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The substratum in Insular Celtic

The discussion focuses on the problem of pre-Celtic substratum languages in the British Islands. The article by R. Matasović begins by dealing with the syntactic features of Insular Celtic languages (Brittonic and Goidelic): the author analyses numerous innovations in Insular Celtic and finds certain parallels in languages of the Afro-Asiatic macrofamily. The second part of his paper contains the analysis of that particular part of the Celtic lexicon which cannot be attributed to the PIE layer. A number of words for which only a substratum origin can be assumed is attested only in Brittonic and Goidelic. The author proposes to reconstruct Proto-Insular Celtic forms for this section of the vocabulary. This idea encounters objections from T. Mikhailova, who prefers to qualify common non-Celtic lexicon of Goidelic and Brittonic as parallel loanwords from the same substratum language. The genetic value of this language, however, remains enigmatic for both authors.

Keywords: Pre-Celtic substratum, Goidelic, Brittonic, Insular Celtic, classification of Celtic languages, etymology, reconstruction, loanwords, wandering words.

1. Introduction

We will never know which language or languages were spoken in the British Isles before the coming of the Celts. The Pictish language, very few documents of which have been preserved in the Ogam script, may actually have been Celtic (Forsyth 1997). If there ever was a pre-Celtic Pictish language, virtually nothing is known about its structure, to say nothing about its genetic affiliation. Moreover, the nature of Insular Celtic is a very debated issue. While some linguists consider it to be a genetic unit, i.e. a branch on the genealogical tree of Celtic languages (e.g. McCone 1996), others believe that the isoglosses shared by Goidelic and Brythonic are better interpreted as results of areal convergence between related, but already divergent branches of Celtic languages (Matasović 2007). The arguments in favour of an Insular Celtic branch rely on the fact that there are several features of Goidelic and Brythonic, especially in the domain of verbal inflexion, which have not so far been attested in Gaulish, Lepontic, and Celtiberian, and which seem to be common innovations of the Insular Celtic languages. The arguments in favour of regarding Insular Celtic as a *Sprachbund* rely on the fact that, although Goidelic and Brythonic do share a number of features, the application of the comparative method does not allow us to reconstruct a Proto-Insular-Celtic as different from Proto-Celtic itself (see Matasović 2007 for an extensive discussion).

Why is the pre-Celtic substratum of the British Isles relevant to the proper subdivision of the Celtic languages? In this paper we shall argue that the two proposed views of Insular Celtic make different predictions about the nature of the pre-Celtic substratum. If the speakers of Proto-Insular Celtic established contacts with speakers of the substratum language (or languages) in the British Isles, we would expect to find a considerable amount of non-Indo-European loanwords shared by both Goidelic and Brythonic, but lacking in other Celtic and Indo-European languages. If, on the other hand, the speakers of Goidelic and Brythonic ar-

rived in the British Isles as linguistically differentiated groups, we would not expect the number of shared substratum words to be significant.[1] The substratum might have shared a number of areally important typological features, which would be reflected in structural convergences in Brythonic and Goidelic, but there would be few, if any, common loanwords shared by these two Celtic Branches. The rest of this paper represents an attempt to see which of these two alternative hypotheses better fits the evidence.

2. The syntactic evidence

The syntactic parallels between Insular Celtic and Afro-Asiatic languages (which used to be called Hamito-Semitic) were noted more than a century ago by Morris-Jones (1899), and subsequently discussed by a number of scholars.[2] These parallels include the following.

a) The VSO order, attested both in OIr. and in Brythonic from the earliest documents, cf. (1a) from Old Irish and (1b) from Berber (Ait Hassan dialect, cf. Sadiqi 1997: 148):

(1a) *Beirid* *in* *fer* *in* *claideb*
carry.3SG.PRES ART man.NOM.SG ART sword.ACC.SG
"The man carries the sword"

(1b) *i-ara* *hmad* *tabrat*
3SG-wrote Ahmed letter
"Ahmed wrote a letter"

b) The existence of special relative forms of the verb, cf. (2a) from Old Irish and (2b) from Ancient Egyptian (Isaac 2001: 154):

(2a) *In* *claideb* *beires* *in* *fer*
ART sword.NOM.SG carry.3SG.REL.PRES ART man.NOM.SG
"The sword that the man carries"

(2b) *jr.t* *ḥrw ...* *jtj.t-k*
eye of.horus take.REL.2SG
"The eye of Horus, which you should take"

c) The existence of prepositions inflected for person (or prepositional pronouns), e.g. OIr. *dom* "to me", *duit* "to you", *dó* "to him", etc., Ancient Egyptian *jm-j* "with me", *jm-f* "with him", etc.

[1] Other possibilities are also imaginable, of course, but they are less probable. It is possible that there was a Common Proto-Insular Celtic, but that it was spoken on the Continent, and that Goidelic and Brythonic arrived to the British Isles as already differentiated languages; moreover, it is possible that, although they were different languages, they both came in the contact with a single, homogenous substratum spoken in the whole of the British Isles, in which case we would again expect a substantial number of common loanwords shared by Brythonic and Goidelic. This latter possibility (a single substratum extending over Britain and Ireland) is *a priori* improbable considering the level of linguistic diversity those parts of prehistoric Europe for which we have more evidence (e.g. Spain and Italy).

[2] E.g. Julius Pokorny (1949), who brought speculations about pre-Celtic substratum in Britain and Ireland to some disrepute by invoking parallels in Basque and (even) North Caucasian. By the time D. Greene wrote his paper on the "making of Insular Celtic" (Greene 1966) the hypothesis about non-IE substrates in the British Isles was very much out of fashion, and it remained so until its recent revival in the works of Gensler (1993) and Jongeling (2000), among others. For a hypothesis about another Nostratic (perhaps Altaic) substratum in Celtic see Mikhailova 2007.

d) Prepositional progressive verbal forms, cf. (3a) from Old Irish and (3b) from Ancient Egyptian (Morris Jones 1899: 625):

(3a) *At-tá* *in* *fer* *oc marbad* *a* *námat*
is.3SG.PRES ART man.NOM.SG at killing his enemy.GEN.SG
"The man is killing his enemy"

(3b) *áu-k* *em* *meh*
be.2SG in filling
"You are filling"

e) The existence of the opposition between the "absolute" and "conjunct" verbal forms. The former are used when the verb is in the absolute initial position in the clause, and the latter when it is preceded by either a subordinator, or an operator changing the illocutionary force of the clause, cf. (4) from Old Irish:[3]

(4) *Beirid* *in* *fer* *in* *claideb.*
carry.3SG.ABS.PRES ART man.NOM.SG ART sword.ACC.SG
Ní *beir* *in* *scíath*
NEG carry.3SG.CONJ.PRES ART shield.ACC.SG
"The man carries the sword. He does not carry the shield"

In Ancient Egyptian, a similar opposition exists between the emphatic and non-emphatic verbal forms, whereby the emphatic forms occur clause-initially, and the non-emphatic forms occur after certain particles, such as the negation *nn*. Thus, the verb 'to be' has the emphatic form *wnn*, and the non-emphatic form *wn* after the negation (Isaac 2001: 158):

(5) *nn* *wn* *tp-f.*
NEG be head-his
"He had no head"

The aforementioned features of Old Irish and Insular Celtic syntax (and a few others) are all found in Afro-Asiatic languages, often in several branches of that family, but usually in Berber and Ancient Egyptian (see e.g. Isaac 2001, 2007a).

