmai*, Gr. *ὁ, τό* etc.) as is the case in other Celtic languages (but see below § 38 for traces of **to-*). The relative pronoun **iōs*, **iāh₂*, **iōd* (or perhaps **Hios* etc., cf. Scr. *yas*, *yā*, *yad*, Gr. *ὄς, ἦ, ὄ*) is also well attested. The following paradigms can be set up:

PARADIGM OF PRONOMINAL STEMS: SG. MASC.

Nom.	ios, so ?	< <i>*iōs, *so</i>	(cf. Scr. <i>yas, sa</i> , Gr. <i>ὄς, ὁ</i>)
Acc.	iom	< <i>*iōm</i>	(cf. Scr. <i>yam</i> , Gr. <i>ὄν</i>)
Gen.	so ?		
Dat.	iomui, somui	< <i>*iōsmōi, (*tosmōi)</i>	(cf. Scr. <i>yasmai, tasmai</i>)
Abl.			
Loc.	somei	< <i>*sosm-</i> with nominal ending <i>*-ei</i>	

NASg. neutr. **sođ** ← **tod* (cf. Scr. *tad*, Gr. *τό*)

FEM.

Nom. sa, ia ?	< * <i>sah₂, jah₂</i>	(cf. Scr. <i>sā, yā</i> , Gr. ἦ, ῆ)
Acc.		(s. below on stam)
Gen. ias ?	< * <i>jah₂-(a)s</i> with nominal ending ? s. below	

PLURAL

NA. neutr. ia ?	< * <i>jah₂</i>	(cf. Scr. <i>yā</i> , Gr. ᾶ)
NA. fem. ias ?	< * <i>jah₂-as, -ns</i>	(cf. Scr. <i>yās</i>)
Gen. masc./neutr. soisum ← * <i>toisōm</i>		(cf. Scr. <i>teṣām</i> , OCS <i>těxъ</i>)

The DLSg. **iomui, somui, somei** (all from K.1.1) may show *-m-* < **-sm-* (cf. above § 21). The neuter NAPI. of the relative pronoun is probably attested in **ia** (K.1.3H), but a NSg. f. cannot be excluded. **so** and **ias** are likewise ambiguous. **so** (K.6.1) can be the inherited asigmatic NSg. **so* but may also be a GSg. with the Celtiberian nominal ending of the *o*-stems (cf. above § 25). **ias** (K.1.1) can be the fem. NAPI. but perhaps also the GSg. with nominal ending (cf. above § 28). It has often been assumed that the ASg. **iom** can have the function of a particle or conjunction developed from its pronominal use. **ios** and **iom** are attested in K.1.1 and now reoccur in BB IV.

The only clear plural form would seem to be GPI. **soisum** (K.1.3H) exactly matching the reconstructed **toisōm* if one allows for the generalization of **so-*.

§ 38 The fem. ASg. of a pronoun is attested in **stam** (K.6.1), where **stam kortikam** seems to refer back to **kortika** in the preceding text. Compared with the syntagm **sa kortika** (also in K.6.1) **stam** seems to belong to another pronominal stem that has perhaps contaminated the anlaut of **so-* and **to-*. A typological parallel may be seen in the Old Prussian pronominal *stas* ‘the, this’. If, then, a pronominal stem **sto-/sta-* existed in Celtiberian in addition to **so, sa**, it seems likely that **stoteroi** in BB IV is a derivative in **-tero-* from this stem, as suggested by JORDÁN (in VILLAR/JORDÁN 2001, 114 n. 48). The suffix **-tero-*, forming (among other things) contrastive pronominals from already pronominal stems, can be seen in e.g. Lat. *alter* ‘the other (of two)’, Gr. *πότερος* ‘who (of two)’, Scr. *yatara-* ‘id. (relat.)’ and OIr. *cechtar* ‘each, both, either’, *nechtar* ‘neither’ etc. **stoteroi**, conceivably beginning a new sentence after a 3Pl. verb in *-onti*, might then perhaps mean something like ‘those (others)’ (as contrasted with ‘these ones’), but the context is too fragmentary to allow confirmation.

Apart from possibly contaminated *sto/ā-*, reflexes of **to-* are difficult to trace in Celtiberian as in the other Celtic languages. Possible candidates are **to[u]ertaunei** in K.1.1 and **TOLUGUES** in K.3.3, which have also been interpreted as preverb, preposition or sentence connective; by isolation of **tas** in the sequence **atibion taskue** (BB IV) the case for pronominal *to/tā* is obviously considerably strengthened (cf. VILLAR/JORDÁN 2001, 114ff), Celtiberian (and possibly Common Celtic) would then show the splitting of **so* and **to* into two complete paradigms rather than simple analogical replacement of *t*-anlaut by *s-*; needless to say, for **to[u]ertaunei** and **TOLUGUES** other options still remain possible even in this new perspective.

Some other words have been taken as pronominals, but their function is less clear. **iste** (K.1.1) may alternatively be a conjunction, **QUEQUI** (K.3.12) is quite enigmatic, **stena, saum, ođas** and **ođias** (all in K.1.1) are better interpreted as nouns (resp. adjectives). To the latter **ođeum** in BB IV may be related in a manner not yet fully

understood (cf. VILLAR/JORDÁN 2001, 109f). **oskued** (K.1.1) may likewise be a nominal or even verbal form, **kuekuetikui** (K.0.14) shows an adjectival suffix and may be derived from a nominal stem **kueku-eto-* or the like.

§ 39 Numerals

The best example of a numeral formation is the derivative **tekametinas** (K.1.1) from the ordinal ‘tenth’, already adduced several times above. The base is seen in **tekam etam** (ASg., also K.1.1) with an apparently faulty word division (or hypercorrect suffix division?). The formation, of course, corresponds exactly to G *decameto-*, OIr. *dechmad*, W *degfed* etc. < **dek̑m-eto-* (cf. above § 2). The numerals ‘3’ and ‘6’ have been seen in **tiris** and **sues** respectively, **kantom** has been interpreted as ‘100’ (all K.1.1). These forms would then go back to acc. **tri-ns* (> /trīs/ **tiris**), **sueks* and **k̑mtom*, cf. OIr. *tri*, *sé*, *cét*, W *tri*, *chwech*, *cant* etc.

Numerals may also occur in compounds and derivatives, particularly in the onomastic material. Thus **tirikantam** (K.1.1) and the family name **tirikantanko** (K.1.3) may contain /tri-/ ‘3’ (cf. below § 53); the ordinal ‘third’ may be the base of names like *Tritallicum*, attested only in Latin inscriptions so far. Their relation to forms like **tirtu** (K.1.3) corresponding to *Tirtaliq.* etc. in Latin inscriptions has not yet been satisfactorily explained. While derivatives like *Tritallicum* suggest a base **trito-* comparable to the G personal name *Tritos*, the place name **Tritiom* underlying the adjective **titiakos** (A.58) points to an ordinal formation **tritio-* comparable to W *trydydd*.

