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STUDIES IN EAST BALTIC CONSONANT CLUSTERS 1: *šr*

Abstract. This article focuses on the sources and outcome of the cluster *šr in East Baltic. This cluster is conspicuously absent in word-initial position. This appears to be the result of “Weise’s law”, which describes a phonotactic limitation against clusters of the type **Ḷr* in Proto-Indo-European. In Balto-Slavic, there is also evidence that Weise’s law applied word-medially: where the cluster **-šr-* does occur, there is usually a clear model for the restoration of **-š-*. An interesting case is **ašra-* ‘sharp’ — as the most basic member of the word family, and given exact parallels in other Indo-European languages, it is not likely the result of a recent restoration. This paper examines this lemma in detail. First, with the help of a parallel in *strénos* ‘small of the back’, it is shown that Lithuanian *aštrūs* ‘sharp’ must reflect a proto-form without **-t-*. Second, it is argued that Latvian *ass* ‘sharp’ may also reflect Proto-East-Baltic **ašra-* through a novel sound law **-šr-* > *-s-*. Two probable and two more possible parallels can be found for this sound change. While the evidence as a whole supports the validity of Weise’s law in both word-initial and word-medial position, various evidence points towards the law having ceased to be productive in Proto-Indo-European, thus placing it in a pre-PIE timeframe.

Keywords: sound law; Proto-Indo-European; phonotactics; Weise’s law.

The Baltic languages are known for their remarkable phonological conservatism compared to Proto-Indo-European (e.g. Klimas 1957, 15–16; Smoczyński 1993; Erhart 1995, 6–7; Jakob 2024a, 3–4), having been referred to as “frozen” in time (Toporov 1981) or as an “echo” of the proto-language itself (Meillet 1913). Numerous words can still be

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understood as direct phoneme-by-phoneme transpositions of a PIE form, with most consonant clusters remaining unchanged (cf. Smoczyński 1993, 74). Notably, for instance, the Baltic languages are the only Indo-European languages to preserve clusters of the type *-mT-*, cf. Lt. *ši̯mtas*, Lv. *ši̯mts* ‘hundred’ against Latin *centum*, Middle Welsh *cant*, Tocharian B *kante*, Old English *hund*, etc.

Logically, the reputation as an archaic branch has sometimes given rise to an “ahistorical” approach to Baltic etymology, whereby forms are projected back to an earlier prehistory without any consideration of the possibility that phonological changes could have occurred within the Baltic languages or dialects. As an example, we can cite the frequent tendency to take Lt. *al̥ksnis* and East Aukštaitian dial. *al̥ksnis* back to two (or more) different Proto-Baltic forms (Būga 1912, 16–17; Trautman 1923, 6; Andersen 1996, 128–129; Derksen 2015, 50–51), instead of the much more trivial assumption of syncope (Pedersen 1895, 40; Szemerényi 1960, 228; Smoczyński 2018, 19; see Zinkevičius 1966, 131–135 for parallels), or — what I now consider more likely — a dialectal anaptyxis.¹

This article is the first in a planned series investigating the outcomes of infrequent or under-researched consonant clusters in Baltic. This particular contribution will focus on the cluster **šr*, which is closely tied to the question of “Weise’s law” in Balto-Slavic. In Section 1, I discuss the cluster (or rather, its absence) in word-initial position, before addressing the word-medial instances in Section 2, providing a new account for some cases of irregular *t*-epenthesis in Lithuanian. In Section 3, I treat the Latvian evidence, suggesting a novel sound law **šr > s*, and in the course of the discussion, reassess the outcomes of the Latvian clusters **-stj-* and **-sv-*.

¹ The motivation for the anaptyxis is likely to be the [l̥] in the cluster [-l̥ks’n̥-]. As [l̥] has a marginal phonological status in areas of Lithuania which have historically undergone *l*-hardening, a prop-vowel is often inserted in loanwords with [l̥], cf. *pòlika* ‘polka’ Kalvarija (LKA 2, 103); *bùl’ava* Joniškėlis, Jukiškiai, Klovainiai (Zinkevičius 1966, 135–136), *bùl’au* Dikoniai (LKA 1, 161) ← Bel. dial. *бўльва* ‘potato’; *Siliveistras* ‘Silvestras’ Tverečius (Otrębski 1958, 242), *Aližbietà* ‘Elžbieta’ Rudamina (Zinkevičius 1966, 136). A similar account explains East Lt. dial. *žal’aktys* ‘grass snake’ < *žalktys* with [-l̥kt̥-], where the lack of *l*-hardening proves that the medial vowel is of secondary origin (cf. Būga 1912, 49).

1. Weise's law: word-initial *šr-

It has been proposed that Proto-Indo-European had a phonotactic constraint against clusters of palatovelars + *r (Weise 1881, 115; Kortlandt 1978, 238). Following Lubotsky (1988, 77) and Kloekhorst (2011), this is now referred to as Weise's law (cf. van Beek 2014, 101 fn. 6; Pronk 2019, 146). The law in question would predict the absence of the clusters *šr and *žr in Baltic (except where *š has arisen as the result of the RUKI law). Remarkably, in word-initial position, this is indeed what we find: no words with such an anlaut can be reconstructed for Proto-East-Baltic, and the Lithuanian initial clusters šr- and žr- seem to be avoided even in expressive formations and onomatopoeia. Aside from a handful of German and Polish loanwords, the LKŽ cites just six words in šr- or žr-, each of which is quoted from a single source:

- *šràgaliuoti* (attributed to Vilius Bruožis) 'walk in broad strides', cf. (?) *stràgaliuoti* 'be restless, frolic'
- *šràk* Degučiai interjection to denote a sudden emergence = *stràk* Alovė, Šimkaičiai
- *šrapáila* Kazlų Rūda 'person who walks clumsily' = W Aukšt. dial. *strapáila*, *krapáila* (on the latter, cf. Čekman 1974, 128)
- † ⟨šzrauŭtuwe⟩ (SD⁴, 112), a typographical error for *prauŭtuwe 'wash basin' (LKŽ, s.v. *šraustuvė*)
- † *šrumbėti** in ⟨šurumbėjufi óda⟩ 'harte H[aut], z.B. an der Hand vom Arbeiten' (Kurschat 1870–1874 1, 599). This is apparently a typographical error for *šurumbėjufi, cf. *surumbėjęs* 'schwierig' (Kurschat 1870–1874 2, 177; LKŽ, s.v. *rumbėti*)
- *βrigβdu* GEN.PL. (*Wolfenbüttel Postilla*, 262), *βriegfdu* GEN.PL. (op. cit., 287), resulting from an irregular metathesis, cf. *žigždras* 'grober Sand, Grand' (Ruhig 1747 2, 299), *žiėgzdros* 'der Grand' (Kurschat 1883, 521), dial. *žiēzdrai* (LKŽ)

