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LITHUANIAN CHIPS FROM AN APTOTOLOGIST’S WORKSHOP

The Lithuanian particles have suffered from no lack of detailed study. Yet the research of generations as summarised in Fraenkel 1962–1965, Stang 1966, Mažiulis *Prūsų kalbos etimologijos žodynas* (1988–1997) and Forssman 2003 has always taken its preforms from Brugmann’s *Grundriss*² (Brugmann 1897–1916) and Pokorny’s *Indogermanisches etymologisches Wörterbuch* (1959). Useful as these works still are, they see the particles only as *disiecta membra* rather than as a distinct morpheme-class, and provide only cursory and if at all possible nominalistic analyses.

That the IE particles were in fact an autonomous morpheme-class on the same structural level as the roots, suffixes, and endings is proven by their non-commutability with the other three within the IE word. The word-structure formula which has served since Schleicher,

a. \[ \text{Word} = R (+S) + E, \]

leaves the particles entirely out of account. But the particles cannot replace the other morpheme-classes, they can only precede or follow a word as defined above. Therefore the formula must be extended to

b. \[ \text{Word} = (P+) R (+S) + E (+P). \]

However, a particle is itself a word; so that a second, entirely different, word-structure must also be allowed, namely

c. \[ \text{Word} = P. \]

¹ The "Chips" series (Dunkel 2007; 2008 and to appear) presents certain grammatical and etymological implications of my forthcoming *Lexikon der idg. Partikeln und Pronominalstämme* in a more coherent manner than that format allows. – Sections 1 and 2.2 of this paper were presented at the conference “Position und Bedeutung des Litauischen im europäischen Kontext” (Freiburg-Bern-Zürich, June 2008).

² By this is meant the *a priori* conviction that most particles and adverbs arose as “frozen case-forms” of (usually otherwise unknown) root-nouns.

Allowing for the pre- and postposition of particles to a word, we arrive at a particle-sequence:

d.
\[
\text{Word} = (P+) \text{ P (+P)}.
\]

Most generally, the formulas b. and d. can be combined as
e.
\[
\text{Word} = (P+) \text{ Word (+P)}.
\]

The phenomenon of “deictic order inversion”, as in Lat. nun-c beside Hitt. ki-nun or Gr. κε-κλυτε beside ἔδω-κε (Dunkel 2004a), is just an illustration of principle e.

The structural study of the IE primary adverbs, prepositions, conjunctions, and other “indeclinables” as a coherent category – let us call it aptotology – soon provides unexpected insights into all levels of grammar. Some well-known etymologies must in consequence be abandoned, but previously intractable aporiae can also be definitively resolved – at times due to the Lithuanian evidence.

1. The imperatival suffix -ki-.

The Lithuanian imperative is formed from the infinitive stem by means of the suffix -ki-, as in the first and second plural -kime, -kite. In the second singular the ending zero allowed the apocope of the suffix, and second singular imperatives in -ki were recessive already in Old Lithuanian (Stang 1966, 427).

The origin of this suffix is not yet clear. Brugmann took -ki as a deformation of the emphatic particle -ka, see fn. 15. Stang (1966, 427) speaks of a “Partikel *ki/e” without going outside of Baltic. Against the idea of a borrowing from Finnish see E. Hamp, Baltistica 14 (1978), 100. An important recent proposal

4 was A. Bammesberger’s equation of Lith. dúok(i) with the Latin interjection cedo “give here, hand over, bring” in his discussion of Lat. fēcī and Gr. ἐθῆκε, Studien zur Laryngaltheorie (1984), 75f. That both forms continue the IE full-grade 2 sing. root-aorist imperative *dēh3-O “give!” (cf. East Lith. duō “give”,

5 Hitt. dā “take!” and the Slavic conjunctive and iussive particle da)\(^7\) has long been known, and the difference in word-order between dúok and cedo (“deictic order inversion”) would once again merely reflect

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4 The ideas of K. Shields, Baltistica 22 (1986) 48-55 were thoroughly dismantled by Hamp 1994.
5 E.g. in Tverčius, see Stang 1942, 246f.
6 On Hitt. dāla “stop! enough!” and ḫūdak “quickly” < ∗“Give here!” see fn. 11.
7 As in expressions like khleb da sol’ and da zdravstvuyet, respectively; see Fraenkel, IF 43 (1926) 304f., fn. 3.
principle e. However, it has also long been known that Lith. -ki and Lat. ce- are phonologically irreconcilable.

Lat. ce- continues the IE near-deictic particle *ke. This has an allomorph *ki due not to ablaut as classically defined (*e/o/Ø) but rather to a type of vowel-alternation peculiar to the particles and pronominal stems (cf. e.g. the interrogative/ indefinite stem *ke/i-); let us call it suppletion (we return to this in § 2). The suppletion *ke/i can be well illustrated from the classical languages alone:

<table>
<thead>
<tr>
<th>*ke</th>
<th>*ki</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gr. κε, κεῖνος, κέλυτε; ἔδωκε</td>
<td>πολλάκι “oft”, τοσσάκι “so often”</td>
</tr>
<tr>
<td>Lat. cedo, cēdō; ecce, nunc, sīc, hīc, hunc</td>
<td>cis, citerior, cīrā</td>
</tr>
</tbody>
</table>

An (invertible) IE verb-phrase *ke/i déh 3-Ø “give (it) here” can be reconstructed from Old Phrygian kedokey “give here!”, Gaul. duci “also; and” (cf. OCS da “and”), and, I suggest, Hitt. ḫūdāk “quickly” < *h₂ú deh 3-Ø ki “give here!”.

Despite its assonance and functional identity with the above forms, Lith. dúoki cannot continue IE *déh 3-Ø ki since IE *k regularly gives Lith. š. That the velar of the near-deictic particle *ke and of the departiculative near-deictic stem *ko/i- was palatal is confirmed by Slavic, Luwian and Armenian.

8 This was not understood by Hardarsson 1993, 149f.
9 Brugmann duly compared cedo and dúok as regards the imperative (Grdr. 2 116 (1916) 565), but kept the particles entirely separate: on Lat. cedo and Lith. šis see Grdr. 2 II.2 (1911) 322; on his treatment of Lith. -ki see below fn. 15.
10 On modal κε see fn. 13; on the ka-aorist see Dunkel 2004a.
11 On *h₂ú “to, toward”, as also in Hitt. elu “come!” and peḫute- “take away”, see § 2.1; the allegro-apocope of -ki as in zinnuk “finally” (to zinnai “finishes”); cf. it “come!” < *h₁i-dhī. – Usually ḫūdāk is derived from a noun ḫūda- “haste”, but this is morphologically unparalleled. Instead, nominal ḫūda- may have been hypostasised from ḫūdāk “quickly”. Comparable is Hitt. dāla- “stop! enough!” < *déh 3-Ø le *“Give there / then!” with its verbal hypostasis (Präsens departiculativum, see Dunkel 2007) dala- “leave alone, leave in peace”.
12 Cf. the Armenian definite article -s. – Near-deictic *ke/i and the derived stem *ko/i- are as such absent from Aryan.
Though crucial for his argument, the irregularity of a development \(^*\tilde{ki} >\) Lith. \(-ki\) was not mentioned by Bammesberger. For this reason Harðarson 1993, 149f. rejected Bammesberger’s equation; Hamp 1994 used the same argument against Shields. Calling this an “incomplete satemisation”, as has been done in similar cases (Stang 1966, 91ff.), would have been a mere obscurum per obscurius.