Numerals have moreover been sought in forms like **tuinikukuei** (K.0.13), where *tui-* is suggestive of **dui-* ‘2’, and in the names **nouantubos** and **nouantikum**, which have been connected with ‘9’, but these are less certain. The ordinal ‘ninth’ in Celtic does not seem to be **noyan-to-* (with a suffix like *trito-* above) but rather something like G *nameto-*, OIr. *nómad*, W *nawfed* etc., although the existence of Celtic variant forms like *trito-* / *tritio-*, G *δεκαῖντεμ* / *decameto-*, G *suexos* vs. OIr. *seissed* etc. calls for caution against overinterpreting the evidential power of Celtic ordinal formations. Alternatively, however, *nouant-* may perhaps be explained as a participial formation, e.g. from a denominative to **neuos* ‘new’ (cf. Lat. *nouāre*, Hitt. *newahhmi* ‘make new’ < **neuah₂*, but **neuiō* ‘new’ elsewhere in Celtic), or from **neuH-* ‘shout’ (LIV2 456f, where OIr. *nó(a)id* ‘makes known, spreads the fame of, celebrates’ ~ Scr. *návate* points to **H = *h₁* by the variant palatal and non-palatal auslaut which then could simply reflect the ablaut of the thematic vowel in **neuh₁-e/o-*). In the latter case *nouant-* may be a *nt*-participle of the root present to **neuH-*, but possibly also of a denominative to a noun comparable to the OIr. adjective *nó* ‘famous, excellent’. Formally comparable are the British tribal names *Nouantae* and *Trinouantes* (where the function of *tri-* remains unclear).

Names in *tur-* are widespread in the Iberian peninsula, including the non-IE speaking areas, but rather rare elsewhere in Celtic. There is nothing to indicate that a Celtiberian personal name like **TUROS** (e.g. K.3.9) is derived from the numeral **k^htur-* ‘4’.

§ 40 The verbal system

The Celtiberian verbal system is less well understood than the nominal and pronominal paradigms. A number of forms can be determined with some certainty thanks to their morphological compatibility with forms attested in other IE languages, but in other cases the classification remains doubtful, and a complete overview of verbal categories

cannot yet be given. Only the third person singular and plural of verbs can be identified, as is common in languages of fragmentary attestation.

COMEIMU (K.3.3) and **rudimud** (K.1.1) have often been taken as 1Pl. verbal forms, but the endings *-mu* and *-mud* rather than expected **-mosi* or **-mos* (**-mes*) remain unexplained.

Verbs show the primary active ending 3Sg. *-ti*, 3Pl. *-nti* (cf. Scr. *-ti*, *-nti*, Gr. dor. $-\tau\iota$, $-\nu\tau\iota$ etc.), the imperative ending is *-tud* < **-tōd* (cf. OLat. *-tōd*, Scr. *-tād* etc.). The majority of examples come from K.1.1, thus **ambitseti**, **audeti**, **kabideti**, **robiseti**, **asekati**, **uerdoniti** and perhaps **kuati**, 3Pl. **bionti**, **didonti**, Impv. **bidetud**, **tatud** and possibly others like **ojsatud**, **tinbitud** and **usabitud** which are ambiguous as *-tud* may also be Abl.Sg. of a noun in *-to-* (cf. § 25).

To these are probably to be added 3Pl. **toruonti** and perhaps **aranti** and Impv. **tidatud** from BB IV, if these are the correct readings (cf. VILLAR/JORDAN 2001, 122ff, 126 where the possibility that **aranti** is a noun is also discussed).

§ 41 Formations with *-e-* or *-o-* before the ending must be thematic. Whether *-e-* can also represent suffixes like **-eh₁-* or **-e₂je-* is unclear. **-e₂je-* is commonly taken as the suffix of **uerdoniti**, where it would have developed to *-ī-*. Thematic formations occur in the indicative, the imperative (**bidetud**) and in the subjunctive of athematic verbs. The latter has in particular been envisaged as the origin of verbs in *-se-*. A stem vowel *-a-* as in **asekati** may point to a denominative (cf. on **nouant-** above § 39); this particular form has often been explained as *ā*-subjunctive, however, as Prof. H. RIX pointed out to me (p.c.), the root **sekH-* ‘to cut’, with which **asekati** has been connected, ends in a laryngeal, which might be responsible for the stem in *-a-*. **asekati** could then be a ‘strong *a*-verb’ (like OIr. *caraid*, cf. MCCONE 1991, 110f). If **H* was **h₂* it may alternatively be thematic with *-a-* < **-h₂a-* (< **-h₂e-* etc.). Root formations are seen in **tatud** and perhaps in **kuati** and **ojsatud** (if *oi-* can be taken as a preverb). **didonti** has a reduplicated stem most closely resembling Gr. dor. $\delta\acute{\iota}\delta\omicron\nu\tau\iota$, though *-o-* may be a secondary thematization in Celtiberian.

§ 42 The system of tenses and / or aspects has not yet been established. Of the moods, the imperative is fairly clear with its ending *-tud*. Subjunctives have been assumed for forms in *-se-* like **ambitseti**, **robiseti**, which have however also been interpreted as sigmatic preterits or unreduplicated futures with reference to *s*-subjunctives, preterits and futures in Insular Celtic languages. The exact function of the Celtiberian forms, however, is difficult to determine.

SISTAT (K.3.3) is the only clear verbal form in Latin script. The ending *-T* can be explained most straightforwardly as the secondary ending **-t* of an imperfect (without an augment). An alternative hypothesis would be, that **SISTAT** has lost auslauting *-i* in *-ti*, the loss being a rather late development within Celtiberian as opposed to earlier preservation of *-i* in forms like **audeti** etc. above. The suggestion that *-(n)ti* in Celtiberian script contains a mute vowel, used only to write the secondary ending **-(n)t* in the semisyllabary after an early loss of *-i#*, has nothing to recommend itself. *-i#* was not simply lost as is clear from **eni** (s. below § 51) and Celtiberians might have resorted to other means of writing *-t#*, rather than using what accidentally looks exactly like the inherited primary ending (cf. below § 45). Further confirmation of the primary status of *-(n)ti* may come from **atibion** BB IV, which, if the reading is correct, may display a secondary 3Pl. ending **-n(t)* in **-bion**, as compared with the primary ending in **bionti**

(K.1.1). As indicated above, BB IV also contains forms in *-nti* like]**toruonti**, which exclude a diachronic development *-nti* > *-n* in this text (cf. the discussion by VILLAR/JORDÁN 120ff, who point out that *-n* may be graphic for /-nt/).

