Daniel PETIT

École normale supérieure, École pratique des hautes études, Paris

ELATIVE AND EXCESSIVE IN LITHUANIAN: daūg 'MUCH' AND per daūg 'TOO MUCH'

Abstract. The Baltic quantifier *daugi is usually derived from a PIE root * $d^h eug^h$ - 'to make, to produce', although its formation, as a substantivized adjective or a noun, remains problematic. In this article, I attempt to determine the original function of the quantifier. To achieve this goal, it is necessary to compare the elative sense ('very much') and the excessive sense ('too much'). The excessive is expressed in Lithuanian by the adverb $pe\tilde{r}$ (e.g. $pe\tilde{r}$ didelis 'too big'). It can be assumed that the form *daugi was first introduced in argumental functions, which the adverb *per(i)-was unable to fulfill, before the latter switched to the excessive sense.

Keywords: Lithuanian; etymology; quantification; elative; excessive.

1. Introduction¹

The term 'high degree' has often been described in linguistics with a certain imprecision, as if high-degree quantifiers – such as 'very', 'much', 'many', 'a lot' – escaped a clear-cut calculation enabling the element in question to be clearly located on a scale. What is traditionally called 'elative' ('very great') is much more difficult to delineate than the comparative ('greater than'), whose position is defined by its relation with another item, and the superlative ('greatest'), whose position is defined as placed at the top of the scale. The elative does not specify anything; from what degree or from what number of

¹ This article was started in Paris and I wrote the last word in Helsinki (Finland) in August 2024. It is partly based on an earlier article (Petit 2021), the results of which I quickly found to be incomplete and unsatisfactory. I would like to express my deepest thanks to Bonifacas Stundžia (Vilnius University), who gave me vital support, so to speak, in Helsinki as I wrote the final pages and encouraged me to propose it for publication. Thanks to Delphine Pasques, Anne Carlier (Paris), Jurgis Pakerys, Axel Holvoet (Vilnius), Tijmen Pronk and Lucien van Beek (Leiden) for their feed-back on earlier versions of this paper.

units are we allowed to say 'very', 'much', 'many', or 'a lot'? This imprecision is not without consequence when we examine the diachronic origin of elative forms, which may have a variety of sources and derive from both qualitative and quantitative intensifiers. From a cross-linguistic point of view, elatives are characterized by two main features: on the one hand, their very strong tendency toward lexical renewal, and, on the other, their fluidity of meaning in relation to a semantically close category, the 'excessive', expressing a higher-than-expected degree ('too great'). The links between elative and excessive are well known and can be illustrated by numerous examples: it suffices to think, for example, of the winding history of the French adverb trop 'much' (Old French) > 'too much' (Old and Modern French) > 'much' (Colloquial Modern French). My first intuition – and this was the starting point of this research – is that there is a link between elative and excessive markers in Lithuanian and that this may contribute to determining the original function of Lithuanian $da\tilde{u}g$.

2. The Elative

2.1. The Elative in Modern Lithuanian

There are in Lithuanian two main elative markers: $da\tilde{u}g$ 'much, many' and $laba\tilde{i}$ 'very'. Their distribution is clear: the former has quantitative, the latter qualitative meaning. This is shown by the following examples (ex. 1–2), where the two adverbs are used with verbal predicates:

- (1) Modern Lithuanian.

 Daug dirbu

 much work.PRS.1.SG

 'I work a lot'
- (2) Modern Lithuanian.

 Labai džiaugiuosi
 very rejoice.prs.1.sg=refl
 'I am very happy'

The selection of the two adverbs is determined by the semantics of the verb they are paired with, in reference to an action that can be quantified (such as work consisting of a number of tasks to be performed, for example)

and an action or state that can only be qualified (such as a psychological state of joy with varying intensity). This distinction is not universal. In French, for example, the quantifier *beaucoup* can be used for both *Je travaille beaucoup* 'I work a lot' and *Je me réjouis beaucoup* 'I am very happy (I rejoice a lot)'. The boundary between the two types of verbs – implying quantity or quality – would require further study and has, to my knowledge, never been investigated for Lithuanian.

Owing to their specific semantic content, $da\tilde{u}g$ and $laba\tilde{i}$ also display syntactic restrictions. $Laba\tilde{i}$ often qualifies adjectives, whereas $da\tilde{u}g$ usually cannot (ex. 3–4):

(3) Modern Lithuanian.

labai brangus
very expensive.NOM.SG.M
'very expensive'

(4) Modern Lithuanian.

†daug brangus much expensive.NOM.SG.M

This restriction is due to the fact that qualities conveyed by adjectives are more easily combined with intensifiers than with quantifiers. A similar restriction is found in other languages, e.g. in English, where adjectives are intensified by *very* (e.g. *very expensive*), while verbs are intensified only by *much*, *a lot* (e.g. *I work / rejoice a lot, much*).

Interestingly, the intensifier *labaĩ* is replaced in Lithuanian by the quantifier $da\tilde{u}g$ when the adjective is in the comparative (ex. 5–6):

(5) Modern Lithuanian.

labai brangus very expensive.NOM.SG.M 'very expensive'

(6) Modern Lithuanian.

daug brangesnis
much more_expensive.COMP.NOM.SG.M
'much more expensive'

The use of a quantifier in the sense of an intensifier with comparatives is shared by many neighboring languages, such as Latvian (intensifier loti / quantifier l

(7) Modern Latvian.

ļoti dārgs very expensive.NOM.SG.M 'very expensive'

(8) Modern Latvian.

daudz dargāks
much more_expensive.comp.nom.sg.m
'much more expensive'

Polish (intensifier bardzo / quantifier dużo, ex. 9–10):

(9) Modern Polish.

bardzo drogi very expensive.NOM.SG.M 'very expensive'

(10) Modern Polish.

dużo droższy
much more_expensive.COMP.NOM.SG.M
'much more expensive'

Russian (intensifier очень *očen*' / quantifier гораздо *gorazdo*, ex. 11–12):

(11) Modern Russian.

очень дорогой očen' dorogoï very expensive.NOM.SG.M 'very expensive'

(12) Modern Russian.

ropaздо более дорогой gorazdo bolee dorogoï much more_expensive.COMP.NOM.SG.M 'much more expensive'

Belarusian (intensifier вельмі *vel'mi* / quantifier нашмат *našmat*, ex. 13—14):

(13) Modern Belarusian.

вельмі дарагі

vel'mi daragi

very expensive.NOM.SG.M

'very expensive'

(14) Modern Belarusian.

нашмат даражэйшы našmat daražeišy much more_expensive.COMP.NOM.SG.M 'much more expensive'

German (intensifier sehr / quantifier viel, ex. 15-16):

(15) Modern German.

sehr teuer very expensive 'very expensive'

(16) Modern German.

viel teurer
much more_expensive.COMP
'much more expensive'

and Estonian (intensifier $v\ddot{a}ga$ / quantifier palju, ex. 17–18):

(17) Modern Estonian.

väga kallis very expensive NOM.SG 'very expensive'

(18) Modern Estonian.

palju kallim
much more_expensive.COMP.NOM.SG
'much more expensive'

This distribution could be contact-induced in Lithuanian, although we have no clear evidence of how it spread between the various languages of

the Baltic area. On the other hand, the same distinction is found more widely in other languages outside this area, e.g. English (*very expensive* / *much more expensive*), and it could also have been established in Lithuanian independently.

A significant difference between the quantifier $da\tilde{u}g$ and the intensifier $laba\tilde{\imath}$ is that the former can be used as an argument of the verb (subject and object), whereas the latter is used exclusively as an adverb of manner. $Da\tilde{u}g$ is multivalent, $laba\tilde{\imath}$ monovalent. In argumental functions, $da\tilde{u}g$ can be followed by a partitive genitive (subject in ex. 19, object in ex. 20):

- (19) Modern Lithuanian. Alfonsas Kalnius (1943, 17)

 Daug knygų yra lentynoje

 much book.GEN.PL.F be.PRS.3 shelf.LOC.SG.F

 'There are many books on the shelf'
- (20) Modern Lithuanian. Jonas Balkevičius (1963, 213)

 Mes sulauksime daug naujienų

 1.PL.NOM.PL receive.FUT.1.PL much news.GEN.PL.F

 'We will receive a lot of news'

Daũg, being invariable, is normally unsuitable for use outside subject and object functions, that is when case functions cannot be easily inferred from the context. It is then usually replaced by the variable noun *daũgelis* 'much, great number' (SG.M *-*iio*-stem, with the 'augmentative' suffix -*elis*), which carries more explicit case marking (ex. 21 = genitive):

(21) Modern Lithuanian.

Susitikome tik po daugelio metų
meet.p=refl=pst.1.pl only after much.gen.sg.m year.gen.pl.m

'We met only many years later'

The form $da\tilde{u}gelis$ can even be used in argumental functions (ex. 22 as a subject) in competition with $da\tilde{u}g$:

(22) Modern Lithuanian. Jonas Balkevičius (1963, 82)

Daugelis abejonių išsisklaidė

much.nom.sg.m doubt.gen.pl.f be_dispelled.p=refl=pst.3

'Many doubts were dispelled'

In all these examples, the complement of $da\tilde{u}g$, $da\tilde{u}gelis$ is expressed in the partitive genitive. More rarely, it can be left in the invariable neuter form (ending -a) if it is a substantivized adjective (ex. 23):

(23) Modern Lithuanian. Jonas Balkevičius (1963, 84)

O kiekvieną dieną įvykdavo daug nauja and every.ACC.SG.F day.ACC.SG.F happen.IMPF.3 much new.NOM/ACC.SG.NT 'And every day much new happened'

The variation between the genitive and the invariable neuter form is reminiscent of the construction of the type $k\grave{a}s$ $na\~ujo$ (GEN.SG) / $k\grave{a}s$ $na\~uja$ (NT) 'what (is) new?', $ni\~eko$ $na\~ujo$ (GEN.SG) / $ni\~eko$ $na\~uja$ (NT) 'nothing new'. The use of the neuter form has been greatly reduced in the modern language, and the predominant construction for the quantifier $da\~ug$ is now with the genitive.

If we summarize, we have the following system:

	Elative (high degree)			
	Quantifier	Intensifier		
+ Verbs	daug dirbu (ex. 1)	labai džiaugiuosi (ex. 2)		
+ Adjectives	labai brangus (ex. 3), daug brangesnis (ex. 4)			

What is striking about this table is its asymmetry. The distinction between the quantifier $da\tilde{u}g$ 'much' and the intensifier $laba\tilde{u}$ 'very' only works with verbs. It is absent with adjectives, where we only have $laba\tilde{u}$ for positive adjectives and $da\tilde{u}g$ for comparative adjectives.

2.2. The Elative in Old Lithuanian

The Old Lithuanian texts (16^{th} – 18^{th} centuries) only marginally modify the description just given, but there are a few discrepancies worth noting. The distinction between the intensifier *labaĩ* 'very' and the quantifier *daũg* 'much' is found in Old Lithuanian under the same conditions as in Modern Lithuanian, as the following examples show (ex. 24–25):

```
(24) Old Lithuanian. Martynas Mažvydas, Gefmes Chriksczoniskas (1570, 4479)

Labai trokscht gerima
very crave.prs.3 drink.gen.sg.m
'He is craving a drink'
```

(25) Old Lithuanian. Johann Jacob Quandt, Das Neue Testament Unsers Herrn JEsu Christi: Deutsch und Litthauisch (1727, Acts 20₁₁)

Ir kalbejo daug fu jeis
and speak.pst.3 much with 3.pl.instr.pl
'And he spoke much with them'

A study of the distribution of the two elative markers with verbs remains to be done for Old Lithuanian. This study will have to take into account the impact of translation situations, which may considerably influence the selection of elative markers.

The distribution that imposes *labaĩ* 'very' before positive adjectives and *daũg* 'much' before comparative adjectives is likewise found since the earliest Lithuanian texts. The intensifier *labaĩ* 'very' before positive adjectives is extremely common (ex. 26):

```
(26) Old Lithuanian. Martynas Mažvydas, Gefmes Chriksczoniskas (1570, 2459) kurs efti labai didis REL.NOM.SG.M be.PRS.3 very big.NOM.SG.M 'who is very big'
```

The use of $da\tilde{u}g$ 'much' before comparative adjectives is rare in Old Lithuanian, and it took me a long time to detect the following three examples (ex. 27–29):

```
(27) Old Lithuanian. Jonas Bretkūnas, Biblija (1590, Prov 31<sub>10</sub>)
     Iei
               kuriam
                                      wieschliba
                                                          Mote
    if
               somebody.DAT.SG.M
                                      virtuous.NOM.SG.F
                                                          woman.NOM.SG.F
     paſkirta
                                      ira.
     ascribe.PART.PST.PASS.NOM.SG.F
                                     be.PRS.3
                     daugia
                                 gierefne
                                                          ira
     3.sg.nom.sg.f
                    much
                                 better.comp.nom.sg.F
                                                          be.PRS.3
     nei
               brangios
                                     fchemczugos
               precious.NOM.PL.F
                                     jewel.NOM.PL.F
     'If a virtuous woman is ascribed to someone, she is much better than precious
     jewels'
```

(28) Old Lithuanian. Jonas Bretkūnas, *Biblija* (1590, Isa 52₁₄)

kadangi weidas since 3.SG.GEN.SG.M face.NOM.SG.M daugia biauresnis iramuch uglier.COMP.NOM.SG.F be.prs.3 nei kitu **Bmoniu** than other.GEN.PL.M people.GEN.PL.M

'since his face was much more disfigured than that of other men'

(29) Old Lithuanian. Daniel Klein, Naujos giesmju knygos (1666, 365₆)

Warg's diddis tiela tenav truth.NOM.SG.F be.prs.3 pain.NOM.SG.M big.NOM.SG.M there Kurmáras fukkafi / turn.prs.3=refl where death.Nom.sg.m Bet daug diddéſnis ten tikkrav / but much bigger.comp.nom.sg.m there really.ADV Kurkára tи reggi /

where war.ACC.SG.M 2.SG.NOM.SG see.PRS.2.SG
'There is in truth great sorrow where death unfolds, but even greater in truth

One could add a few more recent instances from the 18^{th} and 19^{th} centuries (ex. 30-32):

(30) Old Lithuanian. Christian Gottlieb Mielcke, Kūdikių prietelius (1795, 270 $_{\rm 15})$

Daugsmagiausiramuchpleasant.comp.advbe.prs.3

'It is much more pleasant'

where you see war'

(31) Lithuanian. Mikelis Šapalas, *Pasiuntinystės nusidavimai* (1881, 8₄)

todēl ten ir daug didefni therefore there be.prs.3 much greater.comp.nom.pl.m Surinkimai atrandami

gathering.NOM.PL.M find.PART.PRS.PASS.NOM.PL.M 'Therefore, much larger gatherings are found there'

(32) Lithuanian. Mikelis Šapalas, Pasiuntinystės nusidavimai (1881, 618)

kad jû Kudikis that 3.Pl.nom.pl.m baby.nom.sg.m

daug gerefni Tewą

much better.COMP.ACC.SG.M father.ACC.SG.M

```
rades yr
find.part.pst.nom.sg.m be.prs.3
'...that their baby has found a much better father'
```

There are in Old Lithuanian a few instances where the adjective in the comparative is preceded by $daugia\tilde{u}$ (Old Lith. $daugia\tilde{u}s$), i.e. the comparative of $da\tilde{u}g$ 'much' itself (ex. 33–34):

(33) Old Lithuanian. Samuel Chyliński, Novum Testamentum (1664, Mt 626)

Negu	toli	daugiaus	prakiłneſni
NEG	far	more	more_noble.NOM.PL.M
efte	uz	jos ?	
be.prs.2.pl	for	3.PL.ACC.PL.M	

^{&#}x27;Are you not of much better value than them?'

(34) Lithuanian. Juozapas Arnulfas Giedraitis, Naujas Istatimas (1816, Mt 626)

Ar	jus	ne	este
INTERR	2.PL.NOM.PL	NEG	$be. {\tt PRS.2.PL}$
daugiaus	brangiasni?		
more	more_precious.co	OMP.NOM.	PL.M

^{&#}x27;Are you not of much better value?'