Orin Gensler, in his unpublished dissertation (1993) applied refined statistical methods showing that the syntactic parallels between Insular Celtic and Afro-Asiatic cannot be attributed to chance. The crucial point is that these parallels include features that are otherwise rare cross-linguistically, but co-occur precisely in those two groups of languages. This more or less amounts to a proof that there was some connection between Insular Celtic and Afro-Asiatic at some stage in prehistory, but the exact nature of that connection is still open to speculation. Namely, it is not necessary to assume that the British Isles had been populated by speakers of Afro-Asiatic languages prior to the arrival of the Celts: they could also have been populated by speakers of unidentifiable, extinct languages which shared a number of typological characteristics with Afro-Asiatic due to their being spoken in the same macro-area encompasing prehistoric Western Europe and Northwestern Africa.

In this light, it is important to note that Insular Celtic also shares a number of areal isoglosses with languages of Western Africa, sometimes also with Basque, which shows that the

[3] This feature is attested only in the earliest forms of Old Welsh (by the Middle Welsh period it was already obsolete), and it is also not widespread in Afro-Asiatic, occurring only in Old Egyptian and its descendant, Coptic (Isaac 2001).

Insular Celtic — Afroasiatic parallels should be viewed in light of the larger framework of prehistoric areal convergences in Western Europe and NW Africa.

1. The inter-dental fricative /þ/, which is very rare cross-linguistically (according to WALS), is found very frequently in languages of Western Europe (including Insular Celtic languages, but also English, Icelandic, and Castillan Spanish), but also in many varieties of Berber (e.g. in Kabyle) and in several Atlantic languages of the Niger-Congo family in NW Africa (e.g. Balanta).

2. The initial consonant mutations, or regular alternations of initial consonants caused by the grammatical category of the preceding word, or the grammatical construction of the word in question, are extremely rare cross-linguistically. All Insular Celtic languages have this feature, cf. the following examples from Old Irish, where the possessive pronoun *a* causes different consonant mutations of the head noun depending on its gender/number:

(5) *a bó* /a bo:/ 'her cow': *a bó* /a vo:/ 'his cow': *a mbó* /a mo:/ 'their cow'.

Interestingly, the same phenomenon is found in a number of Atlantic languages in NW Africa, including Fulbe, where the verbal root changes the initial consonant depending on the number of its subject (Koval' & Zubko 1986):

(6) *hoto o fahi?* "Where did he go?": *hoto ɓe pahi* 'where did they go?"

3. While the order demonstrative-noun (within the NP) is almost universal in the whole of Northern Eurasia (according to the data in WALS), in Insular Celtic we find the reverse order, cf. OIr. *in fer sin* 'that man', W *y gwr hwnn* 'id.'. The same order is found in Basque (*etxe hau* 'this house') and in most languages of the Atlantic group of Niger Congo languages in NW Africa (e.g. Wolof, Balanta, Ndut, Kisi, Temne, and others). The same order has spread also to a number of Berber languages (e.g. Chaouia, Rif), while in others the original postposed pronoun has become a demonstrative suffix on the nominal root (e.g. in Tashelhit).

4. The vigesimal counting system is clearly much less common in Eurasia than the decimal system, which can be posited for PIE. The Insular Celtic languages clearly stand out among the Indo-European languages in having clear traces of the vigesimal counting system (cf. OIr. *ceithre fichit* '80' = 'four twenties'), although in the historical period this system is not preserved in a pure form. It may be significant that a considerable number of Atlantic languages in NW Africa also have the vigesimal counting system (e.g. Diola-Fogny, Gola, and Fulbe, among others), and that it is also found in Basque.

5. While most languages of Central and Eastern Europe either lack demonstrative articles, or have suffixes expressing definiteness (as in most Balkan languages), preposed independent definite articles characterize most languages of Western Europe (including Ibero-Romance, French, English, but also all Insular Celtic languages). Interestingly, this type of definite article is also found in many Atlantic languages (Wolof, Balanta) and also some Mande languages of NW Africa (e.g. Bambara).

Of course, these parallels could also be accidental, and they are certainly not adduced in order to claim that there ever was a Basque or Atlantic substratum in the British Isles. They are only meant to show that areally significant features of Insular Celtic go beyond Afro-Asiatic.

3. The lexical evidence

Any student of the history of Old Irish and Middle Welsh is probably aware of the fact that many words in these languages do not have Indo-European etymology. My own "Etymologi-

cal Dictionary of Proto-Celtic" (Matasović 2009), which is far from being complete, nevertheless contains the large majority of words that can be safely reconstructed for Proto-Celtic, and their number amounts to only 1490 items. Of these, only 85 do not have Indo-European etymology, which means that they can be considered to be of substratum origin. This amounts to less than 6% of the reconstructed Proto-Celtic lexicon. Now, only a minority of these 85 words are attested exclusively in the two groups of Insular Celtic languages, but not elsewhere. If all of those words with possible or probable cognates in Continental Celtic, or other IE languages are excluded, we are left with only 38 words shared by Brythonic and Goidelic without any plausible IE etymology. These words belong to the semantic fields that are usually prone to borrowing, including words referring to animals (e.g. PCelt. **blVdV-* 'wolf, large predator', cf. OIr. *bled* 'monster, large animal, whale', W *bleidd* 'wolf, hero', OCo. *bleit* gl. lupus, PCelt. **lukot-* 'mouse', cf. OIr. luch, MW *llygod-en,* OBret. *loc*, PCelt. *sido- 'elk, stag', cf. MIr. *sed*, MW *hit, hyd*, MBret. *heizes* 'hind, doe', PCelt. **sukko-* 'pig', cf. OIr. *socc* 'snout, plough-share', MW *hwch* 'pig', OBret. *hoch* gl. aper, PCelt. **wesako-* 'raven, grebe', cf. OIr. *fíach* 'raven', MW *gwyach* 'grebe', PCelt. **wriggant-* 'worm, vermin', cf. MIr. *frige*, MW *gwre*, MBret. *gruech*), plants (e.g. PCelt. **subi-* 'strawberry', cf. OIr. *sub*, MW pl. *syui*), and elements of the physical world (PCelt. **liro-* 'sea', cf. OIr. *ler*, MW *llyr*, PCelt. **klukā* 'stone, rock', cf. OIr. *cloch*, MW *clog*, Co. *clog*).[4] Note that cognates of these words may be unattested in Gaulish and Celtiberian because these languages are poorly attested, so that the actual number of exclusive loanwords from substratum language(s) in Insular Celtic is probably even lower. In my opinion it is not higher than 1% of the vocabulary. The large majority of substratum words in Irish and Welsh (and, generally, in Goidelic and Brythonic) is not shared by these two languages, which probably means that the sources were different substrates of, respectively, Ireland and Britain; here we may mention such etymologically obscure words as OIr. *sinnach* 'fox' (W *cadwo*), OIr. *luis* 'rowan-tree' (W *cerdinen*), OIr. *lacha* 'duck' (W *hwyad*),[5] OIr. *lon* 'blackbird' (W has *aderyn du,* the calque of English *blackbird*), OIr. *dega* 'beetle, chafer' (W *chwilen, gordd*), OIr. *ness* 'weasel' (W has *gwenci*, a compound of *gwen* 'white' and *ci* 'dog')[6], MoIr. *partán* 'crab' (W *cranc,* probably from Lat. *cancer*),[7] etc.