§ 43 While all the verbs mentioned so far show active endings, there are others, that suggest middle or passive voice. If the final sign of **nebintor** (K.1.1) is really *-r*, an interpretation as negative **ne-** + verbal form with *r*-ending imposes itself, and the most likely analysis would be the identification of a verbal stem **-bi-** followed by a 3Pl. ending *-ntor*, rather than separating 3Sg. *-tor* or *-or*. Celtiberian, however (like OIr. in imperfects like *-bered* etc.), also comes up with endings, that look like inherited secondary middle endings in *-(n)to*, notably **audanto** (K.1.3H), probably **esianto** (K.0.14) and perhaps **neito** (K.1.1). All of these could also be GSg. of *o*-stem nouns, but this is not very likely, at least in the case of **audanto**.

§ 44 **audanto** should belong to the same paradigm as **audeti**. Another member of this paradigm seems to be **audares** (K.0.14). **esianto** is linked by **nekue** ‘nor’ to **esoderes** (K.0.14), and if one of these is a verb, so must be the other. These forms, together with **kombalkores** (K.1.1), point to a verbal ending *-res* in Celtiberian, that can be attached to stems in *-a-*, *-e-* and *-o-*. If *-o-*, as seems likely, is the thematic vowel, the nature of *-e-* in **esoderes** is open to question. The ending *-res* may also be present in **tunares** (K.0.14) and **tures** (K.0.7), which are more enigmatic.

The etymological background of *-res* is unclear. The closest parallels seem to be found in 3Pl. Pf. endings in *-r-* (Lat. *-ēre*, Avestan *-ər̥š*), but these constitute by no means a complete match. Moreover, it is not clear that the Celtiberian forms are Pl. (**esianto** next to **esoderes** might be *-ian-to*), and their tense or voice function is likewise undetermined. While **audares** contrasts with **audanto** (and **audeti**), it is not clear which distinction is expressed.

§ 45 Finally, a number of forms in *-d̄* seem to be verbs with secondary 3Sg. ending *-d̄* < **-t*, thus **kombalked̄** (K.1.1, cf. **kombalkores** above) and **teked̄**, the only form in K.6.1 likely to be verbal. **oskued̄** (cf. § 31) and the apparently reduplicated **tertured̄** may also belong here, but are far from clear. It has been stressed that the 3Sg. secondary ending appears as *-d* in OLat. On the other hand, *-d̄* could be a graphic device to express *-t/* without the help of a mute vowel in the syllabic script. In this case **SISTAT** would be immediately comparable, not however the possible 3Pl. **atibion** (s. above § 42), where **-nt* > *-n* would have to be real rather than graphic.

§ 46 Non-finite forms: Infinitives

A handful of forms in *-unei* function as infinitives. This is remarkable because the Insular Celtic languages, as is well known, have never developed this category up to the present day, which seems to be an archaic feature.⁸ Most examples come from K.1.1: **taunei**, **tidaunei**, **to[u]ertaunei**, **a]mbitinkounei**. To these can perhaps be added **usimounei** from BB IV, although the classification here can only rely on the formal

⁸ Otherwise ZIEGLER 1997, who assumes that the Celtiberian situation is closer to Common Celtic and that the Insular Celtic languages have innovated in giving up the infinitive again, as has happened, e.g. in Greek.

identity of the ending (notably with a]mbitinkounei), syntactic confirmation cannot be gained from the fragmentary context.

The suffix *-unei* seems to be the petrified DSg. of ablauting **-uēn-* (probably originally **-uēr/n-*). Approximately comparable infinitive formations could then be seen in Scr. *-váne*, Gr. *-φεναι*, but Celtiberian must show either zero grade or lengthened grade before the ending *-ei*, as opposed to Scr. and Gr. full grade. *-unei* occurs after vowels in all the examples attested so far. While *-o-* of a]mbitinkounei (and *usimounei* ?) is apparently the thematic vowel, *-a-* in *taunei* etc. may go back to a laryngeal (**h₃* or **h₁*, s. below § 62,5), which would not have become syllabic before following **-un-ei-*. This, and the fact that Celtiberian *n*-stems usually seem to generalize the lengthened grade *-un-* (cf. above § 33), may be adduced as an argument for interpreting *-unei* as /-uēnei/ < **-uōnei* with this same generalization. On the other hand, zero grade *-unei* may have been generalized as an infinitive ending for all verbs at a stage much later than the development of the laryngeals to *-a-*, and the latter may have been kept in the paradigm by analogy.

taunei can be regarded as the infinitive of the same verb that is also attested in the imperative *tatud*; moreover, *didonti* stands a good chance of belonging to the same paradigm (cf. § 62,5 below). *to[u]ertaunei* and *tidaunei* may again show the same stem accompanied by preverbs, but there are several problems here: *to-* of *to[u]ertaunei* may be a separate word (s. above § 38 and below § 54). *tidaunei* shows *-ḏ-* after the presumed preverb, but *to[u]ertaunei* has *-t-*. A number of explanations are thinkable – such as compounds from different diachronic layers, semantically conditioned analogical influence of the simple verb on *to[u]ertaunei* but not *tidaunei* etc., but none of these can be confirmed. (Preceding *-r-* rather than a vowel in *to[u]ertaunei* would hardly block a development **d > ḏ* as is apparent from *ardnas* (K.1.1).) If *ti-* in *tidaunei* is a preverb, it would have to be /dī-/ < **dē-* (cf. OIr. *dí*, Lat. *dē*) and therefore prove the development **ē > ī* for Celtiberian (cf. above § 3); if, however, *ti-* is in fact a reduplication, as in *didonti*, its occurrence next to *taunei* would imply that Celtiberian, like Greek or Latin, had more than one infinitive per verb, *tidaunei* belonging to the reduplicated present *didonti* and *taunei* to what is historically the root aorist, as seen in *tatud*. The spelling *ḏ-* in the anlaut auf *didonti*, contrasting with *t-* in *tidaunei* and the use of *t-* in anlaut in general (cf. above § 15), in any case seems to be a sporadic representation of the reduplicated syllable. The matter is further complicated by the existence of *tidauiom* (K.0.14), the word formation of which would be much easier to account for, if *-u-* were part of the root, not the suffix. The question then arises whether this is true for *tidaunei* as well.

a]mbitinkounei may, as has often been suggested, belong to the finite form *ambitiseti*, which would then show a sigmatic formation in *-χs-* (cf. § 42) next to a nasal present.

§ 47 Other non-finite forms

Some derivatives in *-nt-* bring to mind the PIE present active participle (cf. Lat. *agēns*, *agentis*, Gr. *ἄγων*, *ἄγωντος* etc.). Examples are usually found in proper names, and obvious relations to Celtiberian verbal forms are lacking, due to the meagre attestation of the latter. Cf. e.g. the personal names *letont-u*, *sekont-ios*, *STENIONTE*, the family names *kuedont-ikum*, *teiuant-ikum*, the place name *sekotiad* /segontiad/. If *tirikantos* in BB IV is indeed the GSg. to ASg. *tirikantam* (K.1.1, cf. § 34 above), it would have to be added here, making VILLAR's otherwise plausible interpretation as '(a place) having three corners, (meeting place at) a crossroad' more difficult to maintain.