Remarkably, even the loanword *šrātas* ← Pl. *szrot* 'lead shot' (Kregždys 2016, 634) is recorded dialectally as *šīratas* ~ *šāratas* Gelvonai, *šīrātas* Ukmergė (Zinkevičius 1966, 136), *šarúotas* Daukšiai (LKŽ) where the initial cluster is broken up by an epenthetic vowel, and as East Aukštaitian *šātrās*, showing metathesis (Fraenkel LEW, 1026). This could suggest that this anlaut remained illegal for a longer time in the dialects; the metatheses in *šarpnēlis* Kalnalis 'shrapnel' and dial. *šiurbštōkas* 'clamp' for *šriübštōkas* (← Prussian German *šrūwštock*; Alminauskis 1934, 135) seem to be similarly motivated.

This conspicuous phonotactic gap in Baltic provides a good piece of indirect evidence in favour of Weise’s law in word-initial position before a vowel. Indeed, there are almost no plausible Indo-European reconstructions that start with a sequence $*\#K_rV-$, suggesting the sequence was indeed illegal, at least in pre-PIE.² On the other hand, for syllabic $*_r$, the law is less promising. In Baltic, at least, every example of $*\#K_r-$ shows a palatal reflex:

- Lt. *širdis*, Lv. *siŕds* ‘heart’ < $*k_rd-$ (Gr. καρδία, Lat. *cor*, GEN.SG. *cordis*; Pokorny 1959, 579–580; NIL, 417–423)
- Lt. *širšė*, Lv. *siŕsenis*, Pr. E *sirsilis* ‘hornet’ < $*k_rHs-$ (Lat. *crābrō*, OHG *hurnuz*; Pokorny 1959, 576)
- Pr. E *sirwis* ‘roe deer’ < $*k_rʷo-$ (MW *carw* ‘deer’; Pokorny 1959, 576)
- Lt. *žirnis*, Lv. *ziŕnis* ‘pea’, Pr. E *syrne* ‘grain’ < $*g_rHno-$ (Lat. *grānum*; Pokorny 1959, 391)

Given that at least three of these roots have an attested full-grade of the shape $*Ker(C)-$ (cf. Go. *hairto* ‘heart’, Lat. *cervus* ‘deer’, OHG *kerno* ‘kernel, grain’), this would be consistent with the interpretation of Weise’s law as a pre-PIE phenomenon, whereby the palatal was restored analogically in the zero-grade. Another possibility is to simply assume that the law never applied before syllabic $*_r$, which would immediately explain Skt. *śiras-* ‘head’ (< $*k_rh_2-es-$, cf. Gr. κάρα, *śṛṅgá-* ‘horn’ (Lat. *cornū*), and *śithirá-* ‘loose, moving freely’ (< $*śṛthirá-$), if the latter belongs with Gr. κρατερός ‘powerful’ (< $*‘unbridled’$; van Beek 2022, 192–193). Admittedly, there are a couple of cases where an unexpected velar has been explained as the result of Weise’s law before $*_r$, but the only Balto-Slavic example, to my knowledge, in which the velar reflex actually coincides with a zero-grade is OCS жрьдъ ‘club, cudgel’ < Balto-Slavic $*girdi-$ beside Lt. *žárdas* ‘long stick; drying rack’ (Kortlandt 1978, 239).³ In other cases, a generalization of velar

² Of the two etymologies mentioned as exceptions in Kloekhorst (2011, 268), one has been convincingly argued against by van Beek (2014), and the other is just a root equation which may or may not be correct (van Beek 2014, 101 fn. 6). Given this, some other binary equations, such as that between OCS стропъ and ON *hróf* ‘roof’ (Vasmer REW 3, 30) should perhaps be rejected. See, however, Footnote 22.

³ In Indo-Iranian, Lubotsky (apud Cheung 2007, 471) and Kloekhorst (2011, 268–269) have connected Skt. *ghṛṣu-* ‘lively, agile’ and New Persian *gaš* ‘happy’ with the verbal root in Skt. *hárṣate* ‘be excited’, Young Avestan PART.PRES.MED. *zarašiiamna-* ‘excited’. If this identification is correct, it would require that Weise’s law applied before syllabic $*_r$. In addition, Skt. *grhá-* ‘house, residence’ has been compared with Lt. *žar̥dis* ‘enclosure’,

reflexes must be assumed from *unattested* zero-grade forms, e.g. in Lt. *garnỹs* ‘heron’ beside Iron Ossetian *zærnyg*, Pashto *záṇa* ‘crane’ (suggesting **ǵorn-*; cf. Morgenstierne 2003, 102) and Lt. *kárvė*, OCS *кѣрава* ‘cow’ beside Pr. E *sirwis* ‘roe deer’, the latter showing the reverse distribution of velar and palatalovelar (cf. Kortlandt 1978, 239; 2013, 13; Derksen 2015, 173, s.v. *gervė*).⁴ While evidence of this kind might be seen to lend indirect support to the validity of Weise’s law before **ṛ*, it must be admitted that the Balto-Slavic evidence is marginal at best.

2. Word-medial **-šr-*

The Indo-Iranian evidence seems to suggest that Weise’s law did not apply word-medially. At any rate, every relevant example shows a palatal (Kloekhorst 2011, 266–267). This could be consistent with the interpretation of the law as pre-PIE, as a word-medial sequence must necessarily straddle a morpheme boundary, and therefore be of secondary origin. Unlike Kloekhorst (loc. cit.), however, I doubt all of the examples can be explained as analogical restorations *within* Indo-Iranian. In particular, Skt. *ájra-* ‘field, plain’ is a derivative of Proto-Indo-European *ag-* (Gr. *ἀγρός*, Lat. *ager* ‘field’; NIL 268, 274–275 with lit.) and given its semantic specialization vis-à-vis *ájati* ‘to drive’, we would almost expect an archaism here; similarly, Skt. *ásri-* ‘sharp edge; corner’ (Gr. *ὄρις* ‘jagged point, rough edge’) is isolated within Indo-Iranian and restoration on the basis of the

Prussian *sardis* ‘fence’ (Pokorny 1959, 444; Kortlandt 1978, 239; Lubotsky 1988, 77), implying an original palatovelar with blocking of palatalization in the zero-grade. If this comparison is valid, Lt. *gařdas* ‘enclosure’ might be a borrowing from Gothic *gards* ‘house, yard’ (Uhlenbeck 1893, 487; Stender-Petersen 1927, 255–261; cf. OHG *gart* ‘enclosure’), which would be semantically congruent with other Gothic borrowings in East Baltic, cf. Lt. *kiẽmas* ‘village’, *pẽkus* ‘livestock’, and *keřdžius* ‘shepherd’ (Jakob 2024a, 37–44). The main obstacle to this loan etymology is the accentual mobility of the Slavic cognate (cf. Derksen 2008, 178), something which is thought to be atypical of Germanic loanwords (Pronk-Tiethoff 2012, 242–244 with lit.).