The source of these substratum words in Insular Celtic is completely mysterious. The natural place to look for them would be Afro-Asiatic and Basque, but it is quite certain that they were not borrowed from either of these languages.[8] The possible Afro-Asiatic cognates seem to be lacking, and, while there are some Basque words that might be etymologically related to Celtic, the direction of the borrowing is by no means established. Thus, while it is generally assumed that Basque *hartz* 'bear' was borrowed from Celtic (OIr. *art*, MW *arth* < PIE **h₂rtk'o-* 'bear', cf. Hitt. *hartagga-*, Gr. *árktos*, Lat. *ursus,* etc.), what should we think of the

[4] For an extensive list of these words see Matasović 2009: 441–443. To the words listed there we may also add the word for sea-gull (OIr. *faílenn,* MW *gwylan,* Bret. *gouelan*, OCo. *guilan* gl. alcedo, which Schrijver 1995: 115–116 hesitatingly connects to the root **way-* in MW *gwae* ‚woe' and OIr. *fáel* ‚wolf'), the word for bat (OIr. *íaltóc, íatlu,* MW *ystlum, stlum*), periwinkle (MoIr. *faochán,* W *gwichiad,* MoCo *gwihan* — the Irish word may have been borrowed from Brythonic) and possibly a number of others.

[5] W *hwyad* is sometimes incorrectly derived from the PIE word for 'bird' (PIE **h₂ewi-* > Lat. *avis*, etc.), which does not explain the initial *h-* (Matasović 2009: 50).

[6] OIr. has also *es, esóc* with secondary loss of initial *n-* which was assimilated to the article.

[7] See Schrijver 2000, 2005 for a possible connection of this word with the (presumably pre-Irish) ethnonym *Partraige*.

[8] There do not appear to be any Afro-Asiatic toponyms in the British Isles, either. Those proposed by Vennemann (1998a, 1998b) are not persuasive. For a survey of probable pre-Celtic toponyms in Ireland and Britain see Adams 1980.

relationship between MIr. *ander* 'young woman', MW *anneir* 'heifer', Gaul. *anderon* (genitive plural, Larzac) and Basque *andere* 'lady, woman' (Matasović 2009: 35)? In my opinion, if the similarity is not accidental, it is equally possible that the Basque word was borrowed from Celtic as that the borrowing was in the opposite direction. Likewise, if there is any connection between Proto-Celtic **bostā* 'palm, fist' (Matasović 2009: 71, cf. OIr. *bos*, MW *bos*) and Basque *bost* 'five' (perhaps from 'the number of fingers on a palm'), I believe that the Basque word was borrowed from Celtic, because the Celtic words can be plausibly connected to MHG *quast* 'branch', Alb. *gjethe* 'leaf, foliage', so that their IE etymology is probable. Finally, OIr. *adarc* 'horn' does not have any cognates in Brythonic, but Basque *adar* 'horn' appears very similar. If it is an early loan from Basque into Insular Celtic, the word final *-c* in OIr. is unexplicable. If the direction of borrowing was from Celtic into Basque (or from some third language into both Goidelic and Basque) the root-final consonant(s) of the source may have been lost in Basque. But of course, like many Celtic-Basque parallels, this one is also very speculative.

There are several, perhaps many words of substratum origin shared by Insular Celtic (apparently more often Brythonic than Goidelic) and the other Celtic and Indo-European languages of Western Europe. These words were assembled and discussed by Peter Schrijver (see Schrijver 1997), e.g. W *crychydd* 'heron' vs. OHG *reigaro*, OE *hrāgra* 'heron', MW *baed* 'boar' vs. OHG *bēr*, OE *bār* (< PGerm. *baizo-), MW *mwyalch* 'blackbird' vs. OHG *amsla, amasla*, Lat. *merula*, OIr. *lem* 'elm', MW *llwyf* vs. OE *elm*, OHG *elm-boum* and Lat. *ulmus*. These may be from a non-IE substrate of the Central Europe, borrowed independently into Proto-Celtic, Proto-Germanic, and (some of them) into Italic languages. They do not, however, represent loanwords from the pre-Celtic substratum in the British Isles.

It could be argued that the substratum of Insular Celtic could be identified with Afro-Asiatic because of the typological parallels between these two groups of languages, but that the Afro-Asiatic loanwords in Insular Celtic are lacking because of the specific nature of the language contact between their speakers. It is quite possible that there are loanwords that cannot be recognized as such, and we should not forget that intensive language contacts are possible even without massive lexical borrowing (Thomason 2001: 11, 63).[9] In cases where the structure of the language makes it difficult for it to borrow new lexical items (e.g. if compounding is the default strategy for deriving new meanings), languages can co-exist side by side for centuries, and this will not be visible in their vocabularies. However, mutual influences can exert themselves in grammatical structure, especially if there is widespread pattern of bilingualism, e.g. if exogamy is the norm between two ethnically and linguistically different communities. Moreover, languages can be parts of the same *Sprachbund* (language area) and share a number of structural features if they are not spoken in areas adjacent to each other, i.e., if other languages belonging to the same *Sprachbund* intervene. We see this, for example, in the

[9] "But the implications of loanword evidence are asymmetrical: the presence of numerous loanwords is a sure sign of contact with the donor language, but the absence of numerous loanwords does not necessarily point to lack of contact. Montana Salish, for example, has borrowed some words from English, but not very many; instead, when speakers want to refer in Salish to items borrowed from Anglo culture, they tend to construct new words out of Salish components. So, to take just one of many examples, the Montana Salish word *p'ip'uysin* "automobile" literally means "wrinkled feet" (or, more precisely, "it has wrinkled feet"), a name derived from the appearance of the tire tracks. In fact, this aspect of Montana Salish speakers' linguistic behavior may be an areal feature characteristic of the Northwest region of the United States and Canada; the Sahaptian language Nez Percé of Oregon, Idaho, and Washington also has few loanwords, and many years ago the great linguist Edward Sapir commented that Athabaskan languages tend not to borrow words from European languages (Thomason 2001: 11)."