Taken at face value, the structure $daugia\tilde{u} + \text{comp}$ seems to display formal redundancy, the comparative meaning being conveyed by both the adjective and the quantifier that modifies it. It is difficult to determine whether this use is genuine in Lithuanian and, if this is the case, how it came to be replaced by the simple form of the quantifier $da\tilde{u}g + \text{comp}$. It is probably better to argue the other way round that the type $da\tilde{u}g + \text{comp}$ is older, even if its occurrences in Old Lithuanian can be counted on the fingers of the hand, and that the redundant type $daugia\tilde{u} + \text{comp}$ only represents a limited deviation from this type under conditions that still remain to be clarified.

The following two examples from Daniel Klein (1666) are difficult to explain (ex. 35-36):

(35) Old Lithuanian. Daniel Klein, Naujos Giefmiu Knygos (1666, 1623)

Jeib tas fwiets

if DEM.NOM.SG.M world.NOM.SG.M

daugiu plattéfnis [...] butu

much.INSTR.SG.M wider.COMP.NOM.SG.M be.COND.3

'if this world was much bigger'

(36) Old Lithuanian. Daniel Klein, Naujos Giefmiu Knygos (1666, 403₈)

O tu daugiu gerréfnis

and 2.SG.NOM.SG much.INSTR.SG.M better.COMP.NOM.SG.M

'And you are much better'

The form *daugiu* is apparently a marked instrumental singular (ending –u), but its function is unclear. It is different from both the simple adverb *daug* and the comparative *daugiau(s)*, which are both regularly used in the same text.

In Old Lithuanian, another construction is also used before comparatives, $ju\tilde{o}$ 'all the more' + COMPARATIVE (ex. 37–38):

(37) Old Lithuanian. Martynas Mažvydas, Gefmes Chrikfc3onifkas (1570, 126 $_{16})$

Tawa	Diewiſchſkas	wardas		
2sg.gen.sg	divine.NOM.SG.M	name.NOM.SG.M		
iů	didʒaus	butu	ſchwenſtas	
much	greater.COMP.ADV	be.cond.3	holy.nom.sg.m	
'(that) your divine name would be much more hallowed'				

(38) Old Lithuanian. Baltramiejus Vilentas, Catechismas (1579, 57_{24–25})

Ghis	papeik	dabar
3.sg.nom.sg.m	scorn.prs.3	now
уů	dideſnius	daiktus
much	great.COMP.ACC.PL.M	thing.ACC.PL.M
neng	tie	jra.
than	3.PL.NOM.PL.M	be.PRS.3

'He now scorns much greater things than these are' (transl. Ford 1969, 381 modified)

This construction is often used with elative meaning 'all the more' > 'much more'. In addition to the two examples given above (ex. 37–38), it can be noted, for example, that $j\hat{u}$ mielaus 'much dearer' is used in the Lexicon Lithuanicum (17th century: 98₈) to render German viel lieber. Formally, $ju\tilde{o}$ is an instrumental. It is possible that the construction daugiu + COMP, as found in Daniel Klein (ex. 35–36), has been reshaped on the model of $ju\tilde{o}$, but the details of this analogy await a full explanation.

It is rare to find the quantifier $da\tilde{u}g$ 'much' before positive adjectives. I have found only a few instances in Old Lithuanian texts (ex. 39–40):

- (39) Old Lithuanian. Martynas Mažvydas, Gefmes Chrikfczonifkas (1570, 438₂)²

 Afch efmi daug kaltas

 1sg.nom.sg be.prs.1.sg much guilty.nom.sg.m

 'I am very guilty'
- (40) Old Lithuanian. Jacob Brodowski, Lexicon Germanico=Lthvanicum et Lithvanico = Germanicum (1713–1744, 469₁₇)³
 Sawo wlófnas Kampélis daug wertas
 REFL.GEN.SG OWN.NOM.SG.M corner.NOM.SG.M much worth.NOM.SG.M
 '(Having) one's own home is worthy of much' (German Eigen Heerd ift Goldes werth)

These examples, which are very few in number, are unlikely to reflect a distribution comparable to that observed with verbs (qualitative $laba\tilde{a}$ 'very' / quantitative $da\tilde{u}g$ 'much'). The quantifier $da\tilde{u}g$ is probably not used adverbially, but as the complement of the adjective ('guilty of much', 'worthy of much'), which is suggested by the fact that it can be followed by a noun in the partitive genitive, making explicit the relation implied by the adjective (compare ex. 39 with ex. 41, ex. 40 with ex. 42):

- (41) Old Lithuanian. Daniel Klein, *Grammatica Litvanica* (1653, 150₂₅)⁴ $\begin{array}{ccc} \textit{daug} & \textit{griek} \hat{u} & \textit{kaltas} \\ \text{much} & \text{sin.GEN.PL.M} & \text{guilty.NOM.SG.M} \\ \text{'guilty of many sins'} \end{array}$
- (42) Old Lithuanian. Daniel Klein, *Grammatica Litvanica* (1653, 150₂₄) daug penigû wertas much money.GEN.PL.M worth.NOM.SG.M 'worth a lot of money'

The case of *daug kalbus* 'talkative' in Sirvydas' dictionary (ex. 43–44) is probably different:

 $^{^2~}$ Cf. also Mikalojus Daukša, *Postilla Catholicka* (1599, 101 $_5$).

³ Cf. also Christian Gottlieb Mielcke, Kūdikių prietelius (1795, 5₅).

⁴ Cf. also Friedrich Wilhelm Haack, Anhang einer kurzgefassten litauischen Grammatik (1730, 331₁₇): daug Griekû kaltas (German vieler Sünden schuldig).

(43) Old Lithuanian. The $1^{\rm st}$ dictionary of Konstantynas Sirvydas (ca. 1620, $83_{26})$

Mowny / facundus, multiloquus, difertus.

daug kałbus.

much talkative.NOM.SG.M

'talkative'

(44) Old Lithuanian. The $1^{\rm st}$ dictionary of Konstantynas Sirvydas (ca. 1620, 193 $_{20}$)

Wielomowny / loquax, verbofus, multiloquus.

daug kałbus.

much talkative.Nom.sg.M

'talkative'

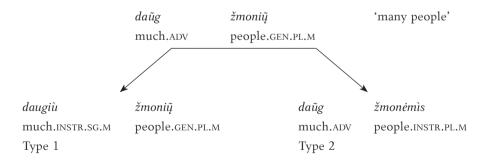
Daug kalbus seems to be calqued on the Latin compound multiloquus, either directly or through Polish wielomówny itself calqued on Latin (daug = multi-, wielo- + kalbus = -loquus, -mówny). Alternatively, one could suggest that the form kalbus represents the East Aukštaitian variant of the participle *kalbas 'speaking'. Note also the compound daugbylis used in the same meaning in Daukša's Postilla (1599): Nom.sg dáugbilis (1599, 78₁₂), daugbilis (1599, 78₁₀), GEN.SG dáugbilo (1599, 78₁₂), INSTR.SG dauġ bilú (1599, 166₂₉), dauġbilu (1599, 166₃₄), rendering Old Polish wielomówſtwo or wielomodlſtwo.

There is no reason to think that the use of the quantifier $da\tilde{u}g$ 'much' before positive adjectives, in contrast with the more common intensifier $laba\tilde{u}$ 'very', reflects a semantic distinction comparable to that carried by the two elative markers with verbs. For all the examples given above, there is a specific explanation, which exempts us from assuming adverbial use. As a rule, only the intensifier $laba\tilde{u}$ 'very' is used before positive adjectives in Lithuanian.

A last detail that deserves attention in Old Lithuanian concerns the insertion of the quantifier $da\tilde{u}g$ in the syntactic environment where it is used. $Da\tilde{u}g$ is invariable and, as such, proves ill-suited to appear in functions other than that of adverb of manner, subject or object, which are easily identifiable in context. In other functions (e.g. genitive, dative, instrumental or locative), it must be replaced by a case-marked form, capable of making its grammatical function more explicit. We have seen that the form $da\tilde{u}gelis$ has precisely this function in Modern Lithuanian. $Da\tilde{u}gelis$ is extremely rare in Old Lithuanian; it is, for example, absent from Mažvydas (1547–1570), the Wolfenbüttel Postilla (1573), Vilentas (1579), and Bretkūnas (1579–1590). There is

only one single instance in Daukša's Postilla Catholicka (1599): daugêlį (ACC. SG in 1599, 555₂₀). A few examples also occur in Konstantynas Sirvydas' Punktay Sakimu (1629): daugieliy (ACC. SG in 1629: I 110₁₈, 133_{31–32}), daugielop (ALL.SG in 1629, I 555₁₃), and a few isolated instances are also found in the Ziwatas, a major source of the Low Lithuanian (Samogitian) dialect in the 18th century (1759): dawgiele (NOM.PL in 1759, 80₂₀, 90₂₂, 95₂, 111₁₆). Globally speaking, daūgelis is not commonly used in Old Lithuanian. The endingless form daugel is attested slightly more frequently, particularly in the Kniga Nobažnystės (1653): daugel (1653: Suma Evangelios 41₁₅; Giesmė ape Muká 142₄₁), and in Daniel Klein's Naujos Giesmju Knygos (1656, 203₅), where it functions as a noun (+ GEN.PL: Daugel wargû 'much suffering').

There are other possibilities in Old Lithuanian. In a noun phrase such as $da\tilde{u}g\ \check{z}moni\tilde{u}$ 'many people', neither the quantifier nor the noun carries any precise information on the grammatical function of the noun phrase by means of overt case marking because, on the one hand, the adverb $da\tilde{u}g$ is invariable and, on the other, the genitive $\check{z}moni\tilde{u}$ only marks the partitive relation and says nothing about the function of the noun phrase. Two innovations are therefore conceivable, modifying either the first or the second constituent of the noun phrase (here exemplified in the instrumental):



The first innovation (type 1) is to replace the invariable form $da\tilde{u}g$ with a variable form. In Old Lithuanian, there is ample evidence for case forms such as daugio (GEN.SG), daugiu (INSTR.SG), etc., from a noun *daugis (M). Such case forms have the advantage of specifying the function of the quantifier more clearly than the invariable form $da\tilde{u}g$. Variable forms of the quantifier can be found throughout Old Lithuanian literature in competition with $da\tilde{u}g$ (ex. 45 = genitive, 46 = instrumental):

(45) Old Lithuanian. Konstantinas Sirvydas, Punktay Sakimu (1629, I 315₁)

del daugio prieźaſtu

because_of much.gen.sg.m reason.gen.pl.f

'for many reasons' (Polish dla wiela przyczyn)

(46) Old Lithuanian. Wolfenbüttel Postilla (1573, 247r₁₇)

Ir daugiu ftebuklu
and much.INSTR.SG.M miracle.GEN.PL.M
ira ftiprinama
be.PRS.3 strengthened.PART.PRS.PASS.NOM.SG.F
'And it (God's goodness) is strengthened by many miracles'

This first option is also possible when the quantifier is used alone (ex. 47 = instrumental, ex. 48 = dative):

(47) Old Lithuanian. Jacob Brodowski, Lexicon Germanico=Lthvanicum et Lithvanico=Germanicum (1713–1744, 119₅₄)

Su $ma \acute{z} u$ $paffir\acute{o} dik$, with little.INSTR.SG.NT show.P=REFL=IMPER.2.SG fu daugiu paffiflepk with much.INSTR.SG.M hide.P=REFL=IMPER.2.SG 'Show up with a little, hide with a lot'

(48) Old Lithuanian. Jonas Rehsa, Der Psalter Davids: deutsch und littawisch (1625, 71_7)

Afch daugiems efmi kaip ftebuklu
1.SG.NOM.SG much.DAT.PL.M be.PRS.1.SG like miracle.INSTR.SG.M
'For many people I am like a miracle'

It could be tempting to argue that such instances reflect the preservation of the inflectional character of a noun reconstructed as *daugis (daũg being a frozen form of this noun), but, considering that they only occur to solve the problems raised by the invariability of daũg (e.g. never in the nominative), it is preferable to think that they are secondary innovations. If I have time and strength, I will come back to this question in a later article.

The second innovation (type 2) is to replace the partitive genitive by a case form adapted to the syntactic context (ex. 49 = dative):

(49) Old Lithuanian. Jonas Bretkūnas, *Postilla* (1591, I 391_{18–19})

Ir paffirode daug famoniems and show.p=refl=pst.3 much people.dat.pl.m

'And he showed himself to many people'

The New Testament by Johann Jacob Quandt (1727) regularly uses this construction (ex. 50 = dative, ex. 51 = instrumental):

(50) Old Lithuanian. Johann Jacob Quandt, Das Neue Testament Unsers Herrn JEsu Christi: Deutsch und Litthauisch (1727, Mt 27₅₃)

Ir daug 3monems paſiróde and much people.DAT.PL.M show.P=REFL=PST.3 'And he showed himself to many people'

(51) Old Lithuanian. Johann Jacob Quandt, Das Neue Testament Unsers Herrn JEsu Christi: Deutsch und Litthauisch (1727, Acts 15₃₂)

Graudéno brolius daug 3od3iais exhort.PST.3 brother.ACC.PL.M much word.INSTR.PL.M 'They exhorted their brothers with many speeches'

even in the nominative (ex. 52):

(52) Old Lithuanian. Johann Jacob Quandt, Das Neue Testament Unsers Herrn JEsu Christi: Deutsch und Litthauisch (1727, Jn 6₁₀)

O daug 30lês buwo toj' Wietoj' and much grass.NOM.PL.F be.PST.3 DEM.LOC.SG.F place.LOC.SG.F 'And there was much grass in the place'

The first Lithuanian grammars by Daniel Klein (*Grammatica Litvanica* from 1653 and *Compendium Litvanico-Germanicum* from 1654) offer interesting data in this regard. Klein classifies $da\tilde{u}g$ (1653, 72) among the 'indeclinable words' (*indeclinabilia*) and indicates that it can either introduce a variable noun ($daug~\acute{g}mones~NOM.PL~/~daug~\acute{g}mon\hat{u}~GEN.PL~/~daug~\acute{g}monems~DAT.PL$) or be itself used as a variable noun (daug~/~daugio~GEN.SG~/~daugi~ACC.SG~/~daugime~LOC.SG). This variation corresponds to the distinction between my type 2 and 1 respectively. Klein further writes (1653, 151):

(53) Old Lithuanian. Daniel Klein, Grammatica Litvanica (1653, 151)

Nomen indeclinabile daug substantivè usurpatum regit Genitivum, ut: daug źmonû fussiejo multi homines convenerunt; Adjectivè verò sumptum cum omnibus casibus construitur, ut: daug źmones / daug źmonêm / daug źmones &c.

'The indeclinabile noun **daug** used as a substantive governs the genitive, as in **daug ámonû fusfiejo** *multi homines convenerunt* 'many people gathered'; used

as an adjective, it is construed with all cases, as in **daug źmones / daug źmone** / **daug źmones / daug źmones / daug źmones /**

In the Compendium (1654, 106), Klein writes with even more precision:

(54) Old Lithuanian. Daniel Klein, Compendium Litvanico-Germanicum (1654, 106)

Das Nomen daug viel / wil zwar von etlichen wie ein Adjectivum gebraucht / und

mit dem Substantivo fast in allen Casibus construiret werden / wie denn im Dativo

recht gesaget wird / daug źmonėms / vielen Leuten; aber mehr und besser wirds wie

ein Substantivum construiret: Daug źmonu ateya manesp / viel Volck ist zu mir

kommen / daug wiru reggėjau ich habe viel Manner gesehen. In Genitivo sagt man

auch / isz daugio prieźáśćiu aus vielen Ursachen; und in Dativo daugiam źmonû

vielen Leuten.

'The noun daug 'much' / is used by some as an adjective / and construed with the substantive almost in all cases / as it is common to say in the dative / daug śmonėms / 'to many people'; but more and better it is construed like a substantive: Daug śmonu ateya manesp / 'many people came to me' / daug wiru reggéjau 'I have seen many men'. In the genitive one also says / if3 daugio prieśáśćiu 'for many reasons'; and in the dative daugiam śmonû 'to many people'

It would be interesting to determine the extension of the two marked patterns (type 1 and 2) in Old Lithuanian and furthermore to see whether they are still attested in modern Lithuanian dialects. I do not have time to go into this research in depth here; this would probably show marginal but very real attempts to solve the problems of morphological marking posed by the invariable form $da\tilde{u}g$ in Lithuanian.

