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THE RISE OF INVARIABILITY IN THE LOW LITHUANIAN REFLEXIVE PARTICIPLES AND VERBAL NOUNS

I. Introduction

It is well known that the affixation of the reflexive particle **-si* (< PIE **soj*) to the verbal forms in the Baltic languages created the conditions for significant alterations of the inflectional endings. These alterations were usually preserved, or reorganised with only few changes, in Lithuanian and Latvian as an active system of morphological rules and thus gave rise to allomorphic alternations separating the non-reflexive and reflexive sets of endings. To take just one example, by virtue of Leskien's law (Leskien 1881), two endings are distinguished in the first person singular in Lithuanian, a non-reflexive ending *-u* (e. g. Lith. *sukù* 'I turn something') and a reflexive ending *-úo-si* (e. g. Lith. *sukúosi* 'I turn, am turned'). Whereas most of these variations remain fairly stable in the conjugated forms of the verbs, they appear to be much more fragile and open to analogical change in the nominal forms of the verbs (participles, gerunds and verbal nouns). To the best of my knowledge, the extension of these analogical changes has not yet been described in a comprehensive way, and much still needs to be done to give full account of the different options available in the Baltic languages. This paper is a first step in this direction and should be seen as a preliminary report on the realisations of reflexive-induced allomorphies in Baltic; a more detailed description will be the subject of an in-depth study that will be published later. The point I would like to emphasise here is that the treatments of the alterations triggered by the reflexive particle can take unexpected turns and cannot be reduced to an alternative between retention or loss. More precisely, I will focus on an option that is widely attested in the Low Lithuanian (or Žemaitian) dialects, but represents the most troubling solution, the rise of invariable nominal forms of reflexive verbs.

II. Allomorphy in the nominal forms of the verbs

To begin with, it is worth presenting a brief overview of all the potential treatments of the nominal forms of reflexive verbs. The following options can be distinguished in theory, illustrated with Lithuanian examples:

- [a] **No allomorphy.** For example in the supine: non-refl. *gîditu* ‘to heal, to cure’ (Daukša, *Postilla Catholica*, 243₅ [1599]), vs. refl. *mêlstu-s* ‘to pray’ (Daukša, *Postilla Catholica*, 618₁₁ [1599]). No allomorphic variation: [-tų], vs. [-tų-s(i)].
- [b] **Preservation of the allomorphy.** For example in the half-participle: nom. pl. masc. non-refl. *keldami* ‘raising’ (Daukša, *Postilla Catholica*, 20₁₃ [1599]), vs. refl. *keldamie-ś* ‘rising, standing up’ (Daukša, *Postilla Catholica*, 126₄₅, cf. 219₄₆ [1599]). Allomorphic variation: [-i] / [-ie-s(i)].
- [c] **Elimination of the allomorphy.** For example in the infinitive: non-refl. *kielti* ‘to raise’ (Mažvydas, *Gesmes Chrikščizonifkas*, 413₃, 418₈ [1570]), vs. refl. *kelti-fi* ‘to rise, to stand up’ (Mažvydas, *Giefme S. Ambrafzejiaus*, 92₅ [1549]; *Gesmes Chrikščizonifkas*, 246₃₋₄ [1570]). No allomorphic variation [-i] / [-i-s(i)], replacing an expected allomorphy [-i] / [-ie-s(i)] (cf. Latv. *celt* ‘to raise’, vs. *celtiēs* ‘to rise, to stand up’).
- [d] **Elimination of the reflexive particle.** For example in the half-participle: nom. sg. masc. non-refl. *ródidamas* ‘showing’ (Daukša, *Postilla Catholica*, 195₄₁ [1599]), vs. refl. *ródidamas* ‘showing oneself’ (Daukša, *Postilla Catholica*, 226₁₀ [1599]). No allomorphic variation, no reflexive marker.
- [e] **Transposition of the allomorphy upon the reflexive particle.** For example in the gerund: non-refl. *škaitant* ‘reading’ (Daukša, *Kathechizmas*, 80₁₅ [1595]), vs. refl. *mêldziant-i-s* ‘praying’ (Daukša, *Kathechizmas*, 80₁₄₋₁₅ [1595]). Allomorphic variation transplanted upon the reflexive particle: [-(i)] / [-i-s(i)] > [-o] / [-is].
- [f] **Development of invariable reflexive forms.** For example in the half-participle in the Low Lithuanian dialects: nom. sg. masc. non-refl. *rodidamas* ‘showing’ (Valančius, *Vajku Knjngiele*, 17 [1868a]), vs. refl. *juokdamos* ‘laughing at’ used for all genders and numbers (Valančius, *Vajku Knjngiele*, 17 [1868a]).
- [g] **Development of an ‘empty preverb’ be-**, hosting the reflexive particle and thus neutralising the potential allomorphy in the inflectional endings. For example in the present active participle: dat. sg. masc. non-refl. *mêtančiam* ‘throwing’, vs. refl. *be-fi-metánčiam* ‘throwing oneself’ (*Kniga Nobaznistes Krikščonifzkos* 2, 22₂₃ [1653]). No allomorphic variation, addition of an empty preverb: [-o] / [be-si-...-o].

An immediate task for the future will be to determine the relative distribution of all these potential treatments. As a first approximation, it can be said that most of them are phonologically conditioned by the nature of the ending:

- After a vocalic ending, we have either no allomorphy [a] or an allomorphy due to Leskien's law [b], occasionally eliminated [c].
- After a sigmatic ending, we have merging with the reflexive particle ([-s], vs. [-s=s] > [-s]), resulting in synchronic loss of the reflexive particle [d].
- After a vocalic ending *-i* eliminated by syncope, we have the rise of an allomorph *-i-s* of the reflexive particle [e].
- In the most problematic contexts, we have the development of the empty preverb *be-* [g].

The phonological context, however, is not sufficient to account for every historical development and one has to reckon with secondary extensions of some possibilities to the detriment of others. In modern Lithuanian, for example, the empty preverb *be-* has come to play an increasingly important role and tends to replace a large number of earlier forms without preverb.

Among all the available options the most striking one is the development of invariable reflexive forms in some Low Lithuanian dialects [f]. What is puzzling is that invariability could arise in the Baltic languages, in glaring contradiction with the highly inflectional nature of these languages. It is necessary to describe this usage in all its dimensions before attempting to determine its origin.

III. Low Lithuanian *-damos* and *-imos*

Invariable nominal forms of the reflexive verbs are found almost exclusively in the Low Lithuanian dialects and are restricted there to two main categories, the reflexive half-participles in *-damos* (vs. non-refl. *-damas*) and the reflexive verbal nouns in *-imos* (vs. non-refl. *-imas*). In both categories, there is evidence for lack of number agreement; in the half-participle in *-damos*, of gender agreement as well (the verbal noun being always masculine); in the verbal noun in *-imos*, of case agreement as well (the half-participle being limited to the nominative).