Balkans, where we do not find many loanwords from Romanian in Albanian (or vice versa), because a belt of South Slavic languages separates them.[10] On the other hand, both languages are exemplary members of the Balkans Sprachbund, sharing such features as the lack of infinitive, postposed definite articles, clitic pronouns, etc.

However, such a scenario (long term bilingualism between languages in contact, with little lexical borrowing) is unlikely for the British Isles. Whenever the Celtic speakers arrived there, they were probably not numerous — there is hardly any archaeological evidence for large-scale migrations into Britain or Ireland in the Bronze Age and later (prior to Roman invasion). Thus, the elite dominance model, where the majority of the population adopts the language of a small group of immigrants, is more likely for the Celticization of the British Isles, and in such a situation we would expect the substratum languages to contribute more than just the syntactic patterns to the superstratum Brythonic and Goidelic. And indeed, this is probably what happened: it is just that there were many substratum languages when the Celts entered the British Isles, and the languages of those Celts were already differentiated by that time. *A priori*, the linguistic diversity in the British Isles before their Celticization is only to be expected. If we look at the linguistic map of Italy before the Roman conquests, we find that very many languages were spoken there, only some of which were Indo-European (Messapic, Venetic, and the Italic languages). Moreover, the non-IE languages of pre-Roman Italy (North Picene and Etruscan) were, in all likelihood, unrelated. There is no reason to assume that there was less linguistic diversity in Bronze Age Britain and Ireland than there was in Iron Age Italy.

4. Conclusion

The thesis that Insular Celtic languages were subject to strong influences from an unknown, presumably non-Indo-European substratum, hardly needs to be argued for. However, the available evidence is consistent with several different hypotheses regarding the areal and genetic affiliation of this substratum, or, more probably, substrata. The syntactic parallels between the Insular Celtic and Afro-Asiatic languages are probably not accidental, but they should not be taken to mean that the pre-Celtic substratum of Britain and Ireland belonged to the Afro-Asiatic stock. It is also possible that it was a language, or a group of languages (not necessarily related), that belonged to the same macro-area as the Afro-Asiatic languages of North Africa. The parallels between Insular Celtic, Basque, and the Atlantic languages of the Niger-Congo family, presented in the second part of this paper, are consistent with the hypothesis that there was a large linguistic macro-area, encompassing parts of NW Africa, as well as large parts of Western Europe, before the arrival of the speakers of Indo-European, including Celtic. The historical origin of this macro-area can be seen in the re-population of Western Europe after the last Ice Age from the Western Mediterranean, or in the much later spread of agriculture along the Atlantic coast, which was probably associated with the archaeological culture of megalithic tombs in NW Africa and the western fringes of Europe in the Neolithic and early Copper Age (Sherratt 1994). We will never know for sure. The existence of a number of typologically similar languages in Western Europe and North-Western Africa prior to the arrival of the Celts (and other speakers of IE dialects) in no way implies that they all belonged to a single linguistic stock, including Afro-Asiatic.

[10] Of course, there is a layer of extremely old and numerous Latin loanwords in Albanian, and Romanian also contains a number of non-Slavic and non-Romance substratum words, some of which are also attested in Albanian.

Finally, the fact that there appear to be only a few words of non-IE origin shared by Goidelic and Brythonic, but not by other Celtic or Indo-European languages, points to the conclusion that Proto-Insular Celtic was not the language spoken by the Celts who first came into contact with the pre-Indo-European inhabitants of the British Isles. As far as the evidence of these loanwords is concerned, Proto-Insular Celtic never existed.

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Once again on the pre-Celtic substratum in the British Islands

A compact paper by the well-known Indo-European and Celtic scholar Ranko Matasović deals with, essentially, three different problems, each of which is extremely complicated and, from the perspective of Celtic studies, hardly suggests a simple and unequivocal solution. Thus, in his introduction he remarks that it is nearly impossible to identify which kind of language — either typologically or genetically — had been spoken on the British Isles before Celtic occupation (the very fact that an unknown pre-Celtic population certainly did exist is indicated by multiple archaeological discoveries, some of which show parallels between Britain and Ireland). However, already in the next phrase Matasović shifts his attention to the old and painful problem of the Pictish language, stating that "it may actually have been Celtic", with a reference to a single concise book by K. Forsyth (Forsyth 1997). Forsyth is, first and foremost, an archaeologist rather than a linguist; second, she is somewhat aware of the fact that her straightforward claim to have identified the Pictish language as Celtic is grossly oversimplified, and, consequently, suggests that linguists might solve the problem by looking from a different angle.

Yet Pictish is actually irrelevant here, because, whatever known family it belonged to — along with the Pretanic theory, there have been claims of identifying Pictish as Basque, Germanic and Proto-Saamic — it would hardly give us the answer to the question of what language had been spoken on the British Isles in the pre-Celtic era, that is, before the mid-2nd millennium BC, which is the earliest likely time of Celtic invasion into the region. The Picts, who inhabited a rather limited area of southeast Scotland (and perhaps northeast Ireland as well) could easily have belonged to a later migration wave. Thus, other lands may have been inhabited by people (or peoples) speaking a different language (or languages). Thirdly, and finally, the problem of pre-Celtic substratum in Insular Celtic languages is directly linked, or at least related, by Matasović to another complex problem that does not have an unambiguous solution problem — that of constructing the genealogical tree for Celtic languages. More specifically, he raises the question of whether the very possibility of explaining the peculiarly Insular Celtic traits in these languages could depend on a particular scholar's adherence to either the «Gallo-Brittonic» or the «Insular» theory.