Stang 1966, 427 saw in Lith. \(-ki\)- and in dialectal and Old Prussian \(-ke\)-variants of the well-known Lith. emphatic particle \(-ka\), citing in support East Lith. imperatives like jim-\(ka\) “take!” East Lith. \(-ka\) is historically one with Slavic hortatory \(ka\), \(ko\) which lends a familiar tone and a sense of urgency to an utterance, oft an imperative. And Proto-Balto-Slavic \(*ko\) and Goth. \(ga\)- together continue an IE perfectivising particle \(2.*ko\) with a plain velar. An extension \(2.*kom\) underlies Hitt. \(-kan\), Proto-Aryan \(*kám\ “for the sake of” (+ Dative), and Gr. \(\varepsilon\varepsilon\nu\) and takes part in the IE particle sequence \(*nú 2.kom\ “just now” (Hitt. \(nu=kan\), Ved. \(nú\) \(kam\), and Gr. \(vó\) \(\varepsilon\varepsilon\nu\)). The final nasal of perfectivising \(2.*kom\) is not facultative, but a well-known adverbial ending (Dunkel 1997); \(2.*kom\) is a derivative, \(2.*ko\) the simplex. The original meaning was something like “fully, altogether”.

IE \(2.*ko\ “altogether, fully”, then, is indeed a plausible source for the suffix of East Lith. jim-\(ka\); but Lith. \(-ki\) cannot be derived therefrom, and neither an \(e\)-grade nor an \(i\)-suppletion of either \(*ko\) is otherwise attested.

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13 Gr. \(\varepsilon\varepsilon\nu\) served originally to underline the generalising value of the subjunctive in subordinate clauses; its vocalism is due to contamination with \(\varepsilon\varepsilon < *\tilde{ke}\), which originally served to distinguish the potential from the cupitive optative; see Dunkel 1990.

14 Perfectivising \(2.*ko\), \(ko-m\ “altogether, fully, insgesamt” arose by fading from its better-known homonym \(1.*kóm\ “with” (Gr. \(\kappa\omega\nu\varsigma\), Ital. \(*kom\), Gaul. \(kom\), OCS \(kūn\)). The nasalless Ital. \(*ko\), Kelt. \(*ko\), and Goth. \(ga\)- are invariably said all to have lost their final \(-m\) under variously but never satisfactorily defined conditions. But here as well, \(1.*ko\) was the simplex and \(1.*ko-m\) its adverbial derivative, so that no unexpected nasal losses are necessary. Against “facultative” final nasals in the IE proto-language in general see my contribution to the Gedenkschrift Emil Forrer: Sarnikzel, ed. D. Grodde, S. Rössle, 2004, 285–295.

15 This fact also vitiates Stang’s daring later derivation of \(-ki\- from IE \(*ke\, NTS 30 (1976), 127–131. All of Stang’s conclusions were accepted by E. Hamp, Baltistica 14 (1978), 110f.; further bibliography in P. Dini, Baltų kalbos (2000) 330. – K. Brugmann had already derived \(-ki\- from emphatic \(-ka\), but by contamination with the optative (Grdr.\(^2\) II.3 (1916) 1001).
I hereby\textsuperscript{16} propose that e.g. $\textit{d\u{u}ok(i)}$ continues a phrase $\textit{*d\u{e}h}_2\text{-O }\textit{k\u{i}-d}$ “give something, give a little”, in which the enclitic neuter indefinite pronoun known from Skr. $\textit{cit}$, Gr. $\tau\iota$, Lat. $-\textit{quid}$ etc. is the object of the imperative. Similarly $\textit{i\textbar{m}k(i)}$ would have originally meant “take a bit, take something”, and so on. With intransitive verbs indefinite $\textit*{k\u{i}-d}$ can have served to indicate a limit, as in $\textit*{h}_1\text{\acute{e}i}-\text{O }\textit{k\u{i}-d}$ “go to some extent, go a little” $>$ Lith. $\textit{e\textbar{ik}(i)}$. By this hypothesis, the phonologic development is regular. The starting-point was with IE full-grade, athematic second singular imperatives (for $\textit*{h}_1\text{\acute{e}i}-\text{O}$ cf. Lat. $\textit{i}$, Hitt. $\textit{e\textbar{hu}}$, and Gr. $\varepsilon\iota$ ($\delta\iota\ddot{\alpha}\gamma\epsilon$)). Postpositive, indefinite $\textit*{k\u{i}-d}$ also lives on in Lith. $\textit{i\textbar{k}}$ “until” (§ 2.1).

Syntactically parallel are expressions like Lat. $\textit{nescioquid}$ “something or other” or, though semantically faded, Rg-Vedic $\textit{vid\acute{a}cid}$ “you (pl.) even know” (5.41.13a), $\textit{\textbar{c}\acute{a}sk\acute{a}m\textbar{bha\textbar{c}it}$ “he even supported” (10.111.5d), etc. Compare also pre-Graeco-Armenian $\textit*h\acute{o}\textbar{j}u\text{-O }\textit{k\u{id}$ “even for a lifetime” as continued by the negations Gr. $\textit{o\u{x\bar{i}}}$ and Arm. $\textit{o\textbar{c}}$.\textsuperscript{17} The phrase’s zero-grade $\textit*{h}_2\text{\acute{u}-O }\textit{k\u{id}$ may live on in Lith. asseverative $\textit{j\textbar{ik}$ “indeed”.

Stang’s assertion that of the IE interrogative/ indefinite stems only $\textit*{k\u{i}-o}$-survived in Baltic (1966, 236) was delusive. After all Slavic has preserved all three stems $\textit*{k\u{i}-o/e/i-}$ ($\textit{k\u{u}t\bar{o}$, $\textit{\textbar{c}e\textbar{so}$, $\textit{\textbar{c}i\textbar{t}o}$) and Baltic can have done the same; archaisms cannot be excluded \textit{a priori}. And in fact, the ablaut-variant $\textit*{k\u{i}-e}$-lives on in $\textit{k\e\textbar{l}i$ “how many?; some” and in the de-instrumental $\textit{ken\ddot{e}$ “whose?”. And now we have recognised suppletive $\textit*{k\u{i}-$ as well.

Thus the eastern dialectal imperative suffix $\textit{-ka}$- from IE perfectivising $2.*ko$ is historically unrelated to the standard $\textit{-ki-} <$ IE indefinite $\textit*{k\u{i}-d}$. In a textbook instance of particle-syncretism (Dunkel 1990, 2005b) the perfectivised and indefinitised imperatives fell functionally together; in standard Lithuanian $\textit{-k(i)-}$ was generalised, elsewhere $\textit{-k(a)-}$.

Still unclear is the dialectal Lith. and Old Prussian imperative suffix $\textit{-ke-}$, which can continue neither $\textit*{k\u{i}-d}$ nor $2.*ko$. Simply invoking “ablaut”, as was done so often in the past, is no longer possible since it is known that neither $\textit*{k\u{i}-d}$ nor $2.*ko$ had an $e$-grade.