In the Insular Celtic languages such participles are no longer part of verbal paradigms, but there are a number of lexicalized remains. Whether the same is true for Celtiberian is unclear.

Verbal adjectives in **-to/ah₂-* became participles in a number of Indo-European languages, e.g. in Latin. In Insular Celtic they even became finite forms. The formation is attested in Celtiberian words like **litom**, **konskilitom**, **listas**, **titas** (all K.1.1) and names like the place name **konbouto** (A.74) and personal names **stat-u**, **stat-ulu**. Only **uertatos** (K.1.1) has a chance of being connected to an attested verb, viz. to the infinitive **to[u]ertaunei**. **korta** (K.0.14) perhaps belongs here. The meaning and etymology of these words is unknown, however, plausible connections can only be made for the proper names, namely between **konbouto** and **pleu-* ‘to flow’ (Gr. πλέω, Lat. *pluit*) or **statu** and **stah₂-* ‘stand’ as in **SISTAT**.

§ 48 Indeclinable words

Some Celtiberian forms can be explained as conjunctions, negatives or prepositions on etymological grounds. For others, such a function is suggested by the context.

§ 49 Conjunctive and disjunctive elements

kue, **QUE** ‘and’ < **k^he* and **ue** ‘or’ < **ue* can be identified beyond any doubt. **kue** can be joined to all members or only to the last in sequences like **tokoitoskue sarnikiokue** (K.1.1) or **arkanta medukenoskue abokum** (K.1.3). **ue** ‘or’ (cf. Lat. *ue*) is only attested in K.1.1 so far, where it occurs joined to all members, as does **kue** in this inscription. Cf. also the negative **nekue** (below § 50).

A conjunctive or disjunctive element may also be seen in **iste**, which appears in K.1.1 with the probable opposites **iste ankios iste esankios** and in **aleites iste ikues** between forms with the same ending. **autom** (K.0.14) can have a similar function and may then be cognate with Lat. *aut*. It appears between identical case forms in **ueidiai mitai autom ailai. uta** (K.1.1, K.7.1, BB IV), **UTA** (K.3.3) is usually interpreted as conjunction ‘and’, but the coordinating function is not clear, it may be a subordinating particle. A coordinating or at least particle-like use has sometimes been proposed for **iom**, the ASg. of the relative pronoun (cf. above § 37). Whether **to** (in **to[u]ertaunei** K.1.1), **TO** (K.3.3) is a sentence connective or rather a preverb, a preposition or a pronoun is doubtful (cf. above § 38) and will possibly only become clearer if further evidence should come up.

§ 50 Negatives

Attested negatives are the inherited forms **ne-** ‘not’ (< PIE **ne*) and **nekue** ‘nor, neither, and not’ (< PIE **nek^he*, cf. Lat. *neque*). Of those, **ne-** seems to be always proclitic, as it is never written separately, cf. **nebintor**, **nelitom** (both K.1.1), perhaps also **nedokim** (K.0.14). **nekue** is repeated in all its attestations so far (K.1.1: **nelitom nekue to[u]ertaunei litom nekue taunei litom nekue masnai tidaunei litom** and K.0.14: **nekue esoderes nekue esianto**; cf. *neque ... neque* in Latin). A negative or rather privative function is also to be assumed for **es-**, cf. § 53.

§ 51 Prepositions

Instead of, or in addition to, prepositions Celtiberian, like other archaic Indo-European languages, apparently uses postpositions. The clearest example is **eni** (K.1.1) which follows the ASg. **tirikantam** and the LSg. **tokoitei** (cf. § 33). **eni** ‘in’ is cognate with

Gr. ἔνι, Lat. *in*; other Celtic languages show reflexes of **eni-* as a prefix (OIr. *in^{L-}*), but use **en* (OIr. *i^N*, OW and Gaul. *in*) as a preposition with the accusative or dative (locative). Celtiberian *ENI-* can be a prefix (or alternatively a preposition?) in **ENIOROSEI** (K.3.3) and **enitoudei** (K.1.1), cf. § 53.

§ 52 For other forms the interpretation as pre- or postposition is less certain. It would be thinkable e.g. for **entara** (K.1.1), which, however, could also be an adverb. **entor** (BB IV) has been compared to Lat. *inter*, OIr. *eter* ‘between’ etc., yet *-tor* rather than *-ter* is strange. **es** in **es uertai** (K.1.1) is doubtless a cognate of Gr. ἔξ, Lat. *ex* and OIr. *a^G* ‘out of’, but in prepositional use one would expect a following ablative, not the dative or locative that is expressed by the ending of following **uertai** (cf. § 27). Thus **es** is possibly a prefix and the word division is a hypercorrect morphemic or etymological division. (Cf. below § 53 on prefixed **es-** and above § 39 on possible morphemic division, to which obvious erroneous word divisions like **sarniki ei** (LSg.; K.1.1) may be added.)

Some elements that occur as prepositions in related languages are only found as preverbs or prefixes in Celtiberian so far, which may be simply due to the fragmentary attestation, cf. below §§ 53f.

III. Word formation

A complete description of Celtiberian word formation cannot be provided here. Only a limited number of compositional and derivative types will be discussed. For further examples see MLH IV 416ff, for the *-ko-*suffixes in particular (below § 56) cf. also VILLAR 1995, RUBIO 2001, 581ff and VILLAR/JORDÁN 2001, 187ff. Questions of verbal stem formation have already been discussed above §§ 41f, for non-finite forms cf. also §§ 46f.

§ 53 Nominal composition

Nominal compounds can consist of two nouns or of a prefix and a noun (resp. adjective). Examples for both are found.

Two nouns are conjoined in the place names with second member *-briχs*: **SEGO-BRIS**, Abl.Sg. (cf. § 33) **seko-biriked** /sego-briged/ (A.89), **ner-to-bis** /ner-to-briχs/ (A.50) and abbreviated **ARCO-BRIG** (K.7.3). In Latin sources a number of further place names of this type are attested; they show the root noun /-brig-/ as second member turned into an *ā*-stem *-briga*, cf. e.g. *Deobriga*, *Dessobriga* and – with a Latin first member – *Iuliobriga*, *Augustobriga*. Comparable place names are found in other Celtic languages, though less frequently, cf. G *Litano-briga*, *Eburo-briga*. In OIr. *Brí Leith*, *Brí Éile* etc. composition has been replaced by a syntagma. Cf. also § 62,6 for the presence of **brig-* as a common noun in other Celtic languages, and see UNTERMANN 1961 and 2001 on the importance of “*briga*-names” for the recognition of Indo-European layers in the Iberian peninsula.

