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THE MULTIPLE SEMANTICS OF PIE DEICTIC $*b^he$ IN BALTIC

Abstract: The traditional equation of Lithuanian connective $b\dot{e}$, be- with the preposition $b\dot{e}$ 'without' can be supported by a more detailed reconstruction of the semantic history of the words. This analysis can be supported by outer-Baltic evidence for the PIE deictic elements $*b^he$, $*b^ho$.

Keywords: Lithuanian; Latvian; Old Prussian; etymology; deixis; conjunctions; particles; prepositions.

1. Introduction

Old and Modern Lithuanian have a connective conjunction and prefix bè, be-, the etymology of which is disputed. Traditionally, connective be is regarded as cognate with the preposition bè 'without' and compared with other Baltic and Slavic words which point to a PIE particle or pronoun $*b^he$. This etymology can be found, for instance, in Fraenkel's etymological dictionary (1962-1965, 38, 41), in Dunkel (2014 2, 116-119), in Derksen (2015, 284), and in ALEW (p. 101). Lühr (1995) provides the key arguments that justify ranking Lithuanian connective bè, be- with other Baltic conjunctions. Yet the recent works of Smoczyński (2007, 51) and Petit (2010, 285) regard the etymology of be as unknown. Ostrowski (2010; 2011; 2012; 2016; 2017) and Nau & Ostrowski (2010) have elaborated on the pragmatic and etymological analysis of a number of usages of be in a series of articles on Lithuanian particles and pronouns. They propose to separate connective bè, be- etymologically from the preposition bè 'without'. Nau, Ostrowski (2010, 21) and Ostrowski (2010, 147) claim that Old Lithuanian be 'still, yet' and Old Prussian bhe 'and' stem from a 3 sg. copula *bijā 'was' (cf. Latvian bija, Old Prussian bēi 'was' in the Enchiridion), which would have developed via $bj\bar{a} > b\bar{e} > b\bar{e}$ to attested be. Ostrowski regards the Old Prussian hapax be 'was' beside usual bēi as an important support for his theory of reduction, but van Wijk (1918, 147) has suggested that it may be a spelling error for bei, caused by be 'and' following immediately in the text. In any case, the reduction theory cannot apply to usual $b\bar{e}i$, bei, which represents an earlier imperfect * $b\bar{e}$ 'was' to which the productive ending $-\bar{\iota}$ of monosyllabic preterites was added (Kortlandt 1998, 146–147).

As I will argue below, the traditional equation of Lithuanian connective $b\dot{e}$, be- with the preposition $b\dot{e}$ 'without' can be supported by a more detailed reconstruction of the semantic history of the words. Further afield, this analysis can be supported by outer-Baltic evidence for the Proto-Indo-European deictic elements $^*b^he$, $^*b^ho$.

2. The evidence

The three main functions of the particles with the form /be/ are the preposition 'without', a conjunction 'and' or 'because', and a phrasal particle with connective or continuative meaning.

2.1. Old Prussian

There is one Old Prussian attestation of *bhe* 'without' taking an accusative object: *Deiwas rīks pereit* ... *ir bhe noūson madlan* 'God's empire will come ... also/even without our prayer' (Enchiridion, Trautmann 1910, 35, line 13–14). Otherwise, *bhe* is the conjunction 'and' in Catechism II and the Enchiridion but takes the forms *ba*, *bah*, *bha*, *bhæ* in Catechism I. Connective *be*- is reflected in the first syllable of the conjunction *beggi* 'for, because' in the Enchiridion.

2.2. Old Lithuanian

The preposition $\langle be \rangle$, to be interpreted as $b\grave{e}$, is found governing the genitive in the meaning 'without'. The same form also occurs as a nominal prefix 'un-, -less' in *bebernis* 'childless'.

The element *be furthermore appears in the proclitic conjunction $b\hat{e}$ - 'for, because' (ALEW, 101–102), in $be\tilde{i}$ 'and, also' (ALEW, 104; Ostrowski 2017), and in the question particle biau 'whether' (thrice in Mažvydas' Catechism; Ostrowski 2012).

Old Lithuanian also employs be as a continuative particle, e.g., kolei be diena 'because it's still daytime', kalei beturrim 'as long as we are still alive' (Ostrowski 2016, 177), and in its negated counterpart nebe- 'not anymore'. Furthermore, be- occurs in the compounded particles begù, bèg 'whether, maybe', begvèl 'again, finally', bejè 'of course', beñt, bént, beñ 'at least, only', bès, bès, bèz 'whether, maybe', and bèt 'but, rather' (in part of the Žemaitian dialects it means 'because').