\textsuperscript{16}This idea \textit{in nuce} in Dunkel 2004a, 49.

\textsuperscript{17}W. Cowgill, \textit{Language} 36 (1960) 347–350 = \textit{Collected writings} 99–101. On $\textit{o\u{x\bar{i}}$ see fn. 11.
2. *ikì, iř, it, id* and the successive semantic differentiations of IE *\(h_2\tilde{o}\) “beside; toward”.

2.1. *ikì, iš* “until, up to” (+ Gen.).

Fraenkel and Stang take *ikì* “until, up to” as a unusual reduction of *jíek* “until, up to; as long as, during”, seeing the same “proclitic shortening” in *tìk* “only; just” beside *tìek* “so much/ many”\(^{18}\). Lith. *jíeki* would continue a locative of the IE relative stem plus an element -*ki*. A somewhat implausible semantic change from “in which” to “up to” must also be assumed.

Phonologically, -*ki* could continue either an instrumental adverb *kli*-\(h_1\) or the inanimate *kli*-\(d\) which we recognise from *dúok(i)* as the neuter singular of the IE interrogative/ indefinite pronominal stem.

Rather than having been reduced in some odd (but early, to judge by Old Prussian *i(c)kai* “if, whether”) way, the first syllable of *ikì* could directly continue an *i*-suppletive allomorph of the IE local adverb *\(h_2\tilde{o}\)* “beside, by; to, toward”, as found in IE compounds such as *\(h_2\tilde{o}-h\ ɪk\~ u\)- “fast”, *\(h_2\tilde{o}-h\ ɪn\)–* “egg”, *\(h_2\tilde{o}-s\)d-o– “branch”, and in IE verb- phrases such as *\(h_2\tilde{o}\ ɪ\)jei– “come to” (Hitt. *e\(h\)u* (Pal. *iu*) “come!”), Gr. oï–*σω “will bring”, oï–*χομαι “go, come”, Lat. oï–*tor “use” (+ Abl.) < “come with”). In the historical dialects, IE *\(h_2\tilde{o}\)* lives on in Hittite *ha-šduēr* “brushwood” and *ha-tk– “close”, in Gr. ὀ-κέλλω “push toward”, ὀ-λβ-ος “happiness” < *“profit, increase, Zunahme”, ὀ-σχ-η “branch” < *“holding to (the tree-trunk)”* et al. The IE adverbial derivative *\(h_2\tilde{o}-b\)h* is continued by Ved. *abhí* “toward, against” and Latin *ob* “against”, the āmreḍita *\(h_2\tilde{o}-h\) 0* by Vedic á /áa/ “toward” and Lat. *oppido* “utterly” < *ό pedō “to the ground”. Proto-Baltic *ažō* (OPr. assa “from”, Lith. *ažuo–*, ažù, až “behind, beyond”) might continue *\(h_2\tilde{o}\ ɪ\)h\_0–*\(h_1\).\(^{19}\)

Beside the *\(h_2\tilde{o}\)* reconstructable on the basis of such material existed a *u*-suppletive variant *\(h_2\)u “beside, by; to, toward”, as in e.g. Hitt. *pe-\(h\)u-te– “bring!”, e-\(h\)u “come!” and *hū-dāk* “quickly” (fn. 11) and in Proto-Aryan *ubha– “both” < *\(h_2\)u \(b\)h\_o– beside Proto-Balto-Slavic *obo– < *\(h_2\)o \(b\)h\_o–. The suppletion *\(h_2\)o/u* is comparable with e.g. *pró/u “forward; in front”, *ápo/u “back; away”, and interrogative/ indefinite *\(k\)li/- beside the *o*- and *u*-stems noted above, occurred e.g. in the IE particle sequence *\(p\)h\_2i*


\(^{19}\) If not *\(ád\ ɪ\)h\_0–*\(h_1\); the second element alone in OCS *za*.
“before, in front of” (air. air-, ar; got. faúr etc.; cf. *prh₂o in Gr. Myc. paro, Att. παρά) and in the IE secondary root *h²eis-d “revere” (Ved. īḍ-, Gr. āḍomai, Goth. aistan), which arose as a univerbation of the phrase *h₂i s(e)d- “sit by” (cf. IE *h₂o-sd-o- “branch”).

It is the last allomorph which we recognise in Lith. iki < 1.*h₂i kʰid “up to what?”. Similar univerbations are seen in French pourquoi, Italian perché “why?” and East Thessalian Greek μεσποδί “until”, διέκι “because; that” (Koiné διότι), ποκκι “that” (Hettrich 1988, 770). Syntactically a partitive genitive such as *h₂i kʰid nɛktʰts “Up to what (part) of the night?” seems to have become objective: “until the night”.

In short: The derivation of iki “until” from 1.*h₂i kʰid “up to what?” instead of from *h₂jó-I²⁰ kʰid “in which” eliminates the need for both “proclitic shortening” and for semantic change. On Old Prussian i(c)kai “if, whether” < 3.*h₂i kʰid see fn. 30.

2.2. iɾ “and; even”.

The communis opinio equates Lith. iɾ, Latv. ir and OPr. ir with early Gr. ἄρ, ῥα on the basis of an IE preform *r “fittingly” from the root *ar- “join, fit”.²¹

The Lith. dialectal variant aɾ is said to reflect the full grade of this endingless root-adverb.

But Gr. ἄρ and ῥα are both reductions of ἄρα, which in Homer serves to mark well-known information as such and can be rendered as “as is to be expected, as is well known”. It is no conjunction, but an adverb of manner; along with Ved. áram “fitting, acceptable”²² and Hitt. āra “lawful, acceptable”, Gr. ἄρα continues an IE root-adverb *h₁ár-a “fittingly” which was already specialised in a moral sense.²³ From the same pre-form comes Lith.

²⁰ The presence of the laryngeal in the relatival stem according to J. Schindler’s unpublished hypothesis on the double treatment of IE *j- in Greek, first presented at the 5th East Coast Indo-European Conference in Princeton, N.J. in June 1986; the identification of the laryngeal is due to the etymology from the particle 4.*h₂j (§ 2.3).
²² With a hypercharacterising -m as in the consonant-stem accusative, type páda+m.
²³ See my contribution to the Festschrift Frederik Kortlandt: Evidence and counter-evidence, ed. A. Lubotsky et al. 2008, 138–141. As to the form of the root, Anatolian speaks against *h₂er- while Greek ἐγι- beside ἀγι- “very, well-” supports *h₁ar-. – Lith. iɾ could in principle be derived from a Lindeman-variant *h₁r-r-a of the zero-grade, but this is otherwise unattested.
interrogative *aʔ, homonymous with but unrelated to the dialectal conjunction *aʔ, whose original usage was rebuking: “Is it (really) fitting, that ...?”.

E. Hamp iconoclastically took *iʔ as a locatival *r-adverb from the near-deictic/ anaphoric stem *i- (in *Historical Syntax*, ed. J. Fisiak (1984), 173–176). This will not account for the synonymic dialectal *aʔ, and a semantic shift from “in the aforementioned place, here” to “and” is by no means trivial. But the identification of adverbial *-r, as in Lith. *kuʔ “where?”, dâbar “still” (OPr. dabber), dabaʔ “now”, tenuʔ “there, thither” (de-instrumental) etc. seems plausible and inspires us to look for a more apt derivational base for Lith. *iʔ.