Reflexive half-participles characterised by an ending *-damos* invariable for gender and number are widely attested in the Low Lithuanian dialects. As far as I know, the first instances date back to the nineteenth century. They are first mentioned in Juozas Čiulda's (1796–1861) grammar, *Krótkie*

pomysły o prawidłach grammatycznych języka żmudzkiego (1855), based on a Low Lithuanian dialect: *kasdamos* ‘kopiąc się’, *sakidamos* ‘powiadając się’ and *turiedamos* ‘trzymając się’ (1855, 62). I have also found numerous examples in the works of the bishop of Samogitia Motiejus Valančius (1801–1875). The reflexive ending *-damos* occurs there with different functions, e.g. nom. sg. masc. (ex. 1):

(1) Motiejus Valančius, *Vajku Knjngiele* (1868a, 16)

<i>Kunegas</i>	<i>juokdamos</i>	<i>atsakie.</i>
priest-NOM.SG.MASC.	laughing-HALF-PART.	answered-IND.PRET.3.

The priest, laughing, answered.

nom. sg. fem. (ex. 2):

(2) Motiejus Valančius, *Vajku Knjngiele* (1868a, 66)

<i>Motina</i>	<i>bijodamos</i>	<i>kad</i>	<i>neiszwirstu</i>
mother-NOM.SG.	fearing-HALF-PART.	that	NEG.-he would fall-COND.3.

<i>lijpe</i>	<i>atsikielti.</i>
ordered-IND.PRET.3.	to stand up-INF.REFL.

The mother, fearing that he could fall, ordered him to stand up.

nom. pl. masc. (ex. 3):

(3) Motiejus Valančius, *Žiwataj Szwėtuju* (1858, 160)

<i>Pagonis</i>	<i>patis</i>	<i>stebiedamos</i>	<i>i</i>	<i>aną</i>
pagans-NOM.PL.	self-NOM.PL.	surprised-HALF-PART.	in	him-ACC.SG.

werkie.
cried-IND.PRET.3.

Pagans themselves, surprised, were crying for him.

nom. pl. fem. (ex. 4):

(4) Motiejus Valančius, *Giwenimaj Szwentuju Diewa* (1868b, 33)

<i>Kitas</i>	<i>miniczkas</i>	<i>dwokulu</i>	<i>bajdidamos</i>
other-NOM.PL.FEM.	nuns-NOM.PL.FEM.	stench-INSTR.SG.	fearing-HALF-PART.

<i>nenorieje</i>	<i>sergantioses</i>	<i>nie</i>	<i>lėnkiti.</i>
NEG-wanted-IND.PRET.3.	the patient-GEN.SG.FEM.=DEF.	NEG.	visit-INF.

The other nuns, fearing the stench, did not want to visit the patient.

According to Zinkevičius (1966, 388), reflexive forms in *-damos* are regular in the modern Low Lithuanian dialects¹. In some Low Lithuanian dialects we find *-damies* instead of *-damos* (Kalnalis, Laukuva). The invariability of the reflexive half-participles in Low Lithuanian contrasts sharply with what we find in the High Lithuanian (or Aukštaitian) dialects, where the corresponding forms are usually inflected for gender and number:

- Masc. sg. *-damas-is*, fem. sg. *-dama-si* or *-damo-si* (from **-damā=s(i)*)
- Masc. pl. *-damie-si*, fem. pl. *-damos(i)* (from **-damās=s(i)*).

In Old Lithuanian, similar, or slightly different forms are attested:

- Masc. sg.: Old Lithuanian *džeugdamos* ‘rejoicing’ (Daukša, *Postilla Catholica*, 279₁₀ [1599]); *melđdamaffi* ‘praying’ (Bretkūnas, *Postilla* 2, 354₂₂₋₂₃ [1591]); *žiamindámáfis* ‘humbling himself’ (*Kniga Nobazniŕtes Krikščonijzkos* 2, 60₂₀₋₂₁ [1653])
- Fem. sg.: Old Lithuanian *žęmindamoš* ‘humbling herself’ (Daukša, *Postilla Catholica*, 474₈ [1599])
- Masc. pl.: Old Lithuanian *faugodámiefi* ‘protecting themselves’ (*Kniga Nobazniŕtes Krikščonijzkos* 2, 55₃₋₄ [1653]), *keldamiés* ‘rising, standing up’ (Daukša, *Postilla Catholica*, 126₄₅ [1599])
- Fem. pl.: Old Lithuanian *dczaugdamofi* ‘rejoicing’ (*Margarita Theologica*, 261₁₉ [1600]), *ŕtebédamoš* ‘wondering’ (Daukša, *Postilla Catholica*, 179₁₃ [1599])

The important point is that, as far as I know, there is no trace of an invariable reflexive ending *-damos* in Old Lithuanian. It is not even attested in the *Ziwatas*, a major source of the Low Lithuanian dialects in the second part of the 18th century (1759). Half-participles are there always marked for gender and number, e.g. masc. sg. *byiodamas* (Ziw, 145₂₈, 150₉, 208₁₀), *byjodamas* (Ziw, 210₁₈, 212₂₃), *melzdamas* (Ziw, 230₁₀₋₁₁) or *daridamafy* (Ziw, 23₉), fem. sg. *jawzdamos* (Ziw, 17₂), *melzdamos* (Ziw, 276₁₂), masc. pl. *byjodamyis* (Ziw, 104₂₃, 143₂₇₋₂₈, 222₁), *kłoniodamies* (Ziw, 288₁₂), fem. pl. *byiodamos* (Ziw, 35₂₁) from *bijótiês* ‘to fear’, *darytiês* ‘to make oneself’, *jaústiês* ‘to feel oneself’, *klōnotiês* ‘to bend’ and *melŕstiês* ‘to pray’. More recently, the sermons (*Pamokslas jsz Prisakimu Diewa*, 1797) by Kiprijonas Lukauskas (1757–1815) still show half-participles marked for gender and number, e.g. masc. pl. *swarstidamis* (1797, 14) from *swarstýtis* ‘to weigh, to consider’. It is therefore likely that the invariable ending *-damos* represents an innovation

¹ In Kretinga, for example, we find *galódamûos* (KTŽ, 99, from *galúotiês* ‘to play’), *jõukdamûos* (KTŽ, 134, from *juõktiês* ‘to laugh’), *spjáudidamûos* (KTŽ, 383, from *spjáudytiês* ‘to spit’) and *žvalgídamûos* (KTŽ, 504, from *žvalgýtiês* ‘to look, to gaze’).

of the modern Low Lithuanian dialects, which cannot have taken place before the beginning of the 19th century.

The other category in which an invariable reflexive ending is found is the reflexive verbal nouns in *-imos*, *-ymos* (vs. non-refl. *-imas*, *-ymas*). This formation, widely attested in the Low Lithuanian dialects, does not show any number or case agreement. Examples are easily found from Old Lithuanian (Mikalojus Daukša and the *Ziwatas*) onwards to modern times, including the works of Motiejus Valančius in the 19th century, with different functions, e.g. nom. sg. (ex. 5):

(5) Mikalojus Daukša, *Kathechismas* (1595, 179₃)

<i>Radimos</i>	<i>io</i>	<i>Bažnīczoiē</i>
the act of finding-oneself-NOM.SG.=REFL.	of him-GEN.SG.	in the church-LOC.SG.

<i>tarp</i>	<i>Dáktaru.</i>
between	doctors-GEN.PL.

