# Searching for Competing Patterns in Morphological Derivation: The Case of Personal and Agent Nouns with Borrowed Roots in Contemporary Lithuanian ${ }^{1}$ <br> Bonifacas Stundžia and Lina Inčiuraitè-Noreikienė <br> Vilnius University, Lithuania 


#### Abstract

This article presents a study of the search for competing patterns that are characteristic of hybrid suffixed and borrowed personal and agent nouns in Lithuanian. In order to find out if the competing nouns, in reality, are synonymous, the research relies on 'Interleksis' - data from the electronic Dictionary of Internationalisms, the Dictionary of Contemporary Lithuanian, the Dictionary of Standard Lithuanian, the Dictionary of Lithuanian, the Database of Lithuanian Neologisms, the Corpus of Contemporary Lithuanian Language. In some cases, internet sources have also been used to check the existence of a competition between two nouns. Four competing patterns of hybrid suffixed and borrowed personal and agent nouns could be distinguished in contemporary Lithuanian, namely the patterns showing competition between: (1) hybrid derivatives and material borrowings, e.g. automobil-inink-as, - $\dot{e}$ 'motorist'/automobil-ist-as, - $\dot{e}$ 'id.', (2) hybrid derivatives, e.g. eksportuo-toj-as, -a 'exporter’ / eksport-inink-as, - $\dot{e}$ 'id.’, (3) suffixed material borrowings, e.g. archyv-ist-as, $-\dot{e}$ 'archivist' / archyv-ar-as, $-\dot{e}$ 'id.', (4) the mixed pattern that includes a broad scale of competition between hybrid derivatives and two different types of material borrowings, e.g. strateguo-toj-as, -a 'strategist' / strateg-inink-as, - $\dot{e}$ 'id.' / strateg-ist-as, $-\dot{e}$ 'id.’/strateg-ik-as, $-\dot{e}$ 'id.'/strateg-as, $-\dot{e} ‘ i d$.'. Patterns 1 and 3 cover two sub-patterns because of the existence of two types of material borrowings, i.e. suffixed and simplex borrowed nouns. We propose two types of competition between competing nouns: strong and weak. Strong competition occurs with a similar frequency of use of competing nouns, whereas weak competition manifests itself with a large difference in the frequency of use of competing nouns. The synchronic approach to the derivation of hybrid and borrowed suffixed personal and agent nouns has been adopted in the research.


Keywords: strong competition, weak competition, hybrid derivative, correlative derivative, simplex material borrowing, personal noun, agent noun
"The survival or preservation of certain favoured words in the struggle for existence is natural selection"
(Darwin 1871: 61)

[^0]
## 1 Introduction

Competition in inflection and derivation has attracted assiduous attention in worldwide linguistics over the last few years (cf. Huyghe \& Varvara 2023a; Rainer et al. 2019; SantanaLario et al. 2017). In Lithuanian, competing patterns which are characteristic of loan adjective derivation and adjective borrowing have been researched (cf. Inčiuraitè-Noreikienė \& Stundžia 2016). However, the competing patterns of borrowed nouns have not been investigated much until relatively recently. A ternary classification of competing patterns of hybrid derivatives and material borrowings has been proposed for Lithuanian (cf. Inčiuraitė-Noreikienė 2022). It has been noticed that synonymous hybrid derivatives and affixed material borrowings can be formed either from the same base (e.g. propagand-inink-as, -e 'propagandist' DI, DCL, DL / propagand-ist-as, $-\dot{e}$ ' id .' DI, DCL, DL, both from propagand-a 'propaganda') or different but common root bases (e.g. legitimišk-um-as 'legitimacy' CCLL $\leftarrow$ legitimišk-as, -a 'legitimate' / legitim-um-as 'legitimacy' DLN $\leftarrow$ legitim-us, -i 'legitimate') and can belong either to the same or different synonymous derivational (semantic) categories. Competing patterns of suffixed denominal personal nouns with borrowed roots have recently been identified (cf. Stundžia \& Inčiuraitè-Noreikiene 2022). The study has revealed that there is predominant competition between hybrid denominal personal derivatives formed with the productive suffix -inink-as, $-\dot{e}$ and common root suffixed personal material borrowings ${ }^{2}$ with six different suffixes, viz. -ist-as, -é, -ionier-ius ${ }^{3}$, $\dot{e}$, etc., e.g. finans-inink-as, -é ‘accountant’ DI, DCL, DL / finans-ist-as, -e 'id.' DI (both from finans-ai 'finance'), kolekc-inink-as, - $\dot{e}$ 'collector’ DI, DCL, DL / kolekc-ionier-ius, - $\dot{e}$ 'id.' DCL, DSL (both from kolekcij-a 'collection'). Other patterns of competition characteristic of suffixed denominal personal derivatives with borrowed roots are rare or very rare (for more, see Stundžia \& Inčiuraitè-Noreikienė 2022). Vaskelienė (2022) analysed common root nouns of the Lithuanian language with the suffix of foreign origin -(i)acij-a and the indigenous suffix -im-as. Her analysis revealed that in many cases, derivatives having the borrowed suffix -(i)acij-a and the indigenous suffix -im-as are partial synonyms, i.e. they show semantic and valency differences that are neutralised only in some word combinations. The stylistics specialist Župerka (1995) has discussed the general issues of competition.

