Why Basque Cannot be, Unfortunately, an Indo-European Language

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12. The presentation of extensive illicit claims means a costly intrusion on the working time of careful scholars who must inspect the total data and detect flawed equivalence claims. The disassembly of illicit trees is a time-taking and potentially annoying business which displaces useful scholarly work.

13. The dissemination of such extended claims gravely misleads the public, a public not equipped to test for such technical failures. (Hamp 1998: 15).

1. The Basque language is, together with Ainu, Burushaski, and some others, one of the best-known language isolates, although there are over 115 languages in the world with no known genetic relationship to any other language. This quite typical situation, if not looked at through Eurocentric eyes, has for two centuries been a continual incentive for linguists and amateurs to try and remedy this solitary situation. And in this regard, there have been multiple attempts to link the Basque language to other world languages, families, and macrofamilies. As a general rule, these efforts have almost always centered on creating families out of isolated remains or small unconnected

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2Campbell 2011, 23: “The Basque language is not strange. It is one of the 115 isolated languages of the world, which constitute the third part of all linguistic families (115 out of about 350).”
families (Na-Dené-Caucasian). Forni’s essay is more ambitious than previous arguments in that he contends that Basque belongs to the extremely well-known Indo-European family. This is, however, not a new argument, given that it was already suggested decades ago by Castro Guisasola (1944), and previously still by illustrious amateurs like the visionary Chaho and Captain Darricarrere, lacking any comparative method as well as the very objectives of comparative linguistics.

One should make it clear that the main objective of comparative linguistics is not to just establish a mere classification of languages into genetic families, attempting to simplify and reduce existing taxa. Establishing linguistic relationships entails practical consequences that transcend mere classification, given that it is the only widely proven method of exploring more thoroughly the prehistory of each of the languages in the family. There is a great difference between classificatory proposals of supposedly new families or phyla, which are mostly obtained through the superficial inspection of a handful of words in very unrelated languages — as in the case of the mass comparison practiced by Greenberg and followers — and the traditional comparative grammar applied to well established language families, such as the Indo-European family. Linguistic comparison must serve, beyond establishing a family, to reconstruct diverse aspects of the protolanguage, and especially to shed light on the origin and evolution of the structures of each particular language, as well as to understand the special historical relations that each of these has maintained with the rest (the subgrouping and formation of the branches of the genealogical tree) or with languages outside the familial circle (loanwords and areal contacts). Forni’s essay, although it differs in the amount of material examined as well as its purpose from macro-family hypotheses, is however one of those works that offers merely classificatory proposals. From the Basque point of view his proposal does not offer any explanation of the origin and development of the different grammatical categories in the Basque language. Nor, from the Indo-European point of view, does he manage to offer a greater understanding of the protolanguage, or indeed suggest a new
genealogical tree that includes Basque in accordance with dialect criteria, or propose any historical evolution out of this new branch from its phase of family unity to its historical attestation.

The second important issue concerns what is considered evidence or proof of a linguistic relationship. It is commonplace to say that a relationship is demonstrated by establishing regular and recurrent sound correspondences among cognate morphemes of the diverse languages in the family. In the practice of their discipline, linguists have always sought out these correspondences in overwhelmingly grammatical morphemes and in the lexicon termed “basic vocabulary.” If professional linguists, after trying and testing comparisons, find no sufficient indications in this area, they will not initiate the phase by which systematic sound correspondences are established, simply because they will not know where to find them or because they will not feel sufficiently sure of or confident in the validity of their inquiries (cf. Watkins 1990). Forni’s essay is almost exclusively limited to seeking out these correspondences in the lexical area, completely overlooking the morphological structure of the language.3

2. The IE linguistic family is, without any doubt, one of the richest, most anciently attested, and best studied in the

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3The following quote by Nichols (1996, 41) is revealing: “The procedure employed by the classic comparative method may be summarized as follows. An initial assumption of relatedness is made on the basis of solid evidence that firmly identifies a unique individual protolanguage; that evidence is primarily grammatical and includes morphological material with complex paradigmatic and syntagmatic organization. ... Once relatedness is assumed, then the labor-intensive process of working out the correspondences and cognate sets begins. Since relatedness is assumed, this lexical work makes the further assumption that any vocabulary set displaying the regular sound correspondences is in fact cognate, however far-fetched the semantic correspondences. This work ultimately yields a detailed picture of the branching structure of the family tree, ...”

“The evidence taken as probative of relatedness is not individual items but whole systems or subsystems with a good deal of internal paradigmaticity, ideally multiple paradigmaticity, and involving not only categories but particular shared markers for them. (Nichols, 1996: 48)
world. Because of all this, the type or linguistic aspect of Proto-IE, whose characteristics have been inherited to a greater or lesser extent by every language in the family, is well-known. Without any attempt to be comprehensive, we could list these specific traits, which become diagnostic of belonging to the family, as follows:

1. The morphemes present a structure with an immutable consonantal framework and an alternating vowel system; it is the typical ablaut. This is a procedure used by IE languages to differentiate diverse forms of the same paradigm, whether nominal or verbal, and in word formation.

2. Both as regards nominal as well as verbal formation, with the exception of some root-words, most words are formed by using certain specific suffixes, some of them nominal (e.g. -es/-os/-s; -en/-on/-n; -ter /-tor /-tr; heteroclite -r/-n for neuters, thematic, participial in -nt-, -to-, etc.), others verbal (e.g. present stems in -yo-, -sko-, nasal infix -n-, -syo-; aorist stem in -s-, etc.).

3. There is a set of nominal, pronominal, and verbal endings that are easily identified in almost all Indo-European languages.

4. By combining the three previously mentioned levels (internal variation of the morpheme, specific suffixes, and multicategory endings) almost every IE language reveals certain grammatical categories: the noun varies formally in order to express gender (up to three), number (up to three), and grammatical case (greater variety among the languages), while in the verb, endings express categories of tense-aspect (present-aorist-perfect), voice (active-middle), and person (three singular and three plural).

None of the aforementioned Indo-European features exists in the Basque language. It shows no indication or trace of ablaut. The set of affixes used in nominal formation barely resembles that of Indo-European if one compares them as a whole, ignoring isolated similarities that can easily be put down to chance, bearing in mind the limited phonic extension of the suffixes. If we examine grammatical categories, we see that Basque has no grammatical gender, nor is there any formal trace that it might have had one in its reconstructible past. As regards
number, singular and plural, it is exclusively limited to a
definite inflection of the noun, whose formation,
although prehistoric, is clearly recent, due to
grammaticalization as a definite article of a previous
demonstrative. The outward appearance and typology of
nominal inflected markers leave little room for comparison,
given that in contrast to the Indo-European nom./acc.
opposition Basque offers an ergative typology, with
agglutinative endings — especially in its oldest singular
inflection — that differ greatly from the Indo-European
endings that amalgamate distinct nominal categories.
Finally, Basque lacks the typical ubiquitous Indo-European
inflected classes. If we look at verbal morphology, there is
no evidence of the well-known IE tense-aspect stems or
any visible traces inherited from the different suffixes that
helped in IE to express those categories or others such as
mood or voice (e.g. present forming suffixes such as
-yο-, -sk-, infixed -n-, causatives in CóC-yο-, etc., the aorist
formation in -s, optatives in -oτ-, active or middle endings,
participles in -nt-, etc.).

