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ZERO-GRADEDENOMINATIVENASALAND *sta*-PRESENTS IN BALTIC

Abstract. The article deals with relics of zero-grade fientive denominative nasal and *sta*-presents in Baltic even when derived from full-grade nominals, a derivational pattern going back to “Northern Indo-European”.

Keywords: Baltic; Indo-European; historical morphology; verb; denominative; ablaut.

1. Lithuanian and Latvian have a wealthy class of fientive denominative nasal and *sta*-presents, e.g. Lith. *šlāpias* “wet” → *šlāpti*, *šlāmpa* “become wet”, *ilgas* “long” → *ilgti*, *-sta* “grow longer”, Latv. *slapjš* → *slapt*, *slūopu*, *ilģs* → *ilģt*, *-stu*. In this article I will argue that the derivational pattern inherited by (East) Baltic involved zero grade of the root even when derived from full-grade nominals, the ablaut invariance of historical Lithuanian and Latvian being a relatively recent innovation. In order to see the issue in its proper perspective it will be convenient to begin with a brief discussion of the position of denominatives in the anticausative-inchoative class of verbs of the northern Indo-European languages.

2. As is well known, Baltic, Slavic and Germanic share a productive class of anticausative-inchoative verbs most saliently characterized by a nasal present, e.g. Lith. *līp-ti*, pres. *li-ĩp-p-a*, pret. *līp-o* “stick to”, OCS *pri-lb(p)-nŕ-ti*, pres. *-lb(p)-ne-tv*, aor. *-lbp-e* “id.”, Go. *af-lif-na-n*, pres. *-lif-ni-þ*, pret. *-lif-no-da* “be left over”. The origins and development of this class cannot be discussed within the limits of this article (my views have been presented in Villanueva Svensson 2011). Here I will only highlight the essential facts insofar as they help define the very existence of a “northern” class of verbs and/or are relevant for the nasal present denominatives:

First, the functional value of the nasal presents in the northern languages contrasts markedly with that which we can reconstruct for Indo-European,

where nasal presents were typically transitive. As expected in a widely represented class, intransitive nasal presents do of course occur in other languages (e.g. Lat. *fungor* “enjoy” = Ved. *bhuñkté* “id.”, but also act. *bhuñákti* “offer enjoyment”), but a consistent class of *intransitive* nasal presents is found in the northern languages alone. This is the main argument for assuming that it rests on a common innovation.

Second, from a formal point of view the nasal presents display slightly different morphology in each of the three northern branches, but there is plenty of evidence pointing to a common Baltic-like prototype **li-m-p-é-ti*, with zero grade of the root, nasal *infix*, and thematic inflection (note relics like Go. *standan* “stand”, OCS *sěsti*, *śęđo* “sit down”, etc.). This has been conclusively shown by Gorbachov (2007), to whom I refer for the details. The formal features of the present type **li-m-p-é-ti* are not particularly surprising in an Indo-European perspective, but the clarity with which such an (innovated) prototype can be reconstructed for northern Indo-European is noteworthy.

Third, although the present type **limpéti* is the most salient morphological feature of the northern anticausative-inchoative class, it is not the only one. As far as the present stem is concerned, one should mention an archaic layer of *ie/o*-presents (e.g. OCS, ORu. *pri-lbple-* ~ *-lb(p)ne-* “cling, cleave to”, ON *liggja*, OE *licgan* “lie”; see Villanueva Svensson 2011, 48ff., building on Tedesco 1948) and the *sta*-presents with which nasal presents stand in complementary distribution in Baltic and perhaps in Balto-Slavic (see Villanueva Svensson 2010; Gorbachov 2014 for two recent and mutually incompatible proposals). There are good reasons to believe that the anticausative-inchoative class involved a thematic aorist as its regular aorist formation (**lip-é-t*, OCS *pri-lbpe* “stuck to”). The thematic aorist, however, is directly preserved only in Slavic (the preterit formations of Baltic and Germanic are clearly innovated) and, accordingly, this cannot be proved.

Fourth, an important argument in favor of a common origin of the type **limpéti* in Baltic, Slavic and Germanic is its position in the verbal system. In Indo-European nasal presents were typically used to provide a present stem to active-transitive root aorists (e.g. Ved. pres. *bhinátti* : aor. *ábhet* “split”). Predictably, in the languages they usually surface as primary verbs (Lat. *findō*, *-ere*, *fidī* “split”). By contrast, northern deverbatives of the type **limpéti* typically belong to one of the following two derivational patterns: i) anticaus-

atives to primary transitive-terminative verbs (e.g. Go. *(ga-)brikan* “break, crush” → *us-bruknan* “be broken off”; Lith. *skleĩsti, skleĩdžia* “spread (tr.)” → *sklisti, skliĩnda* “spread (intr.)”); ii) inchoatives to stative or durative verbs (e.g. Go. *wakan, -aiþ* “be awake” → *ga-waknan* “wake up”; OCS *bvděti, bvždŏ* “be awake” → *vbz-bv(d)nŏti* “wake up”).¹

3. The third derivational pattern in which the type **limpēti* is productive is that of fientive denominatives from adjectives and, less commonly, nouns. Their general meaning is “become X”, where “X” symbolizes what the adjective or noun denotes. Denominatives display exactly the same morphology as the deverbatives and are abundantly represented in all three branches:

Go. *fulls* “full” → *(ga-)fullnan* “become filled”;

Lith. *šlūbas* “lame” → *šlūbti, šlum̃ba* “become lame”;

OCS *lixv* “abundant, excessive” → *lixnŏti* “become abundant, excessive”.

An interesting feature of the denominatives is that they present zero grade of the root when derived from full-grade nominals in Old Norse (where the type is still productive) and oldest Slavic (where the type became unproductive and was replaced by denominatives in *-ěti, -ěŏ*, e.g. *starv* “old” → *sv-starěti sę* “become old”). Some examples:

ON *blautr* “weak” → *blotna* “grow weak”,

ON *heitr* “hot” → *hitna* “become hot”,

ON *hvítr* “white” → *hvítna* “turn white”,

ON *starkr* “rigid, sturdy” → *storkna* “coagulate”,

OCS *gluxv* “deaf” → *o-glŭxnŏti* “become deaf”,

OCS *mrazv* “frost, ice” → *sv-/po-mrvznŏti* “freeze over, become congealed”,

OCS *slěpv* “blind” → *o-slŭpnŏti* “go blind”,

OCS *xromv* “lame” → *o-xrŏmnŏti* “grow lame”.

The agreement between North Germanic and Slavic can only be an archaism, the ablaut invariance of Gothic (*hails* “healthy” → *ga-hailnan* “be healed”, etc.) being an easily understood innovation. A relic of the original morphology is preserved anyway in Go. *ga-staurknan* “become rigid” (= ON *storkna* “coagulate”), no doubt because the base adjective **starks* “strong” was lost in East Germanic (cf. Gorbachov 2007, 72). Ablaut invariance

¹ The northern type **li-m-p-é-ti* certainly includes primary verbs, but most of them are suspect of being relatively recent.

is predictably also found in Old Norse, where it is rare (e.g. *sjúkna* for older *sokna* “fall ill” after *sjúkr* “sick”), and in Slavic (e.g. Ru. *slépnut’* for OCS *-slbpnŋti* after Ru. *slépój* “blind”). The same innovation that took place in Gothic took place in (East) Baltic as well, where nasal and *sta*-present denominatives regularly present the same vocalism as the derivational base (see below).