This kind of approach at first seems to be almost scandalizing, since one hardly can see the Insular theory as having anything to do with the issue of substratum. Indeed, the theory according to which "the Brittonic of the Roman Period was in fact the local British variant of Gaulish" (Schmidt 1980: 179), after having been accepted uncritically for a long time, has been severely criticized during the last decades. As an alternative option, the Insular Celtic theory was constructed, which suggested an original affinity between the Goidelic and Brittonic branches of the Celtic language family, thus inevitably dismissing the 'P ~ Q' subgrouping model for Celtic languages.[11] Certainly, some phonetic fluctuations attested within Gaulish dialects (that is, between the 2nd century BC and 2nd century AD) indicate that this conventional model is somewhat artificial and that the shift $*q^w > p$ is a relatively late phenomenon. However, the proponents of Insular theory rely just as much on the evidence from historical phonology. Besides, as John T. Koch soundly

[11] Reflexes of IE $*q^w$.

remarks in his classic work, "Gallo-Brittonic vs. Insular Celtic" (Koch 1992), any comparison between Insular and Continental Celtic is complicated by the fact that, by the time that more or less valid records of early Goidelic or Brittonic first appeared, the Continental Celtic languages were nearly obsolete. That is, many linguistic traits that are now seen as specifically Insular, especially in syntax and morphology, could theoretically be found in Continental Celtic languages as well, had they persisted for just a few more centuries.

According to Koch, 'the general Neo-Celtic phenomenon of syllable losses and morphophonemic mutations arose in the Insular languages after Celtiberian and Lepontic were dead and Gaulish moribund' (Koch 1992: 491). Perhaps deviating from the subject, one could remark that the latter observation, true as it is, still actually undermines the Insular theory, since the earliest evidence for the loss of final syllables is attested exactly in the so-called 'Gaulois tardif' (late Gaulish), mainly in the nominative and accusative cases, dating back to the 1st–2nd centuries BC. For instance, P.-Y. Lambert says: "Ces abrégements sont plus ou moins importants: ARCANTODAN(nos), dans la même serie des Lixoviens, pourrait avoir perdu trois lettres" (Lambert 1997: 402). One could conceive, therefore, that an imaginary temporal extension of the evolution of Continental Celtic languages could theoretically yield us a stage not unlike Insular, and, vice versa, that the Continental data could be of significant use wherever a reconstruction of Proto-Brittonic or Proto-Goidelic forms is attempted. Moreover, the morphophonemic mutations mentioned by Koch are, at least in Old Irish, plausibly explicable through the (later) apocoped ending of the first word in a two-unit syntagma, and, in a way, it is precisely the data from Gaulish that support this solution. Just a single example will suffice: the nasalized Anlaut after possessive plural pronouns allows us to reconstruct the deleted Auslaut with *-m*/*-n-*:[12]

a n-ech 'their horse' < **eja neχ^{w}a* < **ejan eχ^{w}ah* < **ejam ek^{w}os*

This conjecture is further supported by Gaulish *ejanom* (Larzac) — gen.pl.fem. 'their'.

In the light of this, one should regard as more important those specifically Goidelic and Brittonic innovations on which the entire system of arguments for the Insular theory is based; it is these innovations that could indeed be the real evidence for the shared substratum. Yet the abovementioned article by Koch lists surprisingly few instances (only the fact that both in Goidelic and Brittonic initial *s-* of the radical alternates with the lenited */h/*, along with some vocalic parallels, can be seen as valid enough). While Koch shows, quite convincingly, that the earlier Continental languages, such as Celtiberian and Lepontic, lack a number of important phonetic innovations found in Insular languages, the nature of this difference may be merely chronological. It must be noted once more that the bulk of Koch's arguments is based exclusively on phonetic matches, without much concern for vocabulary or syntax. The Insular theory was further developed by Kim McCone (see "Evidence for Insular Celtic" in McCone 1996) and Peter Schrijver (Schrijver 1995), but then fell under the criticism of other Celtologists (see, for instance, Isaac 2005; 2007b). Presently, this problem is still unresolved, and, as P. Sims-Williams put it, "It seems, then, that attempts to prove the existence of either Gallo-Brittonic or Insular Celtic have failed so far. There are too many possible ways of interpreting the linguistic and ethnic data" (Sims-Williams 2007: 34).

Yet, until very recently, all the arguments concerning the Insular Celtic theory, either from its proponents or its opponents, were limited to the field of historical phonology, and it is only recently that some use has finally been made of archaeological discoveries (De Bernardo Stempel 2006). Even Paul Russell, whose generalization is based upon the idea of long-term contacts between sub-groups, while arguing that "it is at least theoretically possible that all the subgroups of the Celtic group are to be derived directly from Proto-Celtic, and that any striking parallels between sub-groups is due to subsequent contact between speakers" (Russell 1995: 17–18), does not transcend the limits of phonological and, partly, syntactic isoglosses.

Next, there is a matter of terminology. Russian, unlike English, when it comes to linguistic meta-description, can use two separate words for 'Insular (languages)' — *insul'arnyje* and *ostrovnyje* (both words are given in the plural form). The former may be applied to a certain reconstructed unity sharing certain phonetic innovations, which would later diverge into Proto-Brittonic and Proto-Goidelic. The latter means Celtic languages of the British Islands, that is, a historically attested state of Brittonic and Goidelic branches of Celtic, which, during a certain period of time (beginning from the 3rd century A.D.), had undergone a sort of accentual revolution, which reshaped their syntax and basically made them what they are today (with a few subsequent modifications).

[12] From [Jaskuła 2006: 92]; cf. also several other parallel reconstructions, some of which could possibly be supported by Continental data [ibid.].

In English, the term 'Insular Celtic' was originally coined for the latter meaning — for instance, David Greene uses the term 'Insular Celtic' to denote a group of Brittonic and Goidelic dialects of relatively recent origin, attested on the British Islands (Greene 1966). The same meaning was ascribed to this term by Warren Cowgill in his analysis of the two types of verb endings "in Insular Celtic" (Cowgill 1975). Yet, until now, none of the studies in which the term 'Insular Celtic' has been used in any meaning, has dealt with the evolution of vocabulary in these languages.

In this particular respect the article by Matasović is a pioneering effort, an attempt to define what 'Insular Celtic' is from an entirely different point of view — that of vocabulary. Moreover, the very presence of words whose etymology is obscure (and may be substratal) can, in his opinion, serve as evidence either for or against the Insular theory in the difficult task of building the genealogical tree for Celtic languages. As he says: "Why is the pre-Celtic substratum of the British Isles relevant to the proper subdivision of the Celtic languages? In this paper we shall argue that the two proposed views on Insular Celtic make different predictions about the nature of the pre-Celtic substratum. If the speakers of Proto-Insular Celtic established contacts with speakers of the substratum language (or languages) in the British Isles, we would expect to find a considerable amount of non-Indo-European loanwords shared by both Goidelic and Brythonic, but lacking in other Celtic and Indo-European languages. If, on the other hand, the speakers of Goidelic and Brythonic arrived in the British Isles as linguistically differentiated groups, we would not expect the number of shared substratum words to be significant" (p. 154).