⁴ I consider it uncertain that the Balto-Slavic words for ‘cow’ are derived from the root for ‘horn’, as is usually assumed (e.g. Pokorny 1959, 577; Fraenkel LEW, 225). The “alternative” zero-grade attested in Pr. E *kurwis* ‘ox’ would, according to Kortlandt’s own formulation (1978, 240), speak in favour of a labiovelar. In the case of the word for ‘crane’, we may have to assume the influence of forms of the shape **ǵruH-* (< **ǵrHu-*, cf. Lat. *grūs* ‘crane’), in which Weise’s law would be expected to operate. However, no such forms are attested in Balto-Slavic.

semantically remote *ásman-* ‘stone, rock’ (Kloekhorst 2011, 266) is not likely.

Evidence that Weise’s law did apply word-medially is supplied by Balto-Slavic. Here, we find two reflexes of **-kr-*:

- a. **-kr-* (Kortlandt 1978, 239)
 - Lt. *smākras* ‘chin’ (cf. Skt. *śmāsru-* ‘beard’)
 - OCS свекры ‘mother-in-law’ (NIL, 672; cf. Skt. *śvaśrú-*)
- b. **-šr-*
 - Lt. *aštrūs*, dial. *ašrūs*, OCS остръ ‘sharp’ (NIL, 288; cf. Skt. *ásri-*, above)
 - Lt. *mišrūs* (dial. *mišras*) ‘mixed’ (NIL, 481; cf. Skt. *miśrá-*)
 - ORu. пьстрыи ‘multi-coloured, variegated’ (NIL, 547)

It is worth asking whether this split might be phonetically conditioned: it is notable that in both Lt. *smākras* ‘chin’ (cf. Skt. *śmāsru-* ‘beard’) and OCS свекры ‘mother-in-law’, the sequence **-kr-* was followed by an earlier **-u-*. Could we assume that the **-u-* caused some kind of anticipatory labialization, causing the palatalization to be blocked (e.g. PIE **smokru-* > **smok^wru-* > Balto-Slavic **smakru-*)? This is reminiscent of Fick’s (1890, 48) attempt to explain the unexpected initial *k-* in Lt. *klausýti* ‘listen’ (as against OCS слоушати ‘listen’) as due to the following **-u-*. If we assume a sound law **-kRu-* > **-kRu-* to cover these three instances, we would have to assume that the *k-* has spread in Baltic from zero-grade reflexes such as Lt. *pa-klūsti* ‘obey’, Pr. III *po-klusmai* ‘obediently’. In this case, Lv. *sluvēt* ‘become known’ would have taken over the *s-* from forms with full grade (cf. *slava* ‘fame’, with which it indeed belongs semantically).⁵ However, I am unaware of parallels for a similar labialization across an intervening resonant, and this suggested sound law therefore remains uncertain.

⁵ At any rate, I’m not aware of any better explanation for this velar. Meillet (1908–1909, 339), Patrubány (1913, 328) and Stang (1966, 92) have suggested that the initial *k-* was dissimilated against the following *-s-*; but this is an *ad hoc* proposal that immediately runs into exceptions such as Lt. *žqsīs* ‘goose’ (= Skt. *hamsá-*) and *širšė* ‘hornet, wasp’ (= Lat. *crābrō*) (ME 2, 216; Stang 1966, 91–92). Kortlandt (1978, 240) follows an earlier idea of Meillet (1894, 298) that **kl* regularly gave Balto-Slavic **kl* before a back vowel; however, this meets with the problematic, and probably fatal, exception of Lt. *šlaunīs* ‘thigh’ < **klou-ni-*, where none of the cognates support a variant with *e*-grade (cf. the unambiguous *o*-grade in ON *hlaun* ‘buttock’; Matasović 2005, 366). This essentially only leaves the **-u-* as a possible conditioning factor.

On the other hand, while it is clear that the words in group (a) are archaisms — they are both isolated formations to opaque roots,⁶ this is not the case for the words in group (b). Lt. *mišrùs* could be a recent formation to *maišyti* ‘mix’ (cf. Matasović 2005, 366), like e.g. Lt. *vikrùs* ‘nimble’ to *veikti* ‘do, act’ (LEW, 1249) and *skudrùs* ‘sharp, cutting’ to *skaudėti* ‘hurt, ache’ (see Skardžius 1941, 299–300). Likewise, ORu. пѣстрыи need not go back to Proto-Indo-European, but could have been formed within Balto-Slavic to the root of Lt. *piěšti* ‘draw’, cf. Gr. ποικίλος ‘variegated’. Therefore, neither form provides compelling evidence against Weise’s law in word-medial position.

As for Lt. *aštrùs*, dial. *āštras* ‘sharp’, there is a dispute about its exact reconstruction. It is normally derived from PIE **h₂ek-ro-* and compared directly with Lat. *ācer* ‘sharp’, Gr. ἄκρος ‘topmost, outermost’, OIr. *ér* ‘high, noble’ (Pokorny 1959, 21; Derksen 2015, 64; ALEW, s.v. *āštras*). This implies that the *-t-* is epenthetic, while the original constellation would be preserved in the dialectal Žemaitian *ašrùs*. As already noted by Būga (1922, 194; 1930, 65), in most dialects, this kind of epenthesis is not regular; in other examples, it is generally limited to South Aukštaitian (Zinkevičius 1966, 192; LKA 2, 118 and Map 101; cf. Smoczyński 2018, 52). Būga therefore rejects this preform and takes the Lithuanian word for ‘sharp’ from a Proto-Baltic **aš-tra-*, assuming dial. *ašrùs* to be an instance of sporadic cluster simplification (Būga 1930, 65), an interpretation which has been followed in some philological works (e.g. Zinkevičius 1966, 180; LKA 2, 120). If this analysis is correct, this word is irrelevant to the question of Weise’s law in Baltic.