2.3. Modern Lithuanian

Lithuanian *bè* 'without' governs the genitive. The same meaning is found for the nominal prefix *be*-, e.g., *bevaīkis* 'childless'. As a conjunction we find *be* 'and' in dialects: *Aš be tu eisiva medžioti* 'You and I are going to hunt' (LKŽ 1, 703). Other particles in which *be* features are *bè*, *bèg* 'whether' and *beī* 'and', in Žemaitian also 'whether' (Ostrowski 2017). The prefix *be*- of simultaneity (Arkadiev 2011; 2012) occurs with nouns and verbs (especially with participles), for instance in Žiūri jauniausioji Eglė – jos rūbuose žaltys begulįs 'The youngest, Egle, looks, and behold! there is a grass snake in her clothes' (example taken from the story 'Egle, the Queen of Serpents', cited by Arkadiev 2011, 44). In combination with verbs, *be*- also has the meaning 'still' whereas *nebe*- means 'not anymore' (Arkadiev 2011; Ostrowski 2016) or 'only'.

2.4. Latvian

In Latvian, the preposition 'without' takes the genitive and occurs as bez (the modern standard form, Prauliņš 2012, 169) and be (Endzelin 1923, 497–498). Like in Lithuanian, it can be used as '-less' in compounds, e.g., bezdarbība 'unemployment'. The conjunction bet 'but' is identical to Lithuanian bèt (Endzelin 1923, 815).

2.5. Slavic

Slavic only has the preposition Old Church Slavic and Old Russian *bez*, *bezŭ* 'without' which governs the genitive, from Proto-Slavic **beź* (Derksen 2008, 38).

3. Etymologies

Several branches of Indo-European contain evidence for a monosyllabic, particle-like word that can or must go back to PIE $^*b^he$. It can surface as a deictic pronoun, a conjunction, a modal particle, or a preposition. Some of the branches containing $^*b^he$ also show evidence for an ablauting particle $^*b^ho$, and the ablaut between *e and *o would match the known behaviour of PIE morphemes, pronouns included, such as interrogative $^*k^we$ beside $^*k^wo$ 'who, what', demonstrative *te beside *to , anaphoric *2e beside *2o (Beekes, de Vaan 2011, 225–231). I will therefore assume that the three usages of Lithuanian and Baltic be developed out of a single PIE particle $^*b^he$. The reconstruction of the meaning of a deictic particle preserved in several languages can of course only be approximative; for reasons to be explained below I will start from an original identificational or anaphoric particle, 'that

one (there)', 'the one mentioned'. I will discuss the three Baltic usages as a preposition, a conjunction and a particle, respectively, and show how they may all be explained from such an initial meaning.

3.a. Preposition *be, *beź 'without'

The usage as a preposition 'without' goes back to Proto-Balto-Slavic. The two variants BSl. *be and * $be\acute{z}$ would mechanically go back to PIE * b^he and * $b^he-\acute{g}^h$, the latter with the addition of the consonant of the causal particle found as * \acute{g}^hi in Old Church Slavic -zi, Sanskrit $h\acute{\iota}$, Avestan $z\bar{\iota}$ 'for', and Greek $oukh\acute{\iota}$ 'certainly not'. Probably * $-\acute{g}^h$ originally had its own function, such as to indicate causality or to lend emphasis.

In view of the Sanskrit adverb bahis 'outside', which may have added adverbial *-s to IIr. * b^ha-j^hi from PIE * b^he plus * g^hi , it is possible that the particle sequence * $b^he-g^h(i)$ 'outside, without' was an innovation of Late Proto-Indo-European that predated the split between Indo-Iranian and Balto-Slavic. In a construction of the type "X, in particular X_1 ", the speaker singles out the specific relevance of X_1 . A subsequent change in perspective from inclusion ("X, and in particular X_1 ") to exclusion ("X, but in particular X_1 ") is the first step towards a new meaning of the particle. When the referent of X_1 is not viewed as a member of set X anymore but as a separate entity Y, the semantic shift to "X except for Y" has taken effect. That is, the deictic particle has become reanalyzed as a preposition meaning 'without'. A well-known parallel for this development is provided by West Germanic, where the adverb *sundar 'separately, alone' (compare Gothic sundro 'in particular, alone') has developed into the Dutch preposition zonder 'without' and the German disjunctive, adversative conjunction sondern '(not X) but (Y)'.