Northern denominatives of the type **limpéti* have received relatively little attention in the literature, but they are interesting for at least two reasons:

First, they have a remarkable probative force for the very existence of a northern Indo-European class of (secondary!) anticausative-inchoative verbs. The nasal infix was not used to make denominatives in Indo-European, a fact that implies that we must be dealing with an innovation. Even more important is the fact that Indo-European denominatives did not have zero grade of the root when derived from full-grade nominals. The innovation we are dealing with must thus be highly specific.²

The origin of the northern denominative type is reasonably clear on theoretical grounds: some deverbative anticausatives and/or inchoatives were secondarily associated to an adjective or noun of the same root and reinterpreted as fientive denominatives. A new denominative type was thus born and quickly became productive. Unfortunately, the original core that gave rise to this process is impossible to determine because of the very nature of the available evidence (exactly the same problem, it must be noted, is found with the northern deverbatives themselves). The essential point to stress in our present connection is that there must have been a robust class of anticausatives and/or inchoatives for a new denominative type to develop and that the existence of a denominative type characterized by nasal infix, thematic inflection, and consistent zero-grade of the root is so peculiar that it is unlikely to rest on parallel, but independent developments of the three branches. It must have arisen in “Northern Indo-European” itself.

Second, taking the denominatives seriously may give us an additional device to uncover the prehistory of individual verbs and/or word-families in Baltic, Slavic and Germanic. The derivational base of an original denomina-

² A third possible argument would be the associated thematic aorist of denominatives in Slavic, if sufficiently old. As already observed, however, although there are good reasons to project the Slavic thematic aorist of Leskien’s Class II back into northern Indo-European, this cannot be proved.

tive may be lost. The denominative may be reinterpreted as a primary verb and give rise to new derivatives of its own, eventually including a back-formed transitive that would be synchronically indistinguishable from other primary verbs of the language. There is hardly any necessity to observe that such a framework may have an impact on research on “root-enlargements” and other processes leading to the creation of neo-roots in these dialects of Indo-European (see below for some examples).³

4. We can turn now to Baltic, where the nasal presents must needless to say be studied together with the *sta*-presents with which they stand in complementary distribution.⁴

Fientive denominatives are very well represented in Lithuanian (215 examples, according to Pakalniškienė 2000, 72), somewhat less in Latvian (48 examples, according to Hauzenberga-Šturma 1970, 184).⁵ The root vocalism of the denominative regularly copies that of the nominal base (in spite of the fact that zero-grade is perfectly well established among deverbatives), e.g. *žālias* “green” → *žālti*, *žāla/-sta* “grow green”, *sēnas* “old” → *sēnti*, *-sta* “grow old”, *sveikas* “healthy” → *sveikti*, *-sta* “get better, recover”, etc.

In other words, Lithuanian and Latvian present exactly the same picture as Gothic and must rest on an equally trivial innovation. From the preceding section, however, it is clear that the pattern inherited by Baltic regularly involved zero-grade of the root even when derived from full-grade nominals. It is perfectly possible, in principle, that some zero-grade denominatives survived into historical times – presumably not as transparent synchronic

³ In a more speculative vein, one could consider the possibility that the fientive deverbatives, once firmly established in the language, could have a certain impact on the development of the system of anticausative and inchoative deverbatives. Elsewhere I have argued that the inchoatives were originally characterized by a *īe/o*-present, inchoative nasal presents being a secondary import from the anticausatives (Villaueva Svensson 2011, 46ff.). Fientive denominatives must have been frequently paired with a stative denominative in **eh₁-īe/o-*. It is at least conceivable that this fact had a certain influence on the constitution of the characteristic Balto-Slavic deverbative pattern stative Lith. *budėti*, *būdi*, OCS *bŭdĕti*, *bŭdi-* “be awake” : inchoative Lith. *pa-būsti*, *-būnda*, OCS *vŭz-bŭ(d)nŭti*, *-bŭ(d)nŭ* “wake up”.

⁴ The rules ordering the distribution of nasal and *sta*-presents in Lithuanian are well-known and have been described many times (e.g. Stang 1966, 340ff.). See Villaueva Svensson (2010, 206ff.; 2011, 34f.) for their distribution in Proto-Baltic.

⁵ The absence of certain examples in Old Prussian is surely due to chance.

denominatives, but as “disguised” ones whose denominative origin can only be recovered from a historical perspective.

In what follows I will discuss potential examples of inherited zero-grade denominatives in Baltic. The survey is mostly centered on Lithuanian and does not try to be exhaustive. It is rather intended to exemplify the type of evidence and problems we are dealing with. If the framework developed in this article is accepted, I am certain that more examples will show up in the future.

5. The first surprise one finds when approaching the evidence in this perspective is that synchronically recognizable zero-grade denominatives are actually attested in Lithuanian:

- ? (1) *aršùs* AP 4 “furious, violent” (Latv. *aršâk(i)* “more”, *ârsala* “angry woman”) → dial. *iřšti*, *-řta* “rage, go angry” (Latv. *sa-irstiês* “id.”).
- (2) *bjaũrus/bjaurùs*, *bjaũras* AP 2/4 “ugly” (Latv. *bļaiũrs* “bad, awful”) → *bjũrti*, *bjũra/bjũrsta* “become ugly” (also rare dial. *bjaurti*, *-sta* “id.”).
- (3) *brângus/brangùs* AP 1/3 “expensive” (Latv. *braņģs* “id.”) → dial. *brîngti*, *-sta* “become expensive” (normal *brângti*, *-sta* “id.”).
- (4) *draũgas* AP 4 “friend” → OLith. *su-drugti*, *-sta* “become friends with” Bretkũnas (also *draũgti*, *-ia* “be friends with” Daukřa; normal *draugâuti*, *-âuja* “id.”).
- (5) *kartùs* AP 3/4 “bitter” → dial. *kiřsti*, *-sta* “turn bitter” (normal *kařsti*, *-sta* “id.”, also *kartêti*, *-êja* “id.”).
- (6) *kiâuras* AP 3 “holey” (Latv. *caũrs* “id.”) → *kiũrti*, *kiũra/kiũrsta* “grow holey, get holes”.
- (7) *liêsas* AP 1/3 “lean, thin” (Latv. *liêss* “id.”) → *lýsti*, *-sta* “grow thin” (also *liesêti*, *-êja* “id.”, dial. *liesti*, *-sta* “id.”; Latv. *liêst*, *-stu* “id.”).
- (8) *lúošas* AP 3 “lame” → dial. *ap-luřti*, *-lũřta* “become lame” (very rare; also *luôřti*, *-řta* “id.”).
- (9) *niaurùs*, *niaũras* AP 4 “sullen, gloomy, rusty” → *niũrti*, *niũra/niũrsta* “grow gloomy” (also adj. *niũrùs*, but the initial palatalization requires a full-grade base).
- (10) *siaũras* AP 4 “narrow” (Latv. *řâurs*) → dial. *siũrti*, *siũra* “grow narrow” (very rare; normal *siaurêti*, *-êja* “id.”).