While Skardžius (1941, 299 fn.) criticizes Būga’s viewpoint, he fails to adequately clarify the situation himself. It has not been noted explicitly, however, that another word shows a similar pattern and could shed further light on the problem: *strėnos* beside dial. *srėnos* ‘small of the back’.⁷ In fact, the coherence between the forms *ašrùs* and *srėnos* is quite remarkable: where one is attested, so generally is the other:

⁶ True, we do find the palatal in Lt. *šėšuras* ‘father-in-law; husband’s father’, implying that the palatal and velar reflexes coexisted in this root during Proto-Balto-Slavic.

⁷ Lt. *sragiūs* ‘harsh, fierce’ (Zinkevičius 1966, 192) is not relevant here. Its source is not Russian *cmρóзуū* ‘strict’, but Polish *srogi* (Brückner 1877, 136; Fraenkel LEW, 886).

	<i>aštrūs</i> ‘sharp’	<i>strėnos</i> ‘small of the back’
N Žem. Kretingiškiei	<i>āšrūs</i> Kretinga (Aleksandravičius 2011, 31), <i>āšr^os</i> Mosėdis (Vanagienė 1, 27), “ašrūs” Gargždai (Zinkevičius 1966, 180), Plikiai (LKA 2, 120), <i>ašrėsnę</i> COMP. Vėžaičiai (LKŽ PpK)	<i>srėnas</i> ACC.PL. Kretinga (Aleksandravičius 2011, 386), <i>sriėnàs</i> Endriejavas, Plungė (LKŽ PpK), <i>srėn^as</i> Mosėdis, Žalgiriai, Daukšiai (Vanagienė 2, 234), “srėnos” Laužemė, Šateikiai, Vėžaičiai (LKŽ)
N Žem. Telšiškiei	<i>āšr^os</i> Prialgava, Šarkė, <i>āšr^os</i> Vabalai, Ylakiai (Vanagienė 1, 27), derived noun <i>ašrumu</i> INST.SG. Šatės (LKŽ PpK)	<i>srėn^as</i> ACC.PL. Prialgava, Truikiniai (Vanagienė 2, 234), “srėnos” Plateliai, Žemaičių Kalvarija (LKŽ)
W Aukšt. Kauniškiai	<i>ašrūs</i> (Juška 1, 110), <i>āšrę</i> ACC.SG.F. Vilkija (Juška LD 2, No. 772)	<i>srėnas</i> ACC.PL. Alvitas (LKŽ PpK)
<i>Ziwatas...</i> (1759)	<i>ažrus</i> (Girdenis, Girdenienė 1997, 76)	<i>frėnas</i> ACC.PL. (Girdenis, Girdenienė 1997, 298)
Pabrėža	“ašrios” GEN.SG.F. (LKŽ), <i>asžróma</i> GEN.SG. (LKŽ PpK)	<i>srienas</i> ACC.PL. (LKŽ PpK)
Daukantas	<i>aszrūs</i> ‘ostry’, <i>aszrej</i> ‘ostro’ (Daukantas DLL 2, 210–211)	<i>srienoms</i> DAT.PL. (1845, 67); <i>srienas</i> ACC.PL. (1846, 108)
Valančius	<i>aszrej</i> (1864, 377), <i>aszrin</i> (Raštai 1, 718)	<i>srienas</i> (Raštai 1, 134, 684, etc.)

While both are largely limited to North Žemaitian dialects and authors, they are both occasionally attested in West Aukštaitian, which appears to imply an originally broader geography. It is remarkable how consistently A. Juška (from West Aukštaitian Veliuona) used *ašrūs* rather than *aštrūs* in his usage examples, e.g. *ašriós* GEN.SG.F. (Juška 1, 106, s.v. *árdus*), *āšrus* NOM. PL.M. (op. cit. 109, s.v. *asýs*), *ne-ašriù* INST.SG.M. (op. cit. 271, s.v. *čirėnti*), *ne ašrūs* (op. cit. 449, s.v. *glūmsti*).⁸ Furthermore, that *srėnos* is not the result

⁸ On the other hand, the form *ábrá* in *Maldos krikscioniszkos*, 15 (i.e. Text 4 of *Kniga Nobaznistes*, 1653; see ALEW, s.v. *āstras*) appears to be an error. It occurs just once beside 9× *aštr-* / *āštr-*: *āštray* *Giesmes* I, *āštroiá* idem 17, *āštribey* idem 42, *āštribes* idem 126, *Aštrą* idem 150, *āštroiá* idem 255, *aštras* *Summa Ewanieliv* 13, *āštrius* idem 31, *aštru* *Maldos* 27.

of a secondary development is demonstrated by its etymology: it seems nigh inescapable that the word belongs with the following Iranian family (cf. Walde, Pokorný 2, 705): Av. *rāna-*, Book Pahlavi *l'n'* /*rān*/, New Persian *rān*, Ormuri *rān* ‘thigh’, Khotanese *rrāna*, Iron Ossetian *ron* ‘belt’. The proto-form must therefore be reconstructed as **sreh₁-n-*, without **-t-*.⁹

As a result, it does indeed seem acceptable to derive *aštrūs* from Proto-Baltic **ašra-* < **h₂ek-ro-*. The exceptional *t*-epenthesis in Standard Lithuanian *aštrūs* ‘sharp’ and *strénos* ‘small of the back’ is irregular, but might be explained as the result of early interdialectal borrowing from South to East/West Aukštaitian. In fact, there are other words which show *t*-epenthesis outside of the expected area; in particular, *apīnastris* ‘muzzle’ and variants is widespread in West Aukštaitian (Zinkevičius 1966, 193). We might also compare cases like Lt. *ungurỹs* ‘eel’ < **angurja-* (cf. Prussian *angurgis*) and Lt. *volungė* ‘oriole’ < **vā'langē* (cf. Lv. *vāluôdze*), which appear to betray the East Aukštaitian change **anC* > **unC*, suggesting they were borrowed from there into the other Lithuanian varieties (Derksen 2008, 386; Jakob 2024a, 179; 2024b, 36–37 fn. 22).