The identical meaning of Baltic *be and Slavic *beź, as well as the cooccurrence of *be and *beź within East Baltic (unless Latvian bez was borrowed from Slavic), suggest that the presence of *-ź was facultative until the Proto-Baltic period. In other words, the suffixation of *-ź was not necessary for the development of the meaning 'without'. Alternatively, Proto-Baltic (as attested in Old Prussian bhe and Lithuanian bè) secondarily got rid of the variant *beź, but it is unclear by which process that could have happened.

3.b. Connecting 'and' in Prussian and Lithuanian

If, in the construction "X, and in particular X_1 ", the emphatic component 'in particular' of the particle gets bleached, the meaning 'and' or 'or' remains. In Lithuanian, the addition of what was probably the neuter pronoun *id has

yielded bei 'and' (pace Ostrowski 2017, 58, who dismisses this possibility because of the regional restriction of bei within Lithuanian to the southwest; but note that Avestan $b\bar{o}it$ 'even' may also reflect $b^he + id$. PIE id is the pronoun which is used to stress identification in Old Indo-Iranian. We may assume that, in Baltic, it added the emphasis which had been bleached in the process of $*b^h e$ becoming 'and'. The pronoun *i- seems to have lived on for a long time in Baltic, cf. Lith. dial. itas 'this' (Ostrowski 2010). In support of this derivation it may be added that MoLith. beī is only used to connect two closely linked nominal constituents, as in dienà bei naktìs 'day and night'. Ostrowski (2017) has shown that bei has a focalizing meaning and has not become a general connector (yet). This meaning fits the etymology with *id very well. Ostrowski's own etymology of bei as *be-ir 'and-also' (2017, 59-60), with phonotactically induced loss of -r, is conceivable on the phonetic level but it is contradicted by semantics. Ostrowski himself argues that bei is used in Old Lithuanian especially for "natural coordination" of the type 'father and mother', 'hands and feet', but I would argue that especially in the case of natural coordination, languages are less prone to add an emphatic particle such as ir. However that may be, bei is not only used for natural coordination. Ostrowski shows that *bei* is sometimes used to introduce sequential actions which can be conjoined by ir (p. 53-54), as in the following citation from Bretke's Bible (Exodus 2, 1-5): Bei Dukte Pharaono nueija szeminiu, (...) ir ios panios waikschczoia ant kraschto wandinio. Įr ischwidusi Skrinele Szalinosa, nusiunte ghi Tarnaite, ir atneschdinoia ie. 'And the daughter of Pharaoh went down (...), and her female attendants were walking along the riverside: and when she saw the basket among the reeds, she sent her maid to get it'. In such instances, it would be surprising if the phrase started with 'and also', to continue only with 'also'.

The switch to adversative 'but' has been made by Lithuanian $b\grave{e}t$ 'but, rather'. In some dialects, the meaning 'because' developed from earlier betai 'and this' or 'without this', also OLith. betai-g 'but' (see Fraenkel 1962–1965). Both the connecting meaning and the privative meaning could explain the shift to 'but' (for the latter, compare English $but < *b\bar{u}tan$ 'outside of' and German sondern as explained above) but dialectal 'because' clinches the matter in favour of original 'and this'.

A parallel prism of meanings is attested for the PIE particle $*h_1eti$, with a preposition 'beyond, over, to' in Sanskrit $\acute{a}ti$ and Avestan $\acute{a}iti$, and the particles

Gaulish *eti* 'yet, still' and Greek *éti* 'still, also, further'. The meaning of Latin and Umbrian *et* 'and' has developed from 'in addition to, beyond, besides', and the same is true for Phrygian *eti*- 'and' and Gothic *ip* 'but'.

It has been suggested that the meaning 'and' of Lithuanian be resulted from an earlier usage as a modal particle, German "jawohl, freilich" (Dunkel 2014 2, 120⁴) or "wahrlich, wirklich, folglich" (Lühr 1995, 125). I am not convinced that this would work. Whereas the shift from conjunction to modal particle is well-attested (see below), the reverse is less usual. Also, these etymologies are largely based on a comparison with Avestan $b\bar{a}$, which may synchronically be analyzed as a modal particle but which probably goes back to a deictic element. In comparisons with the Balto-Slavic forms, therefore, one should start from the deictic meaning.

3.c. 'Still, maybe', particle or affix of simultaneity

For the shift of *be to the interrogative particle be and to OLith. begù, bèg 'whether, maybe', bès, bès, bès 'whether, maybe', Lühr (1995) starts from the connective meaning 'and'. She assumes that *be then developed into a context-bound question particle for yes/no-questions, much like German und in Und? Habt ihr gewonnen? 'And? Did you win?' In a third stage, the particle would have lost its contextual restrictions, leaving only a yes/no-particle. Finally, in a fourth stage, even the expectancy of a yes/no-answer would have disappeared, leaving a purely grammatical question marker.