Compounds are also found in personal names, but with a much lesser frequency and variation than in other Celtic languages (cf. § 35). Good examples are **među-kenos** (K.1.3) and **retu-kenos** (e.g. K.1.3), attested in Latin inscriptions as *Medugenus* and *Rectugenus*. Names in *-geno-* are more amply attested in Gaulish and the Insular Celtic

languages (s. GPN 203ff, UHLICH 1993, 261f), cf. e.g. Irish names where the first member designates an animal: *Mathgen*, *Artgen*, *Osgen*, *Áugen*, Ogam BRANOGENI; or Gaulish names with a divine name as first member: *Esugenus*, *Totatigen*[u]s, *Camulogenus* and perhaps *Boduogenus*. Some such names reoccur in several Celtic languages such as OIr. *Fidgen*, *Muirgen*, OW *Guidgen*, *Morgen*, G *Uernogenus*, OIr. *Ferngen*, OW *Guerngen*, G *Litugenus*, OIr. *Líthgen* etc. Celtiberian **medukenos** and **retukenos** also have exact equivalents in other Celtic languages, cf. OIr. *Midgen*, OW *Medgen* on the one hand and G *Rextugenos* on the other. Celtic **rextu-* moreover appears as the first member of a personal name in OIr. *Recht-gal*, *Recht-gus*. But while names in *-genos* can be grouped according to the semantic or formal properties of their first member elsewhere (as e.g. animals and divine names above, or adjectives as in OIr. *Coémgen*, *Béogen*, G *Suadugenus* etc.), the Celtiberian examples are fairly isolated, even taking into account attestations from Latin inscriptions such as *Matugenus* and the like.

The rarity of composition is characteristic of Celtiberian personal names (cf. § 35), it does not affect place names (s. above on *-brig-*) nor necessarily common nouns. The dearth of examples for compounded common nouns may be due to the fragmentary attestation, but a clear case is **arkato-bedom** (K.0.7, cf. below § 62,4 on the etymology of both members). If **teiuo-reikis** (K.6.1) is NSg. fem. of an adjectival *i*-stem, agreeing with the preceding **sa kortika**, it may be a possessive compound that has changed an original *o-* or *ā*-stem of the second member into an *i*-stem in composition. This process is well known from Latin examples like *arma* : *inermis*, and is continued in OIr. forms like *sochenéoil* ‘well-born’ (*i*-stem from *cenél*, *o*-stem ‘race, origin’) or *díáirim* ‘countless’ (cf. *áram* *ā*-stem ‘number, counting’). For Celtiberian, however, there seem to be no further examples (s. below § 62,4 for a possible etymology of both members).

It has often been assumed that **tirikantam** (K.1.1), **tirikantós** (BB IV) and the family name **tirikantanko** (K.1.3) are to be analyzed as /tri-kant-/, where *tiri-* could be the numeral ‘3’ (cf. above § 39).

Other possible compounds are uncertain for several reasons. For instance **kubokariam** (K.18.3) could belong here, but one might alternatively assume two or more words.

Nominal compounds with prefixes occur in a number of forms. The prefix is usually also used as preverb in verbal composition (cf. below § 54). Some of those nouns may therefore be of deverbal origin.

eni ‘in’ has already been mentioned above (§ 51) as a postposition and possible prefix in **enitoudei** (K.1.1) and perhaps **ENIOROSEI** (K.3.3).

es seems to be a prefix in **es uertai** (K.1.1, cf. above § 52). It probably has a privative function in **esankios**, if this means ‘non-ankios’ in the sequence **iste ankios iste esankios** (K.1.1). A privative function can have developed from the original ablatival (local) one ‘out of’ (cf. § 52), as in other Celtic languages, cf. G personal name *Ex-omnius* ‘fearless’, OIr. *énairt* ‘without strength’ (*nert*), MIr. *essidan* ‘impure’, cf. further Lat. *exsanguis* ‘bloodless’ etc. **es-** is probably also present in **eskeninum** (K.1.3H) and **eskeinis** (K.23.2), which would then look like privative compounds to **kenis** (K.6.1).

kom-, **kon-** ‘with, together’ (cf. Lat. *com-*) appears in the place names **konbouto** (A.74) ‘Complutum’ and **konterbia** (A.75) ‘Contrebia’, which therefore mean ‘confluence’ and ‘dwelling together’; at least **konbouto** is a deverbal formation. The same is possibly true for the common noun (adjective) **konskilitom** (K.1.1) of unknown meaning. **kom-** can moreover be the first member of **COMEIMU** (K.3.3) and **kontuđos** (K.1.3). For **kombalked** and **kombalkores** (both K.1.1) which may be finite verbs cf. §§ 44f and 54.

A cognate of OIr. *air-*, G *are-* has been sought in forms like **arekorata**, **areikoratikos** (A.52) and a few others, which remains uncertain, as long as there is no plausible interpretation for the second element.

§ 54 Verbal composition

A few verbs are compounded with preverbs. Even with finite verbs, Celtiberian shows as yet no certain case of tmesis, an inherited feature often preserved in archaic Indo-European languages, as e.g. Homeric Greek and Old Latin. Tmesis is still possible in archaic Irish and has left abundantly clear traces in classical Old Irish and early Welsh.

Whether tmesis had been completely given up in Celtiberian – as was its fate in classical Greek and Latin – or whether its apparent lack is due to the insufficient attestation and understanding of the language, is unclear. The case of Mycenaean Greek, without tmesis as opposed to the Homeric record, may be kept in mind.

Moreover there is no clear case as yet, where a verb is accompanied by more than one preverb, although there are examples suggestive of this state of affairs. In archaic languages verbal composition is frequently restricted to a single preverb, but may develop further from this stage, cf. compounds like Lat. *subinuidēre*, Gr. *συγκατασπάω* etc. In OIr. a verb can have up to four preverbs.

kom- which has just been mentioned as a prefix (§ 53) is a preverb in **kombalked** and **kombalkores** if these are finite verbs, as suggested in §§ 44f. In this function it is well attested in the Insular Celtic languages and of course in Latin.

By the same reasoning **es-**, discussed as a prefix above, will be a preverb in **esianto** and **esoderes** if they are verbs (cf. § 44); cf. the use of OIr. *as-*, Lat. *ex-*, Gr. *ἐξ-* etc. in verbal composition.

ambitseti (K.1.1) shows the preverb **ambi-**, which must also be present in a] **mbitinkounei** (K.1.1) probably belonging to the same paradigm (cf. above § 46). *ambi-* is used as a prefix in Gaulish, the cognate OIr. *imb-*, *imm^L-* serves as prefix, preverb and preposition, cf. also W *am-*, *ym-* and Gr. *ἀμφί*. **ro-** < **pro-* (cf. OIr. *ro-*, W *ry-*; Gr. *πρό*) is attested in **robiseti** (K.1.1).

uer- < **uper* (cf. G *uer-*, OIr. *for*, *for-*, W *gwar-*, *gor-*; Gr. *ὑπέρ*) may be a preverb in **to[u]ertaunei** and if the same is true for **to** this would be comparable to the OIr. preverb **to-**. But as already indicated (above §§ 38, 49) the status of **to** remains problematic and in **to[u]ertaunei** a root *uert-* has also been assumed.