3. It is common knowledge that not all known IE
languages share these characteristic to the same degree,
and that with the passage of time a lot of inherited
material has been reinterpreted or substituted by a newer
material. However, not one language exists that does not
show several of the above-mentioned characteristics at the
same time, so that, at first glance, it might not satisfy the
minimum required indications to be considered a candidate
for the family. The history of the deciphering of Hittite,
Tocharian, and Mycenaean, as well as other languages in
Asia Minor, amply illustrates this fact. The history of the
deciphering of Hittite, Tocharian, and Mycenaean, as well as other languages in
Asia Minor, amply illustrates this fact.4 There are cases,
nevertheless, in which a drastic evolution of the formal
aspect of morphemes, linked to a loss or substantial
transformation of categories, led to such a marked loss of
original material that it significantly obscured any

4For this reason the classification by J. Koch 2010 of Tartessian, a
language fragmentarily attested in a few inscriptions of the 7th-4th
centuries BC published in a writing system that has still not been
completely deciphered and originating in the Southwestern Iberian
Peninsula, as a Celtic language is highly improbable (Cf. Gorrochategui
2012).
identification of the cognates. This is not the Indo-European case during the ancient and medieval periods of its diverse branches, but it could be so for certain modern periods, if one disregards existing historical knowledge. One thus enters into conjecture about whether it would be possible to prove the Indo-European nature of some modern languages, such as Irish or Farsi, if we did not know about their ancient periods, Old Irish and Old Persian, due to the drastic transformations experienced by these languages in recent periods. It appears as if Forni imagines the Basque language to be one that has experienced enormous phonological and morphological transformations, perhaps due to strong (non-identified) substrate influences, the consequence of which is that it has lost all trace of its Indo-European nature.

3.1 Yet such a complete loss has never occurred in any IE linguistic branch. If we take a quick look at the structure of Modern Irish (which is crucial, because Forni believes that Basque has shared some dialectal innovations with Celtic), despite the enormous transformations it has experienced, it demonstrates several of the above-mentioned features: a) there are beautiful cases of ablaut (intra-paradigmatic as in bean - mná, nom. and gen. sing. for ‘woman’ respectively, or across the lexicon, such as tenn- verbal stem <*ten-d-e/o- ‘to break’ / tonn < *tondā ‘skin’); b) it has a nominal morphology, in which categories of gender (masc. and fem., fossilized remains of the neuter such as the toponym Loch Neagh), of number and case (nom., voc., gen., and dat.), ordered paradigmatically into diverse inflected classes, point through internal reconstruction to well-known Indo-European markers; c) in verbal morphology first person sg. and pl. endings in the present, that of the third person sg. in the future, the impersonal in -r, etc. are still clearly identifiable. One must add to all this coherent sets of basic vocabulary, such as numerals up to ten (aon, dó, trí /teóir, ceathair, cúig, sé, seacht, ocht, naoi, deich) or kinship relations (athair ‘father’, máthair ‘mother’, dearbháthair (bráthair ‘friar’), deirbhshir ‘real sister’ (siur), neacht ‘niece’).

Modern Persian is one of the Indo-European
languages that has varied most from its older “type” (Lazard 1989). It has almost totally lost nominal and verbal synthetic inflection, and the inflected distinction of case, number, and gender, as well as that of aspect, mood, time, and voice (although not the grammatical categories themselves). Its syntax is organized in a completely different way (head-marking through the ezâfé construction) and its verbal forms are wholly analytical. Despite this, Persian has two verbal stems, present and preterite, in which the remains of IE formations are sometimes noticeable (‘make’ pres. kon- / pret. kard; ‘give’ pres. deh- < pres. redupl. *da-dâ- / pret. dâd < part. pret. pas. *dâ-tâ). The endings of verbal or predicate forms (present stem: -am, -i, -ad, -im, -i-, -and) point easily to Indo-European verbal endings. The interrogative ke (ki) ‘who’ and če ‘what’ have cognates well-known to many languages in the family. And if we focus on basic vocabulary, we can cite the series of numerals up to ten (yak, do, se, cahar, panj, shesh, haft, hashit, noh, dah), kinship terms (pedar ‘father’, madar ‘mother’, baradar ‘brother’, xahar ‘sister’, doxtar ‘daughter’, nave ‘Lat. nepos’), parts of the body (bāzū ‘arm’: Gr. πυξὺς; zānū ‘knee’: Scr. jānu, Gr. γόνυ), or those of a common Indo-European culture (carx ‘wheel’: Scr. cakra; ġuγ ‘yoke’: Lat. iugum).

3.2 Modern Irish and Farsi are examples of modern IE languages in which the change from a rich inflected morphology to another more simple and analytical one, with the loss of a great amount of ancient morphological material, has been the consequence of (or linked to) a more generalized loss of final syllables of the word, where morphological markers were placed. It is the same process that has taken place in, without looking any further, Modern English or the Romance Languages. According to Forni, however, the Basque language has experienced a totally different evolution; instead of losing final syllables, it has lost initial occlusives and even the entire initial syllable, preserving the final syllable quite well. He even explains Basque endings of dat. sg. -i, of gen. sg. arch. -e, and of gen. -en, as originating in the IE *-i, -e(s) and *-om (gen. pl.) respectively. However, he fails to explain, nor
even mention, the thoroughly unusual fact that an IE language loses all its inherited categories, while it preserves relatively well the places in which those categories are expressed, and all this while at the same time Basque maintains dialectal contacts with some of the branches such as Celtic.

3.3. The foregoing, well known by Indo-Europeanists for many years, explains why no linguist has ever thought of undertaking a search into the possible sound correspondences between Basque and IE. Yet Forni claims to have discovered regular phonetic changes between IE protoforms and Basque protoforms, believing he has thus found proof to consider Basque an Indo-European language. We will now verify whether these phonetic changes and sound correspondences are well established. Firstly, though, we will discuss the sources and bibliography used by Forni.

4. On Sources and Bibliography.

It is particularly surprising that in an essay of such grand claims the bibliography and sources used are based solely on a few etymological dictionaries. Among those concerning IE, although some on Tocharian, Italic, and Armenian are mentioned, the citations center on Mallory-Adams for PIE and Matasović for PCeltic; for Basque, he uses Trask (2008) and the bilingual Basque-English dictionary by Aulestia-White, which cannot contribute anything to the topic, although it has perhaps enabled Forni to identify words with which to test his ideas. No work on IE or Basque phonetics, morphology, or dialectology is cited, with the exception of Michelena (1977 Fonética Histórica Vasca) — which has clearly been neither understood or used — and Trask’s standard reference (1997; not 1996), The History of Basque. The book by Greenberg 2000, which does not consider Basque among the relatives of IE, only confuses and disorientates anyone who wants to practice comparative linguistics.

We will not comment on IE dictionaries, given that the discipline has a long tradition. As regards the Basque field, however, at least three works should definitely have been consulted: a) the etymological dictionary by Agud &...
Tovar, whose principal use is in offering an exhaustive repertoire of the etymologies suggested in the bibliography, many of them real atrocities, b) Arbeiaiz 1978, a very useful repertoire of the principal etymologies attributed to Michelena, ordered alphabetically, and especially c) Michelena-Sarasola, *Diccionario General Vasco* (now freely available online), a magnum opus that includes the entire Basque lexicon with its dialectal varieties, philological attestation, and chronology of forms, more approximating a historical dictionary of the language.

Trask’s etymological dictionary is a rudimentary outline of what would have been the finished work. Presumably, knowing Trask’s previous trajectory and publications, the work would just have been an ordered repertoire of the best etymologies proposed up to that moment. Unfortunately, it does not even meet this much more modest objective, and its editors did not improve it at all.