It is possible that the second option (type 2) results in part from foreign influence. In German, the quantifier viel 'much, many' does not govern a partitive genitive, but agrees with the head noun: both members of the noun phrase follow the usual agreement rules required by the syntactic context (e.g. $vielen_{DAT,PL}$ Menschen_{DAT,PL} 'to many people'). Unlike Lithuanian $da\tilde{u}g$, German viel is a determiner and not a nominal form. It can be suggested that the structure $da\tilde{u}g$ žmonė́ms_DAT,PL</sub> 'to many people' imitates the agreement rule of the German structure. The situation of Polish is interesting. The quantifier $du\dot{z}o$ 'much' behaves like $da\tilde{u}g$ in Lithuanian; it governs a genitive partitive (e.g. $du\dot{z}o$ ludzi 'many people' with $ludzi_{GEN,PL}$ = Lithuanian $da\tilde{u}g$ žmoni $\tilde{u}_{GEN,PL}$). But there is in Polish another quantifier, the determiner wiele, which behaves like viel in German. The Polish equivalent of the dative $vielen_{DAT,PL}$ Menschen_DAT,PL

'to many people' cannot use the invariable form $du\dot{z}o$ because the dative function would not be specified; it is necessary, for reasons of morphological legibility, to use the other quantifier wiele, with both members marked in the dative: $wielu_{\text{DAT,PL}} \ ludziom_{\text{DAT,PL}}$. The structure $da\tilde{u}g\ \check{z}mon\acute{e}ms_{\text{DAT,PL}}$ in Lithuanian is parallel to German $vielen_{\text{DAT,PL}}\ Menschen_{\text{DAT,PL}}$ and to Polish $wielu_{\text{DAT,PL}}\ ludziom_{\text{DAT,PL}}$ with the difference that its first member $da\tilde{u}g$ remains invariable.

3.3. Conclusion

To sum up, the Old Lithuanian data do not substantially modify the description given above for Modern Lithuanian. We observe only attempts to solve the morphological underspecification that affects noun phrases of the type $da\tilde{u}g\ \check{z}moni\tilde{u}$ 'many people'. But, for the most part, the system is identical in Old and Modern Lithuanian. It is this system whose origin now has to be determined.

3.4. The Origin of the Elative

To determine the origin of the elative markers in Lithuanian, it is necessary to point out from the outset a difference between the intensifier *labaî* 'very' and the quantifier *daûg* 'much'. *Labaî* 'very' is clearly marked in Lithuanian as an adverb of manner (ending *-ai*) based on the adjective *lãbas* 'good'; its original meaning is 'well' – whatever its more distant etymology may be. ⁵ The use of 'well' as an intensifier meaning 'very' is cross-linguistically trivial. ⁶ In Lithuanian, *lãbas* is now commonly replaced by *gēras* 'good', adverb *geraî* 'well', but *lãbas* is still in use in frozen phraseologisms and its meaning is clearly understood. *Labaî* 'very' is certainly an innovation. ⁷

⁵ Lithuanian *lãbas* 'good', Latvian *labs*, Old Prussian *labs* (*Enchiridion* 1561, III 51₂₀+), is usually connected with Sanskrit *rábhate* 'to seize', *lábhate* 'to receive', Greek λάφυρα $l\acute{a}p^hura$ 'spoils taken in war' (PL.NT). Cf. ALEW (1, 548).

⁶ See the examples given by Hofmann (1930, 140).

⁷ Other intensifiers are used in Latvian: *loti* (*lùoti*) 'very' < 'terribly' (borrowed from Slavic, cf. Russian πютый *ljutyï* 'fierce, terrible') and Old Prussian: *sparts* 'very' < 'strongly' (*Enchiridion* 1561, III 107₅: *fta bei wiffan fparts labban* 'all this was very good' = German *es war alles fehr Gut*, cf. Old Prussian *fpartin* 'strength' ACC.SG.F = German *krafft* III 45₁₀, *fpartint* 'to strengthen' = German *stercken* III 117₁₀, *fpartifku* 'strength' NOM.SG.F = German *stercke* III 85₆). Note that Old Latvian also had *waren*, *varen* 'very' (from the adjective *warens*, *varens* 'strong', cf. ME (4, 477).

The situation is different with $da\tilde{u}g$, which has no identifiable ending. This formal difference is connected with a functional difference, which was already mentioned above. The intensifier $laba\tilde{u}$ 'very' is used exclusively as an adverb of manner, modifying verbs or adjectives, and never appears in argumental functions, whereas the quantifier $da\tilde{u}g$ 'much' is multivalent: it can be used both as an adverb of manner, modifying intransitive verbs, and as a main argument of a verb, subject or object. It can consequentially be followed by a partitive genitive (e.g. $da\tilde{u}g$ žmoni \tilde{u} 'many people', literally: 'much of the people'), constituting with it a noun phrase capable of fulfilling the function of subject or object.

3.5. The Elative and Its Balto-Slavic and Indo-European Cognates

The etymology of daug is usually presented in the literature in a rather imprecise way.⁸ The Lithuanian form is derived from *daugi, whose ending is still sporadically preserved in Old Lithuanian (e.g. dáugi in Daukša, Postilla Catholicka 1599, 382₁₃). It has an exact counterpart in Latvian daūdz 'much' < *daugi, but with an unexplained tonal difference. 9 Interestingly, Latvian daudz faces the same difficulties of case marking as Lithuanian daug: it can be used with a partitive genitive (e.g. daudz cilvēku 'many people', with cilvēk $u_{GEN.PL}$), or alternatively with a case form adapted to the syntactic context (e.g. daudz cilvēki 'many people', with cilvēki_{NOM,PL}, probably calqued on German viele Menschen). The quantifier is usually variable in case: daudzi (NOM.PL), daudziem (DAT.PL), etc. The third documented Baltic language, Old Prussian, has vestiges of *daugi- in personal names (e.g. Daugis, Daugil, Dawkant < *Daug-kant-).10 The usual elative marker in Old Prussian is tūlan 'much' (Enchiridion 1561, III 55_{8-9}), toulan (III 105_2), comparative touls 'more' (III 69_{17} , III 73_4), which corresponds to Lithuanian $t\bar{u}las$ 'much, many' (now obsolete). The syntax of Old Prussian tūlan 'much' cannot be determined with precision, because it always renders German viel in a slavish way. It is used as an adverb or object of the verb (ex. 55):

⁸ Cf. Fraenkel (LEW 1, 84), Smoczyński (SEJL, 94-95), Derksen (EDBIL, 117), ALEW (1, 183-184).

⁹ On the metatony between Lithuanian $da\tilde{u}g$ (< circumflex) and Latvian $da\tilde{u}dz$ (< acute), see Derksen (1996, 326).

¹⁰ Trautmann (1925, 23).

(55) Old Prussian. *Third Catechism, Enchiridion* (1561, III 55₈₋₉), cf. also the comparative *toūls* 'more' (III 69₁₇, III 73₄)

```
Beggi mes deininifku
for 1.pl.nom.pl every_day
tūlan grīkimai
much sin.prs.1.pl.
```

or as a determiner seemingly agreeing with a head noun (ex. 56):

(56) Old Prussian. Third Catechism, Enchiridion (1561, III 105₂)

As	quoi	tebbe
1.sg.nom.sg	want.prs.1.sg	2.sg.dat.sg
toūlan	Gulfennin	teickut
much.ACC.SG.F	suffering.ACC.SG.F	make.INF

^{&#}x27;I want to make you much suffering' (German Jch wil dir viel Schmertzen Jchaffen)

The form *daugi can be traced back to Common Baltic since it is documented in all three Baltic languages, but its original function and distribution remain obscure.

Other Baltic forms are mentioned in the literature: Lithuanian *dukslùs*, *dùkšlas* 'wide', *dùgsinti* 'to increase', Latvian (dial.) *padūgt* 'to be able' (usually negated *nepadūgt*, ME 3, 20) and *duksns* 'corpulent'. If they are really cognate with **daugi*, which is possible, they suppose an ablaut variation [daug] / [dug] / [dūg] under conditions that are still to be determined.

It is generally assumed that the Baltic family of *daugi 'much' has a cognate in the Slavic adjective *dužь 'strong' (from Pre-Slavic *dougjo-):¹¹ Russian дюжий djužiï 'sturdy, hefty, robust, healthy', dial. дужий dužiï 'strong, healthy'; Czech (rare) duží 'firm, strong'; Slovak dúži 'strong, big, healthy'; Polish duży 'big, (old and dial.) strong'. In Polish, the neuter dużo is used as a quantifier 'much' in a way very much similar to Lithuanian daũg. The West Slavic forms are sometimes suspected to be borrowed from East Slavic, where the vowel /u/ can reflect an ancient nasal vowel, i.e. a form *dog-, which could belong to the family of Slavic *deglb 'healthy, strong' (Russian dial. дяглый djaglyï 'healthy, strong', with further cognates in Latvian deñkts 'strong, healthy, important' < Curonian, and Old Irish daingen 'firm, fast, solid'), but I still consider cognacy with Baltic *daugi more likely.

^{&#}x27;For we sin a lot every day' (German Denn wir teglich viel sündigen)

¹¹ Cf. Stang (1972, 17), Derksen (EDSIL, 127).

The Indo-European prehistory of Baltic *daugi is unclear; it is generally derived from a PIE root * $d^h e u g^h$ - 'to be/make useful, to produce' (LIV, 148–149), reconstructed on the basis of Greek τεύχω $teu k^h \bar{o}$ 'to produce, to make, to cause, to bring to pass', τυγχάνω $tu g k^h a n \bar{o}$ 'to happen to be at a place, to reach', Gothic dugan 'to be useful' (SG 3 preterite-present daug), Old High German tugan 'to be useful' (German taugen). All this is possible, but the formal and semantic aspects of this etymology remain obscure. The Hittite verb tukk- 'to be visible, to be important' (SG 3 middle duggari) probably does not belong to * $d^h e u g^h$ -, but to a different root *tuek- 'to be visible', as suggested by Kloekhorst (EDHIL, 897). The traditional comparison with Sanskrit duhati 'to milk', still defended by Pokorny (IEW, 271) and the ALEW (1, 184), is not completely impossible (from a basic meaning 'to produce'?), but remains uncertain.

Kazlauskas (1970) further compares Lithuanian $da\tilde{u}g$ with the verb $d\check{z}ia\tilde{u}gtis$ 'to rejoice, to be happy' (cf. $d\check{z}ia\tilde{u}gsmas$ 'joy', $d\check{z}iug\grave{u}s$ 'joyful, rejoicing'). The alternation between [daug], [džiaug] and [džiug] would reflect the inherited ablaut between $*d^houg^h$ -, $*d^heug^h$ - and $*d^hug^h$ - respectively; the latter should have yielded [dug] in Baltic, but this would have been reshuffled to [džiug] by analogy with [džiaug] $<*d^heug^h$ -. The reason why this reshuffling did not affect $da\tilde{u}g$ is probably its semantic isolation. Formally, this etymology is possible. It is supported by the isolated adverb $d\check{z}iugais$ 'massively' (= $b\bar{u}riais$ in the LKŽ 2, 1029, dialect of Miežiškiai), which semantically goes well with $da\tilde{u}g$ and formally recalls $d\check{z}iug\grave{u}s$ 'joyful, rejoicing'. I leave to a more imaginative mind than mine the question of which analogy can have influenced the form $d\check{z}iugais$ to adopt the secondary initial [džiug-] instead of [dug-] and why this analogy did not affect $da\tilde{u}g$ under the same conditions.

From a semantic point of view, Kazlauskas (1970, 255) supposes a link between 'strong' and 'joyful'. To support this idea, he mentions the parallel of Sanskrit $mah\acute{a}nt$ - 'big' and $mah\acute{a}yati$ 'to make strong, to strengthen', also 'to rejoice' (cf. also $m\acute{a}has$ - 'greatness, strength' $\rightarrow m\acute{a}hasvant$ - 'rejoicing', both in the Rigveda). The semantic link between 'big, strong' and 'joyful' can be illustrated by the following passage of the Rigveda (ex. 57), where the adverb $m\acute{a}hi$ intensifies a feeling of joy:

(57) Vedic Sanskrit. *Rigveda* 10, 167₂ *Suarjítam*light-bearer.ACC.SG.M big.NOM/ACC.SG.NT rejoicing.ACC.SG.M

ándhaso	hávāmahe	pári			śakráṃ
soma-stalk.gen.sg.nt	call.prs.1.pl.mid	around			strong.ACC.SG.M
sutā̇ṁ	úра				
pressed_soma.Acc.sg.	M to, towards				
(m) (.1	1 / 1	. 1.1		. 1	. 11 1

'The conqueror of the sun who finds great exhilaration in the soma-stalk do we call here to the pressings – the all-around able one' (translation: Jamison, $Brereton\ 2014$)

Another parallel mentioned by Kazlauskas (1970, 255) is the Latvian adjective vesels 'healthy' compared with Slavic Becent vesels 'happy, rejoicing'. The direction of the semantic change is not clear, however: the Latvian adjective could be borrowed from Slavic (which would imply Slavic [joy] > Latvian [strength]), or it could be inherited from Indo-European independently of the Slavic form (which would imply PIE [strength] > Slavic [joy]). The Old Prussian adjective weffals 'happy' (Enchiridion 1561, III $121_8 = German fr \delta lich$) and the corresponding adverb weffelingi 'happily' (Enchiridion, III $81_{22} = German fr \delta lich$) do not allow us to decide: the Prussian form is likely to be borrowed from Slavic.

Kazlauskas' suggestion, which would deserve more careful examination, does not modify the etymology of $da\tilde{u}g$: its original meaning is likely to have been 'strong, big'. Its use as a quantifier parallels the evolution observed in the Polish quantifier $du\dot{z}o$, for example. Another parallel could be Homeric Greek $\varkappa \acute{a} \cot k\acute{a} t t \acute{a}$ 'very, much' from an original meaning 'strong' (cf. $\varkappa \varrho \alpha t \acute{u} \acute{s}$ $krat\acute{u}s$ 'strong, powerful').

3.6. Formation of *daugi

The difficulty is that this etymology says nothing precise about the formation of $da\tilde{u}g$, nor about its original function. $Da\tilde{u}g$ (< *daugi) is invariable and isolated. According to $B\bar{u}ga$ (RR 2, 441), it reflects the NOM/ACC.SG.NT of an adjective *daugis (i-stem). This view is traditional and has not really been challenged until today. It does, however, raise a number of difficulties.

There is no productive class of *i*-stem adjectives in Lithuanian, but vestiges like Old Lithuanian *didime* 'big' (LOC.SG.M, e.g. in Daukša's *Postilla Catholicka* 1599, 157₃) suggest that they once existed before being absorbed into the more common -*ijo*-type.¹² An interesting parallel, both formally and semantically, is precisely the adjective *didis* 'big', once *i*-stem, now exclusively

¹² Cf. Zinkevičius (1980–1981 2, 18).

-iio-stem; its replacement by dideis, with the 'augmentative' suffix -elis, is reminiscent of the case of da \tilde{u} gelis' 'much, a great number of', used as a byform of da \tilde{u} ge. With this parallel in mind, one could reconstruct two i-stem adjectives with the corresponding neuter forms:

Adjective	Neuter form	Augmentative
*did-i-s 'great'	*did-i	*did-el-ii̯o-
*daug-i-s 'strong'	*daug-i	*daug-el-iio-

There is, however, a fundamental difference between *did-el-iio- and *daug-el-iio- in spite of their apparent resemblance: the former is an adjective (didelis), the latter a noun ($da\tilde{u}gelis$), and they can only be compared with each other if we explain how one of the forms modified its categorial status, for example by assuming that $da\tilde{u}gelis$ was originally an adjective like didelis and became a noun, which remains pure speculation at this point.