I see this in 2.*h2i, a well-attested suppletive variant of the IE sentence-copulative conjunction 2.*h2o “thereto, and; also”, itself probably differentiated from local 1.*h2o “by; to” by semantic weakening, the development from local adverb to conjunction being almost banal. Three suppletive allomorphs can be reconstructed:

<table>
<thead>
<tr>
<th>2.*h2o</th>
<th>2.*h2u</th>
<th>2.*h2i</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hitt. -a (gem.), -aku, nûwa</td>
<td>addu &lt; *ált h2u</td>
<td>Av. naēda/-δa</td>
</tr>
<tr>
<td>Luv. -ha</td>
<td>Ved. u, utâ, u ca, nû</td>
<td>OCS i &lt; *h2i h2i25</td>
</tr>
<tr>
<td>Ved. átha &lt; *ált h2o</td>
<td>ū &lt; *h2ú h2u25</td>
<td>OCS i &lt; *h2i h2i25</td>
</tr>
<tr>
<td>Gr.</td>
<td></td>
<td>iðē; vaï &lt; *neh1 h2i</td>
</tr>
<tr>
<td>Lat. at &lt; *ált h2o</td>
<td>aut, Goth. -u, -uh, auk</td>
<td>OU *inom &lt; *h2ina om</td>
</tr>
</tbody>
</table>

Attested in three or more IE dialects are sequences of 2.*-h2o and 2.*-h2u with the particles *ált “but”, 1.*nû “now” and 1.*-kûe “and”:

*ált

<table>
<thead>
<tr>
<th>2.*h2o</th>
<th>2.*h2u</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hitt. átha, Lat. at</td>
<td>Ved. addu</td>
</tr>
<tr>
<td>1.*nû</td>
<td>Hitt. nûwa</td>
</tr>
<tr>
<td>1.*-kûe</td>
<td>Hitt. -aku</td>
</tr>
</tbody>
</table>

Lith. *iʔ (with Old Prussian *ir) and dialectal *aʔ in the sense “and”, then, would by this hypothesis continue 2.*h2i-r and 2.*h2o-r, these being adverbial r-derivatives of the IE conjunction 2.*h2o/i “thereto, and; also”. The comparison with Slavic i “and”, Gr. iðē “and” (Homer, Cypriot inscriptions),

24 IE 2.*de “thereto, and” (as in Av., Gr., OIr.) had already developed from *dṓ/de “to” in the protolanguage and IE *jó “and” from “hereto”; in the dialects cf. Lat. et “and” < *é-ti “beyond” and Arm. ew “and” < *épi “upon”.

25 Formally parallel are local *h₁jó hᵱo in Ved. āa, āa “toward” (§ 2.1) and 4.*h₁i h₂i in the Goth. relative particle -ei (§ 2.3).
Sabellian *inom and OAv. naēdā, Yav. naēđa “and not, nor” provides a solid incentive for deriving Lith. ĭr from conjunctive 2.*h₂j.  
A trace of suppletive 2.*h₂u may be suspected in the Lith. interrogative particle baũ < 2.*bʰó h₂u, cf. OCS ubo “now, thus, but” < *h₂éu bʰo, with “inversion” by principle e.

2.3. ĭt “like, as”; “very”.

The final dental of Lith. ĭt necessarily implies the loss of a preceding short vowel.26 Candidates for the one-time end-syllable include the IE adverbial endings *-th₂ (as in Ved. ĭti and Lat. ita or IE *mé-th₂ “with”27), *-tī (as in IE *é-tī, *h₁ár-tī, *h₂u-tī, *km-tī, *pró-tī, *tó-tī), and *-te (as in IE *h₂u-té, *po-te).

As to the first element, Fraenkel 1962–1965, 189 and Stang 1966, 415 equate Lith. ĭt with Ved. ĭti and Lat. ita without mentioning the semantic difficulty: both the latter mean “so, thus”, but Lith. ĭt is relatival. Functionally, Lith. ĭt corresponds to Lat. ut “like; how”. The same problem arises with Ved. ĭva “like, as”, whose second element recurs in Lith. nèva “just like, just as” (§ 3); its first element has also been assigned to deictic/ anaphoric *i– on the grounds of mere assonance, although this involves the same functional incompatibility as did Lith. ĭt.28

An important further comparandum is the Greek adverb ἵνα, whose primary meaning is relatival “where” in Greek poetry from Homer on. The functional shift to a final conjunction is paralleled by those of e.g. Gr. ὡς, Ved. yáthā, Lat. ut, Goth. ei. On the adverbial ending *-na see fn. 41. Since the Lithuanian relative stem ĭ– is often said, like Slav. ĭ–, to represent a syncretism of relatival *h₂jó– with near-deictic/ anaphoric *i–, a derivation of Lith. ĭt from an IE *h₂jó-th₂ (cf. Ved. yáthā) would be within the realm of possibility. But the first syllables of Ved. ĭva and Gr. ἵνα definitively exclude relatival *h₂jó–;29 prima facie they speak for a relatival element *i–.

26 For this reason, the emphatic homonym ĭt “very, ýpaẑ” (Forsman 2003, 95) cannot directly continue IE emphatic *id, despite their functional identity; rather, ĭt “very” is reduced from relatival ĭt “how”.
27 On inclusive *mé see Dunkel 2004b; on Gr. µετά and πεδά see Dunkel 2005b.
28 Mayrhofer’s skepsis (1992, 197–198) is fully justified.
29 Even where a synkesis and samprasāraṇa of *-jo– to -i– occurs (Italic, Luvian), it never does so in first- or monosyllables.
The shape of the IE relatival stem *h₂i— encourages rewriting this as a relatival particle 4.*h₂i, and seeing *h₂i— as a thematisation thereof; practically all other IE “gender-bearing” (non-personal) pronominal stems can be derived from independently reconstructable particles as well, either by thematisation or by direct inflection (hypostasis). The IE relatival particle 4.*h₂i was the derivational base of Lith. itmap, Vedic īva and Greek ἵνα from 4.*h₂i-tV, 4.*h₂i ya, and 4.*h₂i-na respectively. The Gothic relative particle -ei would continue an āmreḍita 4.*h₂i- (fn. 25) and another trace of this relatival particle might survive in Hitt. īwar “like, as” (fn. 38). Remarkably, in this function neither suppletive 4.*h₂o nor 4.*h₂u is attested.

2.4. id, idañt “in order to”. Fraenkel 1962–1965, 182 sees today’s final conjunction idañt as a univerbation of the Old Lith. id (as in Petkevičius’ Duok, id mes gerai gyventumbim) with añt(a) “on, upon; onto; for the sake of” (Fraenkel 1929, 53ff.) from IE *h₂e̞nt—a “faceward”. Simple id he derives from near-deictic/ anaphoric *i—, comparing Ved. idā(nim), YA Vancouver idā “now” and the Lith. dialectal variant adunt from anaphoric *e/o—. Stange 1966, 234, 286, 415 however sees in idañt-t(V) a pronominal adverb in *-ān (like Lith. kadà, tadà, see § 5) which has been extended by adverbial *-te or *-ti. But just as in § 2.3, the near-deictic/ anaphoric stem *i— cannot account for the subordinating function.

