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## OVERVIEW OF NOMINAL COMPOUNDS IN OLD LATVIAN<sup>1</sup>

**Abstract.** This article gives an overview of nominal compounds present in Old Latvian texts and dictionaries of the 17<sup>th</sup> century and analyses their characteristic properties. The results show that the well-attested categories of Baltic compounds are richly represented in Old Latvian texts. Distinctions between the different types of compounds are clearly indicated in terms of the formal properties of the components. It is proposed that a portion of the linking elements that are mostly used in the determinative compounds in Old Latvian might have originated from the original stem vowels of the first components. This Baltic model of coining compounds still attested in Old Latvian texts is no longer visible in Modern Latvian. Finally, it is also shown that the compositional suffix *-is* (m.)/*-e* (f.) generally used in possessive compounds and verbal governing compounds was originally restricted to adjectival compounds in Latvian.

**Keywords:** Old Latvian; Lithuanian; Old Prussian; nominal compounds; linking element; compositional suffix.

### 1. Introduction

The aim of this article is to present an overview of nominal compounds found in Old Latvian texts and dictionaries of the 17<sup>th</sup> century and to analyse their formal and semantic characteristics. In this empirical study, the material is examined both by using language-internal evidence, and by considering compounds in Old Latvian with respect to compounds used in other Baltic

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<sup>1</sup> For a thorough account of nominal compounds found in Old Latvian texts and dictionaries of the 16<sup>th</sup> and 17<sup>th</sup> centuries and the full collection of data, see my doctoral thesis (Bukelskytė-Čepelė 2017). I would like to thank Professor Jenny Larsson and the anonymous reviewers for their valuable comments on the manuscript of this article. I would also like to express my gratitude to the Lena Neuland foundation for financing the preparation of this article and Anja Heron Lind for proofreading the text. Errors or any other misunderstandings are, of course, mine alone.

languages. The main research questions are as follows: Do compounds in Old Latvian differ in terms of their meaning and form? What are the characteristic formal properties of the categories of compounds in Old Latvian? And are there any common features between compounds in Old Latvian and the other Baltic languages, in particular Lithuanian?

Compounds in Old Latvian have only been briefly discussed in previous literature. Amato (1996) considers compounds found in the translation of pericopes (1640) by Georg Elger, while Skujiņa (2006; 2008) looks at material from the first Latvian dictionary (1638) compiled by Georg Mancelius. This article, in contrast, addresses compounds from both dictionaries and texts produced by authors from different writing traditions of early Latvian (for a general overview of early written Latvian, see Larsson, Bukelskytė-Čepelė 2018; Ozols 1965, 27–335; Rūķe-Draviņa 1977, 28–45; and Vanags 2008; 2019).

The data collected for this study (347 unique compounds in total)<sup>2</sup> was compiled from the online Corpus of Early Written Latvian, *SENIE*, and word indexes of the texts that were not represented in the corpus. Examples of clear loaning or cases with etymologically opaque components were excluded from the analysis. Note that due to space limitations, only a representative selection of examples will be quoted in this article. The material will be organized following the categorization of compounds that roughly corresponds to the traditions of historical-comparative linguistics (see Larsson 2002b; 2010a; 2018; Olsen 1999, 657–759; 2002).<sup>3</sup> The main categories addressed here are the determinative compounds, the possessive compounds and the verbal governing compounds.

## 2. Categories of compounds in Old Latvian

The most productive type of compound in Old Latvian is the determinative compound, which functions as a noun, accounting for around 74.6% of all 347 compounds (excluding variants). Possessive compounds (ca. 12.7%) and verbal governing compounds (ca. 12.4%) are also well-attested in Old

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<sup>2</sup> There are 406 compounds including side forms, e.g. *ac-a-vāk-s* ‘eyelid’ and *ac-vāk-s* ‘eyelid’.

<sup>3</sup> In some works in Baltic linguistics, a modified version of this classification is used, see e.g. Endzelīns (1948, 59–66; 1951, 255–264); Forssman (2001, 229–235); Senn (1966, 340–351); Skardžius (1943, 405–415); Stundžia, Jarmalavičius (2019).

Latvian texts. Copulative compounds will not be examined here as there is only one example that can reliably be analysed as a copulative compound, **miež-auz-i** <Meešch=ausi> (nom. pl.) (F1) ‘mixture of barley and oats’ (← *miež-is* ‘barley’ + *auz-a* ‘oat’).

Note that in Old Latvian texts, there are a number of cases formed from two inflected components where the first is a noun used in the genitive case, e.g. **baznīc-as kung-i** <Baznīcas kungi> (nom. pl.) (EE) ‘priest’ (← *baznīc-as* (gen. sg.) ‘church,’ *kung-i* (nom. pl.) ‘master, lord, gentleman’). Additionally, there are examples where the first part is an inflected adjective that agrees with the following noun in number, gender and case, e.g. **liel-s kung-s** <Leels Kungs> (M/L) ‘landlord, lord’ (← *liel-s* (nom. sg. m.) ‘big,’ *kung-s* (nom. sg.) ‘master, lord, gentleman’). Examples like these are problematic, as it is not always possible in such instances to distinguish between compounds and noun phrases.<sup>4</sup> Given this ambiguity, examples where both components are inflected will not be examined as clear cases of compounds in Old Latvian and will be set aside here for the sake of clarity.

## 2.1. Determinative compounds

### 2.1.1. Types of determinative compounds

This section addresses the largest category of Old Latvian compounds, namely the determinative compounds. Compounds of this type are typically made up of two nouns, e.g. **durv-sarg-s** <Durw’= šahrġs> (LD) ‘door-keeper’ (← *durv-is* (nom. pl.) ‘door’ + *sarg-s* ‘guard, watch’), **sān-kaul-s** <Šahnkauls> (PhL) ‘rib’ (← *sān-s* ‘side’ + *kaul-s* ‘bone’). The first component can also be a verbal stem, adjective, numeral or an adverb, but these cases are attested to a significantly lower degree, respectively **ejam-rat-i** <Eiam= ratti> (nom. pl.) (LD) ‘a walker, in which a child learns to walk’ (← *ie-t* ‘to walk, to go’ + *rat-s* ‘wheel’), **plān-al-us** <plahn allus> (F2) ‘light beer’ (← *plān-s* ‘thin, fluid’ + *al-us* ‘beer’), **ses-dien-a** <Šeßdeena> (PhL) ‘Saturday’ (← *sest-ais* ‘sixth’ + *dien-a* ‘day’), **sen-dien-as** <Seenn=deenas> (nom. pl.) (LD) ‘days of gone’ (← *sen* (LD) ‘a long time ago’ + *dien-a* ‘day’). The types of determinative compounds in Old Latvian grouped according to the word-class membership of their components are presented in Figure 1.