The reconstruction of a neuter adjective *daugi 'strong' is fairly well accepted in the literature, ¹³ but its validity must be measured in the light of a precise etymological analysis, which remains to be done. A neuter adjective such as *daugi can be assigned three functions: it can (1°) either be used in its adjectival function, i.e. agreeing with a neuter noun; or (2°) be substantivized as a noun (like, e.g., Lithuanian gera 'the good'); or (3°) be used as an adverb of manner. In Baltic, the first function has been greatly reduced, due to the definitive decline of the neuter gender for nouns. Substantivization of neuter forms has been quite productive for a while in Baltic, as still visible in the history of Lithuanian (cf. Valeckienė 1984, 131sq.), but such forms eventually receded and disappeared; they are rare in Modern Lithuanian. Finally, the adverbializing function of neuters, inherited from Indo-European, has been preserved (cf. Valeckienė 1984, 187–199), but tends to be superseded by more clearly marked formations (such as the adverbial formation in -ai).

From a cross-linguistic point of view, intensifiers like 'very' and quantifiers like 'much, many' can fall into several types, depending on the class of words from which they originally derive:

¹³ Cf., e.g., Stang (1972, 17). An exception is ALEW (1, 184), which sees *daugi as 'the frozen form of the 3rd person of a primary verb' (eine erstarrte Form der 3.prs. eines primären Verbs), but without providing any precise scenario to explain its genesis (and particularly the conditions of its reanalysis).

- (1°) Type 1. Intensifiers and quantifiers can be based on adjectives meaning 'abundant, numerous, great, big, strong' used as determiners with nouns, e.g. Greek πολλοὶ ἄνδρες polloì ándres or Latin multī hominēs 'many men' (NOM.PL.M), cf. also Gothic manags, Old Church Slavic мъногъ mъnogъ 'much', Gothic mikils 'much' (< 'great'), Sanskrit bahú- 'much' (< 'thick')
- (2°) Type 2. Intensifiers and quantifiers can also reflect nouns (or adjectives used as nouns) meaning 'great number, mass, crowd, abundance', e.g. Irish *imde* 'much' (from *imbed* 'mass'), Breton *kalz* 'much' (< 'a heap'); French *beaucoup* 'much' (replacing *mout* < Latin *multum* since the 14th century) is originally *beau coup* 'a fine blow, a beautiful knock'
- (3°) Type 3. Intensifiers and quantifiers can be based on adverbs, e.g. Greek μάλα *mála* 'much' (only adverb), English *very* (< 'really', from Old French *verai*, Modern French *vrai* 'true')

It is unlikely that *daugi originally belonged to type 1, because its syntax (+ GEN) does not point to a determiner-like behavior and it is better to ascribe it to either type 2 or 3. Both options are compatible with an original neuter adjective, either substantivized (type 2) or used adverbially (type 3). The situation is not fundamentally different if *daugi is not a neuter adjective, but a noun.

3.7. Daũg and mãža

There are, in my opinion, two ways of deciding on this matter, but as we will see, each of them will lead to a dead end. The first one is based on a consideration of the lexical environment of the form *daugi. It is interesting to compare the quantifier *daugi 'much, great in number' with its antonym 'little, few in number': Lithuanian mãža, màž (shortened from mãža) or mažaĩ, Latvian maz, Old Prussian probably *maza or *mazai (cf. the comparative massais 'less' in the Enchiridion 1561: III 1158 = German weniger). Originally, we are dealing with a neuter adjective mãža 'little, few' (from mãžas 'little, small') and its adverbial counterpart mažaĩ. In Old Lithuanian, mãža appears frequently since the earliest texts, while mažaĩ seems to be rare and recent: Mažvydas only has maž (massais in 1547, 1016; 1570, 30217, 34814), Daukša almost always mãža (1595, 1x; 1599, 11x), màž (1599, 153x), only once mažaĩ

(mażái in 1599, 295₂) in adverbial function (teip mażái pigina żmônes '[who] values so little people' = Polish ták lekce waża ludżie). Other instances of mažaĩ are found in Vaišnoras, Margarita Theologica / Żemczuga Theologischka (maβai in 1600: Apie popieszischkaie missche 36₁₅, 36₁₇), Sirvydas, Punktay Sakimu (mażay in 1644, II 35₃₀) and the Kniga Nobažnystės (1653, 43₃₃, 60₂₁), always as an adverb of manner. The adverb mažaĩ is mentioned by Klein (1653, 136₁₀) = Latin parum, modicum 'little, moderately'. It can be argued that mãža is the only ancient form, while mažaĩ has developed secondarily, first exclusively in adverbial contexts, then more generally (even in argumental functions, e.g. 58):

```
(58) Old Lithuanian. Jonas Jaknavičius, Ewangelie Polskie y Litewskie (1647, 190<sub>16</sub>)
     Dabar
               mażay
                             ira
                                                terp
                                                                   iuſu
     now
               little.ADV
                             be.PRS.3
                                                among
                                                                   2.PL.GEN.PL
    (aba
               ſш
                             iumus)
                                                [wiefibe]
     (or
               with
                             2.PL.INSTR.PL)
                                                brightness.NOM.SG.F
     'There is now little clarity among you (or with you)'
```

There is a strong functional parallelism between *daugi 'much' and *maźa 'little', as suggested by their co-occurrence (ex. 59–60):

```
(59) Old Lithuanian. Wolfenbüttel Postilla (1573, 83v<sub>9</sub>; cf. also 88r<sub>30</sub>)
     Daug
                ſaka
                               pawadintu
                                                                 ira.
                say.PRS.3
     much
                               call.part.pst.pass.gen.pl.m
                                                                 be.prs.3
     bet
                maſcha
                               ischrinktu
                little
                               choose.PART.PST.PASS.GEN.PL.M
     but
     'There are, it is said, many called, but few chosen'
```

```
(60) Lithuanian. Motiejus Valančius, Patarles Zemajcziu (1867, 11)

Daug prota maź piningu

much spirit.GEN.SG.M little money.GEN.PL.M

'Much intelligence, little money'
```

If we take seriously the parallelism of the two quantifiers 'much' and 'little', we may be tempted to think that their development has been carried out along parallel lines. Since the only old form for the quantifier 'little' is the neuter adjective $m\tilde{a}\check{z}a$, originally used both substantivized in argumental functions (subject or object) and as an adverb of manner, it could be assumed that *daugi was also originally a neuter adjective, used with the

same degree of multivalency. This reasoning has, however, an irreducible flaw in that it assumes that functional parallelism is necessarily coupled with formal parallelism. This is not always the case: a structure is independent of the materiality of its members and can survive their lexical renewal. In the history of the French language, for example, there was formal parallelism in Old French between *molt, mult, mout* 'much' and *pou, pau* 'little', both derived from neuter forms of Latin adjectives (*multum* and *paucum*), but this formal parallelism was broken in the 14th century when *molt, mult, mout* was replaced by *beaucoup*, originally a noun phrase (< 'a fine blow, a beautiful knock'), even though the functional parallelism with *peu* 'little' remained unaffected and still works perfectly today.

3.8. Etymology of *daugi

The second way to decide on the original function of *daugi is to reconstruct with precision its etymology. The traditional analysis, which sees *daugi as the neuter of an adjective *daugis, can be accepted as valid, but leaves a number of problems unexplained.

An adjective *daugis would be isolated in Baltic: the *i*-formation generally includes only nouns (like Lithuanian akis 'eye', avis 'sheep' F, vagis 'thief' M). ¹⁴ There is one adverb that seems to be based on the neuter form of an *i*-adjective: Lithuanian $l\acute{y}g$ 'as, like', Latvian $l\bar{\iota}dz$ 'likewise' (also preposition 'until' + DAT) from * $l\bar{\iota}gi$; ¹⁵ a variant is Lithuanian $l\acute{y}giai$ 'equally, exactly', Latvian $l\bar{\iota}dzi$ 'equally' (cf. lihdfi in Ulmann 1872, 141) with the productive adverbial ending -ai (* $l\bar{\iota}gi$ -+-ai). The formation of Baltic * $l\bar{\iota}gi$ parallels that of *daugi, but this is not of great help to us because both of the two forms are obscure. The corresponding adjective is * $l\bar{\iota}gus$ preserved in Lithuanian lygus 'equal'. Its relationship with the adverb * $l\bar{\iota}gi$ is unexplained. Despite Endzelin (1923, 465), it is unhelpful to reconstruct two parallel formations * $l\bar{\iota}gi$ (adverb) / * $l\bar{\iota}gus$ (adjective) and *daugi (adverb) / *daugus (adjective); the latter is insufficiently supported by Lithuanian daugumas 'large number, great quantity', which belongs to a productive class of abstract nouns.

It has long been assumed that *i*-adjectives are uncommon in the Indo-European languages. The Slavic family, which is known for its proximity

¹⁴ See Skardžius (1943, 48–54).

¹⁵ Petit (2001, 88).

to Baltic, has only *i*-nouns. ¹⁶ Adjectives of this type are found in only a few other IE languages, where their attestation is often scarce and their history often complicated. There are a few of them in Sanskrit, e.g. hári- 'yellow' (cf. Avestan zāiri-), śúci- 'bright, shining', grbhi- 'holding, containing', képi-'trembling, shaking', but it is often difficult to be sure that the vowel *i* reflects PIE *i and not the vocalization of a larvngeal, as in máhi- 'great' (< PIE * $me\hat{g}h_2$ -, cf. Greek μ éyac mégas). Latin has developed i-adjectives, e.g. rudis 'unwrought, unformed, rough, raw', fortis 'strong, powerful', grandis 'full-grown, large, great', particularly to replace old adjectives in -u, e.g. dulcis 'sweet' (vs Greek γλυκύς glukús), suāuis 'sweet, agreeable' (vs Greek ήδύς $h\bar{e}d\dot{u}s$), etc., but the Latin type has all the trappings of a heterogeneous formation made of elements of diverse origin, some of them probably recent. A further vestige of an *i*-adjective is Old Irish maith 'good' (< PIE *māti-). All this gives the impression of a class of adjectives with limited extension and relatively recent diffusion. The question, however, has been profoundly renewed by the decipherment of Hittite, which has brought into full light a rich class of i-adjectives, ¹⁷ e.g. harki- 'white', kappi- 'small', mekki- 'great', *šalli-* 'big', *dapi-* 'all, every, each', and thus suggested that the type might be older than previously thought. Much discussed is the relationship of these *i*-adjectives to the Caland system, where the form in -*i*- is normally limited to composition; compare, e.g., Hittite harki- 'white' and Greek ἀργι-κέραυνος *argi-kéraunos* 'having bright lightning' ($< PIE *h_2r\hat{g}i-$).

A form sometimes mentioned in support of the etymology of Baltic *daugi* as an adjective is Greek τρόφις $tróp^his$ 'well-fed, stout, large'. Both by its formation and its meaning, Greek τρόφις $tróp^his$ (< PIE * d^hrob^h-i -) would be parallel to Baltic *daugi- (< PIE * d^houg^h-i -). In both cases, the i-adjective would display o-grade (*CoC-i-s); the proximity of their meaning ('well-fed, stout, large' and 'big, strong') would also be striking. Etymologically, τρόφις $tróp^his$ belongs to the root of the verb τρέφω $trép^h\bar{o}$ 'to make fat, to feed, to bring up, to care for' (< PIE * d^hreb^h -), whose original meaning was 'to make compact, to make fat' (cf. ταρφύς $tarp^hu$ s 'dense' < PIE * d^hrb^h -u-, Lithuanian trebti 'to spatter with mud, to throw', trebti 'to fall, to drop' < PIE *trebti-, *trebti-).

¹⁶ Cf. Meillet (1905, 260–266); Matasović (2014, 36–40).

¹⁷ Cf. Sturtevant (1934).

As rightly pointed out by Le Feuvre (2016), the difficulty is that τρόφις $tróp^h$ is is completely isolated in Greek as an adjective. The *CoC-i-type includes only nouns in Greek, e.g. τρόπις trópis 'ship's keel' (Homer+, from τρέπω $trép\bar{o}$ 'to turn'), στρόφις $stróp^his$ 'slippery fellow, twister' (Aristophanes, Clouds 450, from στρέφω $strép^h\bar{o}$ 'to turn upside down'), τρόχις $trók^his$ 'runner, messenger' (Homer+, from τρέχω $trék^h\bar{o}$ 'to run'), etc. Τρόφις $tróp^his$ would be the only adjective of this type. According to Le Feuvre (2016), it is not ancient, but results from the misunderstanding of an ancient formula indirectly transmitted through its only occurrence in Homer. In Homeric Greek, we find the hapax phrase τρόφι κῦμα $tróp^hi$ kũma understood as 'a huge, enormous wave' (ex. 61):

(61) Ancient Greek. Homer, Iliad Λ (11), 307

πολλὸν δὲ τρόφι μῦμα μυλίνδεται pollòn dè tróp h i kũma kulíndetai much.acc.sg.nt pcle enormous.acc.sg.nt wave.acc.sg.nt roll.prs.mid.3.sg 'The enormous wave rolls strongly'

In this formula, the form $\tau \varphi \circ \varphi \iota tr \circ p^h i$ is apparently used as a neuter adjective ('huge, enormous, big, compact') modifying the neuter noun κῦμα kũma 'wave', but this is in contradiction with the formation of the word ($^*CoC-i-$), which implies a noun, and not an adjective. Le Feuvre (2016) suggests that the formula, as it appears in this single Homeric occurrence, results from the modification of an (unattested) formula in the genitive *τρόφιος κύματος * $tróp^hios kúmatos$, in which the genitive * $\tau póquos *tróp^hios$ was originally a noun *τρόφις * $tróp^h$ is (GEN.SG *τρόφιος * $tróp^h$ ios) itself accompanied by a genitive κύματος kúmatos 'of the wave', with the meaning '(of) the compactness, (of) the crystallization of the wave' (Le Feuvre: 'cristallisation du / des flots(s)'). Secondarily, Le Feuvre argues, the genitive *τρόφιος $*tróp^hios$ was reanalyzed as an adjective qualifying the genitive μύματοςkúmatos, which gave rise to the formula 'the enormous wave'. Finally, the formula was transposed into other cases, e.g. in the nominative, as we have it (τρόφι κῦμα $tróp^hi$ kũma 'enormous wave' in Λ 307). The recursive use of the genitive in the underlying formula (*τρόφιος χύματος * $tróp^hios$ kúmatos) constituted, according to Le Feuvre, the tipping point that led to understanding * $\tau \rho \delta \varphi i \circ \varphi i \circ \varphi^h i \circ \varphi$ as an adjective and not as a noun. Later, this new adjective would have undergone some productivity even outside

the matrix formula, e.g. τρόφιες $tróp^hies$ 'adult' (NOM.PL.M, about children growing up) in Herodotus (*Histories*, 4, 9), remotivated by the most common meaning of the verb τρέφω $trép^h\bar{o}$ 'to feed, to bring up, to care for (children)'.

There is a great deal of elegance and ingenuity in Le Feuvre's explanation, even if there are a few grey areas. 18 I am not disturbed too much by the fact that an attested formula is explained by the reconstruction of an unattested formula: the traditional formulaic system of Archaic Greek is known to us only in a fragmentary way, and it may very well happen that a formulaic structure is not transmitted directly, but is accessible to us through one of its secondary derivations. Another potential difficulty is that the genitive formula *τρόφιος κύματος *tróphios kúmatos would be unfit to appear in a dactylic hexameter (00 - -00); Le Feuvre (2016, 196) suggests a slightly different formula *κύματος ἐκ τρόφιος *kúmatos ek tróphios 'from a crystallization of the wave' > from an enormous wave', which would work well from a metrical point of view but would still have the disadvantage of being unattested. Finally, the reconstruction of the meaning of the noun *τρόφις * $tr\acute{o}p^his$ as 'crystallization' would be a little unexpected in view of the fact that *-i-stems are rarely abstract nouns in Greek: there are only μῆνις mē̄nis 'anger, wrath', "i"βρις h"ubris 'wanton violence' and φρόνις p^h rónis 'prudence, wisdom'. Among the *i*-stems that have *o*-grade (**CoC-i*-type), only φρόνις $p^h r \acute{o} n is$ 'prudence, wisdom' has abstract meaning, all other nouns are concrete: λ λόνις klónis 'os sacrum', λ όνις kónis 'dust', λ όρις kóris 'bug', ὄρχις δrk^h is 'testicle', ὄφις $óp^h$ is 'snake', πόρις póris 'heifer', maybe also πόλις pólis 'citv'.19

These are just minor details. The positive point is that Le Feuvre's explanation allows us to avoid reconstructing an adjective of a completely isolated type in Greek. For the question I am dealing with in this article, namely the etymology of Baltic *daugi, it also deprives us of the only parallel that would seem to be available. *Daugi as a neuter adjective is possible, but cannot be supported by external parallels.