Although self-explanatory at first sight, not all examples are equally certain. Zero-grade seems to be the rule among roots ending in ^or- (*bjũrti*, *kiũrti*, *niũrti*, all of them belonging to the standard language, dial. *siũrti*), whereas other root structures are more erratically represented and only *lýsti* is normal in standard Lithuanian. The case of dial. *iřšti*, *brîngti*, *kiřsti* (← *aršùs*, *brangùs*,

kartùs) is particularly uncertain because deverbative *u*-stem adjectives with *o*-grade of the root (ultimately continuing the PIE type τoμός) are productive in Lithuanian (*miřti* “die” → *marùs* “mortal”, etc.). The possibility that we are dealing with an old primary verb is high in the case of *aršùs* ~ *iřsti* (cf. dial. *aršytis* “get excited, rage”, *eřstas* “anger”),⁶ but I find it unlikely in the case of *kartùs* ~ *kiřsti* and *brangùs* ~ *bringti* (note, in addition to the semantics, that the original immobility of *brángus/brangùs* is untypical for deverbative adjectives the type *marùs*). An occasional reversion of the derivational channel *miřti* → *marùs* into *kartùs* → *kiřsti* can perhaps not be excluded, but would be distinctly rare.

Apart from Lith. *draũgas*, Latv. *dràugs* (: OCS *drugъ*) none of the items mentioned above has a completely certain extra-Baltic etymology. Accordingly, in many of them we must be dealing with purely (East) Baltic material. *bjaurùs*, *kiáuras*, *niaũras*, *siaũras* → *bjũrti*, *kiũrti*, *niũrti*, *siũrti* must have been created after the sound change *-*euC*- > *-*ĩauC*-. The chronology of this sound change is disputed, but there is some evidence suggesting that it was a relatively late development that took place independently in Slavic and Baltic (cf. Villanueva Svensson 2015a, with references; see further below § 8.2). Finally, *lúošas* → *ap-luřti* implies an exclusively East Baltic neo-ablaut (*-*ō*- >) -*uo*- → -*ũ*- (cf. Villanueva Svensson 2015b, 322ff.). The provisional conclusion seems to be that the derivational process involving zero-grade denominatives did not just leave some relics in Baltic, but was kept alive, at least marginally, in Proto-East Baltic.

Cases like *bjaurùs* → *bjũrti* etc. have only occasionally been noted in the literature (e.g. Pakalniřkienė 2000, 73) and never been highlighted as potentially interesting. In point of fact, most treatments simply do not mention them.⁷ The only exception known to me is Gorbachov (2007, 162),

⁶ The idea that *aršùs*, *iřsti* etc. are Byelorussian loan words (e.g. Fraenkel LEW 16f., 187) is almost certainly false, cf. Urbutis 1989, 44ff.

⁷ It may be illustrative to see how they are treated in the etymological dictionaries (as, put it this way, their authors could not escape this material for the sake of clarity of exposition). The only comment I have found in Fraenkel is that *lyřti* “lautet ab mit *liesas*” (376). Other examples are regularly mentioned, but not commented upon. Smoczyński (2007) offers alternative accounts for *kiũrti* (282) and *niũrti* (426), declares -*drugti* unclear (120), and makes no comment on the other forms. ALEW (2015) offers an alternative account of -*drugti* (988), considers *bringti* a primary verb (130), and qualifies

who correctly observes that *sùsti*, *sūsta* “grow scabby; wither” and *tùkti*, *tuñka* “grow fat” are relics of the original northern Indo-European morphology of nasal present denominatives. Unfortunately, both items are problematic:

- (11) *taukai* AP 3 “fat” (Latv. *tàuki* “id.”, adj. *tàuks* “fat, greasy”, OPr. *taukis* “lard” Elb.) → ***tùkti*, *tuñka* (-sta)** “grow fat” (Latv. *tukt*, *tuku*, also ***tùkt***, **-stu** “id.”) → caus. *tùkinti* “make fat”, adj. *tuklūs* “fat, greasy”, etc. (Latv. *tucinât*, *tukls*).

The Baltic word for “fat” has clear cognates in the northern languages: Sl. **tûkv* AP *c* “fat” (OCS *tukъ*, Ru. *tuk*, SCr. *tûk*, etc.; with derivatives like **tučbnъ* “fat, rich” [OCS *tučbnъ*, Ru. *túčnyj*, etc.], **tučiti* “make fat; (refl.) grow fat” [Ukr. *túčyty*, Pol. *tuczyc’*]), Gmc. **beuha-* n. “thigh” (ON *þjó*, OE *þēoh*, OHG *dioh*). Although less certain, here probably belong Mir. *tón* “hindquarters, bottom” (< **tuknā?*; see Zair 2012, 155 on MW *tin* “arse, buttocks, bottom”), Lat. *tucca*, *tuccētum* “a kind of sausage” Pers.+ (Gaulish loan word), Um. gen. sg. *toco* TI Vb 13 “Hinterschinken” (*vel sim.*; cf. Untermann 2000, 774).

It is generally agreed upon that these forms are related to the root **teuh₂-* “grow fat, strong” (Ved. *tauīti* “becomes strong”, Sl. **týti*, **-jǫ* AP *a* “grow fat”, etc.; LIV 639f.), but the ultimate analysis is problematic. A “root-enlargement” **teuHk-* is probably the standard approach (e.g. IEW 1081), whereas the LIV posits a “Parallelwurzel” **teuk-* (641). The main argument for the latter approach is the interpretation of the Indo-Iranian root **tuakš-* (Ved. *tvakš-* “be active, be strong”, Ir. **θuaxš-* “be busy, work on”) as a fossilized desiderative **tuek-s-* with secondary State II of the root (as in **h₂eug-* → **h₂uek-s-*, etc.). This is attractive, but not conclusive. Leaving Baltic aside, the evidence is multiply ambiguous and does not allow deciding between **teuHk-* and **teuk-* (Sl. **tûkv* is ambiguous as a result of Meillet’s law; Mir. *tón*, if it really goes back to **tuknā*, could point to **teuk-*, but the short vowel could be explained via Dybo’s law [Matasović 2009, 393] or via “Wetter’s rule” [Balles 2011, 281]).

In my view, a problem with both approaches is that the concepts of “root-enlargement” and “parallel roots” are virtually impossible to control and

bjūrti, *lýsti*, *niūrti* as “regelmäßig tiefstufiges intransitives Inchoativum” (119, s.v. **bjūrti*). It is unclear to me what “regelmäßig” means in this context. Derksen (2015) is the only author who correctly observes that *kiūrti* is “a denominative verb belonging to *kiáuras*” (249; other verbs are not mentioned), but does not add any other observation.

should be avoided unless the facts compel us to do otherwise. A more rational approach would be to start from a real derivative **teuh₂-ko-*, **tough₂-ko-* or **tuh₂-ko-* as the source of the Western forms. This would force us to leave In.-Ir. **tʷakš-* aside and it remains a task for the future to work out the evidence in detail.