The intact dental of Lith. id indicates the loss of a short final vowel; here the IE locatival adverbial ending *-dhe/i, though otherwise rare in Baltic, presents itself as a source. The IE relatival particle 4.*h₂i will account for the stem and the subordinating function. The locatival relative adverb 4.*h₂i-dhe/i

30 The diacritic 4 is due to the existence of 3.*h₂o/u/i “if”, as in the following, which all mean “if, whether”: Cun. Luv. āḥha < *ēn 3.*h₂o, NGR. āi < *ē 3.*h₂i, OCS li < *li 3.h₂j, Osk. svai < *sya 3.h₂i “as if” (§ 3), Goth. ūba-ī, ja-u < *jó 2.bhe 3.h₂j, and Old Prussian i(c)kai (locativised from 3.*h₂j ḳid “if to some extent”). – The development of 3.*h₂o/u/i “if” from 2.*h₂o/u/i “and” parallels that of IE 2.*-(s)ḳe “if” from *-(s)ḳe “and” (Dunkel 2008); cf. also Goth. ḳb “and; but; if” and early Modern English an “if”.

31 īva’s asper has always been understood as analogic to that of ὅς ἥ ὅς.

32 As also in Hitt. ħanta “opposite”; for the ending cf. IE *h₁ár-a “(morally) fittingly” (§ 2.2).

33 These are adverbial neuters; the local adverbs were Ved. īhā, OAv. idā, and YA Vancouver ida “here”.

34 Lith. érdēti “to fall apart, dissolve” might continue an *er-dhe/i, cf. Ved. árdha-, ardhá- “half”, ḳdhak “separately”, and OCS rēdûk “rare”.
“where” survived in Proto-Balto-Slavic as *ide, cf. OCS į-, i-de “where; because”, and in Celtic as a relative particle: Middle Welsh yd, Cornish yth, and Breton ez. Some IE adverbial endings were in fact added to both relatival particle and stem and in part to anaphoric / deictic *i- as well:

<table>
<thead>
<tr>
<th>Rel. particle 4. *h₂i</th>
<th>Rel. stem *h₂i-ô-</th>
<th>Anaphor. stem *i-</th>
</tr>
</thead>
<tbody>
<tr>
<td>*-th₂ Lith. it “like, as” (§ 2.3)</td>
<td>Ar. *yáthā “how; as”</td>
<td>Ved. iti, Lat. ita “so”</td>
</tr>
<tr>
<td>*-na Gr. ἵνα “where; in order to”</td>
<td>Ar. *yána (Ved. yéna after yébhis)</td>
<td></td>
</tr>
</tbody>
</table>

We can now extend this structure:

<table>
<thead>
<tr>
<th>*-dhẽ Lith. id “in order to”</th>
<th>OP ya-dā “where”</th>
<th>Ved. ihá “here”</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCS į-, i-de “where”</td>
<td>Gr. ὅ-θι, ὅ-θεν</td>
<td>Gr. ἵθαι-γενής</td>
</tr>
<tr>
<td>MWelsh yd rel. pcl.</td>
<td>“where, whence”</td>
<td>“born here”</td>
</tr>
</tbody>
</table>

To summarise the last two sections: Lith. it “like, as” and id “in order to” are relatival in function and are thus despite the universalis opinio unrelated to Lat. ita “thus”, Ved. iti “thus” and to Ved. idá(nim), YAv. ida “now” respectively, which continue near-deictic/anaphoric *i-. Instead, Lith. it and id are derived, as are Ved. iva “like, as”, Gr. ἵνα “where; in order to”, and the Middle Welsh relative particle yd, from an IE relatival particle 4. *h₂i.

3. nèva “like”, vòs “barely”.

Fraenkel’s identification of the first syllable of Lith. nèva “just like, just as, as if” with the Lith. negation nè- and of its second element with that of Vedic iva and Lat. ceu, both “like”, is correct as far as it goes. It should be added that the comparison of Lith. nèva with YAv. na-uua “no way, absolutely not” implies the existence of a proto-sequence *né ūVm and that the semantic change of the first syllable from “not” to “like” is paralleled not only by Lith. néi (metatonic from neī “not at all”) and Old Russian ne, but already by Ved. ná. The element -va will repay further scrutiny.

The comparison of the second syllable of nèva with Gothic swa “so” and Rgvedic /va/ “like, as” (antimetrically written iva in all its ca. 35 occurrences—

35 P. Schrijver, Studies in the history of Celtic pronouns and particles (1997), 162–172 derives these from *ed-ed.
36 D. Petit argues for a meaning “supposedly” (Fachtagung Salzburg 2008, ed. T. Krisch et al., to appear). We differ on the identity of the second element.
es) speaks for a short, clitic IE modal adverb *(s)µV “thus; as”. This particle could be recognised as the first element in univerbed sequences such as:

- Goth. swe “as”  < *sũV é‑h₁ “just as” (cf. Goth. swa‑swe “so as”)
- Proto‑Ar. *µaï “indeed”  < *ũV 2. hostility; as  “and so” (on 2.*h₂i see § 2.2)
- Osk. svāi  < *sũV 3. hostility; as if” (on 3.*h₂i see fn. 30).

And as the second element in 38:

- YAv. na‑uua “no way, absolutely not”, Lith. nēva “just like”  < *né Ź
- Ved. iva, Hitt. iwār “like, as”  < 4.*h₂i Ź “like which”39
- Lat. ceu  < *kē‑i Ź “like here”
- Proto‑Ar. *a‑yá “so, thus; exactly, just”  < *e‑i Ź “like here”.

As to the vowel of *(s)µV, certain is only that it was not high. C. Watkins saw disjunctive 2. *‑ue “or” in the final syllable of Ved. iva and of his pre‑Latin *ke iye (> ceu);40 but as a parallel for the proposed change from “or” to “like” in comparisons, Watkins’ adduction of “or” to “than” after comparatives is not apt. Furthermore final *‑e is excluded by Lith. ‑va and Goth. swa. And finally, we have just established that relatival Ved. iva continues 4.*h₂i ya (§ 2.3); but a sequence *ke h₂iua “like this” would have given Lat. “caève”:41

In contrast, a locativa sequence *kê‑i Ź “like here” has no such problem.

Taking also into account the long, orthotone allomorph *(s)µó continued by West Germanic sō “so”, Gr. fō+ς “like”, and the Umbr. amrēlita su‑ru+r “likewise”,42 Dunkel (1982/3) proposed an underlying ablaut *sũo/e, as also seen in *dō/e, *gê/o/e, *pō/e, *‑ó/em and the like. But again, *‑ue is excluded by Lith. ‑va and Goth. swa. An allomorphy *(s)µo/ó could be seen as due to stress or to the adverbial ending *‑h₁. But since laryngeals colored only IE *e, a pre‑form *suo 3.h₂i will not give Osc. svāi “if”.

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38 Though the Hittite quotative particle ‑wa(r) is usually derived from the root of Lith. vaṛdas, Lat. verbum, Gr. ὑποτεκου etc., B. Joseph has proposed an original meaning *“like” (cf. Ved. iva and adverbial *‑r), as in current English he’s like X = he says X, KZ 95 (1981) 93–98 and 96 (1982/3) 56ff.; it could be seen as an adverbial derivative in *‑r.