For **ašra-* ‘sharp’, a recent restoration of **-š-* within Baltic seems less likely. This adjective is the most frequent and semantically basic member of the word family, and is unlikely to have fallen under the influence of semantically innovative derivatives such as *ešerỹs* ‘perch’ (Kortlandt 1978, 239) or *āšaka* ‘husk; fish bone’. Contrary to the prevailing view (cf. NIL, 287), Lt. *āšmenys* M.PL., Lv. *asmens* ‘blade, cutting edge’ is most straightforwardly interpreted as an inner-Baltic derivative of **ašra-* rather than as an inherited cognate of Skt. *ásman-* ‘stone’, first and foremost because the regular Baltic continuant of the latter is evidently Lt. *akmuô*, Lv. *akmens* ‘stone’ (apparently showing a development **-km-* > *-km-*; cf. Kortlandt 1978, 241; Kortlandt 2013, 13).

The obvious solution would appear to be that **-š-* has spread from the precursor of Lv. *ass*, dial. *ašs* ‘sharp’, which has traditionally been taken from a preform without suffixal **-r-*, e.g. **ašu-* (Trautmann 1923, 15; Pokorný 1959, 19; Matasović 2005, 366). On the other hand, it is remarkable that no other Indo-European language directly attests an adjective of this form (cf. NIL, 288), and both Lithuanian and Slavic continue a **-ro-* derivative. In

⁹ Here may also belong Lat. *rēnēs* ‘kidney’ (Mastrelli 1979, 37–42; de Vaan 2008, 519), which, if related, would also imply an initial **sr-*.

this context, it seems worth considering whether Lv. *ass* could reflect Proto-Baltic **ašra-*, too.

3. The reflex of Baltic *-šr- in Latvian

It has been suggested (Derksen 2015, 64; ALEW, s.v. *āštras*) that Baltic **ašra-* is continued in Latvian in the form of dial. *asrs* Rucava, Dunika (ME 1, 144; EH 1, 131). However, this word is restricted to dialects right on the Lithuanian border, and the aberrant cluster *-sr-* (as opposed to *-str-*) speaks strongly in favour of a borrowing from Žem. *āšr̥s*.¹⁰ Smoczyński (2018, 51) and ALEW (loc. cit.) see a continuant of Baltic **ašra-* ‘sharp’ in the substantive Lv. *astri* ‘hair of a horse’s tail’, yet the latter is more probably an inner-Latvian derivative of *aste* ‘tail’ (Leskien 1891, 436; ME 1, 146).¹¹

My proposal to derive Lv. *ass* from Proto-Baltic **ašra-*, implies a change **šr* > **š* in the prehistory of Latvian. While a seemingly bold proposal, it is not entirely implausible from a phonetic point of view. Parallels for the simplification of an earlier **šr* beside the preservation of other *Cr* clusters may be cited in Gandhari *śr* > *ṣ* (Baums 2009, 179–180) and Khotanese **śr* > *ṣṣ* (Emmerick 1989, 215; Peyrot 2018, 271–272 fn. 6), and a similar motivation can be seen behind the Sanskrit dissimilation **śr* > *sr* (e.g. Vedic *uṣar* VOC.SG. beside *usrás* GEN.SG. ‘dawn’; cf. Hale 1998). Moreover, there are at least two other cases where Latvian *-s-* appears to correspond to Lithuanian *-šr-*:

1. Lt. dial. *ašrūs* (> *aštrūs*) ~ Lv. *ass*, *ašs* ‘sharp’
2. Lt. *dešrà* ‘sausage’ ~ Lv. *dēsa* ‘sausage, intestine’
3. Lt. dial. *opšr̥ys* Višakio Rūda (LKŽ), *opbrūs* (Kurschat 1883, 281) ‘badger’ ~ Lv. *āpsis*, *āpša* ‘badger’

¹⁰ The Lv. *-s-* can be interpreted as the result of “etymological nativization”; see similarly Lv. *bluzne* Rucava ‘spleen’ ← Lt. *blužnīs* (ME 1, 318); Lv. (*pa-*)*grazāt* Dunika ‘threaten (with the finger)’ (cf. EH 2, 134) ← Lt. dial. (*pa-*)*grazōti*, in turn ← Bel. *na-гpaжáýb* ‘threaten’ (cf. Smoczyński 2018, 378–379); Lv. *ķimst* Aknīste, Liepkalne ‘stuff, eat greedily’ ← Lt. *ķimšti* ‘stuff’ (ME 2, 382; ALEW, s.v. *ķimšti*); and, in the opposite direction, Lt. *ašnīs* ~ *asnīs* ‘ryegrass’ Kvėdarna (LKŽ) ← Lv. *asns* ‘sprout, shoot’. The equally isolated Kursenieki *astras* ‘sharp’ (Bezenberger 1887, 58; Plaķis 1927, 80) must be explained similarly. On this phenomenon, see also Kalniņš 2020, 22–23.

¹¹ The Latvian word for ‘tail’, in turn, can be compared with Lt. *āšutas* ‘hair of a horse’s tail’ (Trautmann 1923, 15), assuming syncope of **u* in Latvian. A similar syncope is found in Lv. *iŗbe* against HLv. dial. *ierube*² (ME 2, 59), Lt. *jerubē* ‘hazel grouse’ and Lv. *vęcs* ‘old’ against Lt. obs. *vetušas* (cf. Endzelīns 1923, 47).

Generally, the above words have been understood as Lithuanian suffixal derivatives in *-r-*. For ‘sausage’, an old ablaut relationship has been seen between *dešrà* and its variant *dešerà* or *dėšera* (Būga 1911, 246; Skardžius 1941, 300).¹² However, it rather appears that we are dealing with an irregular anaptyxis serving to break up the unusual cluster *-šr-* (cf. Bezzenberger 1877, 68 fn. 3). There are a number of parallels for this:

- *aušrà* ‘dawn’ > *aušarà* Daugai (LKŽ PpK), *aušarà* ~ *aūšara* Miežionys, Maciučiai (DvŽ 1, 34), *piė ūšaru* Žižmai (Arumaa 1930, 26), *aūšara* Dumpiai (LKA 1, 183)
- *dedešrà* ‘cow wheat’ > *dedeszeras* ‘Käsekraut’ (Brodowski apud Nesselmann 1851, 132)¹³
- *mekšrỹs* ‘roach’ > *mekšerỹs* Alvitas, Vilkaviškis, Krosna (LKA 1, 153), Užpaliai (LKŽ)
- *vikšris* ‘rush, sedge’ > *vikširis* ‘Carex’ Priekulė (LBŽ, 68)

As a result, only **dešrā-* can reliably be reconstructed on the basis of the Lithuanian data, and the alleged evidence of suffixal ablaut remains dubious.