It is not just that Forni prefers to “limit” himself to basic works, while being unaware of the shortcomings of some of them, but that he also appears to ignore the entire bibliography on Basque philology and linguistics, published in Spanish, French, or Basque, languages whose understanding is absolutely necessary for anyone wanting to start out in the discipline. Nor has he used any other works in English, now easily available, beginning with the rest of Trask’s publications and including other authors such as Hualde or De Rijk (see bibliography), or miscellaneous books such as Hualde, Lakarra & Trask (eds.) 1995.

Finally, likewise it does not appear that the works consulted have helped him to achieve a thorough grounding in the prehistory and history of the Basque language. Instead, they have served as a quarry from which to extract protoforms on which to apply his “phonetic rules.” It is a shame that he did not pay more attention to the wonderful comment by Trask (1997, 412-5) on the techniques employed by amateurs in search of linguistic correspondences between unrelated languages — a

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5We now have access to volume 15 of Michelena’s *Obras Completas* (2011), which includes all the words examined in the work.
method he terms Bongo-Bongo (p. 358) — when referring to an experiment undertaken by Trask himself in comparing Basque and Hungarian, in which he obtained a respectable list of apparent cognates in one afternoon.

5. Forni applies his discoveries to basic vocabulary. He thus attempts to explain the Indo-European origins of the numerals up to ten (bat, bi, hiru(r), lau(r), bortz/bost, sei, zazpi, zortzi, bederazi, hamar), kinship terms (3 aita ‘father’, 96 ama ‘mother’, 75 seme ‘son’, 127 alaba ‘daughter’, 143 ahizpa ‘sister’s sister’, 128 arreba ‘brother’s sister’, 4 anaia ‘brother’s brother’, 131, 8 neba ‘sister’s brother’), and even personal pronouns (69 ni ‘I’, 117 hi ‘thou’, 45 gu ‘we’, 84 zu(ek) ‘you’), resorting to problematic protoforms and to implausible phonetic changes.

5.1 He derives the numeral ‘2’ bi from *\text{dw-ih}_1 (like the fem. Irish dí, di) through plausible sound changes, but for the biga variant he proposes an nonexistent form *\text{dwéh}_1\text{u-a} (neuter pl.), given that every testimony demands a protoform with the vowel o (whether it derives from *\text{dwéh}_3(u), cf. M-A 97, or from *\text{dwoh}_1, cf. M. 110): it remains unexplained why the masculine form is lost, when in the case of the numeral ‘3’ it has been preserved, and the -w > -g change lacks any historical parallels. As regards the numeral ‘3’ Forni believes erroneously that hiru and hirur are different forms, when the former is a banal evolution of the latter, just as lau ‘4’ is from laur. This is an intentional error committed in order to make the first form derive from the masc. *\text{treies} and the second from the fem. *\text{tisores} (as in Irish, in contrast to *\text{tisres} of the other languages), through implausible changes and \textit{ad hoc} analogies. It is impossible for him to derive lau(r) ‘4’ from *\text{kwétwores}, and therefore he turns to metonymy, suggesting *\text{plh}_2\text{meh}_2 ‘palm of the hand’ > *\text{plámá}, from which, by means of implausible phonetic changes, many of them contradicting those accepted elsewhere, he obtains lau: thus, *\text{plama} > *\text{plaua}, yet Forni declares that every intervocalic *\text{m} disappears in Basque without any trace; initial syllable *\text{pl} > *\text{pela-} with anaptyxis, which is a historical phenomenon that Latin loanwords suffer, loss of
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*p > h > Ø-, loss of the pretonic initial syllable, *laua > lau contradicting what was admitted for *biua > biga. The etymon *penkw-ro-st for bost ‘5’ is a phantom notion that does not exist anywhere, thought up by Forni out of two IE dialectal derivatives, one through -sti- for ‘fist’ and the other through -ró- for ‘finger’. Forni’s etymology would thus mean something like “fist of fingers,” but not ‘5’, which is preserved in all the IE languages. Furthermore, in Basque the bost form is secondary to bortz, just as beste ‘other’ is to bertze (cf. FHV, 363-4 for more examples). The IE derivation *septm > Basque zazpi ‘7’ is replete with contradictions: the syllabic nasal -m gives -u, in contrast to the treatment of ‘10’ *dekam, which gives -am, subsequently producing assimilation of the dental -tu > -tsu, a groundless change, in order to then arrive at -i, similarly groundless, in order to end up with *zeptzi or *zeptzi > zazpi with “vowel lowering” in a context in which the following vowel is high. All of this is complete nonsense. For ‘9’ he proposes an innovative Basque form *bede eta oitsu, lit. ‘one and eight’ in which *oitsu is a descendant of *oktō, with -kt-vocalization, as in Brythonic (Old Welsh oith < *oxtu) or in Romance (Port. oito), although the word has not been preserved for the numeral ‘8’ itself, which is zortzi, without an Indo-European etymology, as he confesses; meanwhile, one should point out that in order to express ‘9’ in this way one would expect the sequence ‘eight + one’, starting from ‘eight’ as a closed set of two units of four, while the ‘one + higher unit’ order would imply a subtraction: thus, ‘9’ would be expressed as ‘one from ten’, as in reality seems to be the case if one accepts the traditional etymology of the word, and we see well-known parallels such as Lat. duodeviginti ‘18’. Despite all Forni’s attempts, Basque numerals are separate from the testimonies of every IE language, ancient and modern, in presenting terms without any etymology, like ‘1’ bat and ‘8’ zortzi, in unexplained substitutions such as ‘4’ lau(r) and ‘9’ bederatzi, in unparalleled extensions as in ‘5’ bortz and ‘10’ hamar, and in contradictory choices as in ‘2’ and ‘3’. See Lakarra (2010) for an intra-Basque explanation of numerals.
5.2 It has long been known that kinship terms typically form a small coherent system in itself. The Basque kinship system, with different terms for brother and sister according to what the sex of the EGO is, is unknown in Indo-European and its descendant languages. On the other hand, from a linguistic perspective there is no trace of the ubiquitous IE kinship morpheme -ter, while another different one is attested -ba, whose IE origin in *-kʷa (casual and marginal in some derivatives) is gratuitous. Concrete etymologies enter into internal contradictions: 131, 8 neba (*emne-ba) with the simplification -mn- > -N- fortis or -nn-, as opposed to the expected evolution in eme. Moreover, if the formation is late (given that eme is in turn a Romance loanword, cf. Lat. *fem(ˈ)na), one does not understand why the tonic initial vowel falls, if that is not the case for 143 ahizpa (*gēnh₁-es- > *yanes-ba > *anes-ba > *ahezpa > ahizpa), nor for that of 128 arreba (< *anre, var. of anar (*h₂nēr) + ba), with an identical syllabic structure. Forni surprisingly derives the terms for ‘uncle-aunt’, osaba-izeba, from Romance formations with an article (*l(o) tseo+ba / *(l)a tseə+ba respectively), without explaining either the evolutions of the vowels, or the different internal sibilant, contradicting his own rules.