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<sup>4</sup> The same issue of delimiting compounds from noun phrases exists in Modern Latvian (see e.g. Ahero 1979).

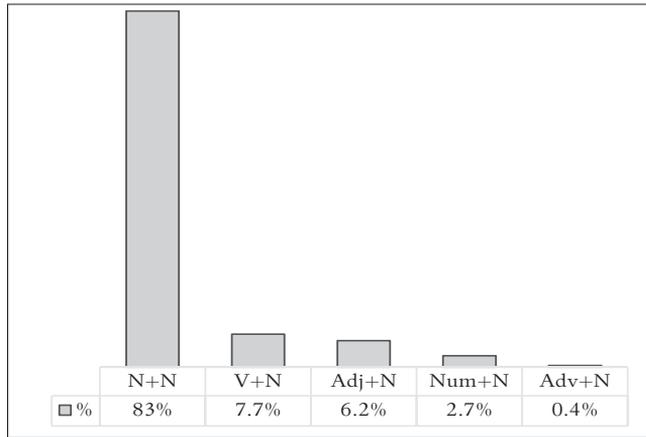


Figure 1. **Determinative compounds according to the word-class membership of the components**

### 2.1.2. The form of the determinative compounds

In many determinative compounds in Old Latvian (ca. 62%), there is no linking element used between the two components.<sup>5</sup> The remainder (ca. 38%) use linking elements such as <a>, <e>, <i> and <u>, with the most common being <a>. These linking elements primarily occur in compounds consisting of two nouns. The distribution of the linking elements depends on the original stems of nouns used as the first components. The linking element <a> is often used in compounds where the first component is a noun with a feminine  $\bar{a}$ -stem, e.g. *galv-a-oirs-s* <Ghallawirß> (PhL) ‘top of the head’ (← *galv-a* ‘head’ + *oirs-s* (KIV) ‘surface’), *rok-a-dzirn-us* <Rohka=dfirrnus> (nom. pl.) (L) ‘quern’ (← *rok-a* ‘hand, arm’ + *dzirn-us* (nom. pl.) (L), *dzirn-is* (LD) ‘hand mill’).<sup>6</sup>

<sup>5</sup> Note that a very strong tendency to lose linking elements in the determinative compounds represented in Langius’ dictionary may be a trace of the Tamian dialect, which might have influenced Langius during his stay in those areas (see Bl e se 1936, 576).

<sup>6</sup> In a few compounds, the linking elements <a> and <e> originally belonged to the genitive endings *-as* and *-es* of nouns of the feminine  $\bar{a}$ - and  $\bar{e}$ -stems. Due to the assimilation of the *s* occurring at the final position of the first part and the initial position of the second, the *s* disappeared. This is why *a* and *e* were reanalysed and used as linking elements, e.g. *vasar-a-svētk-i* <Wafšara=fwehtki> (nom. pl.) (L) ‘Pentecost’ (← *vasar-a* ‘summer’ + *svētk-i* (nom. pl.) ‘festivity’) from *vasar-as svētk-i* <Wassaras Śwehtki>

Where the first component is a noun of a consonantal/*i*-stem, a number of compounds have <i> as a linking element, e.g. **ac-i-kakt-iņ-š** <Azzi kaktinsch> (F1) ‘corner of the eye’ (← *ac-s* (L), *ac-is* (EE), *ac-e* (LD) ‘eye’ + *kakt-s* ‘corner’), **av-i-kūt-s** <awwikuts> (EE) ‘sheepfold’ (← *av-s* (L), *av-is* (LD) ‘sheep’ + *kūt-s* ‘shed’), **asin-i-sērg-a** <Aššinišährgha> (L) ‘dysentery’ (← *asin-s* (L), *asin-is* (LD) ‘blood’ + *sērg-a* ‘epidemic disease’), **ūden-i-trauk-s** <vdennitrauku> (acc. sg.) (EE) ‘water vessel’ (← *ūden-s* ‘water’ + *trauk-s* ‘vessel’). The linking elements <e> and <u> can similarly be found in compounds where the first component is a noun with *ē* and *u*-stems, e.g. **mēl-e-zāl-es** <Mehle=Sahles> (nom. pl.) (F2) ‘*Isatis* (a plant)’ (← *mēl-e* ‘tongue’ + *zāl-e* ‘herb, grass’), **sērksn-e-mēnes-s** <Sehrkšne Mehnes> (F2) ‘March’ (← *sērksn-e* ‘frozen snow’ + *mēnes-s* (L) ‘month’), **vid-u-gavēn-i** <Widdu=ghaweni> (nom. pl.) (PhL) ‘mid-Lent’ (← *vid-us* ‘middle’ + *gavēn-is* (PhL), *gavēn-e* (L) ‘fast’).

These compounds, I would argue, are stem compounds, in which linking elements derive from the original stem vowels of the first components. These types of linking elements are lost in Modern Latvian (Endzelīns 1948, 61), but they are still used in compounds in Lithuanian, e.g. when the first component is a noun of an *a*-stem: **darb-ā-dien-is** (LKŽe) ‘working day’ (← *dārb-as* ‘work’ + *dien-à* ‘day’); an *ā*-stem: **dien-ó-vid-is** (LKŽe) ‘midday’ (← *dien-à* ‘day’ + *vid-ūs* ‘inside’); an *i*-stem: **ugn-ì-kaln-is** (LKŽe) ‘volcano’ (← *ugn-ìs* ‘fire’ + *káln-as* ‘mountain, hill’); or a *u*-stem: **vid-ù-nakt-is** (LKŽe) ‘midnight’ (← *vid-ùs* ‘inside’ + *nakt-ìs* ‘night’).