There is no need to take a strong position here. The relationship between *tùkti*, *tuñka* and *taukaĩ* is so obvious even in modern Lithuanian that a denominative is the most likely solution under any root analysis. Even if we are dealing with a “real” root **teuHk-* or **teuk-*, the fact remains that *tùkti*, *tuñka* would stand alone as the only witness of a PIE primary verb (if LIV’s analysis of In.-Ir. **tʷakš-* is correct, it would be an extremely old formation and thus hardly relevant for *tùkti*).

The original intonation of this Baltic word family is surprisingly indeterminate. Acute intonation predominates in Lithuanian, circumflex in Latvian, without it being easy to derive one from the other. If we start from (pre-)Bl. **taũka-* (Latv. *tàuki*), Lith. *tùkti*, *tuñka*, Latv. *tukt*, *tùku* are unproblematic, but not Latv. *tùkt*, *-stu*. If we start from (pre-)Bl. **táuka-* or **tóuko-* (Lith. *taukaĩ* AP 3), I see two possible solutions for the short vowel of *tùkti*. The denominative could have been formed at a time when “normal” zero-grade derivatives could be made from “long vowel” bases as **tóuko-*. This is perhaps conceivable, but hardly attractive. Alternatively, one could recall the fact that pairs of normal zero-grade nasal present and lengthened zero-grade *sta*-present from original acute roots are well attested in East Baltic (e.g. Lith. *skýsti*, *-sta* “liquify” ~ *skìsti*, *skiñda* “become flimsy”, *trúkti*, *-sta* “be lacking, burst” ~ *trùkti*, *truñka* “last, continue”, etc.). The origin of this phenomenon is unclear, but its reality cannot be doubted. This framework would actually explain why we have not only Lith. *tùkti*, *tuñka*, Latv. *tukt*, *tùku*, but also Latv. *tùkt*, *-stu* (which is otherwise hard to generate within Latvian).

? (12) *saũsas* AP 4 “dry” (Latv. *sàuss* “id.”) → *sùsti*, *sũsta* “grow scabby; wither” (Latv. *sust*, *-u* “become dry”; also *saũsti*, *-sta* “become dry”, *sauséti*, *-éja* “id.”, Latv. *sàust²*, *-stu*, *sàusêt*, *-ēju*, *susêt*, *-u*).

At first sight *saũsas* → *sùsti* looks like an almost ideal example, for two reasons: i) *sùsti*, *sũsta* has secondary semantics vis-à-vis the later denominative *saũsti*, *-sta*, which is exactly what we would expect in an archaism; ii) OCS *suxъ* “dry” → *-sъxnqti*, *-sъxnq* “wither, become dry” offers an

apparently perfect *comparandum*, thus pointing to a Balto-Slavic denominative **su-n-s-e-ti* “becomes dry”.

On closer inspection, however, it is by no means certain that we are actually dealing with a denominative. Beside OCS *-svxne-* there is a well-established *je*-present OCS *-svše-* (cf. Tedesco 1948, 358) with reasonable cognates in Ved. *śúṣyati* “dries up”, Gk. *αῦω* “dry (tr.)”, all of them pointing to a PIE *ǵe/o*-present **h₂sus-ǵé/ó-* (e.g. LIV 285).

The existence of an archaic *ǵe/o*-present in oldest Slavic does not automatically prove that Lith. *sùsti*, *sũsta* is not an old nasal present denominative, but of course it would be preferable to keep the equation OCS *-svxne-*, *-svxne-/svše-* = Lith. *sùsti*, *sũsta*. Slavic actually has a couple of denominative *je*-present variants beside “normal” *ne*-presents (*krěpъ* “strong” → ORu. *o-krěple-* “become strong”, *slěpъ* “blind” → ORu. *o-slěple-* “go blind”, cf. Sigalov 1961, 93) and there is no reason why the northern fientive denominatives could not have encompassed *ǵe/o*-presents in addition to nasal presents. If this is the case, **h₂sous-ó-* “dry” ~ **h₂sus-ǵé/ó-* “become dry” must have been one of the core pairs that gave rise to the whole process (the other option would be to assume that ORu. *o-krěple-*, *o-slěple-* represent a very moderate expansion of “Class II” *je*-presents in some varieties of Slavic).

Turning back to Lith. *sùsti*, *sũsta*, from what has been said it is clear that it is not a probative example of an old nasal denominative. On the other hand, its preservation into historical times (note that its relationship to *saũsas* is self-evident and that Latv. *sust*, *-u*, unlike Lith. *sùsti*, does not have specialized semantics) makes better sense if it was supported by a class of zero-grade denominatives.

6. The examples discussed in § 5 are exceptional. Qua archaisms one would not expect old zero-grade denominatives to be still recognizable as such. In a branch characterized by such a rich derivational system as Baltic we would rather expect them to be synchronically embodied in large word families, their denominative origin being only recoverable from a historical perspective (as to some degree is the case with *taukaĩ* → *tùkti* → *tuklùs*). In this section I will examine some synchronically opaque denominatives:

- (13) **graũbas* “rough, uneven” → *grùbti*, *gruĩba* “become numb, coarsen” → *grub(l)ùs* AP 4 “rough, uneven”.

This word family includes many derivatives (*gruoblẽ* “unevenness (of terrain)”, *graublẽ* “id.”, *grùb(l)as* “id.”, Latv. *grubulis* “unevenness, clod”, etc.),

all of them clearly dependent on adj. *grub(l)ūs*. Note further Latv. *grumbt*, *-ju* “wrinkle”, which looks like a cognate of Lith. *grūbti*, *gruĩba* with *-m-* resegmented as part of the root and transfer to the *ia*-presents.

Other things being equal one would take *grūbti* as an unremarkable denominative of *grubūs*. In Slavic, however, we have adj. **grubъ* “coarse, rude” beside **grōbъ* “id.” (OCS *grōbъ*, Ru. *grubyj*, Pol. *gruby*, dial. *gręby*, SCr. *grūb*, Slvn. *grōb*, Bulg. *grub*), which can hardly be interpreted otherwise than as a full-grade adjective **groub-o-* and a secondary adjective **grumb-o-* that adopted its *-um-* from an original nasal present cognate with Lith. *grūbti*, *gruĩba*. Its more natural interpretation is a zero-grade denominative of Bl.-Sl. **groub-o-*. The derivation of a secondary adjective *grub(l)ūs* from *grūbti* in Baltic is unproblematic, as is the fact that *grub(l)ūs* eventually replaced **graũbas*. The end result was an (East) Baltic word family in which *grūbti* was naturally reinterpreted as a denominative of its original derivative *grubūs*.

- (14) *kraupūs* AP 4 “frightful” (Latv. *kraũps* “rough, coarse”; *kraũpa* “detached tree bark; knot, wart”, *křaũpa* “scab (of horses)”) → ***krūpti*** (***kriūpti***), ***kruĩpa*** “grow scabby, become rough; grow numb, stiff”, Latv. ***krupt*** (***křrupt***), ***krūpu*** “become scabby, rough” (also *křaupt* “id.”, rare) → *kr(i)ūpē*, *kr(i)ūpis* AP 2, Latv. *krupis* (*křupis*), *krūpis* “toad”, Latv. *krups* “tiny”, etc.