39 On 4.*h₂i see § 2.3–4. For *h₂‑i > Hitt. i‑ see G. Rikov, Linguistique balkanique 23 (1980) 75–82; sceptical C. Melchert, Anatol. histor. phonology (1994) 122, 168f.

40 HSCP 77 (1973) 202, 205 = Selected writings II 494, 497. – IE 2.*‑ue “or” is a differentiation of exclusive 1.*‑ue “away, off; without” (Dunkel 2004b).

41 On the fate of final *‑a and of the adverbial ending *‑na in Latin (pōne, dōnec, nōn etc.) see Dunkel 2008.

42 The latter two with secondary adverbial *‑s and *‑r respectively.
That the short allomorph was in fact a-colored is conclusively vouchsafed by Lith. vōs “barely, scarcely”, which imposes an a-vocalism on Proto-Balto-Slavic *vās (cf. OCS jedū-va “μόγις, μόλις”).\(^{43}\) This can continue neither *μο ἐσ\(^{44}\) nor *με ἐσ, but only *μα ἐσ “just so”. Osc. svaí “if” then unproblematically continues *su̯a 3.*h₂i “as if” and even the odd vocalism of the Festus-gloss from a Roman augural prayer suad te “sic te” (with hyperarchaising -d) falls unexpectedly into place. Though the ablaut of IE *(s)u̯o/a “thus; as” is unparalleled in the other three morpheme-classes, among the IE particles it does recur in IE *mō/a “but”. Note that a laryngeal interpretation is impossible, as the zero-grade would be *(s)uH.

4. *aurê “look!”

Fraenkel 1962–1965, 26 and Stang 1966, 236, 414-415 connect the interjection *aurê “look!” with the far-deictic stem *E̯o̯-\(^{45}\) known from Slavic ovū and Old Iranian *ava- and further cite Gr. δεῦ̄γο “hither; back” and the Young Avestan hapax auuarə “downward” without clarifying their formal relations. Forssman 2003, 199 identifies the final syllable as a “particle” – the traditional method of disposing of unwanted left-overs after everything recognisable has been identified.

Fraenkel and Stang both cite H. Nyberg 1932 without mentioning that he had reconstructed “un ancien adverb *ure/o” (247, 260) on the basis of *aurê, auuarə and δεῦ̄γο, to which he had added Armen. owr “where?” and owrek “anywhere”\(^{46}\) in a pioneering aptotological study which has been ignored by subsequent scholarship.

Neither Fraenkel nor Stang mentions the Proto-Aryan *aurā “down; hither” reconstructed by K. Hoffmann on the basis of Av. aorā, OP aurā, and the metathetic Ved. *arvā preserved in arvānīc- “facing hither” and arvāvāt- “vicinity” (MSS 8 (1956) 9-10 = Aufsätze II, 390f.). C. Bartholomae had seen Av. aorā as an instrumental of an adjective *aora- comparable with Ved. ávara- “lower, further back”, to which should now be added the Umbr.

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\(^{43}\) With *ed vās “barely that” cf. *ed ojnom “that alone” > jedină “one”.

\(^{44}\) On the perfective and emphatic functions of IE *ės “fully, completely” see my contribution the the Festschrift Rasmussen: Per aspera ad asteriscos, ed. A. Hyllested et al. 2004, 117–130.

\(^{45}\) The first vowel could have been *a (if from *au “away, off”) or *e (if by vṛddhi from far-deictic *u).

\(^{46}\) But not Lat. re-, which he mentions only while refuting Brugmann (Nyberg 1932, 260).
far-deictic pronoun ure, ure, orer; however IE *áuero- “distant” is derived not from far-deictic *Eyo- (absent from Indic), but from the IE preverb *áu “away, off” (> Ved. áva, see fn. 48) by means of the antithetic suffix *-ero-.

Brugmann had reconstructed Proto-Aryan *áyra for Av. aorā and Ved. ávara- (Grdr. II.1, 324) but did not connect Ved. arvānc- (Grdr. II.2, 921). Hoffmann derived *áyra from *áyár “downward” within Proto-Aryan, but adduced no extra-Aryan comparanda; nor does Mayrhofer 1992, 122 s.v. arvānc- and 132 s.v. ávara-. Klingenschmitt 2004 relates *áyra to an IE adverb *yre “back(ward)” which he finds in Latin, Slavic, Albanian and Tocharian without mentioning Lith. aurė, Arm. urek’, or Nyberg’s study, and cites Gr. δεῦρο only as a semantic parallel.

This lack of controversy reflects not consensus but rather utter disinterest in aptotological issues; as a result, the precise formal analysis of Lith. aurė and of practically all the comparanda still remains unclear. Let us abandon the connection with far-deictic *Eyo- and start afresh.

Since the final vowel of Lith. aurė was shortened from the long vowel continued by Proto-Aryan *áyra, its formal analysis must begin from *áyré. This could have meant either “hither” or “look!”; a local meaning can easily have led to an imperative or the reverse in the proper environment.

Two segmentations are possible using otherwise known IE particles. If the final syllable continues emphatic *éh₁ “so; indeed” (Dunkel 2007, 55ff.), the initial *áyár could formally be either a zero-grade of an IE *áyér “downward” or an adverb from the root *áu- “perceive” (IEW 78). However the usual IE expression for “perceptible” was *āy-īs and neither interpretation leads straightforwardly to either “hither” or “look!”.

If on the other hand segmented as *áu ré, the second element could continue the IE local adverb *re “back; away”, as in Latin re- “back(ward)” and Arm.

47 Altiran. Wb. (1904) 43. To judge by Untermann, Wörterbuch des Oskisch-Umbrischen (2000) 804, Umbrian oro- seems never have been compared with Ved. ávara-; this would practically compel an IE *áuero- “distant” and render Nyberg’s Proto-Aryan derivation from *avár “downward” (1932, 245ff., 249) unlikely.

48 Ved. uv-é “I see” (mediopassive) and Hitt. uḫḫi are primaricised continuants of an IE perfect *(o)u-h₂o-i. Lith. dialectal avà, avè “look!” and Luvian āwa “look!” might continue this root as well, though Luvian āwa could also represent *āu remade after anta, āppa, šarra etc., compare Proto-Aryan *āwa after *āpa, *āpā, *āa (á), *sadhā etc.

owr “where?”< *ku re, indef. owrek “somewhere” < *ku re 3.klōe, to which Klingenschmitt 2004 adds Proto-Slav. *rakū “crab” < *ré-h 3klō-o- “looking backward”. Since a long-grade of this particle is otherwise unknown, *re seems here to have been extended by the instrumental adverbial ending *-h₁.

If the first element of *aµ ré-h₁ were the IE preverb *áµ “away, off”, the meaning could have been either complementary (“away and back”) or synonymic (“off and away”). But local adverbs forming a “complementary unity” were normally conjoined with double 1.*-klōe, as in Ved. á ca párā ca, Gr. περί τ’ ἀμφί τε, Lat. *requē proque (Dunkel, IF 84 (1979), 184–195). And once again, neither meaning would lead to either “hither” or “look!”.