Furthermore, the linking element <a> is used in several determinative compounds where it would not be expected to occur from an etymological standpoint. In these cases, the linking element <a> may have replaced the original stem vowels of the first components, for example when the first component is a noun of an old consonantal/*i*-stem origin, e.g. **ac-a-vāk-s** <Atza=wahx> (L) ‘eyelid’ (← *ac-s* (L), *ac-is* (EE), *ac-e* (LD) ‘eye’ + *vāk-s* ‘lid, cover’), **avj-a-drēb-es** (nom. pl.) <awwia drābes> (loc. pl.) (EE) ‘sheep’s clothing’ (← *av-s* (L), *av-is* (LD) ‘sheep’ + *drēb-e* ‘cloth’), **dakš-a-dzij-as** <Dackfcha=djijas> (nom. pl.) (L) ‘wick-yarn’ (← *dakt-s* ‘wick’ + *dzij-a*

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(nom. pl.) (M/L) ‘id.’ (*vasar-as* (gen. sg.) ‘summer’). Note that the <s> that originally belonged to the genitive ending *-us* was also used as a linking element after the loss of the short vowel *-u-*, e.g. *liet-s-ūden-s* <Leets=vdenns> (L) ‘rainwater’ (← *liet-us* (L) ‘rain’ + *ūden-s* ‘water’) from *lietus-ūden-s* <Leetus= Uhdens> (LD) ‘id.’ (*liet-us* (gen. sg.) ‘rain’).

‘wool, yarn’), **gov-a-pien-s** <Ghohwa=peenß> (PhL) ‘cow’s milk’ (← *gov-s* (PhL), *gov-a* (LD) ‘cow’ + *pien-s* ‘milk’); when the first component is a noun of an *ē*-stem, e.g. **biš-a-trop-s** <Bišŋcha=Trohs> (PhL) ‘beehive’ (← *bit-e* ‘bee’ + *trop-s* ‘hive’); or when the first component is a noun of a *u*-stem, e.g. **klep-a-zāl-e** <Klappa=fahles> (gen. sg.) (PhL) ‘herb used when coughing’ (← *klep-us* ‘cough’ + *zāl-e* ‘herb, grass’).

This spread of the linking element <a> may also be seen in determinative compounds in Lithuanian, e.g. Lith. **galv-ó-virš-is** (LKŽe) ‘top of the head’ (← *galv-à* ‘head’ + *virš-ùs* ‘top’) next to Lith. **galv-ã-virš-is** (LKŽe) ‘id.’; Lith. **ugn-ì-kaln-is** (LKŽe) ‘volcano’ (← *ugn-ìs* ‘fire’ + *káln-as* ‘mountain, hill’) next to Lith. **ugn-ã-viet-ė** (LKŽe) ‘fireplace’ (← *ugn-ìs* ‘fire’ + *viet-à* ‘place, spot’); Lith. **turg-ã-dien-is** (LKŽe) ‘market day’ (← *tuřg-us* ‘market’ + *dien-à* ‘day’); and Lith. **šun-ã-žol-ė** (LKŽe) ‘grass suitable for feeding animals’ (← *šun-s* (gen. sg.) ‘dog’ + *žol-ė* ‘grass’). The tendency to replace other linking elements with <a> was already seen in Old Lithuanian texts (see Drotvinaš 1967, 197ff.).

By contrast, Skujiņa (2006, 19ff.) suggests that the etymologically unexpected linking element <a> found in these determinative compounds may originate from the genitive ending of nouns of the masculine (*i*)*a*-stem that was indicated as <a> in Old Latvian as well. However, given the fact that the same tendency is seen in Lithuanian and that relics of the stem composition are still found in Old Latvian texts (see Blēse 1936, 525), one cannot rule out the possibility that the linking element <a> derived from an original stem vowel.

This latter idea can be strengthened by the fact that the linking element <a> is found in a few compounds in Old Latvian in which the first component is an adjective, e.g. **garīg-a-dziesm-ems** <garrigadzēsmems> (dat. pl.) (EE) ‘hymn’ (← *gar-īg-s* ‘spiritual, ecclesiastical’ + *dziesm-a* (LD), *dziesm-is* (PhL) ‘song’), **liel-a-dien-as** <Leladenas> (gen. sg.) (EE) ‘Easter day’ (← *liel-s* ‘big’ + *dien-a* ‘day’). The linking element <a> cannot be associated with the genitive ending in these cases.

Moreover, the linking element <a> is used in compounds where the first component is the stem of the present tense passive participle and the second one is a noun, e.g. **adām-a-adat-as** <Addama=addatas> (nom. pl.) (PhL) ‘knitting-needle’ (← *ad-ī-t* ‘to knit’ + *adat-a* ‘needle’), **dedzam-a-upur-u** <dædzamma vppuru> (acc. sg.) (EE) ‘burnt offering’ (← *deg-t* ‘to burn’ + *upur-s* (EE), *upur-is* (M/L) ‘sacrifice, offering, victim’), **guļam-a-kambar-is**

<Ghuļlama=kambaris> (L) ‘bedroom’ (← *gul-ē-t* ‘to sleep, to lie’ + *kambar-is* (L) ‘room, chamber’), ***lūdzam-a-nam-s*** <luhdʃama=Nams> (VLH) ‘praying house’ (← *lūg-t* ‘to ask, to plead’ + *nam-s* ‘house’), ***saucam-a-bals-s*** <śauzama Balś> (VLH) ‘calling voice’ (← *sauk-t* ‘to call, to shout’ + *bals-s* (F1, F2), *bals-e* (F1, F2) ‘voice’), ***sējam-a-laik-s*** <śehjama laix> (L) ‘seed-time’ (← *sē-t* ‘to sow’ + *laik-s* ‘time’).

Compounds with the linking element *-(i)a-* where the first component is verbal are prevalent in both Old Lithuanian and Modern Lithuanian (see Drotvinas 1967, 202ff.; LKG 1, 457–460), e.g. OLith. ***nuleist-a-strėn-is*** ‘having lowered loins’ (i.e. ‘a careless, untidy person’) (← *nu-lėis-ti* ‘to let down, lower’ + *strėn-os* (nom. pl.) ‘loins, the small of the back’), MLith. ***iškišt-a-dañt-is***, *-ė* ‘having protruding teeth’ (← *iš-kìš-ti* ‘to put out’ + *dant-is* ‘tooth’), MLith. ***siurb-iā-kirm-is*** ‘liver fluke’ (← *siurb-ti* ‘to suck, absorb’ + *kirm-is*, *kiřm-is* ‘worm’).