 $^{^{18}}$ Another explanation is proposed by van $\,$ Beek (2022, 270).

¹⁹ Cf. Chantraine (1933, 112). The abstract meaning is better attested for *i*-stems in other Indo-European languages, e.g. Hittite *dannatti*- 'desolation' (from *dannatta*-'empty'), Old Church Slavic зъль *zъlь* 'badness' (from зъль *zъlъ* 'bad'), Old Irish *gair* 'shortness' (from *gar* 'short'), Latin *rauis* 'hoarseness' (form *rauus* 'hoarse'). See Nussbaum (1999, 399).

The alternative hypothesis that Baltic *daugi* was originally a noun also runs up against a fundamental difficulty. The parallels we have in the *CoC-i-type are all of animate gender and point to an inflection *-is (NOM.SG), *-im (ACC.SG), etc. There is no neuter formation *CoC-i* from which we can derive the ending -i of *daugi, and conversely there is no way to explain the ending -i of *daugi* on the basis of an animate form. Neuter i-stems nouns can be found in other Indo-European languages, but they usually have concrete meaning and are often of dubious origin, e.g. in Hittite elzi- 'pair of scales', hah(ha)ri- 'lung, diaphragm', hāli- 'corral, pen for cows or horses', huṇuāši- 'stela', kenupi- 'pottery, earthenware', kullupi- 'sickle', luzzi- 'forced labor, corvée'. In addition, none of them seem to have any preference for o-grade. In fact, there is nothing to substantiate the view that *daugi* was originally a neuter noun.

3.9. Conclusion

It will certainly not escape my reader's attention that the two scenarios outlined above - one deriving *daugi from the neuter of an adjective, the other seeing it as a noun – lead to dead ends. If we can be satisfied, formally and functionally, with the idea that *daugi is the neuter of an adjective, its formation and etymology remain unparalleled. Similarly, if we try to analyze *daugi as an old noun, we do not come up with any solid parallels. In both cases, the form *daugi awaits a full explanation. My conclusion at this point is rather pessimistic. When it comes to etymology, it can be frustrating not to find a satisfactory explanation. The only thing we can take for granted is that, from a functional point of view, *daugi originally functions as a noun, but this leaves open the two possibilities that it was originally either an adjective used as a noun (i.e. substantivized) or directly a noun. In both cases, the function of the form would be identical. Even in the absence of an undisputed etymology, one can go further. Etymology is not just about establishing the origin of an isolated word; it is also about determining the structure of lexical systems and their evolution. In this respect, I think it is important to include the origin of the excessive markers in the analysis, because, in my view, they can help us to advance the question of the etymology of *daugi.

²⁰ Hoffner, Melchert (2008, 53). Cf. also Neu (1985), Melchert (2021).

4. The Excessive

4.1. The Excessive in Modern Lithuanian

The excessive meaning ('too much') is expressed in Modern Lithuanian either by the preposition $pe\tilde{r}$ 'through' used alone before the adjective (ex. 62) or alternatively, but more rarely, by the same preposition $pe\tilde{r}$ 'through' combined with the quantifier $da\tilde{u}g$ (ex. 63):

(62) Modern Lithuanian.

per brangus too expensive.NOM.SG.M 'too expensive'

(63) Modern Lithuanian.

per daug brangus too much expensive.NOM.SG.M 'too expensive'

There is no noticeable difference between the two options (62–63); they are used in Modern Lithuanian with the same meaning, but the former (62) is more frequent. With verbs, the excessive is expressed by $pe\tilde{r}$ $da\tilde{u}g$ 'too much' with both quantitative and qualitative meaning (ex. 64–65):

(64) Modern Lithuanian.

Per daug dirbu too much work.prs.1.sg

'I work too much'

(65) Modern Lithuanian.

Perdaugdžiaugiuositoomuchrejoice.prs.1.sg=refl

'I am too happy, I rejoice too much'

If we summarize, we have the following system:

	Excessive (too high degree)
+ Verbs	per daug dirbu (ex. 64), per daug džiaugiuosi (ex. 65)
+ Adjectives	per brangus (ex. 62), per daug brangus (ex. 63)

Here too, we are struck by the asymmetry of this picture. With verbal predicates, the excessive meaning can only be expressed by the quantifying

structure $pe\tilde{r}$ $da\tilde{u}g$ 'too much', regardless of the meaning of the verb. There is no distinction comparable to the one we observed for the elative sense, where some verbs take the intensifier $laba\tilde{a}$ 'very', while others take the quantifier $da\tilde{u}g$ 'much' (ex. 1–2): for the excessive meaning, the only possibility is $pe\tilde{r}$ $da\tilde{u}g$. With adjectives, we have two options, with $pe\tilde{r}$ alone or with $pe\tilde{r}$ $da\tilde{u}g$, and here again we find no equivalence with what we have seen for the elative sense. The question is how this system was formed and what it could still retain from an older system.

4.2. The Excessive in Old Lithuanian

In Old Lithuanian, the same forms are found before adjectives as in Modern Lithuanian. The simple form $pe\tilde{r} + ADJ$ is used consistently in Old Lithuanian texts (ex. 66–67):

(66) Old Lithuanian. Jonas Bretkūnas, Biblia (1579–1590, Ex $18_{18})$

TiedarbaitauDEM.NOM.PL.Mwork.NOM.PL.M2SG.DAT.SGpersunkuyratooheavy.nom.sg.ntbe.prs.3

'These labors are too difficult for you'

(67) Old Lithuanian. Philipp Ruhig, Littauisch=Deutsches und Deutsch=Littauisches Lexicon (1747, 374)

per diddis Drafummas too big.Nom.sg.m boldness.nom.sg.m 'excessive boldness' (German Verwegenheit)

It is only very late, since the 19^{th} century, that instances of $pe\tilde{r}$ $da\tilde{u}g + ADJ$ can be found (ex. 68-69):

(68) Lithuanian. Kristijonas Endrikis Mertikaitis, Wissokies naujes giesmes, arba Ewangeliszki psalmai (1825, 8_{14})

kitts per daug didelis Griekininks
other.NOM.SG.M too much big.NOM.SG.M sinner.NOM.SG.M
'another too great sinner'

(69) Lithuanian. Eikš prie Jėzaus (1845, 3₁₁)

Ar tawo Griekai

INTERR 2.SG.POSS.GEN.SG SIN.NOM.PL.M

per	daug	dideli ?
too	much	big.NOM.PL.M
'Are yo	our sins too big?'	

Even if I cannot exclude that earlier instances of $pe\tilde{r}$ $da\tilde{u}g + \text{ADJ}$ could be detected in Old Lithuanian literature, I have the impression that $pe\tilde{r}$ $da\tilde{u}g + \text{ADJ}$ is more recent than $pe\tilde{r} + \text{ADJ}$. It could reflect the analogy of $pe\tilde{r}$ $da\tilde{u}g + \text{VERB}$, but it is difficult at this stage to develop a more precise scenario.

For the excessive meaning with verbal predicates, $pe\tilde{r}$ $da\tilde{u}g$ is regularly used, either adverbially or in argumental functions (subject or object), cf. ex. (70–71):

(70) Old Lithuanian. Wolfenbüttel Postilla (1573, 229r₈)

```
daug
                                                     daug
Nodemais
                            ir
                                        per
greatly
               much
                            and
                                                     much
                                        too
                        biauriu
iſsiplatinaija
                                          greku
spread.P=REFL=PRS.3
                        awful.gen.pl.m
                                          sin.GEN.PL.M
'Really many and too many awful sins are spreading'
```

(71) Old Lithuanian. Jonas Bretkūnas, *Biblia* (1579—1590, Eccles 6₁₁), cf. also *Biblia* (1579—1590, Jer 5₆)

```
Nefa niekingu daiktu
for vain.GEN.PL.M thing.GEN.PL.M
per daugia ira
too much be.PRS.3
'For there are too many vain things'
```

In Old Lithuanian, there are a few examples of *per* used as a preverb ($p\acute{e}r$ -) with excessive meaning (compare ex. 72):

(72) Old Lithuanian. Philipp Ruhig, Littauisch=Deutsches und Deutsch=Littauisches Lexicon (1747, 422)

```
PérdůmiPerdaũgdůmitoo=give.PRS.1.SGtoo=much.ADVgive.PRS.1SG'I give too much.' (German zuviel geben)
```

The use of $p\acute{e}r$ - as an intensifying preverb has left a few traces in Modern Lithuanian, cf. $dovan\acute{o}ti$ 'to give' / $p\acute{e}rdovanoti$ 'to give too much', $\acute{a}iškinti$ 'to explain' / $p\acute{e}raiškinti$ 'to explain too much, to over-interpret'. The type $pe\~{r}$ $da\~{u}g$ + VERB is much more common. It is unclear whether $p\acute{e}r$ -VERB is

ancient, $pe\tilde{r}$ $da\tilde{u}g$ + VERB recent, or the opposite. The fact that the alternation between $pe\tilde{r}$ -VERB and $pe\tilde{r}$ $da\tilde{u}g$ + VERB is partly parallel to that between $pe\tilde{r}$ + ADJ and $pe\tilde{r}$ $da\tilde{u}g$ + ADJ would suggest an analogy in one direction or the other. The Old Lithuanian data show that the type $pe\tilde{r}$ + ADJ is old, while the type $pe\tilde{r}$ $da\tilde{u}g$ + ADJ is secondary and developed only late in the history of the Lithuanian language, probably by analogy with $pe\tilde{r}$ $da\tilde{u}g$ + VERB. The antiquity of the type $pe\tilde{r}$ -VERB is uncertain. It is limited to a few instances in Old Lithuanian and only sporadically survives in the modern language, but it can reflect an aspectual meaning derived from the basic local meaning ('through' > 'completely' > 'going to an extreme point, beyond measure' > 'too much'). Without prejudice to the comparison with other languages or the prehistory of the different subtypes, the distribution that can be assumed plausible for the moment is $pe\tilde{r}$ + ADJ / $pe\tilde{r}$ $da\tilde{u}g$ + VERB.

In Lithuanian, per is used as a preposition meaning 'through, across, over' + ACC (e.g. per tilta 'across the bridge'). It can also have the temporal meaning 'within, during' (e.g. per dvì dienàs 'within / during two days', per kāra 'during the war') or an instrumental meaning denoting a means of communication (e.g. per rādija 'over the radio'). With acute metatony, there is also a preverb pér- denoting crossing, passing through (e.g. pér-plaukti 'to swim across'), displacement (e.g. pér-kabinti 'to hang somewhere else'), transformation (e.g. pér-grupuoti 'to regroup'), separation (e.g. pér-skirti 'to separate'), completion (e.g. pér-skaityti 'to read completely') and, last but not least, exceeding a certain measure (e.g. pér-džiovinti 'to overdry').

4.3. The Excessive in the Other Baltic Languages

We find a similar expression for the excessive meaning ('too much') in Old Prussian per + ADJ or ADV (ex. 73):

```
(73) Old Prussian. Third Catechism, Enchiridion (1561, III 69<sub>16</sub>)

per tēmprai perdauuns

too expensive.ADV sell.PART.PST.ACT.NOM.SG.M

'sold too expensive' (German 3u thewr verkaufft)
```

This instance is isolated, but its reality makes no doubt; it proves the antiquity of the Lithuanian type. Note that the separate spelling *per tēmprai* (two words) has no probative value, since it can be copied on the German original *zu thewr* 'too expensive' (two words).

The expression of the excessive meaning in Latvian is more complicated. Applied to adjectives, the preposition par 'for, about' is used, but, strikingly enough, in the modern language the adjective introduced by par does not agree with its head noun, it is put in the accusative, as if it were governed by the preposition (+ ADJ.ACC, ex. 74–75):

(74) Latvian.

Bērns ir par jaunu child.Nom.sg.m be.prs.3 too young.acc.sg.m 'The child is too young'

(75) Latvian.

Grāmata man par dārgu
book.NOM.SG.F 1.SG.DAT.SG too expensive.ACC.SG.M
'The book is too expensive for me'

Another option quite common in Modern Latvian is to use the adverb $p\bar{a}r\bar{a}k$ 'overly, too, too much' (neuter of the comparative adjective $p\bar{a}r\bar{a}ks$ 'superior') + the adjective agreeing with the head noun (e.g. 76–77):

(76) Latvian.

Bērns ir pārāk jauns child.nom.sg.m be.prs.3 too young.nom.sg.m 'The child is too young'

(77) Latvian.

Grāmata man pārāk dārga book.NOM.SG.F 1.SG.DAT.SG too expensive.NOM.SG.F 'The book is too expensive to me'

A prepositional phrase *pār lieku* is also attested in Old Latvian (ex. 78–79):

(78) Old Latvian. Georg Manzel, *Phraseologia Lettica* (1638 [Günther 1929, 289])

Parleekufahlitasoversuperfluous.ACC.SG.Msalty.NOM.PL.F'They are too salty' (German fie feynd zu feer gefalzen)

(79) Old Latvian. Gotthard Friedrich Stender, Pafakkas un Stahfti (1789b, 282)

Tapahrleekufmagga1.sg.nom.sg.foversuperfluous.acc.sg.mheavy.nom.sg.f'She was too heavy'

The prepositional phrase pahr leeku (= Modern Latvian $p\bar{a}r$ lieku) is based on the adjective lieks 'odd, superfluous, excessive' introduced by the preposition $p\bar{a}r$ 'over' (+ ACC). Its meaning is 'over the superfluous, beyond the superfluous' > 'too, too much'. While Manzel has par (ex. 78), which could reflect either par (with short vowel) or $p\bar{a}r$ (with long vowel), Stender has pahr leeku (ex. 79), which undoubtedly points to $p\bar{a}r$. From the prepositional phrase a hypostatic adjective $p\bar{a}r$ lieks 'excessive, extraordinary' is derived (cf. ME 3, 164).

An isolated formulation is found in (80):

(80) Old Latvian. Manuale Lettico-Germanicum (ca. 1690, 195 [Fennell 2001])

Winsch man pahr kakku darrijis.