5.3 Although personal pronouns belong to the more systematic and basic strata of a language, in general they typically present reduced or short forms, with the use of the most crosslinguistically common and unmarked phonemes (Nichols 1996, 54-6), thus facilitating superficial similarity. In fact, Basque personal pronouns have been related to both their Euro-Asiatic (Morvan 1996, 103ff.), as well as Dené-Caucasian (Ruhlen 2000) counterparts. The similarities increase if one does not take the complete system into account and only individual explanations are attempted. The Basque pronouns are: ni ‘I’, hi ‘thou’, gu ‘we’, and zu ‘you’ (archaic > form of respect), and are clearly related to the prefix personal marker of the Subject or Patient in the intransitive verb. Forni undertakes veritable acrobatics in order to connect each of these forms to their respective IE etymon, without addressing

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chronologies or motivations of substituting some forms for others. Thus, for the two persons in the singular he starts from some IE forms that evolved as in Celtic (s.v. 69 ni), *mē > *mī and *tū > *tī (only Brythonic), to which he applies his rules: *mī > *i with a general loss of /m/ (against preserving m- in Celtic loanwords such as maite < *mati-) and *tī > hī. Forni believes, against all historical evidence, that in Basque aspiration is not a phoneme capable all by itself of differentiating two forms; thus, with the aim of avoiding confusion, he seeks for the 1st pers. sing. the plural form *(s)nī, which is an exclusively Celtic form deriving from the IE oblique in a still not clarified way. And in order to fill the hole left by the previous reinterpretation, he turns to the IE protoform of the nom. pl. *wei (nonexistent in Proto-Celtic, and in various other branches) in order to derive the Basque gu through completely gratuitous phonetic changes. For the 2nd pl. pron. zu, he does not know whether to make it stem from IE *tū (contradicting the etymology of hī), or from a Para-Celtic form *swe, in which, according to his rules, one would expect **be. Forni is not interested in explaining the historical evolution of a system, or the chronology of its changes, or the implications of all this for IE dialectal relationships. Thus, when examining 117 hī, this time he does not turn to the Brythonic *tī, but instead to Proto-IE *tīH, a reconstruction required by the Hittite zi-ik (in contrast to the non-Hittite common form *tū, *tū).

6. Despite Forni’s claims, his essay offers nothing good about the grammatical structure of Pre-Basque, Proto-Basque, or historical Basque that we did not know before: no fossilized morpheme values matching those of IE, no origins of known Basque morphemes, and no changes in structure and function that could not be reconstructed in another way. Assertions such as the idea that the Basque ergative might come from the IE abl. are pure banalities, given that one could contend the same thing if it belonged to another family, such as to one of the Australian ones that are so rich in ergatives. Yet, whatever the origin, can the derivation Basque erg. -h < abl. -ih < PIE *h₁eģs (table 61) be justified just like that when there were
still, around AD 1600, remains of the abl. -i\text{\textperiodcentered}ka \textless (-ti + -\text{\textperiodcentered}ka) and the partitive -ri\text{\textperiodcentered}ka \textless (-r-i-ka)? If in (post-Aquitanian) Medieval Basque there is -DV \textgreater -T (with a devoicing of occlusives: cf. dut < duda-, ot< ogi ‘bread’) and we have -ga-(n) in locative cases of animates and -k in the erg., it seems like there is no particular difficulty in making an original connection between both markers (Lakarra 2006a).

It is true that the -i of the dative “sounds” similar to the dat. of several IE languages, but this would not appear to be a very significant fact: on the one hand, it is a marker with a minimally phonic body; thereafter, it would have to be clarified from which specific IE form and inflected class it came, but it would be really interesting if in IE we were also to find that dative i- in verbal morphology in the same way we find it in diverse Basque archaic verbal stems (cf. ikasi ‘to learn’, izeki ‘to burn’, irakin ‘to boil’, izan ‘to be’, etc.) or in the ‘ethical’ dative or in the Trask’s “dative flag”. There is nothing like this in IE and, in contrast, it is quite straightforward to retrace all those Basque forms (together with the dative auxiliary paradigm di-, zi-) to *nin GIVE (Lakarra 2008c; cf. Lichtenberk 1985 on New Caledonian languages).

Other Basque suffixes are simply ignored (-di, -gi, -tz, etc.) or are “related” to impossible cognates. Naturally, Forni does not tackle CV- subroot elements like sa- (in sabel ‘stomach’, sabai ‘hayloft with a lower hatchway’, samin ‘intense pain’, samur ‘anger’, sakon ‘profound’, etc.), gi- (gizen ‘fat, fat of the meat’, gihar ‘lean’, and gizon ‘man’), or la- (labar ‘edge of precipice’, labur ‘short’, etc.), even when there are many opportunities for the latter two to be repeated (in the same way as happens with the ancient prefixes za-, da-, and le-) as suffixes -gi \textgreater -ki and -la \textgreater -ra in historical Basque (cf. Lakarra 1995, 2011a-b).

Similarly, he tells us nothing about reduplication (only in the noun, not in the verb, as opposed to what happens in IE) or about other phenomena such as the nonexistence of an extensive or open adjectival class in PB (cf. Lakarra 2006a). As observed in § 2 IE verb categories do not carry on into Basque; grammaticalizations such as that of the imperfective aspect were already studied \textit{in nuce} by Trask (1977) and, as in many other areas (cf. Newmann
ed. 2002), it appears to come from the verb SIT (*dar)*: *dar-tor* ‘sit-come’, from which nator or dator, etc. through the addition of the 1st pers. marker (ni-) or 3rd (ø-) to the imperfective stem dator (cf. Lakarra 2008c). We could also possibly clarify in an acceptable way — without having to turn to creolists, at least for the moment — the origins of various other markers, such as that of the plural or the partitive, or the 3rd level demonstrative, or the past, or the destinate, or of several included in UNTIL (-raining), or in comparatives of equality (adin) and superiority (-ago), etc. Possibly in those cases internal reconstruction, led by diachronic typology and the comparative analysis of grammaticalization in, for example, Austro-Asiatic, Sino-Tibetan, or Kwa languages, could be more relevant (cf. Lakarra 2012a) than the IE lookalike or superficial resemblance analogies offered by Forni.

7. If we focus now on the phonological area, the sound laws that transform original IE forms in PBs must account, not just for the etymologies of concrete cognates, but also for the evolution of the phonological system in a coherent way. The standard systems reconstructed for PIE and PB are very different, both in their inventory and in their distribution within the morpheme. There is the problem of existing phonemes in PIE that do not fit in PB, such as /m/, and unique PIE phonemes that have more than one counterpart in Basque, like the opposition between dorsal and apical sibilants.

7.1 In the first case, one should assume a generalized and gratuitous loss of /m/. It is gratuitous because every Basque /m/ with some degree of antiquity can be explained as a result of: 1) assimilation b > m in the presence of a nasal on the following syllable (*bini > mihi ‘tongue’, like Lat. balnearia > top. Mañaria), 2) resolution — by way of < mm > — of groups /n-b/ (seme ‘son’ < Aquit. Šembe-), or 3) loanwords with an original m (Latinisms such as mez and Celticisms like mando, maite). Because of all this, the contention that IE /m/ (set # 2) disappeared is unnecessary or contradicts all known evidence. For example, 23 eman (with variants emon and emun, which Forni does not cite) does not stem with any certainty from
IE *h₁en + mehan- but rather from a root *bo(n) that is more than sufficient to explain the cited forms and possibly also the dative -o in the 3rd pers. The same could be applied to 134 erhi and 63 joan, among many others.