This study aims to ascertain the possible competing patterns that are characteristic of hybrid suffixed and borrowed common root personal and agent nouns in contemporary Lithuanian. A total of 402 pairs $^{4}$ of competing hybrid derivatives and common root material borrowings have been found. The synchronic approach to the derivation of hybrid and borrowed suffixed personal and agent nouns has been adopted in the research (cf. Marchand 1969; Urbutis 1978, ${ }^{2} 2009$ ).

The paper is organised as follows: the Introduction is followed by Section 2, which is devoted to an overview of the terminology. Section 3 provides a description of the data and outlines the methodology. Section 4 introduces the classification of competing patterns of hybrid suffixed and borrowed personal and agent common root nouns in Lithuanian; it is

[^1]divided into subsections that focus on each competing pattern. The final conclusions are drawn in Section 5.

## 2 Terminology overview

Simplex material borrowings are understood as morphologically indivisible words that consist of one free-stem morpheme (ST), which is not further divisible into meaningful component pieces, and an inflectional formative (IF), cf. the so-called international substantives, which presumably entered Lithuanian through the mediation of neighbouring donor languages, which are Slavic, i.e. Belorussian, Polish or Russian:
(1) a. strateg-as, - $e^{5}$ 'strategist' DI, DCL, DL [ST-IFs]
b. atlet-as, $-\dot{e}$ 'athlete' DI, DCL, DL [ST-IFs]
c. pirat-as, -e 'pirate' DI, DCL, DL [ST-IFs]

Affixed material borrowings ${ }^{6}$, which are interpreted by some scholars, and in this paper, as correlative derivatives (Marchand 1969: 218; Urbutis 1978: 249, ${ }^{2}$ 2009: 293), have borrowed affixes which can be singled out on the basis of simplex material borrowings containing the same root. To be more specific, affixed material borrowings can show formal and semantic motivation, and that is why they are included in the description of the word-formation system of Lithuanian (see Stundžia 2016: 3094f.; Urbutis 1965: 409f.; Urbutis 2005: 138), e.g. (2a-c):
(2) a. tank-ist-as, - $\dot{e}$ 'tankman' $\mathrm{DCL}, \mathrm{DL}^{7}$... tank-as 'tank'
[ST-SF-IFs] [ST-IF]
b. legion-ier-ius, -è 'legionary' DI, DCL, DS, DL $\leftarrow-$ legion-as 'legion'
[ST-SF-IFs] [ST-IF]
c. ferm-er-is, -e 'farm owner or tenant' DI, DCL, DSL, DL $\leftarrow$ ferm-a 'farm’ [ST-SF-IFs] [ST-IF]

Hybrid derivatives are words formed from a borrowed base and a native affix (3a-b) and vice versa (4a-b) (Adams 2001: 12; cf. Fowler 2009: 241; Inčiuraitè-Noreikienė \& Stundžia 2016; 2015: 33). Even though the borrowed stems or affixes are integrated into the recipient language, the language user still recognises the borrowed and to some extent native material, e.g. (3a-b, $4 a-b)$ :
(3) a. borrowed stem + native suffix (a) or prefix (b)
futbol-inink-as, $-\dot{e}$ 'footballer' DI, DCL, DSL, DL ${ }^{8} \leftarrow$ futbol-as 'football'
[ST-SF-IFs]
[ST-IF]
b. po-grup-is 'subgroup' DI, DCL, DL $\leftarrow$ grup- $\dot{e}$ 'group'
[PF-ST-IF]
[ST-IF]

[^2](4) a. indigenous stem + borrowed suffix (a) or prefix (b) vabal-ist-as, -e 'a person who drives a Volkswagen Beetle' DLN $\leftarrow$ vabal-as "Volkswagen Beetle"
[ST-SF-IFs]
[ST-IF]
b. super-žmog-us 'superhuman' CCLL $\leftarrow z ̌ m o g-u s ~ ' h u m a n ' ~$
[PF-ST-IF]
[ST-IF]
A derivational category (also called a semantic category) is defined as a class of derivatives which share a common derivational meaning and particular derivational affixes (cf. Stundžia 2016: 3099). For instance, the category of denominal personal nouns includes derivatives suffixed with -inink-as, $-\dot{e}$ and -eiv-a, e.g.:

```
a. dogm-inink-as, \(-\dot{e}\) 'dogmatist' CCLL \(\leftarrow\) dogm-a 'dogma'
    [ST-SF-IFs]
    [ST-IF]
b. stil-eiv-a 'stylish person' DLC, DL \(\leftarrow\) stil-ius 'style’
    [ST-SF-IF] [ST-IF]
```