In the case of ‘badger’, the suffixal nature of *-r-* appears to be supported by the hapax ⟨opšczus⟩ ‘fisch otter’ (Lex. Lit., 36, repeated in CGL 1, 663). On the basis of this form, ALEW (s.v. *opšrūs*) have suggested that Lv. *āpša* may derive from **āpštja-* with the development **-štj-* > *-š-*. However, while evidence like *aūgša* ‘above’ beside *aūgsts* ‘high’ and *tukšs* beside Lt. *tūščias* ‘empty’ provides strong support for such a change after **-k-*,¹⁴ outside of this position, there is hardly any compelling evidence. Endzelīns (1923, 125–126) cites the following:

- *aūšāt* ‘chatter; talk nonsense’, equated with Lt. *áuščziūju* (Kurschat 1883, 33), *ausczoju* (Nesselmann 1851, 16) ‘chatter, gossip’. Yet the Lithuanian form is analysable as an internal derivative in *-čioti*

¹² Compare *Mėfinne dėžera* ‘Knackwurst’ (Brodowski, 804), *dežerà* ‘die Wurst’ (Mielcke 1800 1, 50), *dešerà* ~ *dešerà* ‘Wurst’ (Gerullis, Stang 1933, 82), dial. *dešerà* Juknaičiai, Kavoliai, Mielagėnai, Skliausčiai, *dešarà* Sausgalviai, Šilininkai (LKA 1, 85–86), *dėšara* Ciskodas (Garšva 2015, 148).

¹³ Kurschat (1883, 81) also quotes Brodowski as the source of *dederβēras* ‘eine Pflanze’ and *dederβēlēs* ‘eine in Samog[itien] bekannte Pflanzenart’ (cf. *dederβēlēs* ‘ein Kraut’, Mielcke 1800 1, 45; *dederszēle*, *dederszpūle* ‘Rittersporn’, Nesselmann 1851, 132). Perhaps these show a similarly motivated metathesis **-šr-* > *-rš-*?

¹⁴ Note the paradigm *rikste*, GEN.PL. *rikšu* ‘twig, branch’ in Standard Latvian and a large proportion of the dialects; cf. LVDA 2, No. 86.

(Smoczyński 2018, 73–74) from the more basic *aušúoti* Salantai, Kalnalis (LKŽ) ‘chatter, gossip’, cf. ⟨3mónes aufzũjia⟩ ‘die Leute schwatzen’ (Brodowski, 869). The Latvian form can therefore just as well reflect **auš-jā-*.

- *nešus* ‘tragend’, reflecting a virtual **neš-tjus*. But as Zubatý (1894, 137) already pointed out, this form can easily be analogical after other words in *-šus*, e.g. *bēg-šus* ‘laufend’, *jā-šus* ‘reitend’, etc.
- *ašu siets* Kandava, Švitene (LD, No. 22024, 22761) ‘a sieve of horsehair’, occurring elsewhere as *ašku siets* (ME 1, 247). Considering the polysemy of *ašķis* ‘horsetail, *Equisetum*; horsehair’, it seems probable that *ašu* here represents the GEN.PL. of the synonym *aši* (= Lt. dial. *asiaĩ*) ‘horsetail, *Equisetum*’ in the sense ‘horsehair’.
- *skaiši* ADV. from *skaišts* ‘beautiful’ Dricēni (Vītoliņš 1968, No. 667), Lēdmane (LD, No. 840 var.), ⟨*fchkaifchi*⟩ Gulbene (LD, No. 25843). Contrast Standard Lv. *skaisti*, dial. *skaišķi*.
- ⟨*fwaiſchu*⟩ GEN.PL. Blīdiene (LD, No. 33852, 1 var.) corresponding to *zvaigžņu* in other song variants. Endzelīns (1923, 125) equates Lt. *žvaiždžiū*. To be corrected to **fwaiſch[n]u*?

While the last two forms are difficult to explain, isolated attestations such as these need not represent archaisms, and cannot be used as proof of the regular development across Latvian. Given the existence of cases like *aũgša* (? < **aũkšļa*) < **au’kštja-*, it is indeed possible, though not guaranteed, that *āpša* (through **āpšļa*?) is regular from **ā’pštjā-*. On the other hand, the form ⟨opɕczus⟩ is a hapax and attested in a different meaning, and one may call its reliability into question. On balance, it would seem preferable, if possible, to use the better attested form with *-r-* as a comparandum for the Latvian forms.

In addition to the three probable cases cited above, I will mention two more examples that could potentially show the correspondence Lt. *-šr-* : Lv. *-s-*:

4. ? Lt. *dedešra* ‘Käsekraut’ (Ruhig 1747 1, 23), dial. *dedešrà*, *dedēšris* ‘cow wheat, *Melampyrum*’ (LKŽ) ~ High Latvian *dadass*, *dadasa* ‘meadow pea, *Lathyrus*’¹⁵

¹⁵ Attested as: (1) *dadass* Kalupe (Reķēna 1998 1, 262), Vārkava (ME 1, 450), PL. *dadasi* Alūksne (Brencis 1911, 111), Barkava (ME 1, 429), DIM. *dadasiņš* Sinole (Putniņa 1983, 139), PL. *dadasiņi* Kalniena (Balode, Jansone 2017 1, 239), Dignāja (Indāne 1986, 155), Tirza (LD, No. 5844); (2) *daddaffa* ‘eine Art Kräuter’ (Stender

5. ? Lt. *vikšris*, dial. *vikšrė* (LKŽ), cf. *Wikβros* (CGL 2, 312) ‘sedge’¹⁶ ~ Lv. dial. *vikse* Aizupe, Sēme, Lazdona, *vikss* Bebrene, *viksa* Usma (ME 4, 584; EH 2, 782) ‘sedge’

Neither of these are certain, however, because beside the variant with *-šr-*, both attest a variant with *-sv-* (or *-šv-*) in Lithuanian, cf. on the one hand *Deddeβwa* ‘Vogelwicken’ (CGL 2, 858), *Dedeswà* ‘Vogelwick’ (Ruhig 1747 1, 23), *dedėšvos* ‘a plant foraged on by cows’ Labanoras (LKŽ PpK),¹⁷ and on the other *Wikβwà* ‘Spitzgras’ (CGL 2, 1145; Ruhig 1747 1, 180), *viksvà* ‘sedge’ (LKŽ). In both cases, therefore, it is theoretically possible that Latvian *-s-* continues earlier **-sv-* (or **-šv-*) rather than **-šr-*. Parallels for the cluster *-sv-* in Latvian are very few. The evidence appears to be limited to the following two word families:

- HLv. *ûsvīs* ‘father-in-law’ Šķaune (Endzelīns 1923, 154) = Lv. *uôsis*² Šķibe, Sesava (ME 4, 421) beside feminine *uôse*² ‘mother-in-law’ Sesava, *ohffe* ‘Schwiegermutter’ (Mancelius 1638, 407), *ôfe* (Elger, 17th century, cf. Draviņš 1961, 23r, translating Luke 4:38).
- *Osvys azars* (< **Asvas ezers*), a lake near Krāslava, perhaps related to Lt. obs. *ašva* ‘mare’ (Endzelīns 1934, 119), cf. [dial.] *ôffa* ‘klaczá, equa’ (Elger 1683, 133) if this is High Latvian for **asva* (Karulis 1992 1, 468).