Other preverbs are not clearly identifiable as yet. **asekati** may contain a preverb *a(d)-*, cognate with OIr. *ad-*, Lat. *ad-*, as may **usabitud** if it has two preverbs *us-a(d)-*. *us-* may in any case go back to **ups-*, which is also the basis of **usama**, *Uxama* (cf. §§ 21, 58). Whether **tinbitud** is a compound verb is even more doubtful; on the problem of possible *ti-* < **dē-* in **tidaunei** cf. above § 46. The preverb **ati-**, corresponding to OIr. *aith-*, G *ati-*, *ate-* is now attested in **atibion** (BB IV).

§ 55 Nominal derivation

A sketch of Celtiberian nominal suffixes must necessarily remain fragmentary, not only because of the insufficient attestation, but also because the meaning of the majority of words is unknown or can only be approximated. Therefore no firm conclusions on the function of various suffixes can be drawn, only formal considerations allow the listing together of some forms.

§ 56 Adjectival formations in *-ko-/-kā-* after different vowels are very frequent, as is the case in other Celtic languages, and further in e.g. Latin and Greek.

The most common are *-iko-* and *-oko-*, specifically for the formation of family names. For those a wealth of evidence can be adduced from Celtiberian inscriptions, but also from Latin ones with indigenous name formulas. A number of them suggest a derivational relation between personal names and family names, thus e.g.

akuios	:	akuikum
tirtanos	:	tirtanikum
turos	:	turikum
alidos	:	alidokum
babos	:	babokum
kalos	:	CALOQ.

-iko- and *-oko-* are also attested in derivatives from place names, cf. **arekoratika** (K.0.11) from **arekorata** (A.52), **kortonikum** (K.0.13) from **kortono** (GSg.), **kortonei** (LSg., cf. § 25, both K.0.7), **oilaunikos** from **oilauu** (A.56, cf. § 33) etc. *-oko-* occurs in **kolounioku**, **CLOUNIOQ** (A.67), referring to the place called *Clunia* by the Romans and probably ***klounia** by the Celtiberians.

It seems that *-iko-* and *-oko-* in the first place form adjectives with a meaning of appurtenance, e.g. ‘belonging to Arekorata, of Arekorata’. These can also be used as substantivally to designate the inhabitants of the town. The basic meaning of family names derived from personal names may have been similar.

If this interpretation can be extended to common nouns, then **kortikos** (K.1.3) and **kortika** (e.g. K.0.5, K.0.10) may mean originally something like ‘belonging to korta’ (K.0.14; cf. below § 62,3 for further suggestions on these words). No basic forms are attested for derivatives in *-oko-*, like **risatioka**, **tanioka** (both K.1.3H) functioning as common nouns.

-ako-, as opposed to *-iko-*, *-oko-*, is not found in the derivation of family names, but well attested for place names, cf. **kontebakom** from **konterbia** (A.71), **sekaidakom** from **sekaida** (A.78) and **uirouiaka** (K.25.1) from **uirouia** (A.71). *-ako-* in non-onomastic contexts may be attested in **berkunetakam** (K.1.1) and **CARACA** (K.14.2, cf. § 62,7 below).

Other vowels preceding *-ko-/-kā-* are less frequent, cf. **kustaikos** (K.1.1), probably from **kusta** (K.1.1), **kustai** (BB IV) of unknown meaning, and the rare *-eko-* and *-eiko-* as in the names **TRIDONIECU** (K.14.2) and **elkueikikum** (K.1.3) or *-uko-* in **monituukoos** (K.14.1). Somewhat better attested again are *-anko-* and *-sko-*, cf. the family names **aiankum**, **baraudanko** (both K.1.1), **tirikantanko**, **rotenanko** (both K.1.3) and the coin legend **ikedankom** (A.74); for *-sko-* cf. the family names **alaskum**, **ateskum**, **kabelaikiskum** (all K.1.3) and on coins **bormeskom** (A.81), **loutiskos** (A.55), **belaiskom** (A.80).

§ 57 Many personal names are short, perhaps hypocoristic forms, cf. the *n-*stems **aiu**, **amu**, **atu**, **anu**, **elu**, **litu**, **memu**, **tirtu** and the *o-*stems **babos**, **lubos**, **tekos**, **turos**. *-u(n)-* can also be a secondary suffix in personal names as in **letontu**, **abulu**, **statulu**. Feminines are formed in *-a* and *-i*, *-in-* (s. above § 33), cf. **aba**, **ama**, **ana**, **keka**, **kara**, **stena**, **suola** on the one hand and **kari**, **raieni**, GSg. **atinos**, **elkinos** on the other (cf. above § 33 on the different inflections of *n-*stems like **letontu** and **abulu** and on the problem of *-in-* vs. *-i*).

Masculine and feminine personal names are built from the same stems, cf. e.g.

aia	:	aiu
akuia	:	akuios
ama	:	amu
ana	:	anu
belsa	:	belsu
stena	:	stenu
elađuna	:	elađunos

Short names of the type just mentioned often contrast with longer formations from the same base, cf. e.g.

tirtu	:	tirtanos, tirtouios
seko (GSg.)	:	sekanos, sekeeios, sekilos, sekilako (GSg.), sekontios
statu	:	statulu
stenu	:	steniontes
turos	:	turaios, turaku

Knowledge of Celtiberian personal names is broadened by numerous attestations from Latin inscriptions.