His presence in the church between doctors
(= pol. *Należenie iego w kościelę między Doktory*)

acc. sg. (ex. 6 and 7):

(6) *Ziwatas* (Ziw 1759, 321₁₂)

<i>uż</i>	<i>platynymos</i>	<i>maięntnaftiefy</i>	<i>ziemyfzkofy</i>
for	the spreading-NOM.SG.=REFL.	in the possessions-LOC.PL.	earthly-LOC.PL.

for the growth of the earthly possessions

(7) Motiejus Valančius, *Vajku Knjngiele* (1868a, 2)

<i>Matusze</i>	<i>pabare</i>	<i>Petri</i>	<i>uż</i>	<i>nedaijli</i>
mother-NOM.SG.	scolded-IND.PRET.3.	Peter-ACC.SG.	for	not nice-ACC.SG.

<i>maldos</i>	<i>laiki</i>	<i>elgimos.</i>
prayer-GEN.SG.	time-LOC.SG.	behaviour-ACC.SG.=REFL.

The mother scolded Peter for his shameful behaviour during the prayer.

instr. sg. (ex. 8):

(8) Motiejus Valančius, *Žemajtiu Wiskupiste* (2 1848, 88)

<i>Tokiu</i>	<i>sawa</i>	<i>elgimos</i>	<i>tribunoluj</i>
such-INSTR.SG.	of him-GEN.SG.	behaviour-INSTR.SG.=REFL.	court-LOC.SG.

<i>didžiausi</i>	<i>orumq (wazność)</i>	<i>o</i>	<i>sau</i>
greatest-ACC.SG.	importance-ACC.SG.	and	for oneself-DAT.SG.

<i>qmžinaj</i>	<i>garsingą</i>	<i>wardą</i>	<i>užpelna.</i>
eternally-ADV.	famous-ACC.SG.	name-ACC.SG.	deserved-IND.PRET.3.

By such his behaviour in the court he deserved the greatest fame and acquired for himself a famous name forever.

nom. pl. (ex. 9):

(9) *Šiaurės rytų dūnininkų šnektų žodynas* (Vitkauskas 1976, 46)

<i>Išni̇ka</i>	<i>tĩ</i>	<i>bĩčũlã̇ vĩmuos.</i>
disappeared-IND.PRET.3.	these-NOM.PL.	friendships-NOM.PL.=REFL.

These friendships disappeared.

In the modern Low Lithuanian dialects, verbal nouns with the invariable ending *-imos* are regular². According to Zinkevičius (1966, 207–208), the invariable ending *-imos*, *-ymos* is also found in some neighbouring High Lithuanian dialects (e.g. Jukiškiai). The majority of the High Lithuanian dialects, however, has different forms marked for case:

- Nom. sg. *-imas-is* or *-ymas-is*: *varžýmas-is* ‘the act of striving, uneasiness, shyness’
- Acc. sg. *-imq-si* or *-ymq-si*: *varžýmq-si*
- Gen. sg. *-imo-si* or *-ymo-si*: *varžýmo-si*
- Dat. sg. *-imui-si* or *-ymui-si*: *varžýmui-si*
- Instr. sg. *-imu-si* or *-ymu-si*: *varžýmu-si*
-imuo-si or *-ymuo-si*: *varžýmuo-si*

Most of these forms are already attested in Old Lithuanian, either directly or with slight differences:

- Nom. sg. *-imas-i(s)* or *-ymas-i(s)*: Old Lithuanian *tikėiimaf-i* ‘the act of believing, belief, faith’ (Daukša, *Postilla Catholica*, 527₃₀, 529₅₀ [1599]); *maudimaf-is* ‘the act of bathing oneself’ = pol. *kapanie fie* (Sirvydas, *Dictionarium trium linguarum* 3, 95 [1643]).
- Acc. sg. *-imq-si* or *-ymq-si*: Old Lithuanian *tikeiima-fi* ‘the act of believing, belief, faith’ (Daukša, *Kathechismas* 153₉)

² In Kretinga, for example, we find *dãužĩmũos* ‘the act of struggling’ (KTŽ, 71), *galãvẽmũos* ‘the act of playing’ (KTŽ, 99), *gnãibĩmũos* ‘the act of pinching oneself’ (KTŽ, 111), *gřãužẽmũos* ‘the act of torturing oneself, remorse’ (KTŽ, 116), *grũmẽmũos* ‘the act of pushing each other, rush, hustle’ (KTŽ 118), *gõudẽmũos* ‘the act of complaining, complaint’ (KTŽ, 120), *ẽlgĩejẽmũos* ‘the act of longing, yearning’ (KTŽ, 123), *kẽikẽmũos* ‘the act of injuring, insulting’ (KTŽ, 153), etc.

- Gen. sg. *-imo-si* or *-ymo-si*: [1595], *Postilla Catholica*, 520₂₄, 545₃₃ [1599]); *tikėiima-s* ‘the act of believing, belief, faith’ (Daukša, *Postilla Catholica*, 588₁₁ [1599]). Old Lithuanian *meldima-fsi* ‘the act of praying, prayer’ (*Wolfenbüttler Postilla*, 168_{v29}, 174_{v33} [1573]); *tikėiimo-fi* ‘the act of believing, belief, faith’ (Daukša, *Postilla Catholica* 553₁₇ [1599]); *kielimo-fi* ‘the act of rising, standing up’ (Sirvydas, *Punktai Sakimu* 2, 233₉ [1644]); *tikėiimo-s* ‘the act of believing, belief, faith’ (Daukša, *Postilla Catholica*, 560₁₀ [1599]); *kelimo-s* ‘the act of rising, standing up’ (Daukša, *Postilla Catholica*, 50₅₀ [1599]).
- Dat. sg. *-imui-si* or *-ymui-si*: No Old Lithuanian example was found.
- Instr. sg. *-imuo-si* or *-ymuo-si*: Old Lithuanian *tikeimuo-fi* ‘the act of believing, belief, faith’ (Daukša, *Kathechismas*, 49₁₃, 50₂ [1595]); *nužeminuo-s* ‘the act of humbling oneself’ (Daukša, *Postilla Catholica*, 586₁₉, 586₂₈ [1599]).

Plural forms are extremely rare, which is not surprising given that substantives in *-imas*, *-ymas* are abstract formations, for which the plural is not normally used.

The evidence shows that the invariable ending *-imos* or *-ymos* is ancient in the Low Lithuanian dialects: it is attested since Daukša (1595) and occurs in the *Ziwatas* (1759) with some frequency. This is a crucial difference with the invariable ending *-damos*, which cannot antedate the beginning of the 19th century. The data offered by the *Ziwatas* (1759) are particularly interesting, since they show us a synchronic state in which *-imos* or *-ymos* are used (e.g. *grudymos* ‘scramble, throng’ Ziw, 234₂₄, *platynymos* ‘the spreading’ Ziw, 321₁₂), whereas there is no trace of the invariable ending *-damos* at all and half-participles are always marked for gender and number (e.g. masc. sg. *byiodamas* ‘fearing’ Ziw, 145₂₈, fem. sg. *melzdamos* ‘praying’ Ziw, 276₁₂, masc. pl. *byiodamyis* ‘fearing’ Ziw, 104₂₃, fem. pl. *byiodamos* ‘fearing’ Ziw, 35₂₁). Any attempt to explain the rise of invariability in the Low Lithuanian half-participles and verbal nouns must take into account this chronological difference.