Compounds in Old Latvian with a verbal stem as the first component have never been systematically examined. They have even been considered to be misprints (see Zemzare 1961, 18–19) or noun phrases (see Elksnīte 2011, 25ff.). Given that the same type of compound exists in Lithuanian, it can be argued that examples fitting this description, where a linking element <a> is used, are indeed compounds, and that compounds of this kind are more widely attested in Old Latvian texts than has previously been believed. For similar analysis of examples of this kind, see Blese (1936, 525) and Skujiņa (2006, 73–77).

It may be concluded that in Old Latvian texts, alongside numerous determinative compounds without linking elements, there is a large group of compounds where linking elements are preserved to a greater extent than was previously thought. This use of linking elements differentiates determinative compounds from the other categories of compounds in Old Latvian. The fact that the linking elements in Old Latvian were mostly used in the determinative compounds may be explained by the place of the stress in a compound. Compounds in Modern Latvian are generally stressed on the first syllable, apart from a few exceptions (see e.g. Balode, Holvoet 2001, 13). Given the original distribution of linking elements in Old Lithuanian compounds (see Larsson 2002a), one cannot rule out the possibility that Latvian possessive compounds were originally stressed on the second component, while the determinative compounds had the stress on the first. This is why linking elements in some determinative compounds

might have been stressed and kept in some compounds found in Old Latvian texts. Unfortunately, the location of the stress is never marked in these texts, making this point somewhat speculative; the original distribution of linking elements in compounds in Latvian remains thus an open question, and should be explored further in future research.

Determinative compounds are further distinguished from other types of compounds in Old Latvian by the form of the second component. The majority of compounds in this category keep the stem form of the second component unchanged, e.g. **gald-auts** <Ghalldautz> (PhL) ‘tablecloth’ (← *gald-s* ‘table’ + *aut-s* ‘binding’), **ses-dien-a** <Šeḥdeena> (PhL) ‘Saturday’ (← *sest-ais* ‘sixth’ + *dien-a* ‘day’). This tendency distinguishes determinative compounds from the possessive and verbal governing compounds found in Old Latvian texts. As will be argued in Sections 2.2 and 2.3, the majority of the possessive compounds and verbal governing compounds are extended by the compositional suffix *-is* (m.)/*-e* (f.). The suffix is considered to be a shared feature of the Baltic nominal compounds: PB \**-ijās*/*\*-ijā*, thus resulting in MLith. *-is*, *-ỹs* (m.)/*-ė* (f.), MLatv. *-is* (m.)/*-e* (f.), OPr. *-is* (m.)/*-e* (f.) (see Endzelīns 1951, 262–263; Forssman 2001, 232–233; Larsson 2002b, 205, 209–211).

In contrast, there are only a handful of unambiguous examples of determinative compounds that added this compositional suffix in Old Latvian: **lin-sēkl-is** <Linn=šehklī> (nom. pl.) (PhL) ‘linseed’ (← *lin-s* ‘flax’ + *sēkl-a* ‘seed’), **mat-aukl-e** <Mattauckle> (L) ‘hairband’ (← *mat-s* (F1, F2), *mat-e* (F2) ‘hair’ + *aukl-a* (LD), *aukl-is* (L) ‘string, cord, line’), **pirm-bērn-is** <Pirm=behrnis> (F2) ‘first child, offspring’ (← *pirm-ais* ‘first’ + *bērn-s* ‘child’), and **tiev-gal-is** <Teew=gallis> (F1) ‘thin end’ (← *tiev-s* ‘thin, slim’ + *gal-s* ‘end, ending’). In three cases, compounds with this suffix have a counterpart without the suffix: **ceļ-mal-is** <Zelļmallī> (loc. sg.) (VLH) ‘roadside’ (← *ceļ-š* ‘way, road’ + *mal-a* (F1, F2), *mal-s* (LD) ‘edge, brim’) and **ceļ-mal-a** <Zelļmallas> (nom. pl.) (F2) ‘id.’; **jūr-mal-is** <Juhrmallis> (LD) ‘seaside, seashore’ (← *jūr-is* (LD), *jūr-a* (F1, F2), *jūr-e* (PhL) ‘sea’ + *mal-a* (F1, F2), *mal-s* (LD) ‘edge, brim’) and **jūr-i-mal-a** <iurimallas> (gen. sg.) (EE) ‘id.’; and **pil-sāt-e** <Pilsates> (gen. sg.) (LD) ‘town, city’ (← *pil-s* ‘palace, castle’ + *sāt-a* (MEe), *sāt-s* (MEe) ‘fence, farm, yard’) and **pil-sāt-a** <Pillsahta> (LD) ‘id.’.

Hence, there is a very clear tendency among determinative compounds in Old Latvian of keeping the stem form of the second component unchanged,

with no suffixes added. As can be inferred from the determinative compounds in Modern Latvian (see MLLVG 1, 200ff.), the process of adding this suffix did not target compounds of this type to any greater extent during later periods, e.g. *balt-maiz-e* ‘white bread’ (← *balt-s* ‘white’ + *maiz-e* ‘bread’), *mež-sarg-s* ‘forester’ (← *mež-s* ‘forest’ + *sarg-s* ‘guard, watch’).

As will be suggested in Section 2.2, the compositional suffix in Old Latvian originally belonged to the adjectival compounds and was subsequently added to the possessive compounds, later spreading to a minority of the determinative compounds.

## 2.2. Possessive compounds

### 2.2.1. Types of possessive compounds

In this section, possessive compounds found in Old Latvian texts are discussed in greater detail. The first component in compounds of this type is most often an adjective or a numeral, while the second is a noun, e.g. *liel-galv-is* <leelghallwis> (L) ‘big-headed’ (← *liel-s* ‘big’ + *galv-a* ‘head’) and *tri-kāj-is* <Trikahjis> (F1) ‘tripod’ (← *trī-s* ‘three’ + *kāj-a* ‘leg, foot’) respectively. A noun or pronoun can also be used as the first component, but this is uncommon, e.g. *vilk-ac-is* <Wilk=azzis> (F1) ‘werewolf’ (← *vilk-s* ‘wolf’ + *ac-s* (L), *ac-is* (EE), *ac-e* (LD) ‘eye’) and *pat-galv-is* <pattghallwis> (L) ‘arbitrary, wilful’ (← *pat-s* ‘self’ + *galv-a* ‘head’) respectively (see Figure 2).