Is this kind of approach relevant? At least upon first sight, it does not seem that way. One might immediately think of hundreds, if not thousands, of loanwords shared by different languages which are not necessarily closely related. Such are Scandinavian loanwords shared by English and Irish, like OI and OE *bord* 'side of a ship, plank, table, board' < ON *borð*; OI *elta* 'engraved sword', cf. Old Icelandic *hjalt* and OE *hilt/helta*; OI *cnapp* 'button'< ON *knappr*, cf. OE. *cnaepp*; OI *bát* 'boat' < ON *bátr*, cf. OE *bāt*. Apparently, these words indicate regular contacts with Scandinavian languages in the same (Viking) era, rather than close linguistic affinity between English and Irish. The same can be applied to the multiple Russicisms found in non-Slavonic languages of the former USSR or today's Russian Federation, or to the even more numerous Latinisms present in nearly every European language, as well as in many non-European languages. Yet all such examples would only indicate linguistic and ethnic contacts, either direct or indirect. Rather than being of *sub*stratal, they are of an *ad*stratal origin, and adstratal loanwords tend to be far more mobile.

In order to model a situation that could have conceivably existed during Proto-Goidelic and Proto-Brittonic occupation of the British Islands, one should think of an ethnolinguistic parallel from a historical period when a region, inhabited by a certain community speaking a language A, was invaded by speakers of languages X and Y that would consequently and simultaneously supersede the language A. The most apparent example would be Canada where the formal spoken languages are presently English and French. Presumably, today's Canadians use substratal words for local realities (although these words need not be shared by everyone). Naturally, this covers toponyms and hydronyms; it must be noticed that the word *Canada* is itself of local origin (from Iroquois *Kanata* 'settlement', see Mithun 1999) and first attested in European maps from the 16th century (probably loaned into English through French). The name of the country sounds differently in English and French, according to the phonetic rules of each language. There could certainly be many other parallels, even more interesting ones, yet the simplest example of 'Canada' clearly exposes the linguistic naïvety of Matasović's approach to the reconstruction of Insular Celtic.

It is worth noting that in the beginning of his work he concedes (theoretically) the possibility of alternate explanations for the shared stratum of obscure (and possibly substratal) lexicon present in Brittonic and Goidelic: "Other possibilities are also imaginable, of course, but less probable. It is possible that there was a Common Proto-Insular Celtic, but that it was spoken on the Continent, and that Goidelic and Brythonic arrived to the British Isles as already differentiated languages; moreover, it is possible that, although they were different languages, they both came in contact with a single, homogenous substratum spoken in the whole of the British Isles, in which case we would again expect a substantial number of common loanwords shared by Brythonic and Goidelic. This latter possibility (a single substratum extending over Britain and Ireland) is *a priori* improbable considering the level of linguistic diversity those parts of prehistoric Europe for which we have more evidence" (p. 154). So does he in fact suggest the 'Canada' model theoretically, only to reject it *a priori* in the end? Tending to oversimplify the issue of the obscure part of Insular Celtic vocabulary by reducing it to the reconstructed Insular Proto-Celtic, Matasović seems to neglect the fact that the Celtization process on the British Isles

was complex, multistage and prolonged (cf. the theory of 'Cumulative Celticity' — Hawkes 1973; for a survey of the theory, see also Mac Eoin 1986; Mallory 1984; Koch 1991). Nor does he take into account the later permanent contacts between Brittonic and Goidelic communities, during which loanwords of local substratal origin could be exchanged mutually (like Latin loanwords on the later British Isles).

All these perplexities could possibly be explained through the fact that, apart from being the author of the reviewed article, Matasović is also the compiler of a dictionary of Proto-Celtic (Matasović 2009). This volume is a product of thorough work that took him many years to complete, and is presently an almost unique collection of basic (broadly speaking) Proto-Celtic stems. As is claimed in a recent substantial review, 'Damit ist endlich eine Basis geschaffen für die mehr als überfällige Aufarbeitung der Etymologie des keltischen Lexikons" (Balles 2011: 265). This work is a large-scale one, and, as Matasović himself is indeed aware, quite open to criticism, still more for the reason that Matasović, unlike Vladimir Orel (Orel 2003), does not confine himself to identifying proto-stems (etymons) and their descendants in daughter languages and citing previous research on the subject, but rather tries to trace the phonetic evolution of each stem on an independent basis, as well as establish proper semantic matches. His research article "The Substratum in Insular Celtic" should therefore be conceivably regarded as an extension (or extended part) of the same work. Naturally, of particular interest should be the list of 85 reconstructions of Proto-Celtic words given on pp. 441–443 in Matasović 2009, whose IE etymons are not known reliably — what Matasović refers to as "The non-Indo-European elements in the Celtic lexicon". The same list is referred to in Matasović's article, where he notes that a considerable proportion of these words is also found in Continental Celtic, so that "we are left with only 38 words shared by Brythonic and Goidelic without any plausible IE etymology" (p. 157). Actually, a simple recount of the words on his list reveals 43 (rather than 38) lexical units that are *not* characterized by him as "probably attested in Gaulish" or "probable (possible) cognates in Germanic". However, this does not add much to the list.

As Matasović correctly notes, some words not attested in Continental Celtic could have simply been lost, for the reason that the evidence for Continental Celtic languages is only fragmentary and, moreover, it is not always the case that meanings of the surviving words can be reconstructed reliably. He further claims (quite correctly, from a theoretical point of view) that many of the words without a plausible Indo-European etymology (according to our calculations, only 9, i.e. 21%), denote floral and faunal objects, that is, part "of the semantic fields that are usually prone to borrowing" (p. 157). These include: 'wolf' (**blVdV-*), 'mouse' (**lukot-*), 'pig' (**mokku-*), 'stag' (**sido-*), 'berry' (**smer-*), 'strawberry' (**subi-*), 'pig' (**sukko-*), 'raven' (**wesakko-*), 'sea weed' (**wimonā-*). In the article, the list based on the 2009 dictionary has been supplemented with the words for 'sea-gull' (OI *faílenn*, MW *gwylan*), 'bat' (OI *íatlu*, MW *ystlum*) and 'periwinkle' (MI *faochán*, W *gwichiad*).

It might also be supplemented, for instance, with the Insular word for 'swallow', which also lacks a reliable etymology[13], yet is definitely Proto-Celtic in form (OI *fannall,* MW *gwennol* < OK **waNālā*, see McCone 2005: 408–9). In the above cited work, McCone drew parallels between Insular Celtic words and Basque *enara*, *ain*(*h*)*ara* 'swallow', tracing them back to a hypothetical Proto-Basque **(w)aiNala*, supposedly loaned into Celtic at some stage. Later, the Proto-Celtic form was more accurately restored as **waNeLā* in (Stifter 2010: 151), where another parallel, Gallo-Roman *vanellus* 'Northern lapwing' (from Vulgar Latin), was also adduced. Juxtaposition of lexical forms brings Stifter to the conclusion that the word for 'swallow' or 'lapwing' could have been borrowed into Proto-Basque and Proto-Celtic from another non-Indo-European language (Stifter 2010: 156).