IV. Explanations

There is no need to stress the oddity of these invariable reflexive formations. The Baltic languages are characterised by a high degree of inflectional

morphology, and the rise of invariable forms has the effect of incorporating a foreign body into the linguistic system. It would be, of course, unrealistic to assume that indeclinable forms have emerged in Low Lithuanian only as a response to the overall difficulty of building reflexive nominal forms of the verbs, because, first, the solution would be worse than the initial problem and, second, there are nominal forms of the verbs that could pose potentially greater problems and yet did not give rise to invariable forms in the Low Lithuanian dialects, for example the active present participles (cf. the paradigm of *juōkiqs-is* ‘laughing’). It is therefore essential to look for a suitable explanation that could account both for the replacement of declinable by indeclinable forms and for the particular shape taken by this replacement.

The only attempt at explaining this change was made by Arumaa (1933, 42). Arumaa suggests two different motivations to account for the rise of invariability. He first explains the ending *-damos* as the result of a phonological merging having its starting point in the feminine where the singular and the plural were identical:

- Nom. sg. fem. **-damos* < **damā=s(i)*
- Nom. pl. fem. **-damos* < **-damās=s(i)*

He further claims that this neutralisation was secondarily extended to the masculine forms, first in the singular, then in the plural, based on the evolution of unstressed *-os* to *-as* in many Low Lithuanian dialects:

Nom. sg. fem. * <i>-damā=s</i> > * <i>-damos</i> > * <i>-damas</i>	}	→	Nom. sg. masc. * <i>-damas=s</i> > * <i>-damas</i>
Nom. pl. fem. * <i>-damās=s</i> > * <i>-damos</i> > * <i>-damas</i>	}	→	Nom. pl. masc. x (x = * <i>-damas</i>) replacing * <i>-damie-s</i>

As to the invariable verbal nouns in *-imos*, Arumaa (1933, 41) derives them from the original genitive singular masculine (*-imo-s*), generalised to the rest of the paradigm, but does not venture to tell us why it was precisely that case which expanded its functional sphere and was finally generalised. A precise scenario remains to be built up.

The evidence provided by the writings of Motiejus Valančius (19th century) contradicts Arumaa’s assumption of a phonological merging of the reflexive feminine forms (sg. and pl. **-damos* > **-damas* in unstressed position) with the reflexive masculine singular **-damas* (from **-damas=s*). Valančius uses consistently *-damos* in the reflexive forms, never *-damas*. This is corroborated by the modern Low Lithuanian dialects, in which the reflexive form of the half-participle does not show any trace of shortening in unstressed position:

in Kretinga, for example, the ending is *-damûos*. This leads us inevitably to the conclusion that Arumaa's explanation of the rise of invariability in the Low Lithuanian reflexive half-participles and verbal nouns cannot account for the active processes behind this evolution. The other problem in Arumaa's approach is that it lacks any functional background: phonological merging can be a triggering factor, but it cannot be decisive alone unless one takes into account the syntactic frame in which it took place.

A priori, the choice is between three possibilities: (1°) invariability affected first the half-participles and then spread analogically to the verbal nouns; (2°) invariability affected first the verbal nouns and then spread analogically to the half-participles; (3°) invariability affected the half-participles and the verbal nouns separately and their parallelism is secondary. These three scenarios must be checked carefully both on a philological and a structural level.

The first scenario has much to recommend it. A very strong argument for its case is the existence of other traces of invariability in the half-participles of the Baltic languages. In Modern Latvian, reflexive half-participles are marked for gender, but unmarked for number. There is a single form *-damiês* for the masculine (singular or plural), *-damâs* for the feminine (singular or plural):

Modern Latvian	Non-reflexive	Reflexive
Masc. sg.	<i>cêdam-s</i>	<i>cêdam-iês</i>
Masc. pl.	<i>cêdam-i</i>	
Fem. sg.	<i>cêdam-a</i>	<i>cêdam-âs</i>
Fem. pl.	<i>cêdam-as</i>	

Examples are given by the standard grammars. I will mention only one for the masculine (sg. in 10, pl. in 11)³:

(10) Latvian: R. Blaumanis, *Kopotî rakstî* 3 1947, 130 (cf. MLLVG 1, 657)

“*Manu pelēcît!*” *Andrs* *ukstēja*
 my-ACC.SG. dapple grey-ACC.SG. Andrew-NOM.SG. whispered-IND.PRET.3.

raustîdamies.
 twitching-HALF-PART.NOM.MASC.SG.=REFL.

“My dapple grey!”, whispered Andrew, twitching.

³ Translation from Schmalstieg 2000, 364.

(11) Latvian: A. Upītis, *Zaļā zeme* 1947, 488 (cf. MLLVG 1, 657)

Uz *krāsns* *mainīdamies*
behind stove-GEN.SG. alternating-HALF-PART.NOM.MASC.PL.=REFL.

cirpstēja *divi* *circeji*.
chirped-IND.PRET.3. two-NOM.PL. crickets-NOM.PL.

Behind the stove, alternating with each other, chirped two crickets.

and one for the feminine (sg. in 12, pl. in 13):

(12) Latvian: R. Blaumanis, *Kopoti raksti* 3, 1947, 161 (cf. MLLVG 1, 657)

Iekliegdamās *Kristīne*
crying out-HALF-PART.NOM.FEM.SG.=REFL. Christine-NOM.SG.

atsitās *no* *durvim* *nost*.
drew back-IND.PRET.3.=REFL. from door-DAT.PL. away

Crying out, Christine drew back from the doors.

(13) Latvian: J. Rainis, *Kopoti raksti* 2, 1948, 154 (cf. MLLVG 1, 657)

Rauduves *aiz* *purviem* *klaigā /*
common goldeneyes-NOM.PL. across bogs-DAT.PL. shouted-IND.PRET.3.

Aizlaizdamās, *noklusdamas*.
flying away-HALF-PART.NOM.FEM.PL.=REFL. keeping silent-HALF-PART.NOM.FEM.PL.

Common goldeneyes shouted across the bogs, flying away, then keeping silent.

This is a recent configuration. In Old Latvian, the feminine forms in *-damās* were not used. Instead of them, we find the same forms in *-damiēs* as in the masculine:

Old Latvian	Non-reflexive	Reflexive
Masc. sg.	<i>ceļdam-s</i>	} <i>ceļdam-iēs</i>
Masc. pl.	<i>ceļdam-i</i>	
Fem. sg.	<i>ceļdam-a</i>	} <i>ceļdam-iēs</i>
Fem. pl.	<i>ceļdam-as</i>	

This lack of number and gender agreement is indicated as regular in Stender's grammar (1761):

(14) Gotthard Friederich Stender, *Neue vollftändigere Lettische Grammatik* (1761, 62, cf. 186)

Hingegen die Præfentia in damees und otees, und die Futura in fchotees, haben diefe einzige Endungen im fing. und plur. als: Winfch, f. winna apdohmadamees runna, er, fie redet fich bedenkend, winni f. winnas apdohmadamees runna fie reden fich bedenkend.

According to Rosenberg (1830, 60) and Hesselberg (1841, 22), half-participles are ‘indeclinable’. It was not until the second part of the 19th century (Bielenstein 1863) that we find the first mentions of a feminine *-damâs* alongside *-damiês*:

(15) August Bielenstein, *Die lettische Sprache nach ihren Lauten und Formen erklärend und vergleichend dargestellt* (1863, 181)

Für den Nom. Plur. Fem. giebt es eine doppelte Form: -î-s und -â-s. [...] sēwas ge'rb-damâ-s aus altem ge'rb-damâ-(s)-s, aber auch nach Analogie der masc. Form ge'rb-damî-s aus ge'rb-damâ-(s)-s, die Weiber, indem sie sich ankleiden.