The meaning of Lith. *kraupūs* “frightful” (with derivatives like *kraũpti*, *-ia* “frighten; scold”, *krūpti*, *-sta* “become afraid”, *krupūs* AP 4 “fearful”, etc.) is almost certainly secondary. The Latvian evidence and Lith. *krūpti*, *kr(i)ūpē* point to an original meaning “rough, coarse, scabby” (*vel sim.*). There are several reasons for assuming that *krūpti*, Latv. *krupt* is an original denominative of *kraupūs*, Latv. *kraũps*:

First, the Germanic and Slavic evidence point to a “northern” full grade adjective **kreupo-* “rough, scabby” as the core of this word family: Gmc. **hreuba-* “scabby, rough” (ON *hrjúfr*, OE *hrēof*, etc.), Sl. **krupъnъ* “coarse” (Ru. *krúpnjy*, SCr. *krúpan*, etc.), **krupā* AP *b* “grain, groats; hail, crumb” (CS *krupa*, Ru. *krupá*, SCr. *krúpa*, etc.). Zero-grade is very rare in Slavic (only Ru. dial. *krópyj*, *kropkój* “fragile, rough” < **krōpъkъ*) and probably secondary in Germanic (ON *hrufa* “rough surface, crust”, OHG (*h*)*ruf* “scab, leprosy”). There is no evidence for a primary verb in either Germanic or Slavic.

Second, the Baltic palatalized variants Lith. *kri°*, Latv. *kř°* require a full-grade base **kr’aup-* < **kreup-* as their starting point (cf. Gmc. **hreuba-*)

and, at the same time, a motivation for the depalatalization to **kr(a)up-*. A denominative **kru-m-p-e/o-*, if sufficiently old, would provide a reasonable source. The existence of a Balto-Slavic denominative **kru-m-p-e/o-* is probably supported by Latv. *kruņpa* “fold, wrinkle”, *kruņpēt* “crinkle, wrinkle”, CS *krōpěti* “contract”, Sl. **krōpъ* “small, short; thick” (CS *krōpъ*, Pol. *krępy*, Bulg. *krăp*).

- (15) **maulas* (*maulióti(s)* “get dirty”) → *mùlti*, *-sta* “get dirty” (rare) → *mùlinas* “dirty”; ? *muļbas* “clay-coloured”, *muļvė* “mud, marsh”.

These forms are dialectal and not abundantly attested (see LKŽ s.v.). Since **meul-* is not an acceptable root structure, the *-l-* must contain suffixal material. An original adjective or noun **maulas* as the source of *mùlti* is supported by *maulióti(s)* and Sl. **mulъ*/**mulbъ* “mud; murky water, rainwater” (Ru. *mul*, SCr. *mùlj*, Cz. *mula*, Pol. *muł*, etc.; see ÈSSJa 20, 185f., with references).

- (16) *mauraĩ* AP 3(1/2/4) “duckweed; silt, mud” (Latv. *maĩrs* “grass, lawn”) → *mùrti*, *-sta*/*mũra* “become wet; sink” (Latv. *iz-muris* “wet”) → *mùras* “wet (earth)”, *murùs* “id.”, *mùrdyti* “plunge”, *murdėti* “welter”, Latv. *mùrdėt* (*muŗdėt*, *muŗdėt*) “well (from)”.

Lith. *mauraĩ* (with transparent derivatives like adj. *máurinas*/*maũrinas*, *maurúotas*, coll. *maurýnas*, denom. *máurėti*/*maurėti*, *maũrinti*, etc.) has clear cognates in Slavic: **murъ*, **mura* “mud, mould” (Ru. dial. *mur* “mould”, SCr. *mũr* “drift sand”, *múra* “mud, clay”, Cz. *mour* “soot”), **murava* “meadow grass, lawn” (Ru. *muravá*, Bulg. *muráva*, Slvn. *muráva*, etc.), perhaps **murъ* “dark-grey” (Ru. dial. *múryj*, Slvn. *mũr*). See ÈSSJa XX 191ff. for more material. As per Smoczyński (2007, 378), we must be dealing with a Balto-Slavic derivative **mouH-ro-* from the root **meuH-* of Latv. *maũt*, *maũju* “swim, submerge”, Lith. *máudyti* “bath”, Sl. **mýti*, **mýjъ* AP a “wash” (OCS *myti*, *myjъ*, SCr. *mùti*, *mìjēm*, Ru. *myť*, *móju*, etc.).

Zero grade is rare in Baltic (it is unattested in Slavic) and clearly dependent on *mùrti*, *-sta* (note that forms like Lith. *murà* “mire”, *mùras* “wet (earth)”, *mùrinti* “make wet, make dirty”, *mùrioti*/*murióti* “id.”, Latv. *murĩt*, *murėt* “id.”, etc. cannot of course continue something like **muH-ro-*). Accordingly, an old zero-grade denominative seems unavoidable.

- (17) *slābnas*, *slōbnas* (Latv. *slābs* [Slavicism?], *slābans*) “weak” → *silpti*/*siļpti*, *-sta* “grow weak” → *silpnas*/*siļpnas* “weak” AP 1/3/4.

If this etymology of *sil̃pti*, *sil̃pnas* is accepted (e.g. Smoczyński 2007, 550) an old zero-grade denominative is the best way to motivate the assimilation *-b-* > *-p-* (**silb-ti*, **silb-sta*, **silb-o* > **silp-ti*, **silp-sta*, **silb-o*). Once established in the language *sil̃pti/sil̃pti* gave rise to a new family of its own that eventually displaced *slōbnas* out of use. Interestingly, the process leading to *sil̃pti/sil̃pti* repeated itself in newly formed denominatives: *slōbti*, *-sta* ~ *slópti/slōpti*, *-sta* (also *slābti*, *slāmba*), Latv. *slābt/slābt*, *-stu* ~ *slāpt*, *-stu* “grow weak”. The original adjective Bl.-Sl. **slābas* is preserved in Sl. **slābъ* AP *a* “weak” (OCS *slabъ*, Ru. *slábyj*, SCr. *slāb*, etc.) and, perhaps, Latv. *slābs* (which has often been suspected of being a Slavic borrowing). The tone of the Baltic forms is surprisingly unstable, but most of the evidence agrees with the Slavic acute.

- (18) *šiáurė* AP 1/3 “North; north wind”, *šiaur̃ys* AP 3/4 “north wind”, *šiáuras/šiaūras* AP 3/4, *šiaur̃us* AP 4 “sharp, biting, cold” (dial. *šiūras* AP 4, *šiūr̃us* AP 4 “id.”) → *šiūr̃ti*, *šiūra/-sta* “bristle (hear); fray (clothes); get rough, rugged” → *šiūr̃inti* “rustle”, *šiur̃kšt̃us* AP 4 “rough, coarse”.

To my knowledge, this etymology of *šiūr̃ti*, *šiur̃kšt̃us* is proposed here for the first time. The more or less traditional connection with *šertis*, *-iasi* “shed hair or feathers, molt”, *šer̃ys* “bristle”, Sl. **sbrstṽ* “hair (of animals)” (e.g. Fraenkel LEW 995, Derksen 2015, 451) is unlikely on formal grounds.