Other words cannot be grouped semantically, including natural objects (for instance, **loro-* 'sea', **klukka* 'rock') as well as artefacts (**mando-* 'awl', **bratto-* 'mantle' etc)[14]. Naturally, as Matasović himself is perfectly aware, this list is open to further expansion, and closer examination of specific Celtic languages, either Insular or Continental, could (and does!) yield more words of obscure origin.

Why not then to define them as merely 'wandering words'(Wanderwörter), presuming parallel and inde-

[13] In Matasović 2009: 391–2, there is an attempt to derive the Proto-Celtic word for 'swallow' (in his reconstruction, **wesnālā*) from IE **wesr/n-* 'spring'. This is hardly convincing, since it runs against the root vocalism in Goidelic (*a*?).

[14] Some of these words can probably be Indo-European, though their etymology is unreliable. Thus, Matasović states that OI *gorm* 'blue' (MW. *gwrm* 'dark-blue', Bret. *uurm-haelon* 'with brown brows', Corn. *gorm* 'dun, dark'), "do not seem to have any cognates in other IE languages, so this adjective was probably borrowed from some non-IE source" (p. 169). Yet there is a probable origin for this word — IE **g^{w}her-mn-os* 'warm, hot' (IEW 1959, 493; MacBain 1982, sec. 21), implying that the word originally referred to embers (reconstructed proto-Celtic **gorsmo-s* (MacLennan 1979: 188). Therefore, although it cannot be restored as a Proto-Celtic word for any particular colour, it is perfectly traceable to an IE stem with another meaning.

pendent processes of borrowing into Brittonic and Goidelic from a third language (or even through the mediation of a fourth language)? Should not the very presence of these words in Gaulish indicate such a possibility? The observed regularity of phonetic shifts could then simply be evidence for an early date of borrowing — before the 'linguistic revolution' in Insular Celtic languages that took place over the relatively recent time period of 4th to 5th centuries AD. Now if one takes into consideration the glottochronological evidence indicating that Proto-Brittonic and Proto-Goidelic diverged approximately in 1200 BC (see Blažek 2007: 94), the words listed by Matasović must have been already present in the hypothetical Insular Celtic, supposedly borrowed from an obscure substratum language pre-existing on the British Isles. However, there is little, if any at all, certainty about it.

Let us take, for instance, the word for 'badger', reconstructed by Matasović, which is also attested in Continental Celtic, although in Gaulish another lexical unit is conjectured for the same meaning, *tasgos*. The latter word is well represented in proper names and survives in French *tanière* 'badger hole' (for details, see Delamarre 2003: 292–293). At the same time, Gaulish NP and NL also had an attested form *Broccos* (*Broccus, Broccius, Broco-magos* 'badger-field') which, through later Insular data, is also identified as a word for 'badger'. This word, lacking IE etymology, had superseded the native *tasgos*: MI *broc* (Ogam. BROCI), Welsh *broch*. The Auslaut in both Irish and Welsh forms, where the original consonant is preserved in the former case and turns into a fricative in the latter, certainly allows the reconstruction of a geminate in **brokkos*, present also in Gaulish personal names. Cf. similar evolution in a native word: proto-Celtic **knokko* 'hill' < IE **knek-* (IEW: 559) — OI *cnocc*, MW *cnwch*. There is no room here to discuss the hypothesis that derives **brokkos* from a possible IE stem **brak-* 'make a cracking noise' and links the word for 'badger' with OI *braigid* 'farts, breaks wind'(LEIA-B: 77; Schumacher 2004: 233). Yet, even if one admits the absence of a reliable IE etymology for this word, there is no need to derive it from an early proto-language, thus dating it back to mid-2nd millennium BC or even earlier. Similarly, G. *cattos*, OI *catt*, MW *cath* 'cat', allow for Matasović's reconstruction of CC **katto-*, presumably dating from the same early period. Yet, having reconstructed the Proto-Celtic form **katto-*, Matasović is aware of its fictitious character, since he admits the possibility of an early borrowing from Latin. It seems that there is no sufficient reason to dismiss the possibility of the same borrowing scenario for **brokkos*. If so, how can it be seen as 'Proto-Celtic' at all? The only unambiguous fact is that the borrowing of this particular word predates the apocope that took place in the 3rd to 4th centuries AD. A similar kind of evolution may be observed in another example from Matasović: PCelt. **sukko-* 'pig', cf. OIr. *socc* 'snout, plough-share', MW *hwch* 'pig', OBret. *hoch* gl. aper; cf. also some examples that are not quoted in the article, yet present in the EDPC:

**slattā* 'stalk, staff': MI *slat* 'stalk, stem', MW *llath* 'rod, staff', MBret. *laz*
**mokku-* 'pig': OI *mucc*, MW *moch*, MBret. *moc'h*
**bratto-* 'mantle, cloak': OI *bratt*, MW *brethyn* 'cloth', MBret. *broz* 'skirt'

Interestingly, the supposedly substratal words are marked by an unusual frequency of geminates: in Matasović's dictionary there are 17 instances, which constitutes 20% of his list of etymologically obscure words and brings to memory the 'language of geminates' theory set up by Peter Schrijver; according to it, this type of language was present in Northern and Western Europe before Germanization and brought a number of loanwords to both Indo-European and Uralic languages (Schrijver 2007).

Nevertheless, our task is not to present any original interpretations of etymologically obscure (that is, lacking convincing IE etymologies) words that are found in either all of the Insular Celtic languages or some of them. In some instances cited by Matasović, there are apparent Basque parallels, while other cases are still left unsolved. Thus, regarding OI *rún* [*ā* f.] 'mystery', MW and MBret *rin* 'mystery, wisdom', cf. Gaulish *comrunos* 'confidant', Matasović, following Orel (Orel 2003: 310, see ibid. for bibliography and speculations on possible IE origins) and Joseph Vendryes (LEIA-R,S: R–53), notes that this word belongs to the shared Celtic and Germanic stratum of sacred vocabulary and could likely have been borrowed from Celtic into Germanic, while "both Germanic and Celtic words may have been borrowed from some non-IE language" (Matasović 2009: 317). At the same time, he reconstructs the Proto-Celtic form **rūnā* (although Orel does the same thing; his version is given as **rūnō*). But did it ever exist at all? And was there ever a Proto-Celtic word for 'swallow', allegedly borrowed from Proto-Basque (see above)? It is worth noticing that Vendryes, who does compare the Celtic and Germanic words for 'mystery', refrains from reconstructing a common proto-stem, and such caution seems justifiable.