The Old Latvian evidence shows that the half-participles were first indeclinable and the ending *-damiês* was used without any distinction of gender and number. This complete lack of agreement was secondarily corrected by the creation of specifically feminine forms in *-damâs* (sg. **-damâ=s*, pl. **-damâs=s*); this correction took place only very late, in the course of the 19th century. The directionality of the evolution [lack of gender and number agreement] > [gender agreement, lack of number agreement] is striking. In any case, it presupposes an initial stage where the half-participles were indeclinable, as in Low Lithuanian. The difference, however, is that the invariable ending was *-damiês* in Old Latvian, whereas it is *-damos* in Low Lithuanian. Endzelin (1923, 717) explains the ending *-damiês* and its invariability by the analogy of the invariable gerund ending *-uõtiês*⁴. It is true that the two formations are parallel on a functional level, both being ‘converbs’ (in the sense of Haspelmath 1995), the half-participle (*-damiês*) in coreferential contexts, the gerund (*-uõtiês*) in heteroreferential contexts; compare the following instances (coreferential *-damiês* in 16, heteroreferential *-uõtiês* in 17):

⁴ The gerund ending *-uõtiês* is itself analogical; it goes back to a prototype **-antiê-s* replacing **-anti-s* (cf. Lith. *-anti-s*) by analogy to the infinitive **-tiê-s* (< **-tēj-si*). Conversely, in Lithuanian, the reflexive infinitive was rebuilt as **-ti-s* (instead of **-tê-s*) by analogy to the gerund **-anti-s* (< **-anti-si*).

(16) Latvian: L. Barons, H. Wissendorff, *Latwju dainas* (BW, 1440)

Laimiņa *laipoja* *pa* *jumta* *wirfu*
Laima-NOM.SG. crossed-IND.PRET.3. over roof-GEN.SG. top-ACC.SG.

Seewiņu *godiņu* *klaufidamees.*
feminine-GEN.PL. feasts-GEN.PL. listening-HALF-PART.NOM.FEM.SG.=REFL.

Laima crossed over the top of the roof, listening to the feast made by the women.

(17) Latvian: L. Barons, H. Wissendorff, *Latwju dainas* (BW, 4664; cf. Gāters 1993, 352)

Zik *dajcham* *puifjcham*
how often numerous-DAT.SG. boy-DAT.SG.

Birft *afaras* *raugotees.*
run down-IND.PRES.3. tears-NOM.PL. looking-GERUND=REFL.

How often the tears run down many boys, as they look [at girls]!

This functional proximity could explain the formal pressure of the gerund ending *-uōtiês* on the ending of the half-participle *-damiês*. To summarise, the Latvian reflexive half-participle seems to have undergone a three step evolution:

- (1°) Prehistorical Latvian: fully inflected half-participle (as in High Lithuanian)?
- (2°) Old Latvian: invariable half-participle in *-damiês* by analogy to the gerund *-uōtiês*?
- (3°) Modern Latvian: half-participle unmarked for number, but marked for gender (masc. sg. and pl. *-damiês*, fem. sg. and pl. *-damâs*)

The question that remains unanswered at this point is why the analogy of the gerund on the half-participle took place only in the reflexive forms, but left unchanged the non-reflexive forms which are still marked for gender and number (masc. sg. *-dams*, pl. *-dami*, fem. sg. *-dama*, pl. *-damas*), whereas the gerund is indeclinable anyway (*-uōt*).

In view of this, the parallel with the Low Lithuanian invariable ending *-damos* loses part of its relevance, since it cannot be argued unreservedly that this ending owes its origin to the analogy of the gerund ending (Low Lith. *-anties*). This parallel is not completely instructive. The only lesson we could learn from it is that a diachronic variation is often observed in converbs between inflectedness and invariability, but this does not help us to explain the rise of the Low Lithuanian ending *-damos*.

In some Lithuanian dialects, there are traces of invariability in the half-participles, especially in the non-reflexive set of forms⁵. Zinkevičius (1966, 388) writes that in the Southern High Lithuanian dialect of Palomenė (near Kaišiadorys) the half-participle is usually left uninflected for gender and number with the originally feminine singular ending *-dama*: we have not only *jì stovédama skaĩto* ‘she reads while standing’ (fem. sg.), but also *jìs stovédama skaĩto* (masc. sg.), *jiẽ stovédama skaĩto* (masc. pl.), *jõs stovédama skaĩto* (fem. pl.). The Lithuanian dialect of Zietela (Belarus) is also said to have an invariable ending *-dami* (Vidugiris 2004, 266); in Lazūnai, it is *-damu* (nom.-acc. dual?). There is thus a clear tendency in some Lithuanian dialects to deprive half-participles of their agreement properties, and this tendency is certainly to be seen in the light of the increasing confusion, in these dialects, of half-participles and gerunds on a functional level: syntactic merging is accompanied by formal merging in terms of lack of agreement. In addition, the influence of the Polish invariable gerunds (in *-qc*) may have played a role in the emergence of invariability in the Lithuanian half-participles, but it is difficult to determine to what extent this role was decisive.

These dialectal parallels add little to the understanding of the rise of invariable forms in *-damos* and *-imos* in Low Lithuanian. The most striking point, calling for a specific explanation, is that invariability is restricted in Low Lithuanian to the reflexive forms, which is not the case in the individual Lithuanian dialects that have developed indeclinable half-participles and finds a parallel only in Old Latvian, although with a different ending. Another point worth noting is that invariability in the verbal nouns in *-imos* is not paralleled, as far as I know, in any other Lithuanian dialect. Zinkevičius (1966, 388) mentions that some Western High Lithuanian dialects (Šakyna, Žagarė) use a nominative ending *-imāsies* instead of other case forms (e.g. instr. sg. *kad tu pasiūstum su savo daūžimasies* ‘that you would run mad with your agitation’), but the extension of this ending to the other syntactic functions does not shed much light on the origin of the ending *-imos* itself. Obviously, we have to distinguish between invariability itself and its materiality: while we have more or less precise parallels for the former, the latter (the ending *-damos*, *-imos*) remains completely isolated.

To summarise, the first scenario is attractive, but leaves many questions unresolved: why does invariability of the Low Lithuanian half-participles

⁵ See also Schmalstieg 2000, 361.

occur exclusively in the reflexive set? how did it spread to the verbal nouns in *-imos*? and, last, but not least, why was it the ‘feminine’ ending which was selected as a default ending, and not another ending?

The second scenario is even more problematic. It is hard to figure out how reflexive forms of the verbal nouns in *-imas* came to lose all their agreement properties in terms of case and number marking, and it is also difficult to imagine concretely how this secondary invariability spread to the corresponding reflexive forms of the half-participles. The most troubling point, however, is that the philological evidence strongly supports this scenario by pointing to the priority of the forms in *-imos* over those in *-damos*. We have here a clear conflict between philology and linguistic plausibility, and it is not a question of one or the other: both should be reconciled.