7.2. In the second case, an effort has been made to find the condition that justifies the split: IE *s > (P)B *s <z> in a normal way, except before the front vowel (i, e) in the initial and after them in the medial, which is ‘palatalized’ giving an apical > *s <s>. However, in Forni’s very essay this rule has as many exceptions as it does supposedly regular cases: osaba vs. izeba; 7 hats (*h₂en-h₁eh₁-tor) vs. 33 hezur (*h₁en-h₁eh₁-tor), 87 (h) atz (*ped-s), 55 (h) itz (*yek-to), 40 gizon (*gid₄on < *d₄g₄om-yo), 47 (h) ortz (*odints < *h₃d-ŋt-s), 114 ezne (*d₄ed₃h₁i-n). He does not appear to be concerned about the chronology of the change, given that 123 haserre (*keh₂d-t) would require the split to be dated prior to vowel coloring by the laryngeal, while 81 zazpi (*septm) demands the split to take place after the vowel has been opened (*e > a). For words with an initial s-, in a context that contradicts his rule, he reconstructs syllables with a front vowel gratuitously (78 sudur ‘nose’ < *h₁ens-h₃od-o-ro-s) or unacceptably (193 suge ‘snake’ < *es(ʔ)-h₂od-wh-). Despite these hopeless efforts by Forni, in the Basque language the two sibilant phonemes cannot be reduced to an original unity, with numerous cases contradicting Forni’s rule: a) there is /t/s/ in contact with the front vowel (zer, zein, zezen, leze, ez, ezin, zerri, heze, hezi ‘tame’ [vs. hesi ‘fence, enclosure’], zidoi, zidor, zigor, ziko, zin, ziri, ziraun, zital, ziape (Lat. senape), hitz ‘word’ [vs. hits ‘pale’]) and b) we have /t/s/ in contact with the non-front vowel (sa-, as in sabel, sabai, samin, samur, sakon cited supra § 6, sagar ‘apple’ [vs. zahar ‘old’], sagu, sail, samar, sari, saldu, sare, sarri, sains, sain ‘body’ and derivatives sorburu, sorbalda, suhi).

7Schuchardt sought to explain — as part of his completely discredited Basque-Hamitic hypothesis (cf. Trask 1997) — the -o as stemming from the 1st person article, and even its phonotactically expected variant -a (cf. deutsu / deutsa-n, -la; dauko / dauka-n, -la …) as stemming from another article, this time of the 3rd person. All of this has for some time been completely unnecessary.
7.3 Although he claims to start from the phonological system reconstructed by Michelena, he does not understand the relationship between the weak and strong consonants in the system, in such a way that he has to presume C + -s groups in order to explain final affricates — which available evidence clearly contradicts (gorputz ‘body’ < Lat. corpus, bortitz < Lat. fortis, etc.) — when it is widely known that these come from a fortition and the (almost) general neutralization in favor of strong affricates (cf. FHV 288ff). Beginning with these groups, Forni cannot explain the alternations gaz-i ‘salty’ ~ gatz ‘salt’, orraz-i ‘combe’ ~ orratz ‘needle’, 116 ugatz ‘udder’ ~ ugasama ‘wet nurse’ or hats ‘breath’ ~ 123 haserre ‘anger’, and still less those forms with fricative (hez-i ‘tamed’ or hazi ‘raised’) that lack affricate allomorph. As a second source of affricates, Forni proposes the palatalization of dentals before -u (original and secondary -u stemming from -o) through a very unnatural phonetic change. Thus, 116 ugatz would come from the pas. part. *dʰuɣʜɨ̂-t-o-s and 52 ikuzi ‘to wash’ from *gʰud-o-s, with the passage of -to and -do > -tsu, without us knowing why the final vowel falls and the affricate is preserved in the first case, while in the second the vowel ends in -i and the affricate becomes fricative, when in Basque there is an opposition between fricative and affricate in the intervocalic position, without any known change of -ts-, -tζ -s-, -ζ; cf. 33 *enazur.

7.4 As is well-known, Michelena (1957, FHV) reconstructs an /h/ phoneme besides 5 occlusives, 6 sonorants, and 4 sibilants for PB. Trask’s reconstruction is different in this regard, given that he thinks the aspiration is an epiphenomenon of the accent and a tool for undoing hiatuses, while Michelena had established the relationship between both in a very different way: for him, /h/ was a phoneme more of PB that disappeared later in certain positions (to the right of the accent). Despite recognizing contradictions in the distribution of the aspiration and the existence of the odd non-etymological /h/, for Michelena the vast majority of aspirates were etymological — 1st h < PB *Th- (strong occlusive); 2nd h < *-n-; 3rd h < Lat.-Rom. f;
4th $h < PB *h$ — with there being many more numerous cases demonstrated of the falling /h/ than those of unmotivated addition.

We can now add quite a lot more cases of an etymological /h/, whether on the initial (harea, hogei, hogen, 48 hibai, 152 euskara · · · < Lat. arena, *bor-gen-i, Lat. ofende(re), ibani, * enuskara · · · with *$h_{2/3} > h_1$), or the 5th /h/ (- $h < -r$ in composition; uhalde ‘river bank’ < *huh- < hur-), or by metathesis (107 ilhargi < hil-argi, ), or by the 6th /h/ (< Gasc. $h$): hami ‘hunger’, hein ‘size’, hobi ‘cavity’. As for the rest, one cannot speak of any definite case of an antihiatic -h- (although one can as regards an antihiatic /g/ and, eventually, > -r-) or of generalizations of h- in Souletine monosyllables — they are etymological and have also been documented outside this area — or after the diphthong (oihu ‘shout’ < Gasc. hou-hou, saihets < sa-hets [cf. sa-bel, sa-bai, sa-kon, etc.), or the Gasc. afodz > aihotz ‘sickle’, etc. Therefore, it is completely absurd to neglect — and not even give priority to — variants with /h/, as Forni does, following a long tradition from Schuchardt — but in radical contrast to Michelena’s method of procedure — leading to disasters such as that on 49 ile/ule, 121 heri, 134 erhi, and in the explanation of the origin of personal pronouns (supra § 5.3). Unfortunately for Forni, his source (Trask 1997) could only lead him into making mistakes time and time again at this crucial point of the reconstruction and history of Basque phonology (Igartua 2001, 2006, 2010, Lakarra 2008a, 2009b, 2012d).

7.5 Forni does not take account of the system as a whole. His phonetic changes do not demonstrate any coherent treatment for phonemes in the same class. Thus, as regards syllabic sonorants, *$m > am$; *$n > en$; *$l > lu$ and *$r > -er$ on the final and -ar- on the medial. One notes this particularity especially well in the treatment of plosives. Word initial non-aspirated voiced plosives (set # 8): *$b$, *$g$- are maintained vs. *$d$, *$h > o$, γ. Treatment of the non-

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*These are the most typical treatments, given that * $m > u$ on 81 zaspi, *$r > ra$ on 108 labur. For 119 adar Forni erroneously copies the etymon M-A 272 *$kər\_\_s\_r$ ‘horn’, making the final -r consonantal.
initial plosives (set # 10) is chaotic: among the aspirates *-bh-, *-dh- > -b-, -d-, while *-gh- > -γ- and *-gh- > -k; in the medial position the palatals and velars evolve in the opposite way to those in the initial position: *-g > -γ-, *-g > -g-. On the other hand, Forni does not realize that, in establishing these sound laws, he has discovered an IE language that maintains differentiated results for each of the three series of dorsals or tectals of PIE (*g, *g, *gw), a specimen arduously sought by every Indo-Europeanist for decades. For this reason, his continuous references to shared treatments and the similarities of PB with the Celtic branch, even at such a specific level as that of Brythonic, are incomprehensible and absurd.

The drastic reduction of plosives in the initial syllable, with the exception of *b and *g and the labiovelar series, which Forni establishes, does not adequately explain the alternation l- / -d- demonstrated by some ancient Basque morphemes (cf. lohi ~ -doi; lats ~ adats), an alternation that is explained by the change *d- > l- in the initial, which is also experienced by some Latin loanwords (cf. leka ‘pod’ < Lat. theca; FHV 211). We can now add over a dozen *dVC roots whose d- is reconstructed for PB, whether they have been maintained as a second member of the compound or in reduplicated forms (cf. infra 119 on *dar, *dol, *der, *dats, etc.), or because they belong to old verbal roots whose d- has been maintained after the prefix *e- (*din, *don, *dul, *dun, etc.), or because they are the original phoneme in the greater part of the l- in hereditary terms (lehen, labur, lohi, luz, 65 lur9).