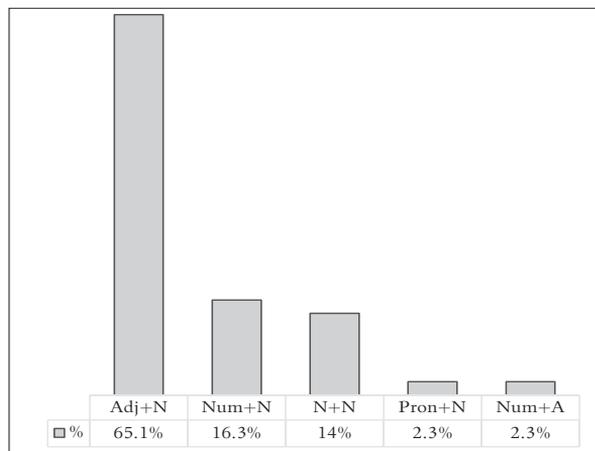


Figure 2. Possessive compounds according to the word-class membership of the components

### 2.2.2. The use of possessive compounds

Possessive compounds are used as both nouns and adjectives in Old Latvian texts. The difference is sometimes indicated through the use of capital letters, following the usage of capital letters for nouns in German, e.g. the adjective *vien-roc-is* <ween=rohzis> (L) ‘one-handed’ (← *vien-s* ‘one’ + *rok-a* ‘arm, hand’); and the noun *Vien-roc-is* <Ween=rohzis> (PhL) ‘sickle, reaping hook’.

Another way of marking the use of possessive compounds as adjectives is by adding external adjectival suffixes, namely the suffix *-īg-*, which is used in forming adjectives and other adjectival compounds in Old Latvian. Given that the language of these texts was tremendously influenced by the German language (see Vanags 2008, 193–196; 2019), the process of adding the adjectival suffix *-īg-* as a kind of external adjectival marker may have been triggered by the suffixed counterpart in German, e.g. *liel-sird-s* <Leel=sirds> (LD) ‘noble-minded’ (← *liel-s* ‘big’ + *sird-s* ‘heart’) and *liel-sird-īg-s* <Leelširdigs> (M/J) ‘id.’.

A similar process of adding suffixes to possessive compounds to overtly specify their word-class membership as adjectives is also seen in Old Prussian compounds (see Larsson 2010a, 30–31). By contrast, in Modern Lithuanian, possessive compounds are rarely formed by adding adjectival suffixes.

Hence, possessive compounds used both as adjectives and nouns in Old Latvian show that substantival compounds of this kind originate from the corresponding adjectival compounds (for a similar process in Lithuanian, see Larsson 2002b, 208). In Modern Latvian, a number of possessive compounds (the so-called *bahvorihi* compounds) are now often used as nouns, but they seem to have their origin in adjectives (MLLVG 1, 212), e.g. *gar-aus-is* ‘one who has long ears’ (← *gar-š* ‘long’ + *aus-s* ‘ear’).

### 2.2.3. The form of possessive compounds

Possessive compounds in Old Latvian exhibit remarkable consistency in their formal properties. In contrast to the determinative compounds, one of the main characteristic formal features of the possessive compounds is the lack of linking elements, e.g. *gar-kāj-is* <gharr=kajis> (L) ‘long-legged’ (← *gar-š* ‘long’ + *kāj-a* ‘leg, foot’), *mel-miz-is* <Mel=Mischi> (nom. pl.) (F1) ‘black alder’ (← *meln-s* ‘black’ + *miz-a* ‘bark, peel’), *vien-ac-is* <weenazzis> (F1) ‘one-eyed’ (← *vien-s* ‘one’ + *ac-s* (L), *ac-is* (EE), *ac-e* (LD) ‘eye’).

Furthermore, as was illustrated above, the majority of determinative compounds in Old Latvian do not change the stem form of the second component, whereas the majority of possessive compounds (ca. 69%) take the compositional suffix *-is* (m.)/*-e* (f.), e.g. **balt-galv-is** (m.), **-e** (f.) <Balt=galwis, we> (F1) ‘having white or blonde hair’ (← *balt-s* ‘white’ + *galv-a* ‘head’), **liel-lūp-is** <Leel=luhpis> (PhL) ‘having big lips’ (← *liel-s* ‘big’ + *lūp-a* ‘lip’), **vārg-dien-is** <Wahrgdeenis> (F1) ‘wretched, unfortunate person’ (← *vārg-s* ‘sickly, infirm’ + *dien-a* ‘day’).

Possessive compounds without the compositional suffix comprise only around 23,5% of all possessive compounds. Some possessive compounds have counterparts both with and without the suffix, e.g. **tri-kāj-is** <Trikahjis> (F1) ‘tripod’ (← *trī-s* ‘three’ + *kāj-a* ‘leg, foot’) and **trī-kāj-a** <Triekaja> (L) ‘tripod’ (← *trī-s* ‘three’ + *kāj-a* ‘leg, foot’); and **vien-ac-is** <ween azzis> (F1) ‘one-eyed’ (← *vien-s* ‘one’ + *ac-s* (L), *ac-is* (EE), *ac-e* (LD) ‘eye’) and **vien-ac-s** <ween=atz> (L) ‘one-eyed’ (← *vien-s* ‘one’ + *ac-s* (L), *ac-is* (EE), *ac-e* (LD) ‘eye’).<sup>7</sup>

As mentioned above, the compositional suffix *-is* (m.)/*-e* (f.) is considered a shared feature of Baltic nominal compounds and, as argued by Larsson (2002b, 205ff.), must first have become a productive suffix in possessive compounds since almost all possessive compounds in Modern Lithuanian and Modern Latvian have the suffix. The process of adding the suffix may thus have started with possessive compounds and spread later to determinative compounds in the Baltic languages (Larsson 2002b, 210ff.). Note that in Modern Lithuanian, the suffix is used in both determinative compounds and possessive compounds, e.g. the determinative compound **šón-kaul-is** ‘rib’ (← *šón-as* ‘side’ + *kául-as* ‘bone’) and the possessive compound **ilg-a-kōj-is, -ė** ‘long-legged’ (← *ilg-as* ‘long’ + *kōj-a* ‘leg, foot’).