The third scenario, postulating independent sources for the rise of invariability in the half-participles in *-damos* and in the verbal nouns in *-imos*, does not sound especially convincing either, considering the large overlap of the two formations in the modern Low Lithuanian dialects. It is true that the data drawn from the *Ziwatas* (1759) suggest a time lag between them, but this cannot overshadow the fact that their evolution is parallel and moves in the same direction.

Finding ways out of this apparent dilemma calls for a broader perspective on invariability in Lithuanian. Apart from recent loanwords that are sometimes incorporated without inflection in the language (e.g. Lith. *ateljė* ‘atelier’, *dominò* ‘domino’, *taksì* ‘taxi’, *lèdi* ‘lady’, *tabù* ‘taboo’)⁶, there is only one class of words in which we observe a strong tendency towards invariability, the so-called substantivised ‘neuter’ adjectives. It is not necessary to re-open here the endless discussion about the fate of the neuter gender in Baltic. For the present purpose, suffice it to say that the existence of a third set of adjectival endings (Lith. *gēra* ‘good’, *gražù* ‘beautiful’) besides the masculine (Lith. *gēras*, *gražūs*) and the feminine (Lith. *gerà*, *graži*) has traditionally led to the reconstruction of ‘neuter’ forms of adjectives. Their usage, however, is subject to specific constraints which separate them from the other forms of gender marking, and the notion of ‘neuter’ has often been criticised⁷. This is, to my mind, largely a question of vocabulary. The point is that these adjectival forms can be used substantively with an abstract meaning pointing to the quality

⁶ Cf. Ambrazas 1997, 125.

⁷ See Tekorienė 1987, 62–73 for an overview.

expressed by the adjective (e.g. *gēra* ‘the good’, *gražū* ‘the beautiful’) and, in this use, they are normally left unmarked for case. Valeckienė (1984, 98–99) provides many examples in which all syntactic functions are illustrated:

- Nom. sg.:

(18) Lithuanian dialect of Ēriškiai (cf. Valeckienė 1984, 98)

Kvaila lenda į galvą.
 stupide–NOM.SG. goes–IND.PRES.3. in head–ACC.SG.
 Stupidity goes to the head.

- Acc. sg.:

(19) V. Mykolaitis–Putinas, *Altorių šešėly* (1933, 375; cf. Valeckienė 1984, 98)

Iš jų aš esu patyręs vien tik gera.
 from them–GEN.PL. I–NOM.SG. am–IND.PRES.1SG. experienced–PART.PRET.ACT.NOM.SG.
 only good–ACC.SG.

From them I have experienced only good things.

- Gen. sg.:

(20) J. Tumas–Vaižgantas, *Rinkiniai Raštai* (1 1922, 136; Valeckienė 1984, 98)

Bijojo bloga ir laukė gera.
 he feared–IND.PRET.3.evil–GEN.SG. and waited for–IND.PRET.3. good–GEN.SG.

He was afraid of the evil and waited for the good.

- Instr. sg.:

(21) Šatrijos Ragana, *Sename dvare* (1969, 21; cf. Valeckienė 1984, 98)

apie tai, ką laikau
 about that–ACC.SG. what–ACC.SG. I consider–IND.PRES.1SG.

šventa
 something sacred–INSTR.SG.

about what I consider something sacred

Interestingly enough, when the substantivised adjective is accompanied by a demonstrative, this receives normally all the agreement properties required by the context (e.g. gen. sg. *tō gēra* ‘this good thing’, acc. sg. *tōkį gēra* ‘such a good thing’). This shows that ‘neuter’ forms are able to transmit agreement properties to their dependents, but are unable to carry them by

themselves. There is, however, a tendency to provide these forms with a full-fledged inflection (e.g. gen. sg. *gēro*, instr. sg. *gerù* ‘the good’); this tendency predominates in Latvian (e.g. acc. sg. *labu* ‘the good’), where it is certainly to be connected with a shift to the masculine gender (cf. the nom. sg. *labs*). In the modern languages, all these forms are often replaced by other abstract formations (e.g. Lith. *gēris*, Latv. *labums*).

Valeckienė (1984, 101) considers the inflected forms (e.g. gen. sg. *gēro*, instr. sg. *gerù*) to be ‘primary’, the uninflected forms (e.g. *gēra* as a gen. or instr. sg.) to be ‘secondary’, but does not explain the evolution from one type to the other. The reverse evolution is more likely, as it represents a *lectio difficilior*. It can be assumed that invariability reflects the initial state of affairs, whereas the development of a full-fledged inflection is due to a secondary regularisation. The question that remains unanswered at this point is how this initial stage of invariability can be accounted for.

It is usually said that the East Baltic languages have lost the PIE neuter gender, but I think that this evolution was gradual, not abrupt, and that invariability reflects an intermediary stage on a scale ranging from the possession of a full-fledged neuter gender to its complete loss. To be more precise, I assume that the neuter gender was first reanalysed *in each of its functions* as adverbial and that this reanalysis led to the loss of inflection that obviously characterises the remnants of the neuter gender in Lithuanian. This loss of inflectional properties was thus the first step towards the change of status of the neuter forms and finally their complete absorption by the system. Typologically, such an assumption is not a trivial matter, and I fully recognise that it requires a more in-depth investigation. But the point that I think cannot be challenged is that the substantivised ‘neuters’ had become indeclinable at some stage in the prehistory of Lithuanian. This is a striking parallel to the invariable use of the half-participles in *-damos* and especially of the verbal nouns in *-imos* in Low Lithuanian. The only difference is the morphological class of the words affected by invariability, nouns (*-imos*), half-participles (*-damos*) or substantivised adjectives (*gēra*), and this is not a minor difference.

Taking this parallel seriously, one could propose the hypothesis that part of the explanation of the invariability of the Low Lithuanian forms in *-damos* and *-imos* lies in the evolution of the ‘neuter’ gender in East Baltic. It is possible that the formation of the verbal nouns in *-imas* includes former neuter substantives. This seems to be suggested by the Slavonic comparanda: Lith. *piešimas* ‘drawing’ seems to correspond to the Slavonic neuter **pismo*

‘letter’ (cf. S.Cr. *písmo*, Pol. *pismo*, Russ. *pis’mó*)⁸. To be sure, the Slavonic evidence is not definitive: the suffix **-bmo* is attested only recently (there is no secure example in OCSl.) and in some cases a reflection of older **-men-* stems seems quite possible (compare OCSl. *pismę*, gen. sg. *pismene* ‘letter, γράμμα, γραφή’). The origin of the Lithuanian formation in *-imas* itself is complex and could include former masculines as well, as the Albanian and Anatolian evidence seems to suggest, if they are valid: in Albanian the type in *-ím* is exclusively masculine (e.g. Alb. *ankím*, def. *-i* ‘complaint’, *kujtím*, def. *-i* ‘memory’, *zbulím*, def. *-i* ‘discovery’) and in Anatolian the corresponding formation in *-ima-* belongs to the common gender (e.g. Hitt. *tetḫimaš* ‘thunder’ in KUB 6.45 iii 1, the neuter plural *tetḫima* in KBo 17.85, 6 is secondary)⁹. All in all, the evidence for a Balto-Slavonic neuter suffix **-imã* is quite fragile and any hypothesis relying on this reconstruction could legitimately appear to be built on sand. Nevertheless, it does not seem to me completely pointless to postulate here the existence of neuter gender substantives in **-imã* in the immediate prehistory of the Lithuanian verbal nouns in *-imas*. The reason for this is that it provides a possible explanation for the invariability of the reflexive forms in *-imos* in Low Lithuanian. This being said, and with all the caution imposed by the circularity of this argument, we still need to build a cogent scenario.