3.sg.nom.sg.m 1.sg.dat.sg over neck.acc.sg.m do.part.pst.act.nom.sg.m

'He has done too much to me' (German Er hat mir 3u viel getan)

In Old Latvian, there is also the adverb višķin 'too much'. It is used by Elvers (1748, 24) to render German all zu 'too much', with two examples: wischkin leels, allzu grosz 'too big' and wischkin leela Steigschana, allzu grosse Eilfertigkeit 'too much diligence'. The same dictionary also renders German zuviel 'too much' by Latvian wifkin daudf alongside par leeku (1748, 303). The form is also mentioned by ME (4, 623) with excessive meaning (= German zu sehr, zu stark, in zu grossem Masse). In Old Latvian, the same adverb has elative rather than excessive meaning: wifkim gäntzlich, allerdings, ganz und gar, durchaus 'completely' (Manuale Lettico-Germanicum, ca. 1690, 706), but the same source (ca. 1690, 3) gives one example where the meaning seems to be excessive ('too, too much'): wifkim, wiffai, lohti, parleek aggri 'too early' (= German gar zu frühe). An evolution from elative to excessive is likely. The origin of višķin, višķim is obscure: it seems to contain a first element vis- 'all' and a second element -kin or -kim probably cognate with the indefinite stem kas 'someone' (cf. Lithuanian viskas 'everything' from *visa=kas), but the ending -in or -im is not clear and only superficially recalls that of the adverbs caurim 'throughout', pārim 'all over', tāpatim 'likewise' and trejim 'three times' (all of them rare or obsolete).²¹

Though ancient, the structure par + ACC is rather rare in Old Latvian. There are also instances of a slightly different structure par + ADJ 'too, too

²¹ Cf. Forssman (2003, 341). Note pahr pahrim 'over and over' (= German $\ddot{u}ber$ und $\ddot{u}ber$) in Stender's dictionary (1758, 280, cf. 1789a, 185).

much'. Ulmann's dictionary (1872) repeats one of the examples given a few decades earlier by Stender's grammar (ex. 81):

```
(81) 19<sup>th</sup> century Latvian. Ulmann (1872, 189)

Winfch irr par leels
3.sg.nom.sg.m be.prs.3 too big.nom.sg.m

'He is too big' (German Er ift 3u grof3)
```

The system is manifestly unbalanced and unstable. The first difficulty is to distinguish the prepositions par (with short vowel) and pār (with long vowel). In Modern Latvian, par means 'for, on, about' (+ ACC, e.g. domāt par to 'to think about it', aizlūgt par mieru 'to pray for peace'), while pār means 'over, across' (+ ACC, e.g. tilts pār upi 'bridge over the river', iet pār tiltu 'to cross a bridge, to go a bridge across'). As soon as we move away from the modern language, the distinction between the two forms becomes blurred. Stender (1758, 283; cf. also 1789a, 185, 187) ascribes to par the meanings 'for, because, to, about' (= German für, wegen, zu, über) and to par (pahr) the meaning 'over' (= German über). More recently, Ulmann (1872, 182) writes that the preposition pār (written pahr) 'is not distinguished from par' (von par nicht *unterschieden*) and ascribes the same meaning 'about/over' (= German *über*) to both (cf. 1872, 182, 189). The polysemy of the German preposition über has obviously played a role in the proximity of the two Latvian prepositions. But there is more than that. Ulmann (1872) gives examples that suggest that the two can have excessive meaning: on the one hand, par leels 'too big' (= German $3u \ gro(3)$ and, on the other, pahrgudrs 'very clever' (= German überklug), pahrdrohfchs 'too bold' (= German allzudreift). There is a graphic difference between them: par is presented as an autonomous morpheme, paras a prefix. Ulmann also mentions (1872, 182) that pār (pahr) can be used as a preverb with the same meaning: pahrmirkt 'to soak too long' (= German zu lange weichen), pahrdsiht 'to make too many efforts' (= German zu sehr anstrengen), pahrbithtees 'to be very frightened' (= German sehr erschrecken). One gets the impression that the semantic distinction between par and $p\bar{a}r$, as it is established in the modern language, is recent. It may have replaced an older distinction separating the autonomous form par (e.g. par leels in Ulmann) and the prefix pār- (e.g. pahrgudrs in Ulmann). The problem is that, even if their distinction is not clear (and perhaps not ancient), one cannot simply make the two interchangeable. In particular, it would be

somewhat flippant to explain the excessive meaning of par (with short vowel) by attributing to it the meaning ('over, across') of the other form $p\bar{a}r$ (with long vowel). This might be a tempting solution on paper, but it cannot be fully endorsed unless a precise scenario is developed that allows us to understand how the distinction between the two forms was created and why their functional sphere appears in the modern language as it does.

In Modern Latvian, the preposition par with excessive meaning governs the accusative, whereas the other option, $p\bar{a}r\bar{a}k$, based on the neuter of an adjective $p\bar{a}r\bar{a}k$ s 'superior' (apparently a comparative derived from $p\bar{a}r$ 'over, across', like Latin superior from super), governs an adjective that agrees with the head noun: $par\ lielu$ (ACC.SG), but $p\bar{a}r\bar{a}k\ liels$ (NOM.SG), both meaning 'too great, too big'. The contrast between the two options is striking. In the 19^{th} century, instances like $par\ liels$ (NOM.SG) are also found. Ulmann (1872, 189) alludes to the co-existence of both possibilities: he mentions $par\ liels$ 'too big' (NOM.SG) and adds that the construction with the accusative (= Modern Latvian $par\ lielu\ ACC.SG$) is also used, but more rarely. It is likely that the type $p\bar{a}r\bar{a}k\ liels$ (NOM.SG) is recent in view of its attestation date and derives from an innovation 'overly great, overly big' > 'too great, too big'.

The variation between *par lielu* (ACC.SG) and *par liels* (ADJ) shows a certain instability in the system. For the time being, there is no way to determine which one of the two variants is likely to be ancient. It depends on how we analyze the use of **per* in the excessive meaning in Baltic. Two scenarios are possible, one operating with Indo-European material, the other one with a contact-induced creation.

4.4. Elative *per(i)- in the Other Indo-European Languages

The use of *per- with elative or excessive meaning is found in other Indo-European languages. In Slavic, the element *prě-, *pere-, *pre- (from *per-) is abundantly attested with elative and/or excessive meaning:

Old Church Slavic πρѣδπατъ prěblagъ 'very good' (= Greek πανάγαθος panágathos); πρѣβεπμκъ prěvelikъ 'very great' (= Greek ὑπερβάλλων huperbállōn, μέγιστος mégistos, ἀνυπέρθετος anupérthetos); πρѣдобръ prědobrъ 'very good' (= Greek μαλλίνικος kallínikos); πρѣмъногъ prěmъnogъ 'very numerous' (= Greek μυρίος muríos); πρѣποдобънъ prěpodobъпъ 'very pious' (= Greek ὅσιος hósios, ὁσιώτατος hosiótatos); πρѣςβατъ

prěsvętь 'very holy' (= Greek πανάγιος panágios, ὑπεράγιος huperágios); прѣскврьньнь prěskvrьпьпь 'very dirty' (= Greek παμμίαρος pammíaros); прѣтьмьнь prětьшьпь 'very dark' (= Greek πανέσπερος panésperos); прѣхвальнь prěxvalьпь 'very famous' (= Greek πανεύφημος panésperos); прѣхвальнь prěxvalьпь 'very famous' (= Greek πανεύφημος panésperos); πρѣщедръ prěščedrь 'very compassionate' (= Greek πανοιντίρμων panoiktírmōn); прѣчисть prěčistь 'very pure' (= Greek ναθαρός katharós, ἄχραντος ákhrantos, άγνός hagnós, σεπτός septós); прѣчьстьнь prěčьstьпь 'very honored' (= Greek πάντιμος pántimos); cf. the adverb прѣзорьно prězorьпо 'very arrogantly' (= Greek ὑπερηφάνως huperéphanōs)

- Bulgarian преблаг preblag 'very good'; прекрасен prekrasen 'very beautiful, wonderful'; премил premil 'very dear'; премъдър premъdъr 'very wise, very clever'; пресилен presilen 'too strong, forced'; престарел prestarel 'too old'
- BCMS (Bosnian-Croatian-Montenegrin-Serbian) пребијел *prềbijel* 'very white, too white'; преблаг *prềblāg* 'very good, too good'; прејасан *prềjasan* 'too clear' (historically also прејасност *prējasnōst* 'His Serene Highness' < 'very clear'); прекрасан *prềkrāsan* 'very beautiful'; прелијеп *prèlijep* 'very beautiful'; премален *prèmalen* 'too small'; премио *prèmio* 'very dear'; препуи *prèpun* 'too full'; прескуп *prèskūp* 'too expensive'; пресвет *prèsvēt* 'very holy'; преучен *prèučen* 'too learned'; cf. the adverb прекасно *prèkasno* 'too late', прерано *prèrano* 'too early'
- Slovenian prebogàt 'very rich', prečíst 'very pure, too pure'; predêbel 'too fat'; predóber 'very good, too good'; prekrásen 'very beautiful'; prekrátek 'too short'; prelahák 'too light'; prelép 'very beautiful, too beautiful'; preljúb 'very dear'; prenágel 'too fast'; presílen 'too strong'; previsòk 'too high'; cf. the adverb premnógo 'too much'
- Russian (< Slavonism) превеликий prevelikii 'very great'; предобрый predobryi 'very good'; предрагой predragói 'very dear'; прекрасный prekrasnyi 'very beautiful'
- Polish przedziwny 'very strange'; przemiły 'very kind'; prześliczny 'very cute'

• Czech *předobrý* 'very good'; *překrásný* 'very lovely, exquisite'; *přepečlivý* 'very careful, too careful', cf. the adverb *přemnoho* 'very much, a great deal of'

Both the elative and the excessive meaning are attested side by side, sometimes applied to the same adjective. It is likely that the elative meaning is more ancient, as it predominates in Old Church Slavic, but the excessive meaning must have always existed at least as a context-related potentiality. The same prefix can occasionally display the same meanings with verbs, 22 e.g. Slovenian solíti 'to salt' / presolíti 'to add too much salt', plačáti 'to pay' / preplačáti 'to overpay, pay too much'; BCMS (Bosnian-Croatian-Montenegrin-Serbian) spàvati 'to sleep' / prespàvati 'to oversleep, sleep too much', which recalls the Lithuanian type dovanóti 'to give' / pérdovanoti 'to give too much', áiškinti 'to explain' / péraiškinti 'to explain too much, to over-interpret'.

The form *per also occurs in Latin as an elative prefix applied to adjectives:

• Latin perabsurdus 'very absurd' (Cicero); peracūtus 'very clear, penetrating' (Cicero); perangustus 'very narrow' (Cicero); perbreuis 'very short, brief, concise' (Cicero); perbonus 'very good' (Plautus, Cicero); percārus 'very expensive' (Terence), 'very dear, much beloved' (Cicero); perdoctus 'very learned, highly skilful' (Plautus, Cicero); perexiguus 'very small, petty, insignificant' (Cicero, Caesar); perfacilis 'very easy' (Cicero); pergrandis 'very large, vast, immense'; permagnus 'very great' (Cicero); permultus 'very numerous, very much' (Cicero); perpulcher 'very beautiful' (Terence); persimilis 'very like, precisely similar' (Cicero); peruetus 'very ancient' (Cicero)

In all these forms, the prefix per- is simply added to the adjective without modifying it (e.g. absurdus 'absurd' $\rightarrow perabsurdus$ 'very absurd'). The productivity of the elative prefix per- has remained high throughout the history of Latin. Some forms are obviously late creations, e.g. perhonestus 'very honest' (Arnobius $Adversus\ nationes\ 2$, 49, 2, 4th century), permagnificus 'very magnificent' (Vulgata, $Esther\ 2$, 18, 4th century), etc. As far as I can

 $^{^{22}}$ Slovenian examples are from Herrity (2000, 211), the BCMS (Bosnian-Croatian-Montenegrin-Serbian) example is from Alexander (2006, 335).

judge, the oldest form with the prefix per- attested in Latin is probably persibus 'very cute' (from sibus 'id' only in Festus 336, 3) used by Naevius (3rd century BCE) according to Varro (De Lingua Latina, 7, 107) and Festus (268, 26). The antiquity of the prefix per- is confirmed by Umbrian **perakre** 'in perfect condition' (e.g. Tabula Iguvina Ib 40, cf. Latin peracer 'very sharp', Cicero, Ad Familiares 9, 16, 4). There are a few instances of per- with the same meaning applied to verbs, e.g. Latin perdoceō 'to teach thoroughly' (Plautus+), percoquō 'to cook thoroughly' (Plautus+), pergraecor 'to live exactly like Greeks' (Plautus, Mostellaria 22, Truculentus 87), with an aspectual value that is not too far from the elative meaning ('completely' / 'very much'). A striking feature of the elative prefix per- is that it can occasionally be separated from the adjective by tmesis, as in per...breuis for perbreuis 'too short' (ex. 81):

```
(81) Latin. Cicero, For Aulus Cluentius 1, 2
    Altera
                       pars
     other.NOM.SG.F
                       part.NOM.SG.F
                                           and
                                                          DEM.NOM.SG.F
    quae
                       propria
                                            est
                       proper.NOM.SG.F
                                           be.PRS.3.SG
    REL.NOM.SG.F
    iudici
                       uestri
    inquiry.gen.sg.nt 2.pl.poss.gen.sg.nt
    et
                       legitimae
                                               uenefici
                       legitimate.GEN.SG.F
                                               poisoning.GEN.SG.NT
    and
                                      mihi
                                                          breuis
    quaestionis
                            per
                                                          -short.NOM.SG.F
     question.GEN.SG.F
                            per-
                                      1.sg.dat.sg
                                                            dicendo
     et
                 non
                                magnae
                                                   in
     et
                 NEG
                                big.gen.sg.f
                                                   in
                                                            saying.ABL.SG.NT
    contentionis
                                                  uidetur.
                                fore
    discussion.GEN.SG.F
                                be.INF
                                                  seem.PRS.MID.3.SG
```

'A part, and one which is proper to your inquiry and to the very question of the poisoning, appears to me very short and not giving occasion to great dispute in speech'

The two elements of *perbreuis* 'very short' are separated (*per...breuis*) by the insertion of the personal pronoun *mihi* 'to me'. Other instances of such tmesis are found in Latin, predominantly with *mihi* constituting the tmetic field, cf. *per mihi benigne* 'with much goodness to me' (= *perbenigne* 'very kindly', Cicero, *Ad Quintum* 2, 9, 2), *per mihi gratum* 'very grateful to me' (= *pergratum* 'very grateful', Cicero, *Ad Atticum* 1, 20, 7), *per mihi mirum* 'very surprising to me' (= *permirum* 'very surprising', Cicero, *De*

Oratore 1, 214), more rarely with other words, e.g. per autem inconsequens (= perinconsequens 'very inconsequent', Aulus Gellius, Noctes Atticae 14, 1, 10) or per hercle rem mirandam (= permirandam 'too surprising', Aulus Gellius, Noctes Atticae 3, 6, 1). It is striking that this type of tmesis survives in Latin prose (especially Cicero), where it cannot be due to poetic license. It suggests that the univerbation of per- and the adjective it is paired with was not complete and the element per- was still independent to some extent. There is no such instance of tmesis with the preverb per-.

A cognate prefix *peri- is used with elative meaning in Ancient Greek. As a rule, in its most ancient attestations, it is not added to the adjective directly but forms a possessive compound (bahuvrīhi) with a noun as its second element, as in περικαλλής perikallḗs 'very beautiful' (Homer+) from the abstract noun κάλλος kállos 'beauty' and not from the adjective καλός kalós 'beautiful'. Its original meaning is thus likely to have been 'having beauty (κάλλος kállos) all around (περι- peri-)', hence 'being surrounded by beauty' > 'very beautiful'. The possessive structure predominates in Homer and is still widely found later:

• Ancient Greek περιμήμης perimékēs 'very tall' (Homer+, from μῆμος mēkos 'size'); περιπληθής periplēthés 'very full of people' (Homer, Odyssey o 405, from πλῆθος plēthos 'people'), περιδεής perideés 'very timid, very fearful' (Herodotus+, from δέος déos 'fear'); περίθυμος períthumos 'very angry' (Herodotus+, from θυμός thumós 'anger'); περίλυπος perílupos 'very sad, deeply grieved' (Isocrates+, from λύπη lúpē 'grief'); secondarily: περιγηθής perigēthés 'very joyful' (Apollonius of Rhodes, Argonautica 3, 814 and 4, 888, from the rare noun γῆθος gēthos 'joy' or directly from the verb γηθέω gēthéō 'to rejoice')

Later, the prefix was added directly to simple adjectives without modifying them, exactly like Latin *per*-:

Ancient Greek περιβαρύς peribarús 'exceeding grevious' (Aeschyles, Eumenides 161, from βαρύς barús 'heavy'); περιπόνηρος peripónēros 'very rascally' (Aristophanes, Acharnians 850, from πόνηρος pónēros 'bad'); περίθερμος períthermos 'very hot' (Theophrastus+, from θερμός thermós 'hot'); περιαληθής perialēthes 'very true' (Philodemus, On Poems 2, 11, 1st century BCE, from ἀληθής alēthes 'true'); περιγλυκύς periglukús 'very

sweet' (Aelianus, *De Natura Animalium* 15, 7, 3rd century, from γλυκύς *glukús* 'sweet'); περίδηλος *perídēlos* 'very clear' (Hesychius, from δῆλος *dēlos* 'clear').