7.6 As regards vowels, it is truly impossible to find any regularity in the set of examples treated: the number of contradictions and differentiated results experienced by the vowels would be interminable. He proposes vowel falls on the final syllable in words with more than two syllables, and a fall of the initial e- in the pre-tonic position, without the position of the accent being addressed anywhere. According to the first rule 40 gizon ‘man’ is obtained from

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9 That the initial l-stems from a *d- is confirmed by handur ‘mean’.

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*gidʰ onyo < *dʰ ɠ om-yo,10 while in 4 anaia, which he makes stem from *adgnaios < *h2ed-𝐠 Spicer-yo-s, the fall does not take place. For the second rule he explains 77 su11 ‘fire’, making it derive from *h2eydʰ-o-s12 (> *aidʰ-o-s > *aitsús > *aitsù > *aisú > *esú > su), although there are numerous cases in which the first *e does not fall, even when it is the atonic syllable in IE and also in Basque, e.g. 53 ilhun (*y- louk-sno-s > *enlunnu > *enlunn > *illun > ilun). Forni does not address the problem of IE vowel quantity whatsoever, a feature that was preserved in many languages in the family (including the Celtic one) until quite late in time, or the evolution of IE diphthongs, which little resemble their Basque counterparts, nor the paradox that the vowel /a/ is not more frequent than the other vowels at the end of a word, where it should continue *-ã from the IE feminine ones, or the conditions for aphaeresis of the initial vowel, apocope of the final one, or syncope of the medial one, which he uses for convenience.

7.7 “Ordered” sound laws and derivative rules have become, following strenuous efforts on the part of worthy researchers whose names remain vivid in the minds of everyone, powerful arguments in favor of linguistic kinship and magnificent foundations of the history of the best studied languages in the world. Unfortunately, any amateur unaware of le métier can use such findings and many more from his or her harvest à tort et à travers in order to link a language with any other in the world, imparting a scientific appearance to their reflections. If exceptions can become as or more numerous than cases subjected to rules and copious rules are absolutely unknown to the historiography of the Basque language, of the IE languages, or both, we then find ourselves faced not with a demonstration of philological and linguistic

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10 He arbitrarily establishes that the anaptyctic vowel is -i-, when it is customary to be identical to that of the following syllable, and proposes -m- > -n- without any explanation.
11 Forni does not cite the most archaic attested variant in the inessive surian.
12 As opposed to the testimonies of Gr. aḯdos ‘fire’ and OInd. ēdha- ‘firewood’.

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accuracy and excellence, but with a completely ad hoc construct that adds no evidence in the field of sound correspondences to the existing lack of correspondences in the realm of grammar.

8. As we noted in § 1, evidence supporting the inclusion of Basque in the IE family must be completed through a hypothesis on the linguistic and extralinguistic stage on which we would have to situate this relationship. In other words, to which Indo-European dialectal groups or areas it belongs, with which languages it shares phonological and morphological innovations, with which others it has maintained contacts that explain loanwords or similar evolutions, trying to establish geographical and temporal coordinates. Forni suggests in several places that Basque has shared innovations with the Celtic group, although without worrying himself about the relative chronology of such events (cf. supra § 5.3 on personal pronouns, § 7.1 on Celtic loanwords with m-, and § 7.5 on three dorsal series). The suggestion that PB was a Creole is misplaced, especially if the donor languages implicated are on the one hand Celtic and on the other an Italoid language; if one thinks that every non-Indo-European morphological marker in Basque (e.g. e- of the verbal stem,\(^\text{13}\) the erg. suf. of the 2\(^\text{nd}\) sg. -k(a) m. / -n(a) f., and many others that Forni does not point out)\(^\text{14}\) is due to an unknown non-IE substrate, this is inventing an unnecessary entity when Basque itself is the non-IE language that accounts for that.

9. Conclusion

At this point in the development of Indo-European

\(^{15}\)Its origin in the IE demonstrative \(^{*}hi\)-e is arbitrary. He does not specify the chronology of this morpheme in PB, but it must be prior to the whole process of weakening initial plosives (sets # 6 and 7), an exclusively Basque change not shared by any other IE language. Despite being a very old atonic prefix it has not suffered apheresis throughout the whole history of the language (set # 22).

\(^{14}\)One should add to this the cultural kind of lexicon, which points to the original economic life, like such emblematic animal names as ‘horse’, ‘cow’, ‘sheep’, ‘goat’, and ‘dog’ (cf. appendix 67), products such as ‘corn’, ‘milk’, and ‘wool’, and implements like ‘wheel’, ‘wagon’, ‘yoke’, etc. Cf. supra § 3.
and Basque linguistics and philology, one would have expected Forni’s attempt to be more solid and better grounded than previous works. We have to admit that it is only so in appearance, despite his avowed purpose of offering a modern and superficially scientific gloss, in order to thus apparently comply with the standards and customs of the profession. Thus, for example, there is the extraordinary fact that the current work is the author’s first - he does not cite himself anywhere nor have we come across any mention of Forni in any Bascology journal or in any of the typical journals of Indo-European linguistics or of the diverse languages and subfamilies. In short, then, this is the work of a beginner who, in his first glorious pure and simple performance opens and closes a topic that whole generations have not only examined and developed, but have not even been aware of its existence.

Even leaving aside the question of the bibliography — see supra § 4 — it is clear that, from the beginning, the author misunderstands the objectives and nature of comparative historical linguistics. We see no attempt in this essay to explain any difficulty, irregularity, or real problem brought up in the existing bibliography about the history of the Basque language or the entire or part of the IE family. Instead, at all costs — even going against (without realizing it or mentioning the fact) perfectly well-established explanations or committing clear errors and contradictions in his arguments — he tries to establish some perfect “sound correspondences” that allow him to confirm a Basque-Indo-European connection.

One might have hoped for important advances in the research of real questions, both in the field of IE as well as in that of Basque, from Forni’s long article. The discovery of a new language in the family — so removed from the known type — should shake the very foundations of the reconstruction known to this point. Yet nothing of the sort occurs, because Basque offers nothing to a new, more profound, or more far-sighted reconstruction of the common IE language or of any of its branches. Nor does Forni discover any cultural element or material that links the Basque people, in any particular or special way at any stage of its past, to Indo-European civilization.
Nor from the Basque side has any new understanding emerged: we know no more about the origin of the (so stable) historical vowel system, or about the weak/strong consonantal system of (is it the same in occlusive and in sibilants or sonorants?); nothing about root phonotactics, about verbal stems and their extensions, and nor is there any word about the ancient value of *e- or of any other ancient morpheme (-di, -gi, etc.); the prehistory of the agglutination — SOV with many suffixes, abundant verbal agreement — could surely have led to some clues if the supposed PB had been projected 3 or 4 thousand years back, at the level it was in the IE family, but Forni never refers to anything like this and his final chorus to collaboration with the Creolists does not go beyond pure unmotivated rhetoric. The alleged genetic and areal relations with Celtic should illuminate relevant aspects of the lexicon and grammar of Basque, or facilitate the identification of pre-Latin IE loanwords, which, if we apply the criteria of Michena 1964 to Latin loanwords, would result in an extraordinary advance in our understanding of a wider and more remote prehistory of the Basque language (Gorrochategui 1987, Lakarra 2012d). The suggestions of Celtic loanwords (pers. pron. hi, 137 inurri, 152 euskara) are just speculations without any justification (cf. supra § 5.3 and infra, Appendix).