§ 58 Comparatives and superlatives can be identified on etymological grounds, though Celtiberian does not yet offer any complete paradigms of adjectival degrees. Superlative forms in *-amo/ā-* are attested in **UERAMOS** (K.3.18), **UORAMOS** (K.3.7) ‘uppermost’ < **uper-ṃ(h₂)os*, **usama**, Abl.Sg. **usamuđ** ‘highest’ < **ups-ṃmo/ā-*, cf. the formation of Lat. *īnfimus* < **nd^h-ṃmos*. The suffix **-is-ṃmo/ā-*, usually found in Insular Celtic superlatives, occurs in **sekisamos** (A.69) ~ ‘strongest’ < **seġ^h-isṃ(h₂)-o-* s. **letaisama** (A.68) may be an equivalent formation if *-a-* can be explained by some analogical process, for **pleth₂-isṃ(h₂)o-* ‘broadest’ would have given **letisama* (indirectly attested for Spain by *Bletisam(a)* in a Latin inscription and by the modern place name *Ledesma*). **letaisama** could be the superlative to the Celtic adjective **litano-* which underlies OIr. *lethan*, W *llydan*, G personal name *Litanus* and from which the Celtiberian family name **litanokum** (K.1.3, cf. § 62,7) is probably derived. Celtic, moreover, preserves traces of the *u-*stem adjective found in Gr. *πλατύς*, Scr. *prthú-* with fem. *πλατεῖα*, *prthiví*. The feminine is continued in the proper names G *Litauia*, W *Llydaw*. The one or the other of these formations may have given rise in Celtiberian to the analogical transfer of *-a-* (< **-h₂-* resp. **-h₂eṃ-* etc.) from the positive to the superlative, which, however, has kept its full grade *leta-* as opposed to zero grade *lita-* in *litano-* etc. (cf. above § 4).

A comparative in *-ero-* or *-tero-* (cf. Lat. *īferus* on the one hand, Gr. comparatives in *-τερο-* on the other) could be seen in **lestera** (K.1.3H), but this is very uncertain. *-tara-* in **entara** and **sankilistara** (both K.1.1) can be graphic for */-tra/* and then reflect, for instance, the plural of a neuter instrument noun of the type Lat. *arātrum* etc.

§ 59 Of the typical suffixes that form deverbal nouns or adjectives, the possibly participial *-nt-* and *-to-* have already been discussed above (§ 47). Verbal abstracts in **-ti-* and **-tu-*, which are frequent in many Indo-European languages and well attested in Celtic (s. IRSLINGER 2002), are only found sporadically in Celtiberian so far, perhaps due to the fragmentary attestation.

The only clear case for an abstract in *-tu-* is the first member *rextu-* (< **h₃reġ-tu-*) of the personal name **retukenos** (cf. above § 53).

-ti- occurs in **kentis** /*gentis*/ ‘child’, which must then go back to **ġen(h₁)-ti-s* (cf. Lat. *gēns*) with no reflex of the laryngeal. **bintis** (K.1.1), designating male persons, could be a similar formation, but remains unclear. For **kentis** one can assume that the abstract meaning ‘birth, generation’ passed into a resultative more concrete ‘offspring, child’. The shift from abstract to concrete meaning is frequent and can be exemplified e.g. by the *ti*-formation OIr. *flaith* f. ‘lordship, rule, ruler’, W *gwlad* ‘country’ (over which one rules). It is well known that the Celtic languages even show a productive formation for masculine agent nouns built on inherited **-ti-* (cf. MCCONE 1995, 6f). Celtiberian, however, does not yet provide enough material to obtain a clear idea of these formations.

§ 60 A few words show suffixes in *-d̄-*. Of those **nouīda** (K.1.3H) and **aiuidas** (K.1.1) are probably common nouns (adjectives), but more examples are found in proper names, cf. the place names **sekaiḏa** (A.78), **kaiḏa** (A.83) and **ikedankom** (A.74) or its base. Personal names are **eladunos**, **alidos**, **usidu**, **useidu**, **tueidu** and possibly **setida**, family names **akaidokum**, **uerḏaidokum** and **teladokum**. *-nd̄-* appears in the personal names **melmandos** (cf. **melmantama**) and **sekondos** (cf. **sekontios**).

Indo-European suffixes in **d^(h)* are not particularly frequent; however, OIr. has a productive suffix **-od̄io-* or **-ad̄io-* which forms denominal adjectives. Comparable formations are also found (more rarely) in W and G, yet it has to be admitted that the Celtiberian forms do not match those exactly, either formally or functionally.

§ 61 Finally a number of forms may be mentioned that seem to show a derivative relation: **ueidiai** (K.0.14) vs. **ueidos** (K.0.11) and **odias** vs. **odas** (both K.1.1, cf. above § 4 on **odeum** BB IV) have a suffix *-ia*, which also occurs in **konterbia** (A.75) ‘Contrebia’ for which there is no possible base attested. *-ino-* can be seen in **tekametinas** vs. **tekam etam** (both K.1.1) and perhaps in **eskeninum** (K.1.3H) vs. **kenis** (K.6.1) and / or **eskeinis** (K.23.2), to which **koruinom** (K.1.1), with no attested base, may be added. However, it has to be kept in mind that *-in(o)-* may have several origins (cf. above § 33), so that we need not be dealing with the same suffix in all these cases.

IV. Lexicon

§ 62 Only a small fraction of the Celtiberian lexicon has come down to us and the majority of words attested in Celtiberian inscriptions are proper names. The meaning of most words is still unknown and cannot be inferred from the contexts. Yet for some elements context and etymological considerations do allow for an interpretation. Forms for which etymological connections are obvious have often been adduced as examples for sound developments in the preceding paragraphs. The clearest cases shall now be listed again under a lexical perspective.

1) The most readily identifiable words are functional words, like the conjunctions **kue** ‘and’ and **ue** ‘or’ (§ 49), the negatives (§ 50), prepositions, prefixes and preverbs (§ 51ff), pronominals (§ 37), and some numerals like **tekametinas** (§ 39).

2) Kinship terms are **kentis** /gentis/ ‘child, descendant’ (§ 59), abbreviated **ke**, **G** in some name formulae, and **tuateres** (NPl.), **tuateros** (GSg.) ‘daughter’ (cf. § 13). **launi**, of unknown etymology, seems to belong to the same sphere. It occurs several times in K.1.3, connected by **kue** to a man’s name, and specified twice by the family name **uiriascum** as in **elkuanos kunikum launikue uiriascum**. A meaning ‘wife’ is not unlikely. Since it is determined only by a family name, but not by a personal name, a meaning ~ ‘bride’ is perhaps also thinkable (if it is assumed that **elkuanos** is to marry one of the **uiriascum** girls, though it is not made clear which one).

UIROS is usually understood as the word for ‘man’, cognate with OIr. *fer*, W *gwr* and Lat. *uir*.

The designation of a person also seems to be the meaning of **ueidos**, perhaps ~ ‘witness’ (§ 8), cf. OIr. *fiadu* (with a different stem formation) and the verbs for ‘to see, to know’ e.g. OIr. *ro-fítir* ‘knows’, Lat. *uidēre*, Gr. ἰδεῖν, οἶδα etc. **bintis** classifies people perhaps as magistrates, councillors or the like, but is etymologically unclear (cf. § 59).