Competition (also known as rivalry) is "an inherent and universal feature of natural languages" (Štekauer 2017: 15). It is defined as "the coexistence of two or more affixes for the same base and for the expression of the same semantic category if restrictions (e.g., phonological, morphological) do not apply and no semantic or distributional differences are observed" (Fernández-Alcaina 2017: 166). Debatable points seem to be "the same base" and "the same semantic category". Our data show that competition is possible among nouns belonging to different but very close derivational (semantic) categories, such as those of personal and agent nouns', e.g. the derived denominal personal noun eksport-inink-as, -e 'exporter' DI, DCL, DSL, DL, CCLL (from eksport-as 'an export') competes with the derived deverbal agent noun eksportuo-toj-as, - a 'id.' DSL, DL, CCLL (from eksportuo-ti 'to export'). The nominal and verbal bases of competitors, i.e. eksport-as and eksportuo-ti share a common borrowed root eksport- (the -uo- of the verb is a derivational suffix ${ }^{10}$ ). If the competing nouns are semantically incompatible, they cannot be called rivals (cf. Huyghe \& Varvara 2023b: 3-4 on the semantic equivalence of rival affixes), e.g., kultūr-inink-as, -eं and kultūr-ist-as, -eं (both from kultūr-a 'culture') are not competing derivatives, as the former refers to 'a disseminator of culture' (DI, DCL, DSL, DL) and the latter refers to 'a bodybuilder' (DSL). A hybrid suffixed derivative traktor-inink-as, - $\dot{e}$ 'tractor-driver' DI, DCL, DL is not in competition relations with the correlative derivative traktor-ist-as, $-\dot{e}$ 'id.' DL (both from traktor-ius 'tractor') due to a dialectal use or pejorative meaning of the latter in standard colloquial language, cf. CCLL: Tai bobelè! - mégindamas apkabinti Stefanija, suvapéjo toksai traktoristas ne traktoristas, bet vis tiek kažkoks mašinorius, nes buvo apsivilkęs kombinezona. What a woman! (pejorative) - while trying to hug Stefanija - a tractor driver, not a tractor driver, but still some kind of machinist - got carried away because he was wearing overalls.

[^3]While analysing competing derivatives in Lithuanian, a significant role is given to formal motivation. As Fernández-Alcaina (2017: 165) points out, "the description of coexisting derivatives synonymous in meaning but formally distinct is also problematic". In our opinion, derivatives whose stems show minimal morphonological differences, as a rule, resulting from the borrowing process, could be considered competitive, cf. aviac-inink-as, -e 'aviator' CCLL / aviat-or-ius, - $\dot{e}$ 'id.' DI, DCL, DL (both from aviacij-a ${ }^{11}$ 'aviation'). Different stem final consonants $-c$ - and $-t$ - are inherited from the donor languages, cf. Rus. aviac-ija and aviat-or, e.g.:

```
aviaç-inink-as, - \(\dot{e}\) 'aviator' \(\leftarrow\) aviacij-a 'aviation' /
    [ST-SF-IFs]
    [ST-SF-IF]
aviat-or-ius, - e 'id.' \(\underset{\text { wa aviacij-a 'id.' }}{ }\)
    [ST-SF-IFs]
    [ST-SF-IF]
```


## 3 Data description and methodology

In order to present a preliminary exploration, the research relies on the data of the electronic Dictionary of Internationalisms 'Interleksis' (DI), the Dictionary of Contemporary Lithuanian (DCL), the Dictionary of Standard Lithuanian (DSL), the Dictionary of Lithuanian (DL), the Database of Lithuanian Neologisms (DLN), the Corpus of Contemporary Lithuanian Language (CCLL) ${ }^{12}$. In some cases, internet sources (IS) have also been used to check the existence of a competition between two nouns. All dictionaries are accessible online free of charge, except the DI. The latter is a computer dictionary containing over 20,000 borrowings. The DCL consists of over 75,000 indigenous and borrowed words; this dictionary is multipurpose because it reflects all areas of common language usage. The DSL is intended more for the general public - this dictionary, which has not yet been fully completed, contains 74,519 native and borrowed words. It is a normative publication, reflecting the lexicon of standard Lithuanian. The DL is a comprehensive thesaurus of the Lithuanian language and consists of 310,659 words, including words from ancient writings; it also shows the dialectal distribution of words, as well as their usage and style. The DLN contains more than 8,818 new words from different spheres of usage in contemporary Lithuanian - mainly compiled from printed and web media sources, fiction, and administrative language ${ }^{13}$. The CCLL encompasses approximately 140 million words; therefore, it is numerically the largest corpus of the Lithuanian language. A major part of this corpus comprises the General Press, i.e. texts both from regional and national newspapers, the Popular Press, as well as the Special Press, i.e. specialist newspapers and magazines. The remainder of it is composed of fiction, memoirs, scientific and popular literature, and diverse official texts.

First of all, the dictionaries and the DLN were reviewed, the competing pairs were marked, and then their use was checked in the CCLL and, in some cases, on internet sources. The competing pairs were extracted from the dictionaries using an asterisk $\left({ }^{*}\right)$ which was placed before the borrowed (e.g. *istas) and native (e.g. *ininkas) suffix. A close reading of

[^4]each entry was necessary to determine whether these words were actually pertinent to the list of competing words. For instance, indigenous nouns (e.g. maist-as 'what is eaten', DCL), simplex material borrowings (e.g. tvist-as, cf. Eng. twist 'recreational dance, a form of rock ' n ' roll', DL), hybrid adjectives (e.g. ozz-ist-as, -a 'stubborn, from ož-ys 'he-goat', DL), indigenous derivatives (e.g. augal-inink-as, -e 'plant breeder, plant researcher, plant production specialist', from augal-as 'plant', DCL), misspelled words and other irrelevant forms were excluded from the list.

The CCLL is not annotated; thus, automatic searching is possible only for certain parts of the word forms. All inflectional forms of both masculine and feminine nouns were searched for, and the obtained data were combined. For instance, all word forms with borrowed (e.g. -ist-) and indigenous (e.g. -inink-) suffixes were extracted. The given manual analysis actually meant the exclusion of non-competing simplex material borrowings (e.g. deist-as 'deist'), native words (e.g. darb-inink-as, -e 'worker', from darb-as 'work'), misspelt words, and other irrelevant forms. A token frequency measure was taken into consideration when describing the distribution of competing nouns in the corpus. The token frequencies provided correspond to the cases where the form expresses a specific sense.