We regret having to end this review with such a harsh judgment. Our efforts to understand the author’s argument, check his sources, and verify his rules and proposals — even though pointless and outside the typical practice of the métier for any professional linguist — have only have been worth the time if in doing so we have warned potential readers, nonspecialists untrained in the use of comparative linguistic techniques, about taking as demonstrated evidence what are no more than arbitrary etymologies and apparently sound laws.

Appendix: Brief Comment from a Basque Point of View on Some of Forni’s IE Etymologies.

12 ber: In Basque d > r or r > d are dialectal (western), very late (postmedieval), and always in the medial, cf. FHV,
18. *buztain: The term has a variant buztain and moreover there exists putz (< butz) ‘blow’, ‘fart’; if we bear in mind *gan(i) [not garai as Forni wants to] > gain ‘above’ we see that the term comes from butz + gain; from the same root plus -gi of matter, with the typical loss of b- before u, o > 109 uzki.

19. *ban; it is widely known that -ki (< -gi, present in Biscayan and occasionally in other dialects) is a late participle marker added to older other ones (above all in -n, cf. *edun > eduki, *edon > idoki); cf. Trask 1995. The root is still present in formations such as lubana ‘ditch, fenced off land’.

26. Erre is an ancient verb, with pref. e- and falling -n (vide 41). This obliges one to explain the presence of a strong trill on the initial of the root, impossible in Proto-Basque and Historic Basque until recently. Naturally, Forni’s “solution” (tr- > rr-) is completely uncommon in the known history of the language and very implausible for its prehistory. He does not know other formations — (h)erro ‘root’, herri ‘people’ or ‘town’, errun ‘to lay (eggs), to spawn’, and even arrain ‘fish’, jarrain ‘to follow’, etc. — in which the same problem occurs, which it would appear cannot be addressed except within the evolution of the verbal stem and ancient Basque prefixes.

33. *Enatsur: There are no known cases of any minimally old -ts- > -z- in patrimonial vocabulary.

35. Gain does not come from garai, since no regular or sporadic losses are documented of -r- (until arriving at late Souletine [18th c. and after] and also then with -r- > -h-, not -r- > -ø); nor does anything like that happen in 41 goi, 42 goiz, 43 gora. The loss of *-r in the demonstrative is not comparable, since it happens at the end and is preserved in the remaining cases of the paradigm: dat. har-i, erg. har-k, etc (cf. §5.1 for hirur and laur).

39. Gibel < gi + bel (cf. gi-har, gi-zen). Forni must think the evolution *gebel > gibel is so banal in Basque that he does not justify it with any parallel, yet we are not aware of any. In contrast, we do know cognates for the root -bel (ubel ‘purple’, orbel ‘fallen leaf’ (< horri), harbel ‘slate’ (< harri), sabel ‘stomach’ (on the prefix sa-, vide § 6), etc.)
and even for *gi- (gihar ‘lean meat’, gizen ‘fat of the meat, fat’ and possibly gizon ‘man’; vide 40).

40. gizon: an etymology à la Meillet is perfectly possible within Basque, with gi- ‘pref. of matter’ (vid. 18, 39) + *zon ‘mud, earth’, cf. zohi ‘dirt clod’ with -n- > -h- after the addition of the participle or adjective marker -i.

41-42-43-49. F “explains” goi, goiz, gora and igo/igan as well as 35 gain and 37 garai. Besides the nonexistence of the rule *-r- > ø in ancient (historic and prehistoric) times, add for the same period the nonexistence of the addition of g; there are, however, cases of -ø- > -g- in Medieval times: 225 negu ‘winter’, legun ‘smooth, soft’, begar ‘must’, etc.. The root structure of the verb ‘to go up’,*gon, is the canonical (CVC) — although it later dialectally lost the -n, as did other -o- verbs (jo, igo) — so one must think of the participle -i (*gon-i) for goi and goiz (the anterior + -z of instr.) Vide 26.

44. Gorotz: it is strange he does not mention what Trask explained (2008, s.v. gorotz).

46. Hartu: Lacking such a well-known form as har-i-tu (Etxepare 1545), it is understandable that he should start from a PB with strong -rr from a supposed IE group -rk, but, unfortunately, there are no rules that transform geminate or strong consonants (whether trilled or not) into weak ones at the end of the word and indeed quite the contrary (see § 7.3). The aspiration is etymological like passim (vide § 7.4).

48. Ibai is just the less informative variant of hibai; it is — as Michelena (OC, VIII 560) once suggested — a compound of hur ‘water’ and the verb *e-ban-i [the PB *abani > *ibani is neither possible nor necessary]: *hur-bani > *huh-bahi via *r > h, *hVh > øVh (as well as *VhC > VC) and *-n- > -h-, with *h3 > h1. Now ubani, ibani and ibahi are documented and do not need any asterisk; cf. Lakarra (2008a), (2009a) for details and parallels.

52. Ikuzi: See 33 on the nonexistence of the changes -ts- > -z-; the -i is the participle, so it does not therefore form part of the root.

53. For ilhun there is no reason to begin from so far away: for many current Basque-speakers there is a clear semantic relationship between ilhun and hil ‘dead’. As a
second element, one must take into account -(g)un(e) of space and time, as well as metathesis of h- (as in ilhargi 'moon' < hil+argi 'light').

63. Joan must have an intervocal -n- at its root, if we have to explain the variant johan; apart from that, there is a metathesis with the prefix vowel, given that no “known” -an suffix exists in the verbal noun: *e-da-non > *e-do-nan > *eohan > johan.

67. Mendi < -di (?); there is no reason to analyze PB *bend-i given that the language has never admitted obstruents at the end and even less in groups; -di is a known suffix in ancient adjectives (hordi ‘drunk’, handi ‘big’) and names of domesticated animals: idi ‘ox’, ardi ‘sheep’, zaldi ‘horse’, etc. There are multiple adjectives with the modern allomorph -ti: cf. beldurti ‘fearful’, uzkerti ‘windy, given to farting’ (Lakarra 2012a).

74. Hotz: There is no evidence of a final group and yet there are internal tests of Basque that speak of a strengthening of final sibilants (Vid. § 7.3). In this case, one cannot overlook the existence of hoz-i-tu ‘wet’ (cf. DGV); cf. har-i-tu in 46.

75. There is no proof of such early -eu- > -e- and even less so that they might have become so widespread throughout the dialects.

76. sei ‘6’. The derivation PIE *seks > Pre-/PB sei is unjustified because of the ending (one expects an affricate sibilant), because of the -i- (there is no -k- > i until late Roman loanwords; never in patrimonial words), and because of the s. It is true that Forni assumes (set # 19) that the IE sibilant becomes apical before e/i, which would “explain” the absence of the dorsal z-, typical in ancient loanwords to Basque (zamari < Lat. sagmarius), but that is clearly incorrect next to the infinity of Basque words that contradict Forni’s context. Vid. § 7.2.