This new formative rule has left a few traces in Homeric Greek already, most clearly in περικλυτός periklutós 'very famous, renowned' (Homer+) from κλυτός klutós 'famous, renowned'. The adverb περιζαμενῶς perizamenỗs 'very powerfully, very violently', attested in the Homeric Hymn to Hermes (495), could also belong to this type, if it is based on an adverb *ζαμενῶς *zamenỗs 'powerfully, violently', but this adverb is not attested (and its oxytone stress would be irregular). The form περίκηλος períkēlos 'very dry, well-seasoned' (Homer Odyssey ε 240, σ 309) is not clear, and the existence of a simple adjective κηλός kēlós 'burning' (from the verb καίω kaίō 'to burn') remains dubious.²³

The new rule ADJ $\rightarrow \pi\epsilon \varrho$ ι- peri-ADJ (instead of ADJ $\rightarrow \pi\epsilon \varrho$ ι- peri-NOUN) is only at an inceptive stage of development in Homer and became productive only later. It can be based on the equivalence between compounds like, e.g., -κλεής -kleέs and -κλυτός -klutós 'glorious', producing $\pi\epsilon \varrho$ ικλυτός periklutós 'very famous' beside $\pi\epsilon \varrho$ ικλεής perikleέs 'id.' (< 'having glory all around'), which eventually could result in the analysis of $\pi\epsilon \varrho$ ικλυτός periklutós as $\pi\epsilon \varrho$ ιperi- + κλυτός klutós 'famous'.

There are in Late Greek a handful of examples of verbs with a preverb πεφιperi- whose meaning is very close to the elative meaning, e.g. πεφικαθαφίζω
perikatharízō 'to purge entirely' (Septuaginta); πεφιαγαπάζομαι periagapázomai
'to love very much' (Hesychius). Their productivity has always been very low.

A Sanskrit example repeatedly mentioned in the literature is *parí-prī*'very dear', but it is isolated (one instance in the *Rigveda*: NOM.PL *parí-priyaḥ*in RV IX, 72, 1). A more common elative prefix in Sanskrit is *ati*- (from 'over, above'): *ati-yājá*- 'excessive sacrifice' is already used once in the *Rigveda* (GEN.SG *atiyājásya* in RV VI 52, 1), but obviously to form a noun. Examples of adjectives with *ati*- are found more recently, e.g. *áti-kṛta*- 'overdone, exaggerated', *áti-guru*- 'very heavy', *áti-dīrgha*- 'very long, too long'. In the *Rigveda*, the meliorative prefix *su*- (from PIE **h*₁*su*-) can also convey elative

²³ It seems to be parallel to εὕκηλος $e\acute{u}k\bar{e}los$, a rare adjective that occurs only once (hapax) in Ion's *Omphale* (*Trag.* 28 S.–K. = 30 L., 5th century) whose meaning is disputed (maybe 'burning easily'). Cf. Alonso Déniz (2020, 17).

meaning, cf. sú-juṣṭa- 'very welcome, very enjoyable', su-pīvás- 'very fat', sú-mahant- 'very great'.²⁴

To sum up, the evidence for the elative use of PIE *per(i)- includes various language families (Slavic, Latin, Greek, maybe Indo-Iranian), which testifies to its antiquity. The data of the individual Indo-European languages show one of the two meanings – the elative or the excessive – as predominant (or even exclusive), but it may also happen that both co-exist in the same language. There is also a formal difference between the two forms of the prefix, *per-(clearly in Slavic) and *peri- (clearly in Greek), both being possible in Latin. The prosodic status of *per(i)- is a further issue that has to be addressed: it is either a prefix, bound to the adjectival or nominal form it is paired with, or an autonomous morpheme, more or less comparable to an adverb. Graphic rules are, of course, of little help when assessing this matter. An easy answer to this question could be that *per(i)- was originally autonomous and merged secondarily with the adjective or noun it qualifies: this is suggested, e.g., by Latin, where instances of tmesis point to the original autonomy of what more generally appears as a bound prefix. But the opposite assumption cannot be excluded, if one recalls the parallel of Latin trans-'through' used occasionally as a bound prefix with elative meaning in Latin (e.g. translūcidus 'shining through or across' > 'very transparent' next to $l\bar{u}cidus$), then autonomized in French très (e.g. très clair 'very clair').

The question at this stage is whether the Baltic data should be compared with those of other Indo-European languages where a prefix *per(i)- is used with elative meaning. There would be no obstacle to this idea, if we remember that elative markers can easily evolve towards excessive meaning, and vice versa, as suggested, inter alia, by the complex history of trop in French (originally elative, then excessive, and now elative in Colloquial French). Taken at face value, the comparison between Lithuanian per didelis 'too big' and Latin permagnus 'very big' could make sense. However, the Latvian structure par lielu 'too big', where the preposition governs the accusative, attracts attention and seems impossible to explain as originally based on a prefix followed by an adjective, as is the case in most other Indo-European languages. The possessive structure attested in Greek $\pi\epsilon\varrho\iota\kappa\alpha\lambda\lambda\eta\varsigma$ perikallés 'very beautiful' (< 'having beauty all around') does not provide an explanatory model applicable to the Latvian structure. Things being what they are, one

²⁴ Kulikov (2021, 409).

could simply reject the Latvian structure $par\ lielu$ as secondary and choose the adjectival type $par\ liels$ 'too big' as original; this would be practical in a sense because the Latvian type $par\ liels$ would be entirely parallel to what is found in Lithuanian ($pe\tilde{r}\ didelis$) and would open the way for comparison with the use of *per(i)- in other Indo-European languages (Latin permagnus).

I think that is not the way to go. The Latvian structure par lielu cannot be dismissed out of hand. It points us towards an internal explanation, independent of the Indo-European comparison. It is striking that the Latvian preposition par means 'for' and corresponds in many of its uses to the German preposition zu and the Polish preposition za. In both languages, the corresponding preposition (German zu, Polish za) is used in the excessive meaning: zu groβ 'too big' and za duży 'too big'. It is therefore simpler to admit a contact-induced explanation in Latvian: the type par lielu / par liels is based on the imitation of German zu groß and/or Polish za duży. The Polish type itself is likely to have been influenced by German. The origin of this linguistic expression in German does not concern me directly here. What is important is that it provides us an explanation of the Latvian structure par *lielu / par liels* and thus makes the comparison with the type *per(i)- in other Indo-European languages superfluous. This also suggests an explanation for the double structure attested in Latvian. In the German construction *zu groβ*, the adjective is invariable and cannot be recognized as an inflected form. This is what may have caused the hesitation, in Latvian, between an inflected form of adjective par liels and the accusative governed by the preposition in par lielu. On the basis of Latvian, the same explanation could then be accepted for the Lithuanian type per didelis, in which case the comparison with other Indo-European languages would lose all character of necessity. The difference, however, is that the preposition per does not mean 'for', but 'through' in Lithuanian; only in limited conditions does it display a meaning 'for, as' which could fit with the contact-induced evolution supposed for Latvian.

My suggestion is that it could well be the case that Lithuanian and Latvian have undergone different paths of development, with Lithuanian retaining the ancient structure (the Latin *permagnus* type) and Latvian being more influenced by German. The formal proximity between the inherited structure and the foreign model could have been instrumental in imposing it in Latvian; this factor was more superficial in Lithuanian. To assess this idea, it is necessary to reconstruct how the elative and excessive functions were expressed in the Baltic languages before this foreign model played a role.

4. The Elative and The Excessive: A Connection

Readers will certainly have been struck by the fact that the above considerations have led to a complete dead end: neither the origin of *daugi, nor that of *per(i)- can be determined with certainty. It is somewhat frustrating to devote to a linguistic problem, however promising its scope might appear at first glance, a few dozen pages whose only result turns out to be an entirely negative conclusion. I think that only a comparison between the elative and the excessive may bring some progress into both issues *at once* and allow us to reconstruct a plausible scenario.

The distinction between elative and excessive does not separate two completely different meanings. It is generally only by contextual implication that an adjective will be understood as 'very big' or as 'too big': their distinction reflects a difference in expectation and not a difference in nature. If we assume that *per(i)- was really inherited in Baltic, before its merging with a foreign model, it has to be assumed that its original meaning was elative, the excessive meaning being only a context-related potentiality. What is striking is that this potentiality has been promoted in Baltic to become an inherent feature: the excessive meaning ('too much') is actualized systematically as part of the fundamental semantics of the prefix in Baltic. At a later stage in the prehistory of Baltic, the elative function was taken over by new forms such as Lithuanian $laba\tilde{i}$, Old Latvian waren, Latvian loti(luoti) 'very' – all of recent creation. The couple *daugi / *per(i)- was replaced by daugi / $laba\tilde{i}$ in Lithuanian, daudz / loti(luoti) in Latvian, etc.

How the expression of the elative and excessive meanings can be reconstructed for PIE remains fundamentally uncertain. It can be assumed that repetition of the adjective (*'big big' = 'very big'), was one of the main strategies to denote elative meaning in PIE times, as still suggested by Classical Sanskrit $p\bar{u}rva-p\bar{u}rva-$ 'the very first' (from $p\bar{u}rva-$ 'first'), Latin feriferus 'furious' (from ferus 'wild'), Classical Armenian uhòuuhò mecamec 'very big' (from uhò mec 'big'), Breton tomtom 'very hot' (from tom 'hot'), etc. Whatever its source, the development of *per(i)- in the elative meaning is likely to be post-PIE; it is nevertheless ancient. The creation of the specifically quantitative form *daugi* in Baltic is much more recent and took place only in Common Baltic (or maybe in Balto-Slavic, if Polish dużo is directly connected with the Baltic form), in competition with other innovations such as *tūlan 'much, many' (from a PIE root *teuH-, zero grade *tuH- 'to swell').

Little progress can be made on the etymology of *daugi itself, which is likely to be based on a substantivized adjective, even if its formation remains obscure. But I think that its original function can be reconstructed with more precision. One of the defining properties of Lithuanian daug is that it can be used for both adverbial and argumental functions: it is multivalent. I suggest that *daugi first appeared to fulfill argumental functions (subject and object), which the inherited form *per(i)- was unable to do. It is a wellknown fact that the lexical renewal of the elative meaning often goes through the creation of expressive noun phrases, such as 'a lot, a great deal', or the like, first used in argumental functions (like, say, English *I lost a lot of money*, I spend a great deal of time on leisure) and only secondarily adverbialized (like English I work a lot, it will help you a great deal). Once again, the history of French beaucoup is a good parallel, originating from a noun phrase ('a fine blow, a beautiful knock') first used in argumental functions (e.g. with a transitive verb j'ai lu beaucoup de livres 'I have read many books') and secondarily adverbialized (e.g. with an intransitive verb je dors beaucoup 'I sleep very much').²⁵ Quantifiers of nominal origin often come from noun phrases used in subject or object functions, and precisely this function could not be fulfilled by *per(i)-, limited to adverbial constructions (+ ADJ, e.g. veryexpensive, + VERB, e.g. to overtake, to overinterpret). It is thus likely that the original distribution between *per(i)- and *daugi was the following:

*per(i)- adverbial / *daugi argumental

Secondarily, *daugi spread to adverbial functions, probably first with its specifically quantitative value, in particular with verbs (e.g. to say much \rightarrow to say a lot).

5. Conclusion

The aim of this article has been to establish as precisely as possible the origin of the Lithuanian quantifier $da\tilde{u}g$ 'much, many'. All the analyses put forward so far in the literature, which derive $da\tilde{u}g$ from a PIE root $*d^heug^h$ -'to produce', usually based on the reconstruction of an adjective $*d^houg^h$ -i-, remain possible, even if they still have shadow areas: it is likely that $da\tilde{u}g$ was

²⁵ See Carlier (2011), who confirms the fact that French *beaucoup*, being originally a noun phrase ('beautiful knock'), was first used in argumental functions.

originally a substantivized adjective, but the details are still unclear. The only way to go beyond this imprecise assumption is to reconstruct the original function of $da\tilde{u}g$. What I have tried to show in this article is that progress on this question can only be achieved by taking precise account of the system in which the quantifier $da\tilde{u}g$ takes place, including not only the expression of the elative meaning, but also that of the excessive meaning. I propose that *daugi* was first introduced in argumental functions, in competition with *per(i)-, limited to adverbial elativity, before the semantic shift that led to the specialization of *per(i)- to the excessive meaning ('much' > 'too much'). There is a strong element of speculation in this analysis. Any linguistic reconstruction is like a house of cards, each element of which is supported by another in such a way that, if one element is removed from the structure, the whole building is destroyed.

ELIATYVAS IR EKSCESYVAS LIETUVIŲ KALBOJE: daūg IR per daūg

Santrauka

Baltiškasis kvantifikatorius *daugi tradiciškai kildinamas iš ide. šaknies *dheugh- 'daryti, gaminti', nors jo, kaip substantyvizuoto būdvardžio ar daiktavardžio, susidarymas išlieka problemiškas. Straipsnyje bandau nustatyti pirminę kvantifikatoriaus funkciją. Šiam tikslui pasiekti būtina palyginti eliatyvinę ('labai daug') ir perteklinę ('per daug') reikšmes. Perteklinė reikšmė lietuvių kalboje reiškiama prieveiksmiu per (pvz., per didelis). Galima daryti prielaidą, kad forma *daugi pirmiausia buvo įvesta sakinio argumentų funkcijose, kurių negalėjo atlikti prieveiksmis *per(i)-, iki kol pastarasis perėjo prie perteklinės reikšmės.

GENERAL ABBREVIATIONS

ABL – ablative Loc – locative

ACC – accusative M – masculine

ADJ – adjective MID – middle

ADV – adverb NEG – negation

BCMS – Bosnian-Croatian- NOM – nominative

Montenegrin-Serbian NT – neuter

COMP – comparative P - p-word, particle COND – conditional PART - participle PASS - passive

DEM – demonstrative PIE – Proto-Indo-European

F-feminine PL-plural

FUT – future POSS – possessive

GEN – genitive PRS – present

IMPER – imperative PST – past

IMPF – imperfect REFL – reflexive

INSTR – instrumental REL – relative

INTERR – interrogative SG – singular

BIBLIOGRAPHICAL ABBREVIATIONS

ALEW – Hock et al. 2015

EDBIL - Derksen 2015

EDHIL - Kloekhorst 2008

EDSIL – Derksen 2008

IEW - Pokorny 1959

LEW - Fraenkel 1962-1965

 $LIV-R\,i\,x^{-2}2001$

 $LK\check{Z}-Lietuvių\ kalbos\ \check{z}odynas$

ME - Mühlenbach, Endzelin 1923-1932

 $RR - B\bar{u}ga$ 1958–1961

RV – Rigveda

SEJL – Smoczyński 2007

PRIMARY SOURCES

Bretkūnas, Jonas 1579–1590, *Biblia, tatai esti wisas Schwentas Raschtas, lietuvischkai pergulditas per Jana Bretkuna*, Königsberg: Osterberger (= Range et al. 1991–2013).

Bretkūnas, Jonas 1591, Postilla, Königsberg: Osterberger (= Aleknavičienė 2005).

Brodowski, Jacob 1713–1744, *Lexikon Germanico-Lithuanicum et Lithuanico-Germanicum* (= Drotvinas 2009).

Chyliński, Samuel Boguslaus 1664, Novum Testamentum [New Testament in Lithuanian], London (= Kudzinowski, Otrębski 1958).

Daukša, Mikalojus 1595, Kathechismas, Vilnius (= Jakštienė, Palionis 1995).

Daukša, Mikalojus 1599, *Postilla Catholicka*, Vilnius: Academia Societatis Jesu (= Palionis 2000).

Drawneeks, J[ēkabs] 1910, Wahzu=latweeſchu wahrdniza / Deutſch=lettiſches Wörter-buch, Rīga: Sichman.

Eikš prie Jėzaus, 1845.

Elvers, Caspar 1748, Liber Memorialis Letticus, oder Lettisches Wörter=Buch, Rīga: Fröhlich.

Giedraitis, Juozapas Arnulfas 1816, *Naujas Istatimas Jezaus Christaus*, Vilnius: pas kunigus missionorius Wilniuje.

Haack, Friedrich Wilhelm 1730, Vocabularium Litthuanico-Germanicum et Germanico-Litthuanicum... nebst einem Anhang einer kurzgefaβten Litthauischen Grammatic, Halle: S. Orban (= Zubaitienė 2012).