The Google search engine (google.com) provided us with the common root personal and agent nouns that were not recorded in the CCLL or dictionaries. We had a list of keywords we were going to search for. For example, atlant-inink-as, $-\dot{e}$ 'supporter of NATO' was found in the CCLL. Then we took the root atlant- and added the native suffix -iet-is in the Google search engine. We used quotation marks to search for exact words (e.g. "atlantietis" NOM. SG. of 'NATO supporter'), "atlantiečiu" GEN. PL. of 'NATO supporter', etc.). Google displayed a list of search results based on our query. When reviewing the search results, it was important to evaluate the sources for accuracy and credibility. We looked only for reputable sources such as websites of educational institutions, professional organisations, official government pages, etc.

We propose two types of competition ${ }^{14}$ between competing nouns: strong and weak (cf. Fradin ${ }^{15}$ 2019, 84; Miliūnaite ${ }^{16} 2009,12$ ), depending on the frequency of the use of competing

[^5]derivatives. Strong competition is characterised by the same or similar but less than three times difference, whereas weak competition is characterised by a greater difference in the frequency of use of competing derivatives. If there is only one other competing case, then we can state the beginning of competition ${ }^{17}$. Our proposal to distinguish between the two types of competition should be seen as a working hypothesis and is subject to modification or revision.

## 4 Competing patterns of hybrid suffixed and borrowed personal and agent common root nouns in contemporary Lithuanian

We propose the fourfold classification of competing patterns of hybrid suffixed and borrowed personal and agent common root nouns in contemporary Lithuanian (Figure 1 below shows the number of competing pairs in each pattern):

1. the pattern showing competition between hybrid derivatives and material borrowings (approx. $90 \%$ ) and covering two sub-patterns because of the existence of two types of material borrowings:
1.1 the sub-pattern showing competition between hybrid derivatives and suffixed material borrowings, which are interpreted as correlative derivatives, e.g. a hybrid suffixed denominal derivative automobil-inink-as, $-\dot{e}$ 'motorist' ( $\leftarrow$ automobil-is 'car') competes with the correlative common root derivative automobil-ist-as, - è ‘id.' ( $\leftarrow-$ automobil-is 'id.');
1.2 the theoretically possible very rare sub-pattern showing competition between hybrid derivatives and material borrowings functioning as simplex words, e.g. a hybrid suffixed deverbal derivative strateguo-toj-as, -a 'strategist' ( $\leftarrow$ strateguo-ti ‘strategise') competes with the simplex common root borrowing strateg-as, $-\dot{e}$ 'id.';
2. the pattern showing competition between hybrid suffixed deverbal and denominal derivatives (approx. $8 \%$ ), e.g. an agent noun eksportuo-toj-as, $-a$ 'exporter' ( $\leftarrow e$ eksportuo-ti 'to export') competes with a common root personal noun eskport-inink-as, - eं 'id.' ( $\leftarrow$ eksportas 'an export' or 'an exported good');
3. the pattern showing competition between common root material borrowings (approx. $1 \%$ ) and also covering two sub-patterns:
3.1 the sub-pattern showing competition between two material borrowings having different suffixes, e.g. a correlative derivative archyv-ist-as, - $\dot{e}$ 'archivist' competes with another common root correlative derivative archyv-ar-as, - $\dot{e}$ 'id.' ( $\leftarrow \cdots$ archyv-as 'archive');
3.2 the theoretically possible very rare sub-pattern showing competition between suffixed and simplex material borrowings ${ }^{18}$, e.g. a correlative derivative liberal-ist-as, $-\dot{e}$ 'liberal' ${ }^{19}$ competes with a simplex common root borrowing liberal-as, $-\dot{e}$ 'id.';
4. the rare mixed pattern ${ }^{20}$, which is possible only when the internet data are included, covers a broad scale of competition between hybrid derivatives and common root material

[^6]borrowings (approx. 1\%), cf. competition among a deverbal hybrid suffixed agent noun strateguo-toj-as, -a 'strategist' ( $\leftarrow$ strateguo-ti 'strategise'), the denominal hybrid suffixed personal noun strateg-inink-as, - $\dot{e}$ ‘id.', correlative denominal personal suffixed nouns strateg-ist-as, $-\dot{e}$ 'id.' and strateg-ik-as, $-\dot{e}$ 'id.' (all three from strategij-a 'strategy'), and the simplex common root borrowing strateg-as, $-\dot{e}$ 'strategist'.


Figure 1: Number of competing pairs in each pattern
4.1 Competition between hybrid denominal and deverbal derivatives and common root borrowings: the first pattern