Lühr intended this analysis for the Old Lithuanian particle biau, bau, of which she and most other scholars assume that it reflects *be plus the PIE particle *u, whence biau and, with depalatalization, bau. Ostrowski (2012) now explains biau as *be plus the focus marker jau, much like $neja\tilde{u}(gi)$ also occurs as interrogative particle. If the origin were so recent it seems questionable that no trace of *be-jau would be left, but Ostrowski's alternative cannot be excluded.

A parallel development from 'and' to an interrogative particle is offered within Baltic by Proto-Baltic *ar 'and' yielding OLith. er 'and', Latvian ar 'with', OPru. er-ains 'anyone', er 'until' (a calque on German und), but surfacing as the question particle $a\tilde{r}$ in yes/no-questions in Modern Lithuanian (Lühr 1995, 123–124).

Another meaning of the particle *be* in Lithuanian is continuative 'still', e.g. in OLith. *kolei be diena* 'because it's still daytime', in the Modern Lithuanian prefix *be*- of simultaneity 'still', and in the particle chains *nebe*- 'not anymore'

and *tebe*- 'still' (e.g., *tebeguli* 'is still lying'), cf. Arkadiev 2011; 2012; Ostrowski 2016. This usage is best explained on the basis of the meaning of additive 'and', compare *ne* ... *plus* 'not anymore' in French, *niet* ... *meer* 'not anymore' in Dutch, which contain additive *plus* and *meer*, respectively.

Finally, Old Lithuanian *beñt, béñt, beñ* 'at least, only' can be explained from **bene* 'and-not' or 'yet-not'. After apocope to *beñ*, enclitic *-*te* or *-*ta* was added, before the final short vowel was again apocopated (Ostrowski 2011).

4. Summary of the Baltic evidence

For the semantic developments which affected Proto-Baltic *be in Lithuanian, I depart from a PIE deictic particle $*b^h e$ meaning 'this particular one'. The exact usage in information structure must remain uncertain, but in view of Avestan and Greek, a role as anaphoric or cataphoric particle seems likely. At the Proto-Balto-Slavic stage, PIE $*b^h e$ appears to have developed two independent usages. The first one is as a connective particle or conjunction (the denomination of the word class depends on morphological nomenclature more than on differences in information structure) $b^{+}e^{-}$ 'namely, and'. The second usage is as a preposition ${}^*b^he$ 'without'. This second usage presupposes a semantic development from inclusive 'and in particular' to exclusive or adversative 'but in particular, except for' of the type WGm. *sundar 'separately' > Dutch zonder 'without', German sondern '(not X) but (Y)'. In Proto-Baltic, the connective usage is grammaticalized in two different ways, one being the identificational and causal particle 'namely, for', the other being the connector 'and'. The preposition 'without' lives on separately. In Old Lithuanian, the conjunction 'and' and the preposition 'without' survive. The particle 'namely, for' develops further shades of meaning such as 'whether' and 'still'.

5. The Indo-European comparanda

A number of ancient Indo-European languages possess cognate particles of the form $^*b^hV$ which show similar meanings and syntactic usages as the Baltic ones. Together, they strengthen the unitary analysis of the origin of Lithuanian be.

5.1. Avestan $b\bar{a}$ is often translated as 'truly'. It can be analyzed as a cataphoric particle meaning 'this particular one, that I will now say something about' (de Vaan 2009). It mainly occurs in introductory nominal and adverbial sentences of the type 'it is he, who...' and 'it is so, as...'. Its form may theoretically continue PIE * b^heH , * b^hoH or * b^he or * b^ho .

A compound particle is Young Avestan $b\bar{o}it$ 'even', which is also cataphoric. It is less frequent, and only occurs in sentences which comment on the topic. Furthermore, $b\bar{o}it$ lends a sense of climax to the word that precedes it. $B\bar{o}it$ goes back to PIr. $*b^ha + *id$ or $*b^haH + *id$.