The elimination of neuter substantives in East Baltic has usually led to their integration into the corresponding masculine formations. If a neuter **-imã* has ever existed in the prehistory of the East Baltic languages, it should be reflected by a masculine **-imãs* (cf. the classical example Lith. *bùtas* ‘flat’ compared with OPr. *buttan* ‘house’). It has long been noticed, however, that the existence of former neuter gender substantives is often betrayed by their fluctuation, in the Lithuanian dialects, between the masculine and

⁸ As to the formation, see also Sl. **pražbmo* ‘something fried’ (Pol. *prażmo* ‘a meal made of green grains fried on the oven’ from *prażyć* ‘to fry’).

⁹ Cf. Kloekhorst 2008, 882. On the Hittite type in *-ima-* see also Laroche 1956; Bammesberger 1973, 116; S. Ambrazas 2011, 44. The equation Hittite *-ima-* / Baltic *-ima-* is not beyond criticism: Hittite *-ima-* could result from the adjunction of a suffix **-mo-* to **-i(i)a-* verbs (see Bader 1974, 1). What is certain is that Hitt. *išḫima-* ‘string, line, cord’, mentioned by S. Ambrazas (1993, 25), does not belong here: this is an extrapolation based on the nom. sg. *išḫimaš* (KBo 17.15 rev. 11) of a **-men-* stem *išḫiman-* (cf. the acc. sg. *išḫiman* KBo 20.40 v 9, etc.), on which see Kloekhorst 2008, 392.

the feminine genders: alongside Lith. *bùtas* there is also a feminine *butà* (cf. already *ik bútai tàwai* ‘until your home’, Daukša, *Katechismas*, 163₂ [1595]). Such fluctuations were thoroughly described by Stundžia (1978; 1994) in line with Skardžius (1943, 43) and Kazlauskas (1968, 125). Whatever the explanation, this seems to suggest that the absorption of the neuter substantives is not very old in East Baltic¹⁰.

Now, if we assume that the verbal nouns in *-imas* still had a neuter ending **-imã* at the time of the constitution of their reflexive counterparts and if we remember that invariability had become a characteristic feature of all neuter forms shortly before their elimination, we are in a position to reconstruct the following contrast:

non-reflexive **-imã* (invariable), vs. reflexive **-imã=si* (invariable)

I assume that the ending **-imã* was first preserved and reanalysed as parallel to, though distinct from, the feminine ending, providing the basis for the analogical creation of a reflexive counterpart **-imã=si* (instead of **-imã=si*) with the alternation characteristic of the feminine:

non-reflexive **-imã* (invariable), vs. reflexive **-imã=si* (invariable)

This could be ultimately the origin of the Low Lithuanian ending *-imos*: its invariability comes from its neuter origin, its materiality from a superficial adequation of this origin to the feminine type. Note that this reconstruction implies that the neuter gender was still distinct at the time of Leskien’s law, which is far from insignificant for the relative chronology of the two phenomena.

At a later stage, the neuter ending **-imã* was completely eliminated and replaced by the masculine ending **-imãs*, an usual process in the fate of the neuter gender in Baltic. But – and this is the crucial point in my scenario – the ancient reflexive ending *-imos* was retained in Low Lithuanian together with its invariability, whereas the new ending **-imãs*, fully integrated in the system of masculine formations, regularly received the inflectional properties of its class:

non-reflexive **-imãs* (inflected), vs. reflexive **-imã=si* (invariable)

The reason for the discrepancy between the non-reflexive and the reflexive sets of endings obviously lies in the difficulty of building a reflexive declension: retaining the ancient irregular form in *-imos* with its invariability was definitely not the best solution, but it was a solution. In the other Lithuanian

¹⁰ See a short discussion in Petit 2010, 170–171.

dialects, the pressure of the non-reflexive pattern and the unnaturalness of the invariable form led to the creation of a full-fledged reflexive declension (with a nom. sg. *-imas-i(s)*, a gen. sg. *-imo-si*, etc.):

non-reflexive **-imās* (inflected), vs. reflexive **-imās=si* (inflected)

This is typically the situation of most of the High Lithuanian dialects. Even in these dialects, the problem was not yet fully resolved, since the reflexive declension in *-imas-is* was subject to serious phonetic and morphological difficulties. Not surprisingly, it became quickly recessive. Jablonskis (1922, 20) writes that the type in *-imas-is* is hardly used in Lithuanian outside the nominative singular and is often replaced by the corresponding non-reflexive forms (e.g. gen. sg. *mušimo* instead of *mušimo-si* ‘mutual striking’ or *varžymo* instead of *varžymo-si* ‘feeling shy, shyness’).

As already said, the philological evidence shows that the development of the invariable half-participles in *-damos* in the Low Lithuanian dialects is a more recent phenomenon than the rise of the indeclinable verbal nouns in *-imos*, which are already attested in Old Lithuanian. But it would be too easy to claim that the ending *-damos* and its invariability are simply due to the ‘analogy’ of the older ending *-imos*. First, the syntactic basis for this analogical extension does not appear clearly: there is no contact point between verbal nouns and half-participles. Second, assuming a directionality [*-imos*] → [*-damos*] has the effect of leaving unexplained the complete invariability of the Old Latvian half-participle (*-damies*). There are in Latvian no verbal nouns corresponding to the Lithuanian formation in *-imas*, and the other available classes of verbal nouns, when combined with the reflexive particle, do not show any trace of invariability whatsoever: a reflexive verbal noun like *redzēšanās* ‘seeing oneself’, for example, can be inflected in Latvian (acc. sg. *redzēšanos*), even if the paradigm is largely defective and several forms are not used at all. Kabelka (1975, 102) also mentions *vēlējumies*, acc. sg. *vēlējumos* (from the verb *vēlētīe-s* ‘to wish’). The directionality [*-imos*] → [*-damos*] also leaves unexplained the sporadic traces of invariability of the non-reflexive half-participles in some Lithuanian dialects (with the endings *-dama*, *-dami* or *-damu*). Even if some of these forms may be regarded as secondary or even as contact-induced, the fact remains that there must be something real and substantial in this trend towards invariability.

Here again, my personal view is that we have to distinguish between invariability itself and its materiality. Invariability in the half-participles is cer-

tainly a pervasive tendency in the Baltic languages, a tendency largely due to the pressure of the gerunds, which were by nature invariable. It is not really surprising that invariability is only found in the half-participles, not in the other subsets of participial forms: their converbial status and their proximity to invariable gerunds make them more vulnerable to invariability than the other participles.

It should be noted that the Baltic system is unbalanced, as it combines variable half-participles and invariable gerunds in complementary functions. The status of converbs, intermediate between appositive participles and adverbial complementation, predisposes them to fluctuate between inflection and lack of inflection. Historically, appositive participles may lose their agreement properties: the Ancient Greek inflected participle (masc. $-\omega\nu$, fem. $-\omega\nu\sigma\alpha$, nt. $-\omega\nu$), for example, became an invariable gerund in Modern Greek ($-\omega\nu\tau\alpha\varsigma$). Or, conversely, adverbial gerunds may acquire secondary agreement properties: the Slavonic invariable gerund, for example, became in Czech an inflected gerund, called ‘transgressive’, marked for gender and number (e.g. masc. sg. *vida*, fem. and nt. sg. *vidouc*, pl. *vidouce* ‘seeing’). In this respect, the category of converbs is in a permanent state of flux and change.