The first pattern shows competition between hybrid denominal and deverbal derivatives and common root material borrowings and covers two sub-patterns because of the existence of two types of material borrowings. Firstly, the first sub-pattern of competing hybrid derivatives and suffixed common root material borrowings is discussed. It must be admitted that this subpattern is the most frequent. Hybrid and common root correlative derivatives are intimately related to each other.
4.1.1 Competition between hybrid derivatives and suffixed common root material borrowings: first sub-pattern
Hybrid denominal personal nouns formed with the productive indigenous suffix -inink-as, $-\dot{e}$ and hybrid deverbal agent nouns formed with the productive indigenous suffixes -toj-as, $-a$ compete with the common root correlative derivatives formed with several borrowed suffixes, i.e. productive ones -ist-as, $-\dot{e}$, -ionier-ius, $-\dot{e}$, -ator-ius, $-\dot{e}$, and unproductive ones -ar-as, $-\dot{e}$, $-a t-a s,-\dot{e},-a r i j-u s,-\dot{e}$.
4.1.1.1 Competition between hybrid denominal -ininkas, - $\dot{e}$ personal nouns and suffixed common root material borrowings
4.1.1.1.1 Hybrid denominal derivatives with the productive indigenous suffix -inink-as, $-\dot{e}$ frequently compete with the correlative derivatives formed with the productive borrowed suffix -ist-as, - $\dot{e}$, cf. automobil-inink-as, $-\dot{e} /$ automobil-ist-as, $-\dot{e}$ 'motorist' (from automobil-is 'car', see 7a). Sometimes common root correlative derivatives formed with unproductive borrowed suffixes -iat-as, - $\dot{e}$ (e.g. nobel-iat-as, - $\dot{e} ‘ N o b e l i s t ’, ~ f r o m ~ N o b e l i s ~ ‘ N o b e l ~ P r i z e ’, ~ s e e ~ 7 b), ~-a r-a s, ~$ $-\dot{e}$ and -arij-us, $-\dot{e}$ (e.g. archyv-ar-as, $-\dot{e} / \operatorname{archyv}-a r i j-u s,-\dot{e}$ 'archivist', from archyv-as 'archive', see 7c) enter into competition with common root -inink-as, $-\dot{e}$ derivatives, i.e. nobel-inink-as, $-\dot{e}$ 'Nobelist', archyv-inink-as, $-\dot{e}$ 'archivist'. Competing hybrid and correlative derivatives belong to the same derivational category, i.e. denominal personal nouns, and are formed directly from simplex material borrowings. All competing derivatives in (7a-c) are absolute synonyms. See the examples below ( $7 \mathrm{a}-\mathrm{c}$ ) with their contexts from the CCLL:
a. automobil-inink-as, -e 'motorist' DI, DCL, DL $\leftarrow$ automobil-is 'car' /
[ST-SF-IFs]
[ST-IF]
automobil-ist-as, -e ‘id.' DI, DCL, DL $4 .=$ automobil-is 'id.'
[ST-SF-IFs]
[ST-IF]
Iš viso Vokietijos automobilininku klubo bandytojai egzaminavo 39 skirtingas vasarines padangas, suskirstytas i tris grupes (CCLL). A total of 39 different summer tyres were tested by the German Automobile Club testers, divided into three groups.
Jis sakė, kad buvo automobilistų klube ir kad mažas berniukas smarkiai susižeidè [...] (CCLL). He said that he'd been at the automobile club and that a little boy had been badly injured [...].

According to the CCLL, competition between automobil-inink-as, $-\dot{e} \times 559$ and automobil-istas, $-\dot{e} \times 44$ is weak; the former is used almost thirteen times more than the latter.
b. nobel-inink-as, -e 'Nobelist' DLN, CCLL $\leftarrow$ Nobel-is 'Nobel prize' /
[ST-SF-IFs]
[ST-IF]
nobel-ist-as, - $\dot{e}$ DLN, CCLL / nobel-iat-as, $-\dot{e} \times 1 d . '$ CCLL $\leftarrow \ldots$ Nobel-is ‘id.'
[ST-SF-IFs]
[ST-SF-IFs]
[ST-IF]
Virginija Kochanskyté deklamavo naujosios nobelininkès Wislawos Szymborskos eiles [...] (CCLL). Virginija Kochanskyte recited the verses of the new Nobelist Wislawa Szymborska [...].
Būtent garsusis nobelistas parengé Wato atsiminimu knyga "Mano amžius" (Moj wiek) (CCLL). It was the famous Nobel Prize winner who prepared Wat's memoir 'My Age' (Moj wiek).
Jame apsilanké ir poetès vertéjas $\mathfrak{i}$ švedu kalba Andersas Bodegardas, nemažai prisidèjes prie to, kad poeté tapo nobeliate (CCLL). It was also attended by Anders Bodegård, the poet's translator into Swedish, who was instrumental in the poet becoming a Nobel Prize winner.

A small number of correlative personal derivatives nobel-iat-as, $-\dot{e} \times 21$, nobel-ist-as, $-\dot{e} \times 16$ have been recorded in the CCLL, among which we can see the signs of strong competition. The common root hybrid derivative nobel-inink-as, $-\dot{e} \times 3$ perhaps indicates the beginning of competition.
c. archyv-inink-as, $-\dot{e}$ 'archivist' DL, CCLL $\leftarrow$ archyv-as 'archive' / [ST-SF-IFs]
[ST-IF]
archyv-ist-as, - $\dot{e}$ ‘id.' CCLL / archyv-ar-as, $-\dot{e}$ ' id .' DI, DCL, DL / archyv-arij$u s,-\dot{e}$ 'id.' CCLL
[ST-SF-IFs]
[ST-SF-IFs]
[ST-SF-IFs]
$\leftrightarrow \cdots$ archyv-as 'archive’
[ST-IF]
Sunku ìsivaizduoti geresnị archyvininka ar tikslios aparatūros meistra nei šio Zodiako ženklo atstovas (CCLL). It is difficult to imagine a better archivist or master of precision equipment than the representative of this Zodiac sign.
Tai tik keli skyreliai iš didžiulės garsaus mūsu kino populiarintojo, kino archyvarijaus knygos "Miniu mylimasis (nuo atrakciono iki nacionalinio kino meno" [...] (CCLL). These are just a few chapters from the huge book of our famous film populariser, film archivist 'Crowd's Beloved (from attraction to national cinema art)' [...].
Dèl to neteisinga kritika archyvo atžvilgiu užgauna ne tik archyvistụ, bet ir čia dirbančiu politiniu kaliniu bei tremtiniu jausmu (CCLL). As a result, unjust criticism of the archive is not only felt by the archivists but also by the political prisoners and exiles who work here.
Archyvarai vertina dokumento struktūrini integraluma balais nuo vieno iki dešimties (CCLL). Archivists rate the structural integrity of a document on a scale of one to ten.