The base word *šiáurė* has well-known cognates in Sl. **séver̃ъ* AP *a* “North; north wind” (CS *sěver̃ъ*, SCr. *sjeṽer̃*, Ru. *séver*, etc.) < **keh̃₁uero-*, Lat. *caurus* “north wind” (< **kh̃₁uero-*). The mismatch between Lith. *šiáurė* and Sl. **séver̃ъ* is usually explained as reflecting Balto-Slavic ablaut, but this would imply a fairly unique type of paradigm. I thus prefer assuming that Bl.-Sl. **séuero-* was syncopated to **séuro-* in Baltic, whence Lith. *šiáurė* by regular sound change. If this is correct, derivatives like adj. *šiáuras/šiaur̃us* must be exclusively Baltic. The meaning of the denominative *šiūr̃ti* (be it from *šiáurė* or from adj. *šiáuras*) must rest on a development “get bitten by cold wind” → “bristle (hear), get rough (hand) out of cold” (*vel sim.*). Dialectal forms like *šiūras/šiūr̃us* “sharp, biting, cold” may have been formed from *šiūr̃ti* at an early date and reflect its original meaning.

7. As observed above (§ 6), old zero-grade denominatives are likely to end up as part of large word families. In this section I will study three cases that on a priori grounds must represent the most common constellations in which

old zero-grade denominatives can be found. In all three cases we are dealing with unremarkable derivatives from a synchronic point of view.

7.1. The original zero-grade denominative looks like a normal denominative from a zero-grade nominal that was derived from it:

- (19) *kaĩpas* AP 2/4 “corner” → *kuĩpti*, *-sta* “become crooked, bent; bend (intr.)”
→ *kuĩpas* AP 4 “bent, crooked”.

Lith. *kaĩpas*, *kuĩpti*, *kuĩpas* are Proto-Baltic in date: Latv. *kaĩpis* “curved piece of wood”, *kuĩpt*, *-stu* “become crooked, bent; shrivel”, *kuĩps*² “shriveled, crooked” (if not Curionianisms, as suggested by the preserved *-m-* and the intonation), OPr. *kumpint*, *kũmpinna* “push away, hinder” (implying **kumptvei* = Lith. *kuĩpti*), *etkũmps* “again, anew” (implying **et-kumpas* = Lith. *kuĩpas*). Lith. *kaĩpas* belongs with PIE **kamp-* “bend (*vel sim.*)”: Gk. *κάμπω* “bend, curve”, *κάμπη* “caterpillar, silkworm” (?), Lat. *campus* “field”, Gmc. **hamfa-* “mutilated, lame” (Go. *hamfs*, etc.), Sl. **kq̃tb* AP *b* “corner” (OCS *kq̃tb*, etc.) < **kamp-to-* or **kump-to-*.

From a synchronic point of view *kuĩpti* is an unremarkable derivative of *kuĩpas*. If this analysis is historically correct, it requires previous *kaĩpas* → *kuĩpas*. The derivational morphology implied here, however, is unparalleled in Baltic. Similar difficulties arise if one projects *kuĩpas* back into Indo-European or Balto-Slavic: there is no comparative evidence for an adjective **kmp̃-ó-* and zero-grade derivatives are rare for PIE roots with root vowel **a*. It is therefore preferable to assume that *kuĩpas* was derived from *kuĩpti*. As for *kuĩpti*, *-sta* itself, there are two ways to generate the zero grade within Baltic. It could be an old anticausative to a lost transitive primary verb **kaĩpti*, *-ia* “bend” cognate with Gk. *κάμπω* (as perhaps implicitly suggested in LIV 342). This, however, has the disadvantage of operating with unattested evidence. The second option is to assume an old zero-grade denominative of *kaĩpas* “corner”, which has the advantage of operating with attested material at a relatively late date. Although this cannot be verified, Sl. **kq̃tb* could be a derivative from the Balto-Slavic denominative.

7.2. The original zero-grade denominative looks like an inchoative from a stative-durative verb that was derived from it:

- (20) *míelas* AP 1/3 “dear”, Latv. dial. *mĩls*² “id.” (< **miels*², Latv. *miēlasts* “Gastmahl”, *miēluôt*, *mielât* “host, feast, feed; be dear”) (also Žem. *mýlas*, Latv. *mĩls*, *mĩļš*, OPr. *mijls*, *mĩls* “dear”) → (*pa-*)*mĩlti*, *-sta* “fall in love; become dear” → *myléti*, *mýli*, Latv. *mĩlēt*, *-u*, OPr. *mijlt*, *mĩlē* “love”.

Synchronically (*pa-*)*mīl̥ti* is an unremarkable inchoative of *m̥l̥éti* of the type *žydėti* “bloom” → (*pra-*)*žýsti* “begin to bloom”. Since **mei[H]l-* is not an acceptable root structure it is clear that *m̥l̥éti* cannot be a primary verb and that it must be somehow derived from the primary adjective *m̥élas/m̥ýlas* “dear” (not “beloved”), with a perfect cognate in Sl. **m̥il̥b* AP *a* “dear” (OCS *m̥il̥b*, Ru. *m̥ilyj*, SCr. *m̥iō*, etc.) < **m̥éiH-lo-* or **m̥iH-ló-*. Further material from the root **m̥eiH-* (Lat. *m̥ītis* “soft”, etc.) is well known and needs not be repeated here.

Other things being equal one would simply assume that Bl. **m̥il̥éti* “*be dear > love” is a denominative of the primary adjective (and hence was inflected as **m̥il̥éti, -éja*) that became a primary verb and was transferred to the type *budėti, būdi*, the unmarked type for stative deverbatives. The problem in this case lies in the primary adjective, for which both **m̥éila-* and **m̥íla-* are well established in Baltic (Sl. **m̥il̥b* is ambiguous). Most authors simply recognize ablaut variants **m̥éila-* ~ **m̥íla-*. Although this cannot be excluded, it is a priori unattractive to operate with synonymous variants in prehistory. In such cases it is always advisable to at least explore the possibility that only one of them is original.

The above scenario starts from the assumption that full grade was original in the primary adjective **m̥éilas, *-m̥ílti* “become dear” being an old zero-grade denominative. The denominative **-m̥ílti* then generated a stative verb **m̥il̥éti* “be dear”. The semantic shift to “to love” could have taken place either with **-m̥ílti* or with **m̥il̥éti*. When this happened the neo-stative **m̥il̥éti* became the center of this word-family, with the result that adj. **m̥éilas* “dear” was remade to **m̥ílas* in most Baltic dialects (note that most traces of **m̥éil̥^o* in Latvian have displaced semantics and must thus be relatively old). The position of **-m̥ílti* in the system was naturally reordered.

Note that it is not possible to reach an explanation of the variation **m̥éila-* ~ **m̥íla-* along these lines starting from the stative **m̥il̥éti*, as stative denominatives in **-eh₁-iē/o-* do not seem to have triggered zero-grade of the root in Balto-Slavic or Indo-European.