Furthermore, the plant name *gārsa*, *gārsa*², *gārsa*² ‘ground elder, *Aegropodium*’ corresponds to Lt. *garšvā*, *gāršva*, in the same meaning. However, there is no trace of a form with *-v-* in Latvian, so it remains doubtful that the suffix goes back to Proto-East-Baltic. Alternatively, we could assume the addition of a suffix *-sva* in Lithuanian by analogy to other plant names, such as the aforementioned *dedešvā* and *viksvā*. Note in this context that

1761, 27), *dėdėsa* /*dadasa*/ Lizums ‘meadow pea’ (ME 1, 450). On the other hand **dedesis* is expected to give HLv. **dedess*, so *dadasis* Saikava (EH 1, 301), PL. *dadaši* Cesvaine, Ranka ‘meadow pea’ (ME 1, 429; cf. *dadafchi* ‘agrimony’, Lange 1773, 60) must be secondary (back-formed from the analogical diminutive?).

¹⁶ In Standard Lithuanian, *vikšris* refers to ‘rush, *Juncus*’, which seems to be due to botanical literature. The LKŽ cites this sense from just a few Žemaitian dialects.

¹⁷ In the standard language, *dedešvā* means ‘mallow, *Malva*’, but this seems merely to derive from Nesselmann’s conjecture “vielleicht *Malva rotundifolia*” (1851, 132), an interpretation which (via Kurschat and Matulionis) was taken over in the botanical nomenclature (LBŽ, 212). No dialectal evidence for this sense is cited in the LKŽ.

Pabrēža used a suffix *-sva* productively to form botanical neologisms, e.g. *krauswa* ‘Lythrum’ < *kraūjas* ‘blood’ (Gedrimas 2005, 89).

Given that the cluster *sv-* is preserved word-initially in all Latvian dialects, we cannot accept a general sound law **sv > s* for Latvian. ME (4, 421) have suggested that *uôsis*², similarly to dial. *ciris* < *cīrvīs* ‘axe’ (Endzelīns 1923, 154–155; LVDA 2, No. 107), has arisen due to a regular development **-vj- > *-j-* in the oblique cases, i.e. *uôša*² GEN.SG < **uôš-ja* < **ô’šv-jā*. In this case, *uôse*² could be analogical after the masculine, but it remains unclear how Elger’s *ôffa* can be accounted for, provided it has been correctly analysed. Interestingly, Selonian High Latvian dialects spoken in Vidzeme typically show the development **-vj- > -v-*, instead, and even in Tirza, Cesvaine, and Saikava, where *-v-* is regularly preserved in *cīrvīs* (LVDA 2, loc. cit.), there is no trace of *-v-* in *dadas(i)s* ‘meadow pea’. It could therefore be argued that it is safer to set up preforms with **-šr-*, but in view of the unclear status of the cluster **-sv-* in Latvian, it cannot be ruled out that these words reflect **-sv-* (or **-šv-*), instead.

In conclusion, there are three probable and two more possible examples of the sound law **-šr- > -s-* in Latvian. The same development has apparently not occurred in the case of **sr-*, which remained unassimilated in Latvian, cf. Lv. *strāva* < **srāvā-* ‘stream, current’ (= Lt. *srovė*; Endzelīns 1923, 175). As a result, the proposed sound law, if valid, would have interesting implications for Latvian relative chronology: the assimilation would have to predate the Common Latvian development **š > s*, and would thus provide an additional argument in favour of a Proto-Latvian stage (see Kalniņš 2020, 27–29 for this debate).

However, there are also a couple of exceptions to the development which need to be addressed. Firstly, there is the Latvian noun *mīstra*, *mīstrus* ‘hodgepodge’, which appears to be related to the aforementioned Lt. *mišrūs*, dial. *mišras* ‘mixed’. However, as with the Lithuanian word, it is difficult to exclude that this is a relatively recent, independent derivative of *māisīt* ‘mix’ rather than a word inherited from Proto-East-Baltic. Therefore, this form does not constitute compelling counter-evidence.

A more important exception is Lv. dial. *aūstra*, *àustra* ‘dawn’, which matches Lt. *aušrà* ‘dawn’. This presents much more of a challenge to the proposed sound law, but it is interesting to note Endzelīns’ (1942, 457–458) claim that this Lithuanian word originally contained *-s-*, in support of which he quotes *аустрялеј ауштант* ‘какъ заря занималась’ Triobiškiai/

Juniškiai (Miller, Fortunatov 1873, No. 2, verse 6) and *austrėlė* Onuškis (LKŽ, s.v. *austrā*). Later on (apud Stang 1966, 99), he added *austrinė* Kabeliai (*Tautosakos darbai* 4, 183); however, Kabeliai neighbours the village of Ašašinkai, where š and s appear to have fallen together (Zinkevičius 1966, 147), so this form cannot be used.¹⁸ The two remaining isolated attestations remain shaky grounds for the reconstruction of a Proto-East-Baltic **ausrā-*. Still, if we are willing to entertain the possibility of an earlier **-s-*, this would provide a plausible account for the Latvian reflex, considering that **sr* does not appear to have been assimilated in Latvian. The form *aušrā*, in Endzelīns' interpretation (loc. cit.), has adopted its -š- from the verb *aušta* 3PRES. 'it dawns', where the -š-, in turn, would be related to the *sk*-present in Skt. *uchāti* 'dawn, lighten'.¹⁹

An alternative account is perhaps suggested by the sustained tone of dial. *aūstra*, which ME (1, 229) reports from North Kurzeme (Dundaga, Vandzene, Kandava) and North Vidzeme (Salaca, Rūjiena).²⁰ This distribution could be consistent with the interpretation of this word as a "Curonianism", especially considering that the sustained tone has been argued to be the typical "Curonian" reflex of an original circumflex (cf. Illič-Svityč 1964, 24–25; Pronk 2017, 661–662; but more critically Derksen 2024), and that *àustrenis* (ME 1, 229), *aūstrenis* (LVPPV, 111) 'north-east wind' is a term characteristic of Kurzeme (Zemzare 1968, 270–272). Under this

¹⁸ Also of uncertain value is the form *úšras* 'dawn' quoted beside *úšras* from Juška in the LKŽ. The form *apausriai*, which I quoted at the CIEL Seminar in Leiden, 17 February 2023, appears to be a mere typographical error in the electronic edition of the LKŽ; the paper edition has *apaušriai*.