Given the distribution of the compositional suffix *-is* (m.)/*-e* (f.) in Old Latvian, it may be concluded that the suffix was originally an adjectival suffix added to possessive compounds. It was only later used in determinative compounds, although ultimately to a lesser extent, as can be inferred from the determinative compounds in Modern Latvian (see MLLVG 1, 200–210).

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<sup>7</sup> There are only four examples with ambiguous second components like *laps-ast-e* <Laps=aste> (LD) ‘dissembler, sycophant’ (← *laps-a* (LD), *laps-is* (M/L) ‘fox’ + *ast-e* ‘tail’).

Thus, the compositional suffix *-is* (m.)/*-e* (f.) was generalized for use in possessive compounds but not determinative compounds in Modern Latvian, a distinction already visible in compounds found in Old Latvian texts.

### 2.3. Verbal governing compounds

#### 2.3.1. Types of verbal governing compounds

This section addresses the verbal governing compounds found in Old Latvian texts. The first component in compounds of this kind is usually a noun and the second is almost always a verbal stem, as shown in Figure 3 below, e.g. *mat-pin-is* <Mattpinnis> (LD) ‘braid’ (← *mat-s* (F1, F2), *mat-e* (F2) ‘hair’ + *pī-t* ‘to braid, to weave’), *mel-kul-is* <Mällkulis> (L) ‘tale-teller/liar’ (← *mel-i* (nom. pl.) ‘lie’ + *kul-t* ‘to thresh, to flail’). The first component can also be an adverb, numeral or pronoun, but these examples are all uncommon, e.g. *šķīb-raug-s* <Skihb=Raug> (F2) ‘cross-eyed’ (← *šķībi* ‘askew’ + *raudz-ī-t* ‘to look at’), *pirm-dzim-is* <Pirmsiņis> (LD) ‘person’s first child’ (← *pirm-ais* ‘first’ + *dzim-t* ‘to be born’) and *pat-mal-as* <Pattmalas> (nom. pl.) (PhL) ‘windmill, watermill’ (← *pat-s* ‘self’ + *mal-t* ‘to grind, to mill’) respectively.<sup>8</sup>

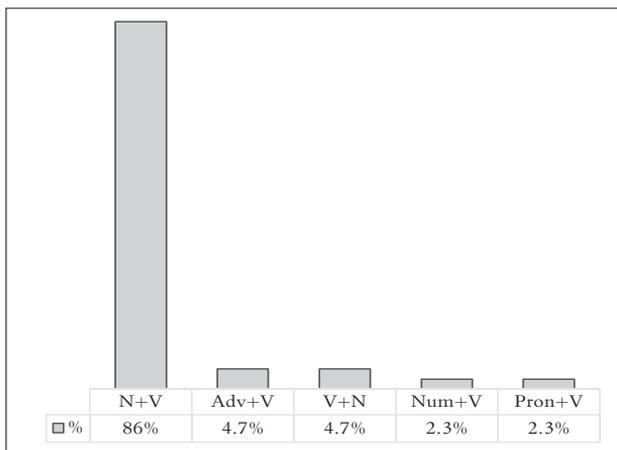


Figure 3. Verbal governing compounds according to the word-class membership of the components

<sup>8</sup> In addition, there are two compounds that can be understood as verbal governing compounds but have the component order reversed, where the first component is a verbal stem and the second is a noun, e.g. *šņug-degun-s* <Šņuhg=deġ=guns> (LD) lit. ‘one

### 2.3.2. The meaning of the verbal governing compounds

The verbal governing compounds differ semantically in Old Latvian, and these same semantic types are also found in Lithuanian and Old Prussian (see Larsson 2002b, 217–218; Senn 1966, 341). The majority of these compounds are agent and instrument nouns. For instance, **bad-mir-is** <baddmiris> (L) (← *bad-s* (L), *bad-us* (F1, F2) ‘famine’ + *mir-t* ‘to die’) is one who is dying of famine, the compound denotes a ‘starving person’, while **pat-mal-as** <Pattmalas> (nom. pl.) (PhL) (← *pat-s* ‘self’ + *mal-t* ‘to grind, to mill’) denotes something that grinds itself, here a ‘windmill’ or ‘watermill’.

The smallest group of verbal governing compounds include action nouns expressing the time when an action takes place, e.g. **zem-lik-a** <Seņlikka> (F1) ‘the evening of the feast of Sts. Simon and Jude when food offerings are left for the spirits’ (← *zem-e* ‘earth, ground’ + *lik-t* ‘to put, to place’). One verbal governing compound is used both as an action noun and an agent noun in which the linking element <a> may have been inserted in order to differentiate homonymous forms: the agent noun **pup-kār-is** <Pupp=kahris> (F1) ‘child who wants to be breastfed’ (← *pup-s* (PhL), *pup-a* (L) ‘breast, nipple’ + *kār-o-t* ‘to desire, to long for’) and the action noun: **pup-a-kār-is** <puppa=kahris> (F1) ‘time (moment) when a child wants to be breastfed’.<sup>9</sup>

### 2.3.3. The form of the verbal governing compounds

In Old Latvian, the verbal governing compounds differ from the determinative compounds in terms of their form. The majority of verbal governing compounds contain no linking elements between their components.

There are only a few exceptions to this tendency, all of which take the linking element <a>. This linking element may be considered an original stem vowel of the first component of these compounds, e.g. **abr-a-kas-is**<sup>10</sup> <Abra kahsis> (F1) ‘instrument which helps to scrape the rest of the dough off a kneading trough’ (← *abr-a* (L), *abr-s* (M), *abr-is* (L) ‘kneading

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who is blowing his/her nose’ (← *šņūk-t*, *šņauk-t* ‘to blow, to snuff’ or *šņuk-ā-t* ‘to sniff, to smell’ (?)) + *degun-s* ‘nose’), **valb-ac-s** <wallbatz> (PhL) ‘one who is rolling his/her eyes’ (← *valb-ī-t* ‘to roll one’s eyes’ + *ac-s* (L), *ac-is* (EE), *ac-e* (LD) ‘eye’).