7.3. The original zero-grade denominative looks like an anticausative from a transitive verb that was back-formed from it:

- (21) Sl. **m̥ōrk̥b* AP *c* “darkness” (OCS *m̥rak̥b*, SCr. *m̥rāk*, Ru. dial. *m̥órok*, etc.) → **m̥īrk̥ti, -sta* “grow dark” → *m̥érk̥ti, -ia* “close one’s eyes” (whence *m̥irks̥éti, m̥irksi*, Latv. *m̥īrk̥šēt* “blink”).

on the other hand, is clearly a denominative replacing the old primary verb (in Latvian we also have *dzīvât*, *dzîvēt* and OLatv. *dzîou*; the denominatives *gyvóti*, *gyvúoti* are in use in Lithuanian as well). For Slavic we can reconstruct a paradigm Sl. *žíti, pres. *živŏ, *živetb AP c, aor. *žixъ, *žitb/*žive (OCS žiti, živŏ). As per Koch (1990, 642ff.), the stem *žī- of inf. *žíti, aor. *žixъ goes back to *žīv- (*žīvoti, *žīvxъ) and does not continue unextended *g^wih₃-. The modern Slavic languages present more variation. East Slavic agrees with OCS žiti, živŏ (Ru. žít', živú, živět, etc.). In West Slavic we have an (easily understood) *je*-present (Cz. žiti, žiji, etc.). In South Slavic we have -ěti, -ěje- in Bulg. živéja, Maced. živee “live” and -ěti, -i- in SCr. živjeti, živīm, Slvn. živěti, živím “live”, which also have a *je*-present with a slightly different meaning in SCr. užiti, užijem, Slvn. užíti, užijem “recover, get better”. It is unclear whether South Slavic requires an old second stem in -ěti to be equated with OPr. inf. *giwīt* and whether the meaning “recover, get better” of SCr. užiti etc. can be equated with Lith. gýti (discussion in Koch, *loc. cit.*, Kolln 1977, 107ff.).

Turning back to Lith. gýti, gỹja/-na/-sta “recover; heal”, it has traditionally been regarded as a primary derivative of the unextended root *g^wieh₃- (*g^weih₃-). The details have needless to say never been clear and, generally speaking, Lith. gýti does not look so archaic. As an alternative I propose considering gýti an old zero-grade fientive denominative of the PIE noun *g^wóih₃-o- of Sl. *gôjb, Ved. gaya-, Av. gaiia- m. “life, vitality, household” (with quasi regular *Schwebeablaut* of *g^wieh₃- “live”). Whether the adjective Lith. gajùs was derived from the noun Bl. *gajás or from gýti is something that cannot be determined with certainty. In any case, Sl. *gôjb → *gojiti “treat, heal” offers a clear parallel.

From a typological point of view the Balto-Slavic facts have two important implications: i) unlike the primary adjective, the primary verb is by no means stable; ii) the primary verb may easily be replaced with a denominative. Nominal reflexes of the unextended root *g^wieh₃- (*g^weih₃-) are reasonably well-attested in the Indo-European languages. A primary verb is usually also reconstructed on the apparently impressive evidence of five branches (e.g. LIV 215f.). On closer inspection, however, the evidence is quite deceptive. Baltic (Lith. gýti) and Slavic (OCS žiti) have already been discussed. Arm. *keam* “live”, I submit, goes back to *g^wih₃-eh₂-je/o-, a denominative of *g^wih₃-o-, coll. *g^wih₃-éh₂- (Gk. βίος, Cypr. acc. sg. ζαν “life”, βία “bodily strength”, Ved. jiyá- “power”, Um., Paelign. *bia* “fountain”; cf. Weiss 1994,

154f.), not to an old athematic present.⁹ YAv. 2 sg. mid. *jīyāēša* Y. 62,10 = V. 18,27 has been much discussed (cf. Kümmel 2000, 628f., with references). In my view its isolation in Indo-Iranian and the fact that it occurs in a *figura etymologica* (+*ar̥ha* +*uruuāxš.ar̥ha* *gaiia jīyāēša tā xšapanō yā juuāhi* “Mit einem Dasein, das ein frohes Dasein ist, mit Lebenskraft mögest du leben die Nächte, die du leben wirst” [trans. Kümmel]) strongly favors explaining *jīyāēša* as an *Augenblicksbildung* created within the poetic tradition (a possibility fully exploited in Vedic or Homeric studies, but generally avoided in Avestan studies). This leaves us with Gk. (Hom.) fut. βέομαι, aor. ἐβίων as the only possible witness of a PIE primary verb of the root **g^wieh₃-* (**g^weih₃-*). I have nothing to offer on the Greek evidence, but I strongly believe it is not enough for reconstructing a PIE primary verb beside the unusually well-established **g^wih₃uēti*.

8.2. Lith. *čiùtnas* and the development of **ēu* in Baltic and Balto-Slavic.

(23) *tautà* AP 4 “people, nation” (< **t’autā*) → **čiùsti*, **čiũnta* “get people-like, get human-like” > “get orderly, proper” (*vel sim.*) → dial. *čiùtnas* AP 4 “tidy, neat”, *čiutniūs* “id.”, *čiutlius* “id.”, *čiùntyti*, *-ija* “put in order, tidy up”, *čiūtinti* “take care of, pamper”, *čiūsnyti*, *čiūstyti* “clean out”, ? *čiutėti*, *čiũta* “doze”, *čiūtėti*, *čiũti* “lie/sit motionlessly, hide”.

Here perhaps also belong Lith. dial. *tutėnti* “take care of”, *tautėti* “keep, take care of”, *tūtinti* “spoil, pamper”, Latv. *tutināt* “swathe, pamper”, which are formally closer to *tautà* (see below), as well as dial. (*nu-*)*taũsti*, *-sta/-čia* “long for, be homesick; be sad; become weak, miserable” (with rare *nomen postverbale tautà* “nostalgia”), which looks like an independent later denominative.

This etymology of *čiùtnas* etc. goes back to Karaliūnas (1976), who presented an impressive amount of dialectal material allegedly related to *tautà*. Karaliūnas’s material was subject to a detailed criticism by Petit (2000), who dismisses all of it (for the most part correctly, in my opinion). The notion of an archaic layer of zero-grade fientive denominatives, however, permits looking more favorably at part of Karaliūnas’s material (which otherwise is left without a good etymology). The case of *nu-taũsti* “be homesick” →

⁹ It is interesting to observe that Klingenschmitt (1982, 85) and Barton (1990-91, 45⁵⁸) also considered deriving Arm. *keam* from **g^wih₃-eh₂-ie/o-*, but dismissed this possibility because of the questionable status of **g^wih₃-eh₂-ie/o-* as a *deverbative* formation. It is a pleasure to acknowledge that Oliver Plötz (p.c.) had also arrived at this interpretation of Arm. *keam* on different grounds.

“be sad” is particularly clear. The semantic development one has to assume for *čìutnas* etc. is admittedly peculiar, but not absurd (note modern Lithuanian expressions like *bùk žmogùs!* “Behave in a proper way!”, literally “Be a man!”). Since *čìutnas* etc. cannot be directly derived from *tautà*, it is reasonable to postulate an intermediate denominative **čìusti*, **čìuñta* (← **t’autā*). Forms like *tuténti* may reflect secondary influence of *tautà*.