¹⁹ Endzelīns' assumption that PIE **sk̑* gave Baltic **š* can hardly be maintained (Villanueva Svensson 2009), but at the CIEL Seminar (see previous footnote), I have argued against the general validity of the RUKI law after **i* and **u* in Baltic, preferring the analysis that it only affected the cluster **sk* in this position (cf. similarly Endzelīns 1911, 54–55). In this context, I have suggested (like, e.g., van Wijk 1933) that *aušta* has replaced an earlier **auška*. In this scenario, which is admittedly far from certain, Baltic **ausrā-* beside **aušta* (< **auška*) would be fully regular.

²⁰ ME (loc. cit.) quotes the variant *àustra* only from Drabeši and J. Cīrulis, where the intonation may have been taken from *āust* 'to dawn'. Standard Latvian uses *aūsma* or *rīt-aūsma* (LVPPV, 111, 675) for 'dawn', a secondary deverbal derivative. Beside this, ME cites *ausa*, *pus-ausa* 'daybreak' (1, 226), *rīt-ausa* 'sunrise' (3, 540), which according to the proposed sound law could theoretically reflect **ausrā-* directly. However, a secondary derivative of *āust* cannot be ruled out.

interpretation, Lv. *aūstra* would not be directly inherited from Proto-Baltic, but borrowed from another Baltic language, and would therefore not provide any information about the Latvian reflex of the cluster **šr*.

4. Conclusion

In this paper, I have investigated the outcome of the cluster **šr* in Baltic. In word-initial position, we have seen that this cluster does not occur. This is likely the result of a phonotactic restriction against clusters of the type **Ķr* going back to (pre-)Proto-Indo-European, which is referred to as Weise's law. In the narrowest formulation, only the sequence **ĶrV* was prohibited; that the law applied before syllabic **r̥* is implied primarily by indirect evidence, and remains uncertain. Two Balto-Slavic lemmas, represented by Lt. *smākras* 'chin' and OCS свекръ 'mother-in-law', speak in favour of a similar blocking rule in word-medial position. The most important counter-example to this development is Baltic **ašra-* 'sharp', which must be from **h₂ek-ro-*. On balance, it is likely that this form results from a restoration of some kind, but it remains unclear on what basis the palatovelar could have been restored within Balto-Slavic. I have argued that Latvian *ass* 'sharp', which is traditionally taken from a Proto-Baltic **ašu-*, may rather reflect **ašra-*. The development **-šr- > -s-* has two probable and two more possible parallels within Latvian. The most important exception to this development is Lv. *āustra* 'dawn', for which two possible explanations are available: an alternative Proto-East-Baltic reconstruction with **-s-* or a borrowing from another Baltic dialect.

As the semantically most basic member of the word family, it is unlikely that **ašra-* is the result of a recent restoration within Baltic. It is possible, however, that the restoration of the labiovelar is older. Above, I have already quoted examples of words from Indo-Iranian which show palatovelars before **-r-*, and which are unlikely to be the result of a recent restoration. One of these is Skt. *ásri-* 'sharp edge', a derivative of the same adjective **h₂ek-ro-* from which Baltic **ašra-* derives. A possible explanation could be that Weise's law was no longer productive in Indo-European, and that the restoration in this word took place already within the proto-language. The conclusion of this paper regarding Weise's law, therefore, is that while the law is very likely correct, it must be placed in a pre-PIE timeframe.²¹

²¹ Additional evidence that the rule had stopped applying in synchronic PIE would seem to be supplied by Skt. *śrād dhā-* 'trust', Lat. *crēdō* 'believe', where **kred* most prob-

RYTŲ BALŲ PRIEBALSIŲ JUNGINIŲ TYRIMAI 1: *šr

Santrauka

Straipsnyje aptariami rytų baltų priebalsių junginio *šr šaltiniai ir tolesnės raidos rezultatai. Pastebėtina, kad šis junginys nepasitaiko žodžio pradžioje. Atrodo, kad tai galėtų būti „Weise’s dėsni“, nusakančio *Ķr tipo junginių fonotaktinį apribojimą indoeuropiečių prokalbėje, rezultatas. Baltų ir slavų kalbose esama duomenų, liudijančių Weise’s dėsni veikus ir žodžio viduryje: jei junginys *-šr- vis dėlto pasitaiko, paprastai esama aiškaus modelio *-š- atstatymui. Įdomus atvejis yra *ašra- ‘aštrus’ – atsižvelgiant į tai, kad, tai yra būdingiausias žodžio šeimos narys, ir turint omenyje tikslas paraleles kitose indoeuropiečių kalbose, mažai tikėtina, kad tai galėtų būti neseno atstatymo rezultatas. Straipsnyje ši lema detalai aptariama. Pirma, pasitelkiant žodžio *strénos* paralelę, parodoma, kad lie. *aštrūs* atspindi pirminę formą be *-t-. Antra, teigiama, kad la. *ass* ‘aštrus’ taip pat gali atspindėti rytų baltų *ašra- per naujai postuluojamą garsų dėsni *-šr- > -s-. Dėsniui pagrįsti galima rasti dvi tikėtinas ir dar dvi galimas paraleles. Nors dauguma duomenų patvirtina Weise’s dėsni veikus tiek žodžio pradžios, tiek žodžio vidurio pozicijoje, esama duomenų, rodančių, kad dėsni buvęs nebe produktyvus indoeuropiečių prokalbėje ir veikęs ikiindoeuropietiškoje epochoje.

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ably belongs with *kerd- ‘heart’ (cf. NIL, 422–423 with lit.). In view of this, it is possible that some other PIE reconstructions with *Ķr- are valid provided they result from a secondary innovation or borrowing.

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