The corpus data (see Table 1 below), because of low frequency, show signs of strong competition between denominal hybrid derivative archyv-inink-as, $-\dot{e} \times 14$ and common root correlative derivative archyv-ist-as, $-\dot{e} \times 20$, and weak competition of both with the predominant correlative derivative suffixed with -ar-as, $-\dot{e}$ (archyv-ar-as, $-\dot{e} \times 167$ ). The correlative derivative archyv-arij-us, $-\dot{e}$ is used only once in the CCLL. This can be compared with more examples of competing hybrid denominal derivatives belonging to this pattern ${ }^{21}$ : fleit-inink-as, $-\dot{e} /$ fleit-ist-as, - $\dot{e}$ 'flutist' (from fleit-a 'flute'), monopol-inink-as, $-\dot{e} /$ monopol-ist-as, $-\dot{e}$ 'monopolist' (from monopol-is 'monopoly’), motocikl-inink-as, -é / motocikl-ist-as, - $\dot{e}$ 'motorcyclist' (from motocikl-as 'motorcycle'), etc.

[^7]Table 1: Frequency of hybrid denominal -inink-as, $-\dot{e}$ personal nouns and common root material borrowings suffixed with -ist-as, $-\dot{e}$, $-a t-a s,-\dot{e},-a r-a s,-\dot{e}$, and -arij-us, $-\dot{e}$ in the CCLL

| Hybrid derivatives | Frequency | Correlative derivatives | Frequency |
| :--- | :---: | :--- | :---: |
| automobil-inink-as, $-\dot{e}$ | 559 | automobil-ist-as, $-\dot{e}$ | 44 |
| nobel-inink-as, $-\dot{e}$ | 3 | nobel-ist-as, $-\dot{e}$ | 16 |
| nobel-iat-as, $-\dot{e}$ | 21 |  |  |
| archyv-inink-as, $-\dot{e}$ | 14 | archyv-ist-as, $-\dot{e}$ | 20 |
| archyv-ar-as, $-\dot{e}$ | 167 | archyv-arij -us, $-\dot{e}$ | 1 |

4.1.1.1.2 Hybrid denominal personal derivatives suffixed with -inink-as, $-\dot{e}$ also interact with common root correlative derivatives formed with the productive borrowed suffix -ionier-ius, $-\dot{e}$ (8). Both competing hybrid and correlative derivatives are absolute synonyms and are directly derived from material borrowings. Cf. competition between hybrid suffixed personal noun kolekc-inink-as, -eं 'collector' and common root correlative derivative kolekc-ionier-ius, $-\dot{e}$ 'id.', both from kolekcij-a 'collection' (see (8) with examples from the CCLL):
(8) kolekc-inink-as, -e 'collector' DI, DCL, DSL, DL $\leftarrow k o l e k c i j-a$ 'collection' / [ST-SF-IFs] [ST-IF]
kolekc-ionier-ius, -e 'id.' DI, DCL, DSL, DL $\leftarrow$... kolekcij-a 'id' [ST-SF-IFs]
[ST-IF]
Tuo ịsitikino Vilniuje gyvenantis meno bei unikalių muzikos ịrašú kolekcininkas 65 metu Inocentas Algirdas Motieka (CCLL). 65-year-old Inocentas Algirdas Motieka, a collector of art and unique music records living in Vilnius, was convinced of this. Jos tėvas Robertas R. Milleris yra žinomas milijardierius, be to, Renesanso epochos meno kūriniu kolekcionierius (CCLL). Her father, Robert R. Miller, is a well-known billionaire and collector of Renaissance art.

According to the frequency of use given in the CCLL, it can be seen that competition between kolekc-inink-as, $-\dot{e} \times 667$ and kolekc-ionier-ius, $-\dot{e} \times 487$ is strong, as the correlative derivative is used only about 1.4 times less frequently than the hybrid denominal derivative. Further examples of competing hybrid denominal derivatives belonging to this pattern include: kontrrevoliuc-inink-as, $-\dot{e} /$ kontrrevoliuc-ionier-ius, - $\dot{e}$ 'counter-revolutionary’ (both from kontrrevoliucij-a 'counter-revolution'), selekc-inink-as, $-\dot{e} /$ selekc-ionier-ius, $-\dot{e}$ 'breeder' (both from selekcij-a 'selection'), legion-inink-as, $-\dot{e} /$ legion-ier-ius, - $\dot{e}$ 'legionnaire' (both from legion-as 'legion'), etc.