If this is correct, it has an important implication for the double treatment of PIE **ěu* in Baltic (Balto-Slavic), which seems to have yielded both **iau* (e.g. Lith. *liáudis*, OCS *ljudbje* “people” < **h₁leud^h-i-*, cf. OHG *liut*) and **au* (e.g. Lith. *tautà*, Latv. *tàuta*, OPr. *tauto* “nation” < **teuteh₂-*, cf. Go. *þiudo*). One can distinguish two main accounts: i) the double treatment depended on the quality of the following vowel: **eu* > **iau* before front vowels, **au* before back vowels; ii) the double treatment depended on word-position: **eu* > **au* in heterosyllabic position, **iau* in tautosyllabic position. This is not the place to argue at length for my acceptance of the second view (see Villanueva Svensson 2015a, with references).

Most of the examples allegedly favoring the first view can be explained in some other way (e.g. Lith. *naūjas* “new” after **nouo-* < **neuo-*, OCS *новъ*, etc.). The major exception (and thus its main argument) has always been precisely Bl. **taūtá*. None of the solutions proposed so far to account for Bl. **tautā* for expected †*čiautà* is attractive (dossier in Petit 2000, 142f.). Pedersen (1934–35, 151) proposed that it continues **t’autā* with assimilation of **t’...t* to **t...t*. The *ad hoc* flavor of Pedersen’s account is self-evident, but assimilation and dissimilation are processes that actually take place in natural languages. Lith. *čìutnas* etc., if correctly interpreted, now provides evidence indicating that Pedersen’s assimilation (pre-Bl. **teūtá*) > **t’auťá* → **taūtá* (> Lith. *tautà*) is actually right.¹⁰

¹⁰ It may be interesting to draw attention to another potential piece of evidence concerning the development of **ěu* in Balto-Slavic that has appeared very recently. There has been considerable discussion about the interpretation of the Old Prussian digraph <eu> (e.g. OPr. *keuto* “skin” (Elb.) ~ Lith. *kiáutas* “shell”), the main positions being i) real /eu/ (< Bl.-Sl. **eu*), ii) a rendering of /’au/. If the account of *tautà* (OPr. *tauto!*), *čìutnas* presented above is correct, it is evident that the idea that Old Prussian <eu> simply continues unaffected Bl.-Sl. **eu* cannot be right. As for the second option, in my view a more natural development would be something like **eu* > Bl.(-Sl) **iau* > Bl. **’au* > pre-OPr. **’eu* > OPr. *eu*. Positive evidence for the intermediate stage **’eu* may actually have just been found. According to Lemeškin (2014) the recently found Old

The case of *tautà* AP 4 “people, nation” → *(nu-)taūsti*, *-sta/-čia* “long for; be sad; become weak” (which is clearer and independent from that of *čīūtinas*) allows us to add a final example of a zero-grade denominative giving rise to a new word family with strongly displaced semantics:

- (24) *liāudis* AP 1 “people, nation” (Latv. *ļaudis*) → **(nu-)liūsti**, **-sta** “become sad”
 → *liūdēti*, *liūdi* “be sad”, *liūdnas* AP 4 “sad”.

This etymology is also due to Karaliūnas (1976, 89). It is not the standard one, which rather connects *liūdnas* to Sl. **lūdъ* AP *c* “crazy”, Go. *liuts* “hypocritical” (e.g. Fraenkel LEW 378f., Smoczyński 2007, 360f., Derksen 2015, 289). Although in principle perfectly possible, note that it operates with (unfortunately fairly typical) semantic freedom. The case of *(nu-)liūsti* → *liūdēti* (synchronically *(nu-)liūsti* is an unremarkable inchoative of *liūdēti*) is the same as that of *(pa-)mīlti* → *mylēti*, see above § 7.2.

9. The conclusions of this article are easily summarized. The evidence discussed in § 5-8, I believe, shows that Baltic did indeed inherit zero-grade fientive denominatives from northern Indo-European. Some examples seem to reach Balto-Slavic antiquity (e.g. Lith. *grūbti*, *grūmba* ~ Sl. **grǫbъ*, etc.), but, interestingly, others suggest that the principle was kept alive, at least marginally, into Proto-East Baltic (e.g. *bjūrti*, *bjūra/bjūrsta*, *lýsti*, *-sta*, etc.). I would like to stress that my survey is not exhaustive and that the corpus will no doubt be enlarged in the future.

Baltic thus joins North Germanic and Slavic in using a present type **li-m-p-é-ti* for fientive denominatives, with regular zero grade of the root even when derived from full-grade nominals. This is an important and often overlooked argument in favor of the very existence of a common northern Indo-European class of anticausative-inchoative verbs.

As for Baltic itself, I hope to have shown that the framework developed in this article has a considerable interest for research on the historical composition of its lexicon. It may lead to new etymologies (e.g. *šīurti*, *šīūra/-sta*, *šīurkštūs*), and to a better grounding of already proposed ones (e.g. Sl. **slābъ* ~ *silpti/sil̃pti*, *-sta*, *silpnas/sil̃pnas*). It may help in clarifying the precise relationship between Baltic and Slavic word families (e.g. Sl. **mōrkъ*, **mōrknōti* ~

Prussian Trace of Crete (1422) contains the word (acc. sg.) *pievffen* = Elb. *peuse* “pine” (Lith. *pušis*, Gk. *πέυκη*, OHG *fiuhta*). It is tempting to see in *pievffen* the missing link between Bl. **p’aus-* and OPr. *peuse*.

mérkti, *-ia*), and the precise prehistory of complex Baltic word families (e.g. *míelas/mýlas* ~ *myléti*, *mýli* ~ *-milti*, *-sta*). Finally, it may even have an impact on broader issues of Baltic and Balto-Slavic historical grammar (e.g. *tautà* ~ *čiūtnas*).

NULINIO LAIPSNIO DENOMINATYVINIAI INTARPINIAI IR *-sta* PREZENSAI BALTŲ KALBOSE

Santrauka

Šiaurės indoeuropiečių kalbose (germanų, baltų, slavų) buvo gausi antikauzatyvinių-inchoatyvinių veiksmazodžių klasė. Vienas pagrindinių šios klasės darybos tipų buvo denominatyviniai fientyvai, padaryti iš būdvardžių ir, rečiau, iš daiktavardžių bei turintys reikšmę „tapti X“. Senojoje islandų ir senojoje slavų kalbose tokie denominatyvai turi nulinį šaknies vokalizmo laipsnį net tada, kai jie yra padaryti iš pamatinio laipsnio vardažodžių, pvz., s. isl. *blautr* “silpnas” → *blotna* “susilpti”, s. sl. *gluxъ* “kurčias” → *o-glъxnъti* “apkursti”. Tai yra akivaizdus archaizmas, o gotų ir baltų kalbose vartojama apofoninė invariacija, lengvai suprantama kaip naujadaras. Straipsnyje pristatoma daugiau nei 20 pavyzdžių ir rodoma, kad baltų kalbos paveldėjo darybos principą, pagal kurį intarpiniai ir *-sta* prezensai įgydavo nulinį laipsnį net tada, kai jie buvo daromi iš pamatinio laipsnio vardažodžių (pvz., lie. *bjāurus* → *su-bjūr̃ti*). Taip pat aptariama, kaip toks archajiškas darybos principas galėtų praversti nagrinėjant baltų kalbų žodžių etimologiją bei baltų kalbų žodžių šeimų priešistorę ir struktūrą.

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