3) **kortikos**, designating a person in K.1.3, looks like the masculine to **kortika**, occurring on *tesserae hospitalis*. The exact meaning and etymology remains unknown, the probable base **korta** (K.0.14, cf. § 56) gives no help. **kortika** has been interpreted as ‘tessera’ or ‘contract’, but has also been etymologically connected with OIr. *gort* ‘field’, Gr. χόρτος ‘enclosure’, Lat. *hortus* ‘garden’ < **g^hor-to-s* which leads to a meaning ~ ‘town, community’. If this meaning applies to **korta**, then **kortikos** could correspond to Lat. ‘(*seruus*) *publicus*’, **kortika** could refer to a ‘public’ hospitality contract (i.e. one made with a town, not an individual).

4) For two compounds etymological considerations lead to assumptions about the meaning: /arganto-/ ‘silver’ (§§ 20, 53) as the first member of **arkatobedom** is perhaps followed by a second member formally equivalent to W *bedd* ‘grave’. The root **b^hed^h(h₂)*- ‘to dig’ is also underlying Lat. *fodere* ‘id.’ and *fossa* ‘ditch’. There is something, then, speaking in favor of the supposed meaning ‘silver mine’ for **arkatobedom**.

/deiuo-/ ‘god’ is seen in the family name **teiuantikum** (K.1.3, cf. § 8), which more specifically seems to be derived from the participle of a denominative verb (meaning something like ‘to call upon the gods, to worship, to consecrate’ or the like; cf. also the similar denominative Oscan *deiuatud*, Lithuanian *dievótis* ‘to swear’). /deiuo-/ also seems to be the first member of **teiuoreikis** (K.6.1). If this is a possessive compound (as suggested in § 53 above), the second member could be **reigo-* or **reigā-*, perhaps derived from the root **reig-* ‘to bind’. **teiuoreikis** would then mean ~ ‘having the binding of a god, bound by the gods’.

5) For verbal forms the connection of **SISTAT** (§§ 21, 42) with the root **stah₂-* ‘to stand, to set up’ is obvious, cf. the reduplicated present in OIr. *-sissedar*, Gr. ἵστημι, further Lat. *stāre* and *sistere*.

didonti can be formed from **doh₃-* ‘to give’ like Gr. δίδουσι (Dor. δίδοντι, also Lat. *dare*), **tatud** and **taunei** could derive from the aorist stem of the same paradigm (§ 41). It is not to be excluded, however, that the root involved is rather **d^heh₁-* ‘to put’ (cf. Gr. τίθημι, further Lat. *facere*). A meaning ~ ‘give’ is also probable for **audeti** and related forms (§ 44), but etymological connections are more difficult to ascertain.

6) Fairly plausible etymological interpretations can also be found for a number of proper names. In place names, the element *-brig-* ~ ‘hill, height’ is to be compared with OIr. *brí* ‘hill’ (§§ 13, 53); a place is named ‘highest’ in **usamuđ** (Abl.Sg.), **usama**, *Uxama*. In K.1.3 **usama** is attested as the name of a woman. To the same semantic field belongs **UERAMOS**, **UORAMOS**, referring to a person as ‘highest’, < **uper-* underlying the preverb OIr. *for-*, W *gwar-* etc. and perhaps Celtiberian *uer-* (cf. above § 54). The first member of /*segobrixs*/, **SEGOBRIS** and Abl.Sg. **sekobiriked**, derives from PIE **seǵh-* ‘to overcome, be superior’ (§ 13), as do the place names *Segontia*, Abl.Sg. **sekotiad**, **sekisamos** (§ 58) and the personal names **sekontios** (§ 47), **sekilos** and the like. Parallels are found in Gaulish, for instance in the place name *Segodunum*, personal name *Segomaros*, in British a place name *Segontium* is also attested. The first member of **nertobis** /*nertobrixs*/ corresponds to OIr. *nert*, W *nerth* etc. ‘strength, power’ and the first member of the G personal name *Nertomaros* (§ 19). For the place names with prefix *kom-*, **konbouto** ‘Complutum’ ~ ‘confluence’ and **konterbia** ‘Contrebia’ ~ ‘common inhabitation’ cf. §§ 47, 53. The element *-treb-* in the latter is identical to OIr. *treb*, W *tref* etc. ‘dwelling, homestead’. The place name **klounia* ‘Clunia’, attested in the derivative **kolounioku** (§ 56), may be cognate with OIr. *clúain*, W *clun* ‘grassland, meadow’, often used in place names.

7) The personal names **međukenos**, *Medugenus* and **retukenos**, *Rectugenus* /*rextugenos*/ can be translated as ~ ‘mead-born’, ‘right-born’, cf. § 53; *-genos* derives from the same root as **kentis** ‘child’ (cf. also OIr. *-gainethar*, *gein*, Lat. *gignere*, *genus*, Gr. γίγνομαι, γένος etc.)

On **koloutios** /*kloutios*/ ~ ‘famous’ (?) and **loukio**, **loukanikum** etc. (from **leuk-* ‘to shine, to be bright’ ?) cf. § 19; on **statu** etc. from **stah₂-* ‘to stand’ see § 21. On *litano-* ‘broad’ in **litanokum** see § 4 and cf. the superlative **letaisama** § 58. **letontu** can be based on a participle (§ 47) ~ ‘spreading, broadening’ (?) of a verb built on the same root (cf. the verb Scr. *prathati*, also OIr. *lethaid* ‘spreads, extends’, W *lledaf*). Whether **litu** belongs with these words as a short form or rather with OIr. *lith* ‘feast’, and the G personal name *Litumaros* cannot be decided.

If the family name **kuedontikum** is based on a participle of a verb derived from **g^{uh}ed^h* ‘to ask, beseech’ (cf. OIr. *guidid* ‘asks’, W *gweddaf* ‘I pray’, Gr. θεσσασθαι and ποθέω, cf. § 13), it shows Celtiberian *ku* /*g^u*/ < **g^{uh}*.

In names like **kara** the Celtic root **kar-* ‘to love’ may be sought, cf. OIr. *caraid* ‘loves’, W *caraf* ‘I love’, OIr. *carae* ‘friend’, W *car* ‘friend, relative’, further Lat. *cārus*. This element is found in personal names in other Celtic languages as well. In Celtiberian it also seems to underlie the abbreviation **kar**, appearing in on *tesserae hospitalis* and probably referring to the hospitality pact. An unabbreviated form may be attested in **CARACA** (K.14.2), but the reading remains uncertain.

LUGUEI (and perhaps **LUGUES**, both K.3.3) may be the Celtic divine name **Lugus*, cf. G *Lugu-*, OIr. *Lug*.

C. Abbreviations

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II. Other Abbreviations

Abbreviations for grammatical terms are the usual ones, e.g. N: nominative, Pl.: Plural.

Abbreviations for languages:

PIE: Proto-Indo-European

IE: Indo-European

OIr.: Old Irish (MIR.: Middle Irish)

W: Welsh (OW: Old Welsh)

G: Gaulish

Gr.: Greek

Dor.: Doric

Lat.: Latin

Scr.: Sanscrit

OCS: Old Church Slavonic