### 4.1.1.2 Competition between hybrid deverbal -toj-as, -a agent nouns and suffixed common root material borrowings

Hybrid deverbal agent nouns formed with the productive indigenous suffix -toj-as, -a closely interact with common root correlative derivatives suffixed with:
-ant-as, -e (cf. reprezentuo-toj-as, -a / reprezent-ant-as, $\dot{e}$ 'representer', from reprezent-uoti 'represent', see (9)) and
-ator-ius, -é (cf. reformuo-toj-as, -a / reform-ator-ius, - $\dot{e}$ 'reformer', from reformuo-ti 'to reform'). In the latter case, the common root hybrid denominal personal derivative suffixed
with -inink-as, - $\dot{e}$ (cf. reform-inink-as, - $\dot{e}$ 'reformer', from reform-a 'reform', see 10) also takes part in competition. The competing nouns (in $9-10$ ) are absolute synonyms. In the base verbs of some competing derivatives, the suffix -uо- is considered derivational since, in the recipient language, it is possible to see the derivational opposition between reformuo-ti 'to reform' and reform-a 'a reform'. Examples (9-10) with contexts from the CCLL are provided below:
(9) reprezentuo-toj-as, -a 'representer' CCLL $\leftarrow$ reprezentuo-ti ‘represent' /
[ST-SF-IFs]
[ST-SF]
reprezent-ant-as, - $\dot{e}$ ‘id.' DI, DL $\leftarrow-\cdots$ reprezent-uoti ‘id.'
[ST-SF-IFs]
[ST-SF]
Jie yra tikrieji imonés reprezentuotojai (CCLL). They are the true representatives of the company.
Tuojau paskelbti mobilizacija, nes vokiečiu vyriausybé laiko generola vieninteliu lietuviu tautos reprezentantu [...] (CCLL). Immediately announce the mobilisation, because the German government considers the general to be the only representative of the Lithuanian nation [...].

In the CCLL, the deverbal correlative derivative reprezent-ant-as, $-\dot{e} \times 1069$ is used more than six times in comparison with the hybrid derivative reprezentuo-toj-as, $-a \times 163$; thus, the competition is weak. More examples of competing hybrid deverbal derivatives belonging to this pattern are: debiutuo-toj-as, -a 'debutant' / debiut-ant-as, -e 'id.' (both from debiutuo-ti 'to debut'), emigruo-toj-as, -a / emigr-ant-as, - $\dot{e}$ 'emigrant' (both from emigruo-ti 'to emigrate'), kolaboruo-toj-as, $-a /$ kolabor-ant-as, $-\dot{e}$ 'collaborant' (both from kolaboruo-ti 'to collaborate'), etc.
(10) reformuo-toj-as, -a 'reformer' DL $\leftarrow$ reformuo-ti 'to reform' /
[ST-SF-IFs] [ST-SF]/
reform-ator-ius, - $\dot{e}$ 'id.' DI, DCL, DSL, DL $\leftarrow$ reformuo-ti /
[ST-SF-IFs] [ST-SF]
reform-inink-as, $-\dot{e}$ 'id.' CCLL $\leftarrow$ reform-a 'a reform'/
[ST-SF-IFs]
[ST-IF]
[...] laikui bégant net radikalesnieji reformuotojai susikūrè savas tradicijas, prie kuriu didžiai prisirišo [...] (CCLL). [...] over time, even the more radical reformers developed their own traditions to which they greatly adhered [...]
Daugeliui Kinijos reformatoriu buvo pakirpti sparnai (CCLL). Many Chinese reformers had their wings clipped.
Bent ligi šiolei buvo dar aiškiai pastebima senoji kova tarp neišnykusios komunistinés nomenklatūros ir Sajūdžio išjudintụ provakarietišku reformininku (CCLL). At least until now, the old struggle between the communist nomenclature and the pro-Western reformers stirred up by the Reform Movement of Lithuania was still clearly visible.

The data from the CCLL (see Table 2 below) show weak competition between the deverbal hybrid derivative reformuo-toj-as, $-a \times 120$ and common root correlative one reform-ator-ius, $-\dot{e} \times 826$ with 6.8 times higher frequency of the correlative competitor. Regarding the denominal common root hybrid derivative reform-inink-as, $-\dot{e} \times 6$, it seems that the CCLL could
indicate the beginning of competition. Consider these additional examples of competing hybrid deverbal derivatives belonging to this pattern: kolonizuo-toj-as, $-a / k o l o n i z-a t o r-i u s,-\dot{e}$ 'coloniser' (both from kolonizuo-ti 'to colonise'), kompromituo-toj-as, -a / kompromit-atorius, $-\dot{e}$ 'compromiser' (both from kompromituo-ti 'to compromise'), konfrontuo-toj-as, -a/ konfront-ator-ius, $-\dot{e}$ 'confronter' (both from konfrontuo-ti 'to confront'), etc.

Table 2: Frequency of -toj-as, $-a$ deverbal agent nouns and common root denominal personal material borrowings suffixed with -antas, -é, -atorius, $-\dot{e}$, and hybrid denominal personal derivatives in -inink-as, -é

| Hybrid derivatives | Frequency | Correlative derivatives | Frequency |
| :--- | :---: | :--- | :---: |
| reprezentuo-toj-as, $-a$ | 173 | reprezent-ant-as, $-\dot{e}$ | 1069 |
| reformuo-toj-as, $-a$ | 120 | reform-ator-ius, $-\dot{e}$ | 826 |
| reform-inink-as, $-\dot{e}$ | 6 |  |  |