89. ile, ule. At the very least, the variants eile and elle are missing, which would make it resemble a protoform similar to other lexical families with the variation i-/u- (occasionally e-): cf. irten / urten / erten ‘to go out, leave’ < *(bere burua) egorten ‘to send (each to oneself)’, explained in FHV 479f. Forni gives no parallels for other examples of -ln- > L such as that he needs to derive from
Proto-Celtic — we know of some cases of \( n + l \) (mendialat \(< *\text{mendi-an-lat}, \text{Araluze} < \text{Haran-zule} \) ‘valley + long’, etc.) — nor does he say anything about the \( h \) in ilhe in the eastern dialects, as etymological as all the others seen up to now; -le might be the same suffix of ‘agent’ that we find in \( \text{erle} \) ‘bee’ (< \( ez\text{-}le \), cf. \( ez\text{-}ti \) ‘honey, sweet’ or bele ‘crow’, cf. *\( bel \) ‘black’). Thus *\( e\text{-}non\text{-}le \), on the same root *\( non \) ‘to grind, carve out’, would explain all the variants: \( *\text{enonle} > *\text{enoLe} > *\text{ehoLe} > *\text{he.ole} > *\text{heule} > *\text{eule} \) (and west. monophthongization ule) / *\( \text{heile} > *\text{hile} \) (and loss of /\( h/ \) in central-eastern southern dialects) > ilhe (metathesis of \( h\)-, vide 53 ilhun).

90. In *\( \text{elarru} > \text{larru} \) the fall of the V- is unwarranted: this does not occur in possessives (\( \text{ene} \) ‘mine’), or in nouns (\( \text{egun} \) ‘day’, \( \text{ehiza} \) ‘hunt’), or in ancient verbs (ekarri ‘to bring’, etorri ‘to come’, etc.), or in loanwords (eleiza < Lat. ecclesia), etc. With the cited exception on 100, we know of few definite cases of such a phenomenon, and it cannot be used as a reconstructive rule in any way.

94. For \( \text{alu} \), vid. Dic. Etim. by Ernout-Meillet, s.v. \( \text{aluus} \) ‘stomach’ and ‘uterus’.

95. Had Proto-Basque *\( \text{holiV} \) (which Forni needs in order to be able to derive it from IE) ever existed, such a thing would never have given \( \text{horri} \), but rather **\( \text{hori} \), since -\( l\)- gives -\( r\)- and we do not know of any case of -\( rr\)- < -\( l\)-; apart from that, \( \text{horri} \) has all the hallmarks of coming from *\( \text{hoR} + \text{-i} \) just as \( \text{gorri} \) does from goR + -i, zorri from zoR + -i, etc.

100. That the \( e\)- in \( \text{eke} \) might be original is a very remote possibility given its scarce range and its belonging to some Navarrese subdialects in which torri ‘to come’, karri ‘to bring’, etc., with the fall of \( e\) (vide 90) also occur; this suggests a back formation or rule inversion, as in the case of haundi ‘big’, documented in late Guipuscoan (as opposed to the ancient and general handi), i.e., in the dialect in which aul-, aun-, aur- > al-, an- and ar- had monophthongized earlier.

103. \( \text{Ero} \) ‘to kill’ is an ancient causative *\( \text{e-ra-non} \) from *\( \text{e-non} \) (> \( \text{eho} \) ‘to grind, beat’). We thus arrive at hero (documented form of er(h)o ‘to kill’). On the supposed PIE *\( m\)- > PB \( \varnothing \) - see § 7.1. Haragi ‘meat, flesh’ (185) [i.e. ‘sacrificed flesh’] derives from the same root, with -\( n\)-
> -h- and *h₂ > h; -gi is the known late participle (cf. Trask 1995: 227ff.): the previous -a- comes from -o in composition and the -a- of the initial syllable from assimilation.

104. Handi: This must be analyzed as *han + -di; PB *anti would never have given -d- in the whole territory (as well as the h-, naturally). Cf. hordi ‘drunk’, (h)erdī ‘half’ and animal names such as idi, etc. (vide 67, 178).


119. It is strange that Forni says nothing about the well-known hypothesis that links adar to Celtic. His suggestion of dissimilating rhotics is totally meaningless and he says nothing about the clear parallelisms between adar < *dar ‘horn, branch’, odol < *dol ‘blood’, eder < *der ‘beautiful’, adats < *dats ‘long hair, mane’, ohol < *(n)onol < *nol ‘board’; i.e., we are faced with reduplication such as those of gogor ‘hard’, zezen ‘bull’, etc., with a fall of the initial dental (cf. § 7.5)

121. It is clear that if we give heri back its etymological h-, its Romance (Gascon) origin is obvious.

126. The orol variant (if it exists) is completely dialectal and documented very late, as are the remaining d/r variation samples. Vide 119 adar, for Basque etymology.

127. Alaba cannot come from alu according to Basque derivation rules: it would give **alba, with a loss of the final vowel of the stem, cf. buru ‘head’+ hezur ‘bone’ > burhezur ‘skull’, elhorri ‘thorn’ + abundant suf. -zu > *elhorzu > top. Elhossu; moreover, vide 91 on alu.

134. Eri. Forni does not cite the most informative variant erhi, whose -h- probably comes from a metathesis *hVR- > VRh like those of alha, orheit, unhatu, etc., so we are dealing with the root *her, already known in heren, hirur, hertsi, hiri, hertze, etc. (vide 118). For the supposed fall of

137. It is not true that nothing can be said just from mere Basque data about alternating z- / ø- (and tx-): in fact, we find it in several lexical families in which tx- matches the phonosymbolic prefix added to a vowel initial (as in this case), while in others it matches the palatalization of an anterior C-; finally, the z- is the “restitution” of a non-phonosymbolic C- Thus, e.g. tx-/zorabiatu ‘sick, queasy’ from the Gasc. horabiat is explained. Apart from that, PCeltic *(s)indo- evolves into a definite article out of a demonstrative only in the medieval Celtic languages.

141. That sartu comes from the Latin insertu could perhaps be possible if we were to have **zartu; nor does the existence of sarrí ‘thicket’, whose relation is known, help. Apart from that, we are told nothing about the actual existing evolution of Lat. insertare > txertatu.

142. Same comment as above; in this case, add that sor- is the compounding form of soin ‘body’: sorbalda ‘shoulder, back’, sorburu ‘idem’; cf. ohoin ‘thief’ : ohorgo ‘theft’, (h)oin ‘foot’ : orpo ‘ankle’.

152. A loanword from Medieval Breton teut (< teaut; OW tauat) would require a **deut form, with voicing of t-, as Latin loanwords demonstrate (dolare ‘wine press’ < Lat. torculare). The IE etymology *teutā ‘people, town’, preferred by Forni, does not obey his rule Vu > V (set # 22). It is surprising that Forni is not aware of perhaps the most famous etymology in the language: heuskarra (which already appears in Etxepare 1545) comes with -n- > -h- and *h₂ > h₁ from enausi ‘to speak’ + -(k)ara ‘way of’ (Irigoyen 1990).

154. An unfeasible etymology given that hareitz precedes (h)aritz; nor does it appear coincidental that leizar ‘ash tree’, urreitz ‘hazel tree’ (> urretx) share with hareitz the segment -leitz-.

155. In Basque there are no extensions on -l- and, of course, none that might be optional: there are, however, regular alternations such as sari ‘price’ (< *sal-i) / saldu ‘to sell’,...
and rule inversions such as abel- / aber ‘livestock’, estal- / estari ‘to cover (oneself)’, etc.

156. No IE forms “merge” in hertze but rather it is a combination of the root her ‘to close’ (v. 118, 134) and the nominalizer -tze (-te is the most archaic allomorph).

162. Ortzi has a more ancient variant in -e and none with h-, which is more suspect if it were to come from PB h. Michelsen already suggested that we are dealing with *bor-tze ‘firmament’, ‘orb’, with a regular fall of b.

165. Ume comes from umme (documented in the Latin inscription from Lerga) that, in turn, comes from *onbe (vid. Ombe, in Aquitania; Gorrochategui 1984). The final -be coincides with that of the Aquit. sembe > seme. On occlusive / zero alternation on the initial, and specifically k-/-ø-, cf. FHV, 244ff.

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