<sup>9</sup> Note that the translation of the compound in Latvian differs from the translation in German, suggesting that this compound is not a loan translation: Latv. <Tam behrnam uhseet puppa=kahris> and Germ. <dem Kind verlanget nach der Zitzen> (F1).

<sup>10</sup> In *abr-a-kas-is*, a linking element may have been used due to phonetic reasons, in order to avoid a consonant cluster.

trough, kneading dough’ + *kas-ī-t* ‘to scrape, to scratch’), ***ād-a-min-is*** <Ahda=minnis> (F1) ‘skinner’ (← *ād-a* ‘skin, leather’ + *mī-t* ‘to tread, to step’), ***ugun-a-kur-is*** <uǵgūna=kurry> (loc. sg.) (LD) ‘fire, bonfire’ (← *ugun-s* ‘fire’ + *kur-t* ‘to make fire’). Stem compounds of this kind are prevalent in Modern Lithuanian, and the most frequent linking element used in these compounds is also *-a-*, e.g. Lith. ***od-a-min-ỹs*** (LKŽe) ‘skinner’ (← *ód-a* ‘skin’ + *mìnt-i* ‘to tread, to step’) alongside Lith. ***od-min-ỹs*** (LKŽe) ‘id.’, and Lith. ***ugn-ā-kur-is*** ‘fire, bonfire’ (← *ugn-is* ‘fire’ + *kūr-ti* ‘to make fire’) alongside Lith. ***ugn-iā-kur-is*** (LKŽe) ‘id.’, see <sup>4</sup>DLKG (163ff.). While there are a few exceptional cases of verbal governing compounds with linking element <a>, those without linking elements predominate in Old Latvian texts. This is thus a key respect in which they differ from the determinative compounds found in the same texts.

Another characteristic formal trait of the verbal governing compounds, which distinguishes them further from the determinative compounds, is the use of the compositional suffix *-is* (m.)/*-e* (f.). Approximately two-thirds of all compounds of this type (ca. 65%) contain this suffix, e.g. ***ties-nes-is*** <Teeßneßsis> (L) ‘judge, justiciary, magistrate’ (← *ties-a* (L), *ties-s* (F1, F2) ‘truth, verity’ + *nes-t* ‘to carry, to bear’). The same suffix is similarly used in verbal governing compounds in Lithuanian, e.g. Lith. ***málk-neš-is*** (LKŽe) ‘one who carries wood’ (← *málk-a* ‘firewood’ + *nėš-ti* ‘to carry, to bear’).

Several verbal governing compounds in Old Latvian take the ending *-a* (East Baltic \**-ā*), e.g. ***ceļ-tek-a*** <Zeļ jeb Seņ=tekka> (F1) ‘vagabond’ (← *ceļ-š* ‘road, way’ + *tec-ē-t* ‘to flow, to trickle’), ***zem-tek-a*** <Zeļ jeb Seņ=tekka> (F1) ‘vagabond’ (← *zem-e* ‘earth, ground’ + *tec-ē-t* ‘to flow, to trickle’). These compounds are also found in Lithuanian, and can sometimes denote both the masculine and feminine gender, e.g. Lith. ***ak-ī-plėš-a*** (LKŽe) m./f. lit. ‘eyetearer’ (i.e. ‘an insolent person’) (← *ak-īs* ‘eye’ + *plėš-ti* ‘to tear’).

In addition, there is a small group of compounds ending in *-s*, e.g. ***ād-min-s*** <Ahdmins> (L) ‘skinner’ (← *ād-a* ‘skin, leather’ + *mī-t* ‘to tread, to step’). Skujiņa (2006, 111) argues that this example is a mistake, since deverbal compounds do not take this ending in Old Latvian. However, there are several more compounds of this type attested in Old Latvian texts. A closer examination of the compounds ending in *-s* reveals that they originally contained the compositional suffix *-is*, but the short vowel /i/ was lost, most likely due to phonetic reasons such as initial stress; ***ād-min-s*** above derives

thus from *ād-min-is* <Ahd=minis> (L) ‘skinner’ (← *ād-a* ‘skin, leather’ + *mī-t* ‘to tread, to step’).<sup>11</sup>

A short vowel /i/ might arguably have been lost in a few more compounds that end in -s in Old Latvian, as compounds with the same second component taking the compositional suffix -is can be found in both Modern Latvian and Modern Lithuanian, e.g. OLatv. *kann-dar-s* <Kann=darrs> (LD) ‘pot-maker’ (← *kann-a* ‘can, pot’ + *dar-ī-t* ‘to do, to perform’) alongside Latv. *al-dar-is* (MEe) ‘brewer’ (← *al-us* ‘beer’ + *dar-ī-t* ‘to do, to perform’) and Lith. *al-ù-dar-is* (LKŽe) ‘brewer’ (← *al-ùs* ‘beer’ + *dar-ý-ti* ‘to do, to perform’).

Three examples suggest a different origin of the ending -s: *šķīb-raug-s* <Skihb=Raug> (F2) ‘cross-eyed’ (← *šķībi* ‘askew’ + *raudz-ī-t* ‘to look at’), *var-māk-s* <warr=maks> (F1) ‘oppressor, violator, despot’ (← *var-a* (L), *var-s* (LD) ‘power, authority, rule’ + *māk-t* ‘to oppress, to overpower’) and *zem-tek-s* <Jemmtäx> (L) ‘vagabond’ (← *zem-e* ‘earth, ground’ + *tec-ē-t* ‘to flow, to trickle’). As the stem consonant preceding the ending -s is not palatalised, the ending -s could not have originated from the compositional suffix -is. If this were the case, the stem consonants /k/ and /g/ that precede the ending -s would be palatalised, as in *var-māc-is* (MEe) ‘oppressor, violator, despot’ (← *var-a* ‘power, authority, rule’ + *māk-t* ‘to oppress, to overpower’) and *vasar-audz-is* (MEe) ‘teenager, youth’ (← *vasar-a* ‘summer’ + *aug-t* ‘to grow’). The ending -s may in fact have originated from the ending \*-as, which is still retained in compounds of this kind in Lithuanian, e.g. Lith. *aūs-kar-as* (LKŽe) ‘earring’ (← *aus-īs* ‘ear’ + *kār-ti* ‘to hang’) compared to Latv. *aus-kar-s* (MEe) ‘earring’ (← *aus-s* ‘ear’ + *kār-t* ‘to hang’).