Enlightening, in comparison, is to see in the first element of *aµ ré-h₁ the athetic imperative *aµ-Ø⁵¹ “perceive!” as preserved in Hitt. au “look!” to u-hḫhi “I see” (see fn. 48). The phrase *aµ-Ø ré-h₁ would have meant “look back!”; Lithuanian lost “back”, Aryan lost “look!” and shifted from “back” to “hither”.

Inscriptional Attic Greek δευγε “hither”⁵² is a precious archaism, a Greek expansion by means of allative δε (fn. 24) of the particle sequence *u re “back there”. Elsewhere in Greek, δευγε was “preverbalised” to δευγο, cf. already Mycenaean dewero-, and “pluralised” to δευτε (on praesentia departiculativa see Dunkel 2007). Though taken as a simplex by Nyberg and Klingenschmitt, the parallel phrases *ku re “back where?” (Arm. owr(ek) and *áµ-Ø re-h₁ “look back!” (Proto-Aryan *aµrá, Lith. aurè) show that *u re was an IE particle-sequence as well.

5. tataĩ “just that”, èš “I”: Final devoicing?

In Lithuanian and the other Baltic languages no word-final IE stops have survived as such.⁵³ All of today’s final stops are due to relatively recent apocopes (as in dúoki > dúok, § 1); these are not limited to short vowels, cf. taĩpo > taĩp. Particularly common in final position were IE *-t and *-d serving as verbal, nominal, and pronominal endings;⁵⁴ these were lost in all the Baltic

⁵⁰ A semantic amredita like Gr. ἀμφι-περι-, ἐξ-απο-, Lat. ac-ce-, ab-so-, dis-so-, ex-po- etc.⁵¹ For the zero-ending cf. IE *deh₃-Ø “give!” and *h₁ej-Ø “go!”, § 1.⁵² Threatte, Grammar of Attic inscriptions II (1996) 409.⁵³ On the development of IE *-g(h) to Lith. -š see the end of this section.⁵⁴ On the different sound-systems of the four morpheme-classes see my contribution to the Proceedings of the 12th UCLA IE conference, ed. M. Huld et al. (Journal of Indo-European Studies, Monograph Nr. 40, 2001), 1–14.
languages after short\textsuperscript{55} and long\textsuperscript{56} vowels as well as post-consonantally.\textsuperscript{57} Final
dentals arose again due to later apocopes, as in \textit{it “like, as”} < 4.*$h\textsubscript{2}i-th\textsubscript{2}$, \textit{id “in order to”} < 4.*$h\textsubscript{2}i-d\textsuperscript{h}e/i$ (§ 2.3-4) and emphatic -\textit{pat} < 2.*$po-te$ (Dunkel 2005a). Importantly for the aptotologist, “die Apokope ist geradezu zu einem
Kennzeichen der Adverbia geworden”.\textsuperscript{58} But was the loss of final IE dental
stops which is patent in the earliest stages of all Baltic languages a parallel
innovation or already Proto-Baltic? Certainly the loss of all final consonants
in Proto-Slavic\textsuperscript{59} is, as part of a general “law” of open syllables which has no
counterpart in Baltic, irrelevant for the present question.

In Greek traces of final dental stops have survived in opaque univerbations
and derivatives such as \textit{ότ-τι “whatever”}, \textit{οὐτιδ-ανός “worthless”}, and \textit{ποδ-, ἀλλοδ-απός “coming from where?, elsewhere”} reflecting IE *$h\textsubscript{2}iód$, *$k\textsubscript{x}id$, *$k\textsubscript{x}ód$ and *$aljod$ respectively,\textsuperscript{60} in \textit{άτ-άq “but; and”} < IE *$át h\textsubscript{1}ar-a$ and in
forms like περιέμος beside πέλεμος.\textsuperscript{61}

Turning to Lithuanian in search of something similar, we note that ad
verbs like \textit{kadà “when?”}, \textit{kadàngi “because”} and \textit{tadà “then”} reflect a Proto-
Baltic temporal *$-d\textsubscript{n}$ of unclear origin (Stang 1966, 285f.; Forssman
2003, 92–95). Now in the proto-language phononorminal forms seem to have
been derived not only from stems, but from already fully inflected pronouns;
e.g. the plural stem *$to\textsubscript{j}$ is nothing other than the hypostasised nominative
plural. That such procedures continued in the dialects is shown by Ved. \textit{yád-i “if”}\textsuperscript{62}
and once more by Gr. \textit{ποδ-, ἀλλοδ-απός}. Thus the Proto-Baltic tem-

\footnotesize
\textsuperscript{55} As in the 2. sg. imperative \textit{dúoki} < *$dëh\textsubscript{2}-\textit{këid}$ (§ 1); in \textit{beï “and”} < 2.*$b\textsuperscript{h}e\textsubscript{id}$, cf. YAv. \textit{böit “indeed”}; in the 3. sg. pres. indic. -\textit{a} < *$-at$ (for IE *$-et$ after the plural).
\textsuperscript{56} As in the thematic gen. sg. -\textit{o} < *$-\textit{ād}$ from the IE abl. *$-\textit{aad}$ and in the 3. sg. pres.
indic. -\textit{o} < *$-\textit{eh}\textsubscript{3}t$, *$-\textit{eh}_{1}\textsubscript{t}$.
\textsuperscript{57} As in the nom. plur. themat. ppe. -\textit{q}, whether (as usually) from a neuter singular
*-$ont-\textit{O}$ or from a third plural injunctive *-$o-nt$ (with W. Cowgill, in Baltic Linguistics,
\textsuperscript{58} Stang 1966, 116. Cf. Endzelins, Comparative phonol. and morphol. of the Baltic
langs., transl. Schmalstieg and Jégers, 1971, 54 and Fraenkel’s important article on
Verstümmelung, IF 41, (1923) 393–421.
\textsuperscript{59} On Slavic \textit{niz(û), iz(û), bez, vûz, raz, and čerez} see Dunkel to appear.
\textsuperscript{60} However Gr. \textit{τίπτε} reflects τί ποτε, not IE *$k\textsubscript{x}id-pe$, see Dunkel 2005a.
\textsuperscript{61} περιέμος was back-formed to univerbations like *$φερετ$-πέλεμος which are parallel
\textsuperscript{62} On the differentiation of \textit{yádi} from conditional \textit{yád} in Vedic prose see Hettrich
1988, 225 with fn. 36.
poral adverbs in *-dán could continue pronominal nom.-acc. sing. neuters in *-o-d which would have been extended by either the adverbial ending-conglomerate *-ām (Dunkel 1997) or by the pleonastic emphatic phrase *óh₁ em. This would show not only that in Proto-Baltic final dental stops were still intact, but also that the neuter singular pronominal ending was underly-ingly voiced in the IE proto-language. The loss of final dental stops must then have been a parallel innovation among the individual Baltic languages.

However A. Meillet has argued that Lith. *tataĩ “just that”, *antaĩ “voilà”, *štaĩ “voici” and the like continue pronominal nom.-acc. sing. neuters whose final *-d was devoiced in Proto-Baltic and disappeared in pre-Lithuanian (MSL 10 (1898) 135-136) except before emphatic –aĩ (as in *tasaĩ and *jisaĩ “just he”). This devoicing he saw not as a sound-law, but as the generalisation of a sandhi-allophone which originally occurred, as in Aryan, before voiceless phonemes and perhaps at sentence-end. Lith. *tataĩ and *antaĩ would continue the pre-voiceless allomorphs of the neuters *tód and *ánod – though attested only before vowel. Syncope then led from *anataĩ to *antaĩ, from *šitaĩ to *štaĩ and from *tataĩ to *taĩ “that; then, so”. Stang adds the case of *tačiaũ “nevertheless, however” < *tát jaũ (1966, 66, 114–115, 232–235, 242).