Old Latvian and Low Lithuanian are unique in their combination of the two possibilities: they present, on the one hand, inflected non-reflexive half-participles and, on the other hand, uninflected reflexive half-participles. The parallel is too striking to be due to chance, the more so as this distribution appears to be cross-linguistically unparalleled. For Old Latvian, Endzelin’s solution involving the analogy of the gerund ending $-u\ddot{o}ti\ddot{e}s$ on $-dami\ddot{e}s$ is attractive, but does not explain why this analogy is limited to the reflexive ending. One reason may be the fact that the realisations of the reflexive half-participles provided a particularly favourable condition for the emergence of this analogical pattern. A direct line evolution of the inflected reflexive half-participles would have yielded the following forms in Latvian:

Masc. sg. $*-damas$	($< *-damas=s(i)$)	Fem. sg. $*-dam\ddot{a}s$	($< *-dam\ddot{a}=s(i)$)
Masc. pl. $*-damies$	($< *-damie=s(i)$)	Fem. pl. $*-dam\ddot{a}s$	($< *-dam\ddot{a}s=s(i)$)

The reflexive paradigm was significantly unbalanced due to the lack of number agreement in the feminine set in contrast to the masculine. One may assume that this difference was neutralised by the suppression of any number agreement in the reflexive set by generalisation of the plural form:

Masc. sg. * <i>-damies</i>	(replacing * <i>-damas</i>)	Fem. sg. * <i>-damās</i>
	↑	
Masc. pl. * <i>-damies</i>		Fem. pl. * <i>-damās</i>

At this stage, the reflexive half-participles were limited to two forms **-damies* (masc. sg. and pl.) and **-damās* (fem. sg. and pl.). It is easy to see how the masculine ending *-damies* supplied the impetus to the analogy of the gerund ending *-uoties*, resulting in the generalisation of *-damies* to the feminine forms:

Masc. sg. * <i>-damies</i>	}	→	Fem. sg. * <i>-damies</i> (replacing * <i>-damās</i>)
Masc. pl. * <i>-damies</i>			Fem. pl. * <i>-damies</i> (replacing * <i>-damās</i>)

This is the Old Latvian state of affairs; the only further step was, in the 19th century, the reintroduction of new feminine forms in **-damās*.

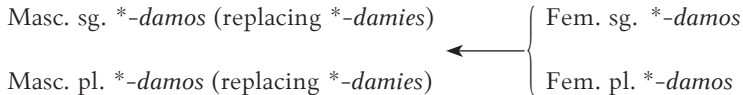
A similar development would be very likely to account for the rise of invariability in the Low Lithuanian half-participles in *-damos*, but its mechanism requires a more sophisticated elaboration. The starting point is known: it is directly reflected in the *Ziwatas* (1759). Reflexive half-participles are there regularly marked for gender and number (masc. sg. *-damas*, fem. sg. *-damos*, masc. pl. *-damyis*, fem. pl. *-damos*). If we try to formalise this in a scheme comparable to the one we have drawn for Old Latvian, this gives the following paradigm:

Masc. sg. * <i>-damas</i>	(< * <i>-damas=s(i)</i>)	Fem. sg. * <i>-damos</i>	(< * <i>-damā=s(i)</i>)
Masc. pl. * <i>-damies</i>	(< * <i>-damie=s(i)</i>)	Fem. pl. * <i>-damos</i>	(< * <i>-damās=s(i)</i>)

One century later (ca 1850–1860), Valančius displays invariable half-participles with a unique ending *-damos*. What happened in between? The first step could have been the same as in Latvian, the correction of the unbalance between the masculine and the feminine sets by generalisation of the plural form in the masculine by analogy to the feminine:

Masc. sg. * <i>-damies</i>	(replacing * <i>-damas</i>)	Fem. sg. * <i>-damos</i>
	↑	
Masc. pl. * <i>-damies</i>		Fem. pl. * <i>-damos</i>

At this stage, the reflexive half-participles had two forms in Low Lithuanian, **-damies* for the masculine (sg. and pl.) and **-damos* for the feminine (sg. and pl.). The last step was the generalisation of one single form, as in Latvian and for the same reasons. Unlike Old Latvian, however, it was not the masculine form **-damies* which was extended to the feminine¹¹, it was the feminine ending **-damos*:



The reason why *-damos* was retained instead of *-damies* to become the single marker of reflexive half-participles could lie in the fact that Low Lithuanian had preserved the ancient invariable substantives in *-imos*: the origin of *-damos* and *-imos* is different, but their formal resemblance and their common invariability provided a model for the selection of *-damos*, not *-damies*, in Low Lithuanian. Strikingly enough, the distant model of *-imos* was more effective than the close model of the gerund in *-anties*, which would have rather promoted the ending *-damies*, as in Old Latvian.

V. Conclusion

The explanation proposed in this paper may appear extremely sophisticated or even quite incredible, but it is proportionate to the oddity of the phenomenon: the existence of indeclinable nominal forms in highly inflectional languages requires attention. What I have tried to do here is to give full account of the Low Lithuanian philological evidence, which undoubtedly shows that the invariable verbal nouns in *-imos* antedate the invariable half-participles in *-damos*. The only solution is then to assume that invariability has an independent source in the verbal nouns in *-imos*: my explanation by the neuter gender may be right or not, it is based on the parallel of the substantivised neuter adjectives in which we observe the same trend towards invariability. The half-participles in *-damos*, for their part, cannot have acquired their invariability only by virtue of the analogy of the verbal nouns in *-imos*. Their ultimate source is here assumed to have been a phonological merging, reshaped in a complex way; the role of *-imos* in this development was rather superficial. I fully recognise that this scenario had to take rather complicated

¹¹ Except perhaps for some Low Lithuanian dialects like those of Kalnalis and Laukuva, in which we find an invariable ending *-damies*.

side roads to reach its goal and there remain some areas of uncertainty in which the picture is not so bright, but what I aimed to achieve here is more to raise new research questions than to solve old problems.

POLINKIO NEKAITYTI SANGRAŽINIŲ DALYVIŲ IR VEIKSMAŽODINIŲ DAIKTAVARDŽIŲ ŽEMAIČIŲ TARMĖJE KILMĖ

Santrauka

Žemaičių tarmėje sangražiniai pusdalyviai ir veiksmažodiniai daiktavardžiai nelinksniuojami ir turi vienintelę galūnę *-damos* resp. *-imos*. Straipsnio tikslas – paaiškinti polinkį nekaityti šių formų, atspindintį unikalų žemaičių tarmės bruožą. Teigiama, kad polinkis nekaityti veiksmažodinių daiktavardžių su priesaga *-imos* atsiradęs dėl pirmykštės jų bevardės giminės, o pusdalyvių su *-damos* – dėl sudėtingų fonologinio sumaišymo ir analoginės kaitos procesų. Abiem atvejais polinkio nekaityti išlikimą nulėmė bendro pobūdžio sunkumai, susiję su sangražinių veiksmažodžių vardažodinių formų daryba.

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