- **5.2.** The Hittite sentence particle $-pat < \text{PIE }^*-b^hod$ is glossed "enclitic particle of specification, limitation and identity" by the *Chicago Hittite Dictionary*. This meaning closely matches the meaning established for Avestan. The Hittite and Cuneiform Luwian pronouns $ap\bar{a}$ —'that (near you)' and Lycian ebe—'this' reflect Proto-Anatolian * $Hob\acute{o}$ —from PIE * h_1o —+ * b^ho —(Kloekhorst 2008, 191). In its inflection, the Hittite pronoun shows a variation between the stems $ap\bar{a}$ —and ape—which goes back to PIE * b^ho —versus * b^he —, and that can also be found in other deictic pronouns in Hittite, such as $k\bar{a}$ —, ke—'this' and $a\check{s}i$, e—'that (over there)'.
- **5.3.** The Ancient Greek particle $\varphi \hat{\eta}$ 'like, as' only occurs in the oldest alphabetical texts. It most likely arose from the PIE instrumental singular $^*b^heh_1$ or contains a lengthened vowel $^*\bar{e}$ which was probably an internal development of Greek (cf. δ $\hat{\eta}$ 'indeed' beside δ $\hat{\epsilon}$).

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Hymn to Hermes, 240–241: ἐν δ' ὀλίγω συνέλασσε κάρη χεῖράς τε πόδας τε φή ῥα νεόλλουτος προκαλεύμενος ἥδυμον ὕπνον
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'He squeezed head and hands and feet together in a small space, like a new born child seeking sweet sleep' (translation Evelyn-White 1967, 381)

- **5.4.** Reflexes of ${}^*b^he$ and ${}^*b^ho$ abound in Germanic. Most of them occur in combination with a preceding deictic pronoun, such as Gothic *ibai* 'or?', Old High German *ibu*, Old Saxon and Old Icelandic *ef* 'or, whether' from ${}^*h_1e-b^ho-$ (Lühr 1976, 82, 90–91), Gothic *jabai* 'whether', Old English *gif*, Old Frisian *jef*, *jof* 'if' from relative **io-* plus our particle, and Gothic *niba*, *nibai* 'if not'. An isolated occurrence of Gothic -*ba-* 'if' from PIE * b^ho is in ga-ba-daupnip 'if he dies' to gadaupnan.
- **5.5.** Apart from the forms reflecting ${}^*b^h e$ discussed in sections 1 to 4, Balto-Slavic also continues the variant ${}^*b^h e$. In Baltic, this particle has a-vocalism: Old Lithuanian ba, bo, bo, bo, bo 'for, namely', $ba\tilde{u}$ 'whether, really'. Latvian ba 'just, namely', e.g. $tas\ ba$ 'eben derselbe', neba 'doch nicht' (Endzelin 1923, 541–542).

Dunkel (2014 2, 113–127) distinguishes stressed PIE $*b^h o$ 'out, outside, away', a local adverb, from unstressed $*b^h o$ 'really, just', a particle. But on p. 116 he allows for the possibility that the latter developed from the former by differentiation. I think that the identity of both particles is evident. Instead of 'outside, away', the original meaning of PIE $*b^h e$, $*b^h o$, rather seems to have been identificational, 'that one', 'there', vel sim. In Slavic, *bho yields, for instance, OCS bo 'for' and Russian (dial.) bo 'if, for, because' (Derksen 2008, 49).

5.6. Based on the specifying or identifying usage seen in Hittite –*pat* and Avestan cataphoric $b\bar{a}$, the Greek usage for introducing a comparison can easily be explained. The connecting meaning in Germanic is strongly reminiscent of the semantic spectrum of Baltic be.

Since there is no indication for a specific case meaning (instrumental or otherwise), since the long vowel in Greek can be due to a secondary lengthening, and since Avestan does not contradict a Proto-Indo-Iranian preform $*b^ha$ with a short vowel, we may start from the two PIE variants $*b^he$ and $*b^ho$ which are directly attested by Balto-Slavic and Germanic. These Indo-European ablaut variants were still preserved in Proto-Balto-Slavic. There is no evident functional difference between them; in Slavic, *bo has become more productive, whereas in Baltic, it was *be. The difference between the two vocalic variants in Late PIE may have been of an accentual nature, $*b^h\acute{e}$ being the stressed variant, $*b^ho$ the unstressed one. Other factors may have been involved, but the issue exceeds the limits of this paper; for a more detailed reconstruction of the ablaut of PIE pronouns, I refer to de Vaan (in press).

IDE. DEIKTINIO $^*b^he$ DAUGYBINĖ SEMANTIKA BALTŲ KALBOSE

Santrauka

Tradicinį lietuvių kalbos konektyvo $b\dot{e}$, be- siejimą su prielinksniu $b\dot{e}$ galima patvirtinti išsamesne šių žodžių semantinės raidos rekonstrukcija ir ide. deiktinių elementų $*b^he$, $*b^ho$ refleksų ne baltų kalbose analize.

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