Reconstructing proto-languages from «Wanderwörter» is almost as safe as roller-skating in the mire,

and using these reconstructions to build up branches of a linguistic genealogical tree is even less promising. Matasović's conclusion that "finally, the fact that there appear to be only a few words of non-IE origin shared by Goidelic and Brythonic, but not by other Celtic or Indo-European languages, points to the conclusion that Proto-Insular Celtic was not the language spoken by the Celts who first came into contact with the pre-Indo-European inhabitants of the British Isles. As far as the evidence of these loanwords is concerned, Proto-Insular Celtic never existed" (p. 160) may be agreed with, but for a different reason — from the viewpoint of the conventional Gaulish-Brittonic theory. Analysis of obscure words held to be of substratal origin does not significantly change things. Insular Celtic is nothing more than a modelled molecule of imaginary substance, completely out of place within the linguistic model based on glottochronology. Of course, Matasović is not the only scholar to be blamed for that.

In this case, is there any positive agenda in the substratum theory at all? For a long period of time, before Celtic languages were introduced to Britain and Ireland, earlier peoples must have used local toponyms for at least the most prominent features of the landscape, and some of these could have possibly survived the shift from languages now lost to those now present on the British Islands. One such group of identifiable toponyms consists of river-names that date from a very old stage of Western Indo-European. Such names have been identified on the Continent by Hans Krahe (Krahe 1962, 1964) and are also present in Britain (Nicolaisen 1976, 1982) and Ireland (de Bernardo-Stempel 2000, 2005, 2007 and Vennemann 1998). These names are described as 'Pre-Celtic' or 'Old European (*Alteuropäisch*)'. The development of this trend seems to be the only prospective way, but, although it was first contemplated quite a while ago, it has not yet yielded any linguistically reliable basis. Residues of so called «Old European» hydronymy have indeed been identified within Celtic-speaking regions — for example, the stem **ausa*- or "the well-known hydronymic base **dura*-/**duria*" (De Bernardo Stempel 2000: 99). To those, we could add the etymologically obscure Irish hydronyms **ness*- and **úr*, but in any case, the whole matter lies in the domain of "the unresolved question about the real nature of the river-names ascribed to 'Old European" hydronymy" (ibid.). This issue goes beyond the subject of Indo-European or Celtic studies and has little to do with either the construction of a genealogical tree for Celtic or arguments in favour of the Insular theory.

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Reply to Tatyana Mikhailova

In her comments on my article on the substratum in Insular Celtic, Tatyana Mikhailova raises some important questions. The first is the genetic classification of Celtic languages, on which I personally prefer to remain non-committed, but which is a matter of serious disputes in Celtic linguistics. I would say that the majority of scholars now seems to accept the "Insular Celtic" hypothesis of McCone, Schrijver, and others, but I agree with Mikhailova that the alternative, Gallo-Brythonic hypothesis, remains a viable option. I cannot agree, however, with her thesis that the distribution of non-Celtic loanwords in Insular Celtic languages is irrelevant to the issue of genetic classification.

It is true that Irish and English share many loanwords from Old Norse, but the crucial thing is that we can show that they were borrowed *independently* in those languages. Of course, it would be absurd to assume that Irish and Welsh arrived to the British Isles before their separation because they share a huge number of loanwords from the same source (English), but this is because historical phonology of these languages shows that these loanwords entered both Irish and Welsh *after* certain exclusive Goidelic and Brythonic innovations. For example, although both W *papur* and Ir. *páipéar* come from English *paper* (ultimately, of course, from Gr. *pápyros*), it is clear that these words were borrowed after lenition and apocope that affected both

Goidelic and Brythonic, with different results. I believe the same argument holds for non-IE loanwords in Insular Celtic: since the number of such loanwords that are attested in both branches of Insular Celtic is rather small, it is more plausible to assume that the ancestors of the Irish and Welsh did not speak a single language at the time of borrowing of the substratum vocabulary. The opposite case (that the Insular Celts arrived to the British Isles as a single linguistic community, but borrowed very few common substratum words) remains a possibility, but to my mind it is clearly less probable. It is also possible that Celts simply did not borrow many words from substratum language(s) in the British Isles, but this is improbable considering the large number of words in Irish and Welsh that do not have any etymology at all and that cannot be projected to Proto-Insular Celtic. Of course, future etymological research could disprove this claim.

Mikhailova is correct in arguing that the exact number of substratum words in Insular Celtic is uncertain, and I am quite convinced that it is indeed larger than the number indicated in my *Etymological Dictionary of Proto-Celtic* (Matasović 2009). However, I do not find justified Mikhailova's criticism of my etymology of OIr. *fannall*, MW *gwennol* "swallow". The avocalism in Goidelic may be due to a trivial assimilation (**wesnālā* > **wennālā* > **wannālā*), similar to well-established Joseph's rule (**eRa* > **aRa*), which operated in Proto-Celtic. The existence of Gallo-Roman *vanellus* "Northern lapwing, *vanellus vanellus*" only shows that the reflex of Proto-Celtic **wesnālā* "swallow" may have existed in Gaulish, where the Celtic suffix **-ālā* was apparently replaced by the similar Latin *-ellus*. I believe that, when a plausible Celtic and Indo-European etymology of a word exists, we need very strong reasons to assume that it was borrowed from some unknown source.

Note, finally, that Proto-Celtic **brokko-* "badger" may have an Indo-European etymology after all. Irene Balles (2010: 15–16) suggests that this word is derived from PIE **brog^h-ko-* (with the same suffix as in **sukko-* "pig" and **bukko-* "goat"). The root would have been **b^{h}reg^h-* "to smell, to stink" (Lat. *fragrāre*, OIr. *braigid* "to fart"). This etymology will be discussed in detail in the second, enlarged and corrected edition of my *Etymological Dictionary of Proto-Celtic* (preliminary *Addenda et corrigenda* are available for free download from my website (http://www.ffzg.hr/~rmatasov).

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Дискуссия посвящена проблеме докельтского субстрата Британских островов. Статья Р. Матасовича, в первую очередь, касается анализа синтаксических черт, общих для островных кельтских языков (бриттский, гойдельский) и языков, входящих в афроазиатскую макросемью. Вторая часть его статьи представляет собой анализ кельтской лексики, не имеющей индоевропейской этимологии и предположительно субстратной. Значительная часть таких лексем засвидетельствована только в бриттском и гойдельском, и автор предлагает реконструировать их протоформы на уровне островного кельтского. Эта идея отвергается Т. Михайловой, которая предпочитает трактовать данные слова как более поздние параллельные заимствования в гойдельский и бриттский из одного и того же субстратного языка. Генетическая отнесенность данного субстратного языка остается не проясненной у обоих авторов.

Ключевые слова: докельтский субстрат, гойдельский язык, бриттский язык, островные кельтские языки, классификация кельтских языков, этимология, реконструкция, лекические заимствования, бродячие слова.