Alternation between these aforementioned morphological types could also be seen in a number of verbal governing compounds in Old Latvian, with vacillation between the endings -is, -a and -s, e.g. *zem-tek-s* <Jemmtäx> (L) ‘vagabond’ (← *zem-e* ‘earth, ground’ + *tec-ē-t* ‘to flow, to trickle’) and *zem-tek-a* <Semmtækka> (M/J) ‘id.’; and *slep-kav-s* <šleppkaws> (L) ‘killer’ (← *slepu(s)* ‘secretly’ + *kau-t* ‘to murder’), *slap-kav-a* <slapkauwas> (gen. sg.) (EE) ‘id.’ and *slep-kav-is* <šlepkawis> (M) ‘id.’. This same vacillation is also observed in Lithuanian, e.g. Lith. *žōd-lauž-a* (LKŽe) ‘person who is not

<sup>11</sup> The place of the stress is never marked in Old Latvian texts, but as can be inferred from material in Modern Latvian, verbal governing compounds are initially stressed (see LVPPV).

carrying out promises' (← *žōd-is* 'word' + *láuž-ti* 'to break') alongside Lith. *žod-lauž-ỹs* (LKŽe) 'id.'. Larsson (2010b, 129) points out that in Modern Lithuanian, there are compounds with the compositional suffix *-is* that have counterparts without the suffix in Old Lithuanian texts, e.g. OLith. *kard-neš-a* 'sword-bearer' (← *kárd-as*, *kařd-as* 'sword' + *něš-ti* 'to carry, to bear') and MLith. *kard-neš-ỹs* 'id.'.

Lastly, as was the case for the possessive compounds, the verbal governing compounds were superseded in some cases by agent nouns with suffixes that were also prevalent in Old Latvian texts, such as *-ēj-* or *-tāj-*. These suffixes may have been similarly added to overtly mark the agentival use of compounds of this type and mimicked the form of their German counterparts, e.g. Latv. *mēl-nes-is* <Mehlnešis> (L) 'tale-teller/liar' (← *mēl-e* 'tongue' + *nes-t* 'to carry, to bear') and Latv. *mēl-nes-ēj-s* <Mehlnesseis> (M) 'id.'.

### 3. Conclusion

In this article, a detailed overview of different compounds in Old Latvian was presented. The main categories addressed here were determinative compounds, possessive compounds and verbal governing compounds. It has been shown here that the distinctions between these different types of compounds in Old Latvian were clearly indicated, not only semantically but also in terms of the formal properties of their components.

The majority of possessive compounds and verbal governing compounds did not include linking elements, while one of the most common ways in which determinative compounds are marked is by the insertion of a linking element between the components, with <a> being the most common. The origin of the linking element <a> was also discussed. On the one hand, this linking element might have originated from the genitive ending of nouns of the masculine (*i*)*a*-stem that was then reanalysed and later used as a linking element. On the other hand, the linking elements <a>, <e>, <i> and <u> can all be traced back to original stem vowels of nouns used as the first components in the determinative compounds. Thus, one cannot rule out the possibility that the origins of these linking elements lie in a reanalysis of the stem vowels, that then spread beyond their original distribution, as is the case for compounds in Lithuanian. The model of coining stem compounds found in Old Latvian texts disappeared completely over the course of the next few centuries and is no longer in use in Modern Latvian.

It has additionally been shown that the Old Latvian material presents similarities to the Lithuanian data in terms of the use of common suffixes. The compositional suffix *-is* (m.)/*-e* (f.) in Old Latvian was mainly used in possessive compounds and verbal governing compounds, and was present in only a few determinative compounds. It was concluded that the suffix was originally an adjectival suffix, which was first added to possessive compounds to mark their adjectival use, and was only later used in coining determinative compounds, though to a lesser extent, as can be inferred from the determinative compounds in Modern Latvian.

Lastly, several verbal governing compounds ending in *-a* and *-s* were considered in this article. By drawing parallels with counterparts in Lithuanian, the origin of the ending *-s* in compounds in Old Latvian was discussed. It was suggested that in some cases, this *-s* might have originated from the compositional suffix *-is*, and otherwise derives from an older unshortened variant *\*-as* that is still retained in compounds in Lithuanian.

## **DŪRYBA SENUOSIUOSE LATVIŲ KALBOS TEKSTUOSE IR ŽODYNUOSE**

### *Santrauka*

Straipsnyje nagrinėjama XVII a. latvių kalbos tekstuose ir žodynuose užfiksuotų daiktavardinių bei būdvardinių dūrinių sandara ir semantika. Nustatyta, kad šiuose tekstuose užfiksuoti ir kitoms baltų kalboms būdingi dūrinių tipai, t. y. determinatyviniai dūriniai, posesyviniai dūriniai, valdomieji dūriniai. Rezultatai rodo, kad dūriniai skiriasi ne tik semantiškai, bet ir struktūros požiūriu. Dalis jungiamųjų balsių, vartojamų determinatyviniuose dūriniuose, gali būti kildinami iš pirmųjų dėmenų kamienų balsių. Šis baltiškas dūrinių tipas dabartinėje latvių kalboje nebevartojamas. Išnagrinėjus dūrinių struktūrą, prieita prie išvados, kad posesyviniams ir valdomiesiems dūriniams būdingos galūnės *-is* (m.) ir *-e* (f.) (<*\*-iĭas* ir *\*-iĭā*) buvo pirmiausia apibendrintos būdvardiniams dūriniams ir tai įrodo jų būdvardinę kilmę.

## ABBREVIATIONS

acc. – accusative	MLith. – Modern Lithuanian
Adj – adjective	N – noun
Adv – adverb	nom. – nominative
dat. – dative	Num – numeral
f. – feminine	OLatv. – Old Latvian
gen. – genitive	OLith. – Old Lithuanian
Germ. – German	OPr. – Old Prussian
Latv. – Latvian	PB – Proto-Baltic
Lith. – Lithuanian	pl. – plural
loc. – locative	Pron – pronoun
m. – masculine	sg. – singular
MLatv. – Modern Latvian	V – verb

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