Jaknavičius, Jonas 1647, *Ewangelie Polskie y Litewskie*, Vilnius: Academia Societatis Jesu (= Lučinskienė 2005).

Klein, Daniel 1653, *Grammatica Litvanica*, Könisberg: Reusner (= Balčikonis, Kruopas, Larinas 1957).

Klein, Daniel 1654, Compendium Litvanico-Germanicum, Könisberg: Reusner (= Balčikonis, Kruopas, Larinas 1957).

Klein, Daniel 1666, *Naujos Giesmju Knygos*, Königsberg: Reusner (= Michelini 2003).

Kniga Nobažnistės Krikśćioniszkos, Kėdainiai: J. J. Rhetas, 1653 (= Pociūtė 2004).

Lexicon Lithuanicum [17th c.] (= Drotvinas 1987).

Manzel, Georg 1638, *Phraseologia Lettica*, Rīga: Schröder (= Günther 1929 2; Fennell 1989).

Mažvydas, Martynas 1547–1570 (= Michelini 2000).

Manuale lettico-germanicum [ca. 1690] (= Fennell 2001).

Mertikaitis, Kristijonas Endrikis 1825, Wissokies naujes giesmes, arba Ewangeliszki psalmai, Tilžė: H. Post.

Mielcke, Christian Gottlieb 1795, Kūdikių prietelius, Königsberg: Hartung.

Petkevičius, Merkelis 1598, *Polski z Litewskim Katechism*, Vilnius: S. Wierzeyski (= Balčikonis 1939).

Quandt, Johann Jacob 1727, Das Neue Testament Unsers Herrn JEsu Christi: Deutsch und Litthauisch, Königsberg: Eckard.

Rehsa, Johann 1625, *Der Psalter Davids: deutsch und littawisch*, Königsberg: L. Segebad (= Fecht, Šinkūnas 2007).

Rigveda (= Aufrecht ²1877; Jamison, Brereton 2014).

Ruhig, Philipp 1747, *Littauisch-Deutsches und Deutsches-Littauisches Lexicon*, Königsberg: Hartung.

Sirvydas, Konstantinas [ca. 1620], [*Prompt[u]arium dictionum Polonicarum*, *Latinarum et Lituanicarum*], [Vilnius] (= Pakalka 1997).

Sirvydas, Konstantinas 1629–1644, *Punktay Sakimu*, Vilnius: Academia Societatis Jesu (= Specht 1929).

Stender, Gotthard Friedrich 1758, Lettisches Lexicon, darin alles nach lettischen Stammwörtern [manuscript].

Stender, Gotthard Friedrich 1789a, Lettisches Lexicon, Jelgawa/Mitau: Steffenhagen.

Stender, Gotthard Friedrich 1789b, *Pafakkas un Stahsti*, Jelgawa/Mitau: Steffenhagen.

Šapalas, Mikelis 1881, *Pasiuntinystės nusidavimai*, Priekulė: Tiesos Prietelio priedas.

Ulmann, Carl Christian 1872, Lettisches Wörterbuch. Erster Theil. Lettisch=deutsches Wörterbuch, Rīga: Brutzer.

Valančius, Motiejus 1867, *Patarles Zemajcziu*, Tilžė (= Valančius 2001, 689–775). Vaišnoras, Simonas 1600, *Margarita Theologica*, Königsberg: Osterberger (= Michelini 1997).

Vilentas, Baltramiejus 1579, *Catechismas*, Königsberg: Osterberger (= Ford 1969). *Wolfenbüttler Postilla*, 1573 (= Gelumbeckaitė 2008).

Ziwatas Pona yr Diewa Musu Jezusa Christusa, Vilnius: W Drukarnie J. K. M. yr RP. Kollegio Kunigu Pioriu, 1759 (= Girdenis, Skirmantas 1998).

REFERENCES

Aleknavičienė, Ona (ed.) 2005, *Jono Bretkūno Postilė*, Vilnius: Lietuvių kalbos institutas.

Alexander, Ronelle 2006, *Bosnian, Croatian, Serbian, A Grammar with Sociolinguistic Commentary*, Madison: The University of Wisconsin Press.

Alonso Déniz, Alcorac 2020, A burning question. On the etymologies of Greek κήλων 'stud'. *Historische Sprachforschung* 133, 4–26.

Aufrecht, Theodor (ed.) ²1877, Die Hymnen des Rigveda 1–2, Bonn: A. Marcus.

Balčikonis, Juozas (ed.) 1939, *1598 metų Merkelio Petkevičiaus katekizma*s, Kaunas: Švietimo ministerijos knygų leidimo komisija.

Balčikonis, Juozas, Jonas Kruopas, Borisas Larinas (eds.) 1957, *Pirmoji lietuvių kalbos gramatika*, Vilnius: Valstybinė politinės ir mokslinės literatūros leidykla.

Balkevičius, Jonas 1963, *Dabartinės lietuvių kalbos sintaksė*, Vilnius: Valstybinė politinės ir mokslinės literatūros leidykla.

Beek, Lucien van 2022, Artificial word formation in the epic tradition: θοῦρος ('fierce') and the formula θούριδος ἀλκῆς', *The Journal of Hellenic Studies* 142, 255–273.

Bielenstein, August 1863, Lettische Grammatik, Jelgawa/Mitau: Lucas.

Būga, Kazimieras 1958–1961, *Rinktiniai raštai* 1–3, ed. by Zigmas Zinkevičius, Vilnius: Valstybinė politinės ir mokslinės literatūros leidykla.

Carlier, Anne 2011, From *multum* to *beaucoup*: between adverb and nominal determiner, in Lucia M. Tovena (ed.), *French Determiners in and across Time*, London: College publications, 55–87.

Chantraine, Pierre 1933, La formation des noms en grec ancien, Paris: Champion.

Derksen, Rick 1996, Metatony in Baltic, Amsterdam, Atlanta: Rodopi.

Derksen, Rick 2008, Etymological Dictionary of the Slavic Inherited Lexicon, Leiden: Brill.

Derksen, Rick 2015, Etymological Dictionary of the Baltic Inherited Lexicon, Leiden: Brill.

Drotvinas, Vincentas (ed.) 1987, *Lexicon Lithuanicum. Rankraštinis XVII a. vokiečių–lietuviu kalbu žodvna*s, Vilnius: Mokslas.

Drotvinas, Vincentas (ed.) 2009, *Jokūbas Brodovskis. Lexicon Germanico=Lithvanicum et Lithvanico=Germanicum* 1–3, Vilnius: Lietuvių kalbos institutas.

Endzelin, J[an] 1923, Lettische Grammatik, Heidelberg: Winter.

Fecht, Rainer, Mindaugas Šinkūnas 2007, *Jonas Rėza. Psalteras Dovydo. 1625*, Vilnius: Raštijos paveldo tyrimų centras.

Fennell, Trevor G. (ed.) 1989, *A Latvian-German Revision of G. Mancelius' "Phraseologia Lettica"* (1638), Melbourne: Latvian Tertiary Committee.

Fennell, Trevor G. (ed.) 2001, *Manuale Lettico-Germanicum*. *The Text of the Original Manuscript* 1–2, Rīga: Latvijas Akademiskā Biblioteka.

Ford, Gordon B. (ed.) 1969, The Old Lithuanian Catechism of Baltramiejus Vilentas (1579). A Phonological, Morphological and Syntactical Investigation, The Hague, Paris: Mouton.

Forssman, Berthold 2003, Das baltische Adverb. Morphosemantik und Diachronie, Heidelberg: Winter.

Fraenkel, Ernst 1962–1965, *Litauisches etymologisches Wörterbuch* 1–2, Heidelberg: Vandenhæck & Ruprecht.

Gelumbeckaitė, Jolanta (ed.) 2008, *Die Wolfenbütteler Postille von 1573*, Wiesbaden: Harrassowitz.

Girdenis, Aleksas, Petras Skirmantas 1998, 1759 metų "Ziwatas". Faksimilinis leidinys, Vilnius: Mokslo ir enciklopedijų leidybos institutas.

Günther, August 1929, Altlettische Sprachdenkmäler 1–2, Heidelberg: Winter.

Herrity, Peter 2000, *Slovene. A Comprehensive Grammar*, London, New York: Routledge.

Hock, Wofgang et al. 2015, Altlitauisches etymologisches Wörterbuch 1–3, Hamburg: Baar.

Hoffner, Harry A., H. Craig Melchert 2008, A Grammar of the Hittite Language 1–2, Winoka Lake: Eisenbrauns.

Hofmann, Erich 1930, Ausdrucksverstärkung. Untersuchungen zur etymologischen Verstärkung und zum Gebrauch der Steigerungsadverbia im Balto-Slavischen und in anderen idg. Sprachen (= Ergänzungsheft zur KZ 9), Göttingen: Vandenhæck & Ruprecht.

Jakštienė, Vida, Jonas Palionis (eds.) 1995, *Mikalojaus Daukšos 1595 m. katekizmas*, Vilnius: Mokslo ir enciklopedijų leidykla.

Jamison, Stephanie W., Joel P. Brereton 2014, *The Rigueda. The Earliest Religious Poetry of India* 1–3, Oxford: Oxford University Press.

Kalnius, Alfonsas 1943, Lietuvių kalbos sintaksė, Kaunas: Valstybinė leidykla.

Kazlauskas, Jonas 1970, Liet. *džiaūgtis* ir jo giminaičiai, in Velta Rūķe-Draviņa (ed.), *Donum Balticum. To Professor Christian S. Stang on the Occasion of His Seventieth Birthday, 15 March 1970*, Stockholm: Almqvist & Wiksell, 254–257.

Kloekhorst, Alwin 2008, Etymological Dictionary of the Hittite Inherited Lexikon, Leiden: Brill.

Kudzinowski, Czesław, Jan Otrębski (eds.) 1958, *Biblia litewska Chylińskiego. Nowy Testament* 2: *Teksts*, Poznań: Zakład narodowy im. Ossolińskich we Wrocławiu.

Kulikov, Leonid 2021, Old Indo-Aryan, in Götz Keydana, Wofgang Hock, Paul Widmer (eds.), *Comparison and Gradation in Indo-European*, Berlin, New York: De Gruyter, 385–415.

Le Feuvre, Claire 2016, Le type τρόπις, στρόφις, τρόφις et le problème de τρόφι κῦμα (Il. 11, 307), in Alain Blanc, Daniel Petit (eds.), *Nouveaux acquis sur la formation des noms en grec ancien*, Louvain, Paris: Peeters, 179–202.

Lietuvių kalbos žodynas 1–20, Vilnius, 1941–2000.

Lučinskienė, Milda (ed.) 2005, *Jono Jaknavičiaus 1647 metų* Ewangelie Polskie y Litewskie, Vilnius: Lietuvių kalbos institutas.

Matasović, Ranko 2014, Slavic Nominal Word-Formation, Heidelberg: Winter.

Mažiulis, Vytautas 1966–1981, *Prūsų kalbos paminklai* 1–2, Vilnius: Mintis, Mokslas.

Meillet, Antoine 1905 [2 1961], Études sur l'étymologie et le vocabulaire du vieux-slave, Paris: Champion.

Melchert, H. Craig 2021, Hittite neuter *i*-stems, in Hannes A. Fellner, Melanie Malzahn, Michaël Peyrot (eds.), *Lyuke wmer ra. Indo-European Studies in Honor of Georges-Jean Pinault*, Ann Arbor, New York: Beech Stave, 379–390.

Michelini, Guido (ed.) 1997, Simono Vaišnoro 1600 metų Żemczuga Theologischka ir jos šaltiniai, Vilnius: Baltos lankos.

Michelini, Guido (ed.) 2000, *Martyno Mažvydo raštai ir jų šaltiniai*, Vilnius: Mokslas. Michelini, Guido (ed.) 2003, *D. Kleino Naujos Giesmju Knygos. Tekstai ir jų šaltiniai*, Vilnius: Lietuvių kalbos institutas.

Mühlenbach, K[arl], J[an] Endzelin 1923–1932, *Latviešu valodas vārdnīca / Lettisch-deutsches Wörterbuch* 1–4, Rīga.

Neu, Erich 1985, Zur Stammabstufung bei *i-* und *u-*stämmigen Substantiven des Hethitischen, in Hermann M. Ölberg, Gernot Schmidt, Heinz Bothien (eds.), *Sprachwissenschaftliche Forschungen. Festschrift für Johann Knobloch zum 65. Geburtstag dargebracht von Freunden und Kollegen*, Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck, 259–264.

Nussbaum, Alan J. 1999, **Jocidus*: an account of the Latin adjectives in *-idus*, in Heiner Eichner, Hans Christian Luschützky, Velizar Sadovski (eds.), *Compositiones indogermanicae in memoriam J. Schindler*, Prague: Enigma, 377–419.

Pakalka, Kazys (ed.) 1997, Senasis Konstantino Sirvydo žodynas, Vilnius: Mokslas.

Palionis, Jonas (ed.) 2000, *Mikalojaus Daukšos 1599 metų Postilė ir jos šaltiniai*, Vilnius: Baltos lankos.

Petit, Daniel 2001, À propos de quelques adverbes lettons, Res Balticae 7, 85-92.

Petit, Daniel 2021, Baltic, in Götz Keydana, Wofgang Hock, Paul Widmer (eds.), *Comparison and Gradation in Indo-European*, Berlin, New York: De Gruyter, 99–147.

Pociūtė, Dainora (ed.) 2004, *Knyga Nobažnystės Krikščioniškos 1653*, Vilnius: Lietuvių literatūros ir tautosakos institutas.

Pokorny, Julius 1959, *Indogermanisches etymologisches Wörterbuch*, Bern, München: Francke.

Range, Jochen Dieter et al. (eds.) 1991–2013, Biblia, tatai esti wisas Schwentas Raschtas, lietuvischkai pergulditas per Jana Bretkuna [1–3] (= Biblia Slavica. Serie VI: Supplementum: Biblia Lithuanica 1.1–1.4/5), Paderborn: Schöningh.

Rix, Helmut (ed.) ²2001, *Lexikon der indogermanischen Verben*, Wiesbaden: Reichelt. Skardžius, Pranas 1943, *Lietuvių kalbos žodžių daryba*, Vilnius: Lietuvos mokslų akademija, Lietuvių kalbos institutas.

Smoczyński, Wojciech 2007, *Słownik etymologiczny języka litewskiego* 1–2, Vilnius: Vilniaus universiteto leidykla.

Specht, Franz (ed.) 1929, *Šyrwids Punktay sakimu (Punkty kazań)*, Göttingen: Vandenhæck & Ruprecht.

Stang, Christian S. 1966, Vergleichende Grammatik der baltischen Sprachen, Oslo, Bergen, Tromsö: Universitetsforlaget.

Stang, Christian S. 1972, Lexikalische Sonderübereinstimmungen zwischen dem Slavischen, Baltischen und Germanischen, Oslo, Bergen, Tromsø: Universitetsforlaget.

Sturtevant, Edgar H. 1934, Adjectival *i*-stems in Hittite and Indo-European, *Language*, 10(3), 266–273.

Trautmann, Reinhold 1925, *Die altpreußischen Personennamen*, Göttingen: Vandenhæck & Ruprecht.

Valeckienė, Adelė 1984, *Lietuvių kalbos gramatinė sistema. Giminės kategorija*, Vilnius: Mokslas.

Valančius, Motiejus 2001, *Raštai* 1, ed. by Vytautas Vanagas, Vilnius: Lietuvių literatūros ir tautosakos institutas.

Zinkevičius, Zigmas 1980–1981, *Lietuvių kalbos istorinė gramatika* 1–2, Vilnius: Mokslas.

Zubaitienė, Vilma (ed.) 2012, Frydrichas Vilhelmas Hakas. Vocabularium Litthuanico-Germanicum et Germanico-Litthuanicum... nebst einem Anhang einer kurzgefaßten Litthauischen Grammatic 1–2, Vilnius: Vilniaus universiteto leidykla.

Daniel PETIT
École normale supérieure
45 rue d'Ulm
FR-75005 Paris
France
[daniel.petit@ens.fr]