Meillet’s analysis seems overly complicated for *taĩ and will not account for *kaĩ “when? as” at all. An entirely different approach to these two forms had been taken by J. Schmidt, who compared them with the Lat. pronominal neuter plurals *istaec and *quae, seeing here a variant of the collective suffix (Die Pluralbildungen der idg. Neutra (1889), 227–231). Since then however no function for or explanation of this variant has ever been proposed. I sug-

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63 Emphatic *óh₁ as in Lat. idô-neus, Goth. ita; emphatic *-em as in Lat. idem, Ved. idám; the pleonastic phrase *óh₁ em also in Greek emphatic oûv, Cypriot oin; compare lith. -aĩ < *óh₁ ih₁ (fn. 65).


65 Emphatic –aĩ continues a pleonastic emphatic phrase *óh₁ ih₁ (for the latter cf. Greek óûtoç-û) parallel to *óh₁ em in fn. 63. – Meillet’s attractive proportion Lith. –aĩ: gr. –ê = gr. αû:v: ved. ū will not work with today’s pre-forms: *óh₁ ih₁ : ih₁ ≠ 2.*h₂u : 2.*h₂û (h₂)û.

66 H. E i c h n e r modernised Schmidt’s *-ã-î and *-ãĩ to *-eh₂î(h,?) but said nothing as to its function in Grammatische Kategorien, ed. B. Schlerath 1985, 156–160.
gest then that free taĩ continues a normal pronominal collective followed by emphatic ĭh in a phrase *té-h2-失望 iň; and similarly for Lith. kaĩ “when?; as” and the neuter plurals Lat. quae and Osc. pai.

Yet Meillet’s morphological analysis of Lith. tataĩ, antaĩ and šitaĩ could be defended, if modified: these forms could still continue the IE singulars *tó-d, *áno-d and *ki-d; however these would have given not pre-dialectal “tat” “anat”, and “sit”, as Meillet urged, but rather “ta”, “ana”, and “ši”.

These would then have been univerbated neither with emphatic -aĩ nor with the above-mentioned emphatic collective taĩ, but with a homonymic locatival taĩ as preserved in taĩp “so, indeed” and taĩgi “therefore, thus” from IE *tó-i “in this (aforementioned) place; there, here”;*tód toĩ meant “that there”. However locatival taĩ can just as well have been added to the pronominal stems derivationally, like an adverbial ending.

Other candidates for a sound-change devoicing final dental stops are insecure. Phonologically, the first element of Lith. tačiaũ “but, however” < *tát jau68 can continue IE *tó-ti “so many” as well as *tó-d “that” (semantically, neither preform is satisfactory). On Lith. it “like, as” beside id “in order to” see § 2.3-4. Lith. at- “toward” does not continue *ád “toward” but is semantically polarised from *áto “back; away”.

To sum up: a derivation of tataĩ from *tód toĩ or *tó-toĩ “that there” is preferable to Meillet’s derivation from *tad aĩ < *tód óh1 ĭh1. As the adverbs in *-dān show, final voiced dental stops were not phonologically devoiced before they disappeared, a process which occurred post-Proto-Baltically.

Meillet had en passant rejected a sound-law devoicing all final stops (not just dentals). Although the development of IE *e̱(H) “I” to Proto-Baltic *eš and of IE *é̱h “out, outward” to Lith. iš, OPr. is might suggest a Proto-Baltic devoicing of IE final palatals, and in Lith. už “behind; for; than” IE *é̱h was not originally final, having been apocopated from Proto-Balto-Slavic *uži “upward” < IE *úd ê/h1 just as was OCS vůz, a Proto-Baltic *iš is invalidated or at least complicated by Latv. iz. To account for the voicelessness of Proto-Baltic *eš “I” by means of a regular Auslautsverhärtung would thus amount to a one-word Lautgesetz.

67 The adverbial type geraĩ “well”, labai “very” continues more probably a neo-locative (type žemaĩ “low”), i.e. “in a good (place)” than an emphatic collective. – On the IE locative *-eĩ and the neo-locative *-oĩ see my contribution to Früh-, Mittel-, Spätindo-germanisch, ed. G. Dunkel et al. 1994, 17–36.

6. *pās “by, to, at”.

To the comparison of Lith. *pās (Fraenkel 1929, 81–84; not mentioned in Forssman 2003) with Greek (Arcado-Cypriot) *pōs should now be added Phrygian *pōs-ekāve “has damaged”.

This allows the reconstruction of an IE 2.*pōs on the basis of three IE dialects, whose meaning “to, toward; by, at” is everywhere intact. This 2.*pōs is homonymic with but historically distinct from 1.*pōs “behind, after, late” (as in *pōs-dʰi), which is a back-formation from *pó-skʰe “and after”, i.e. ultimately derived from IE *ápo “back, away” (Dunkel 2000, 21).

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LIETUVIŲ KALBOS SMULKMENOS IŠ APTOTOLOGO DIRBTUVIŲ

Santrauka

Ide. dalylyčių tyrimų pažanga (ypač supletyvinės balsių *i, *o ir *u kaitos sistemas pripažinimas) įgalina, netgi verčia reinterpretuoti kai kurias gerai žinomas lietuvių kalbos dalylytes ir morfemas. Imperatyvo priesaga -ki susiejama su ide. nežymimąja enklitine dalylyte *kʰlid, taip pat randama ir iki < ide *1. h₂j kʰlid „iki ko?“. Pastarosios pirmasis komponentas *h₂j „prie, palei“ jau ide. laikais išsirūpino į 2.*h₂j „prie to; ir; taip pat, irgi; siejamą su lie. ir (plg. Homero ἰδέ, sl. i < 2.*h₂j-h₂j. Tolimesne diferenciacija į santykinę dalylytę 4.*h₂j (pvz.: ved. iva „kaip“, Homero ἰνά „kur“ ir go. sant. dalylytė –ei < 4.*h₂j-h₂j) yra tęsiamą lie. it, id, idaňt. Lie. nēva ir vōs padeda rekonstruoti ide. *(s)yó/a „taip“. Lyginant lie. auro su protoindų-iranėnų *aurā „žemiai; čia“ ir gr. δεῦρε „čia“ atkuriama imperatyvinė frazė *au-Ø ré-h₁ „atsigręžk, žvalgykis“. Pagaliau mintis apie žodžio galo priebsių duslėjimą, remiamą tokiomis formomis kaip tataî ir č. „aš“, laikytina nepagrįsta turint galvoje išlaikytus skardžiusius priebsius tokiais atvejais kaip kadà.

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69 A semantically parallel but earlier compound of the same root may be suspected in IE *kʰpen–, *tken– “wound, kill” from *ad ken– “hit at” (Dunkel 2007).

70 Also unrelated is North Greek and Old Iranian *pó-tí, itself most probably dissimilated from IE *pré-tí “toward; against, opposite”.

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