4.1.2 Competition between hybrid denominal personal nouns and common root material borrowings functioning as simplex words: the second sub-pattern
The second sub-pattern shows rare competition between hybrid nouns and common root simplex material borrowings in internet use; the CCLL records only one other case. Hybrid denominal personal derivatives formed with the productive indigenous suffix -inink-as, -é, e.g. akrobat-inink-as, -e 'acrobat' (from akrobat-ik-a 'acrobatics'), atlet-inink-as, - $\dot{e}$ 'athlete’ IS (from atletik-a 'athletics') compete with common root simplex material borrowings, in this case, akrobat-as, $-\dot{e}$ 'id.' (see 11) and atlet-as, $-\dot{e}$ 'id.' DI, DCL, DL. The competing nouns are partial synonyms. It should be noted that the hybrid derivatives akrobat-inink-as, $-\dot{e}$, atlet-inink-as, $-\dot{e}$ have a truncated stem, i.e. a stem that is morphemically shorter than the stem of the base word (cf. Urbutis ${ }^{2} 2009,149$ ). In the base of hybrid derivatives, the noun suffix $-i k$ - is omitted (it is characteristic also with the suffix -ij-, see 6, 8, 14), cf. akrobatik inink-as, $-\dot{e}$, atletik-inink-as, $-\dot{e}$. This suffix has entered the recipient language from the donor languages with the borrowed word (cf. Rus. akrobat-ik-a, atlet-ik-a; Eng. acrobat-ic-s, athlete-ic-s). Denominal hybrid derivatives are derived from suffixed material borrowings. Examples of competitors are accompanied with their contexts from the CCLL:

```
akrobat-inink-as, -eं 'acrobat' CCLL }\leftarrow\mathrm{ akrobat-ik-a 'acrobatics'
[ST-SF-IFs] [ST-SF-IF]
akrobat-as, -ė 'id.' DI, DCL, DSL, DL
[ST-IFs]
```

Po šiu parodomuju skridimu akrobatininku trejetas skraidè Vilniuje, Raseiniuose, aktyviai remiamas žiūrovy (CCLL). After these demonstration flights, the trio of acrobats flew in Vilnius and Raseiniai; they were actively supported by the audience. Dèl pasaulio taurès varžési 10 pajègiausiu planetos lakūnu akrobatu (CCLL). The ten most capable aerobatic pilots on the planet competed for the World Cup.

The CCLL data perhaps display the beginning of competition, as one member of the pair prevails; in this case - the simplex borrowing akrobat-as, $-\dot{e} \times 289$, and the hybrid denominal derivative akrobat-inink-as, $-\dot{e}$ is recorded only twice (a very small sample). In the CCLL, only atlet-as, $-\dot{e} \times 1250$ is recorded. Atlet-inink-as, $-\dot{e}$ occurs in internet use. In addition, there are
more examples of competing hybrid denominal derivatives and simplex material borrowings belonging to this pattern from IS: literatūr-inink-as, -e (from literatūr-a 'literature') / literatas, $-\dot{e}$ 'literary researcher', pirat-inink-as, $-\dot{e}$ (from piratau- $t i$ 'to pirate, to use or reproduce someone's work or a product for profit without permission')/pirat-as, -e 'pirate, a person who violates copyright', etc.
4.2 Competition between hybrid suffixed denominal and deverbal common root derivatives: the second pattern

The second pattern shows competition between hybrid suffixed common root derivatives, e.g. a deverbal derivative eksportuo-toj-as, $-a$ 'exporter' competes with a denominal derivative eksport-inink-as, $-\dot{e}$ ‘id.’ (12a). Competing nouns belong to different derivational categories. Deverbal derivatives are classified within the derivational category of agent nouns (the first pair in 12a-c), whereas denominal common root derivatives belong to the derivational category of personal nouns (the second pair in 12a-c). Although the competing hybrid derivatives belong to different derivational categories, semantically personal and agent common root nouns are closely related and interconnected. Deverbal derivatives are derived, as a rule, from suffixed borrowed verbs (the first pair in 12a-c), whereas denominal derivatives are derived from simplex material borrowed nouns (the second pair in 12a-c). These competing derivatives in (12a, 12c) are absolute synonyms, whereas the derivatives in (12b) are partial synonyms (cf. the meaning of min-inink-as, $-\dot{e}$ below). The bases of deverbal derivatives are morphologically decomposable, whereas the bases of common root denominal derivatives are morphologically indecomposable. In morphologically decomposable bases (the first pair in 12a-c), the verbal suffix -uo- fulfils a derivational function, e.g., eksport-uo-ti $\leftarrow e k s p o r t-a s$, cf. competition between hybrid deverbal agent and denominal personal common root nouns eksportuo-toj-as, $-a /$ eksport-inink-as, - $\dot{e}$ 'exporter' (12a), minuo-toj-as, -a / min-inink-as, - $\dot{e}$ 'miner' (12b), and importuo-toj-as, $-a /$ import-inink-as, $-\dot{e}$ 'importer' (12c). All examples of competitors are accompanied by their contexts from the CCLL:
(12) a. eksportuo-toj-as, -a 'exporter' DSL, DL, CCLL $\leftarrow e k s p o r t u o-t i '$ 'to export' / [ST-SF-IFs]
[ST-SF]
eksport-inink-as, - $\dot{e}$ 'id.' DI, DCL, DSL, DL, CCLL $\leftarrow e k s p o r t-a s ~ ' a n ~ e x p o r t ' ~$ [ST-SF-IFs]

Pastebimi Lietuvos mésos eksportuotojų bandymai ịvežti $\dot{j}$ JAV šaldytos avienos, jautienos, veršienos ir triušienos (CCLL). The attempts of Lithuanian meat exporters to import frozen mutton, beef, veal, and rabbit meat into the US are noticeable.
Lapkričio 13 d. atvykęs ị Čikaga, jis pageidavo susipažinti su Čikagos skerdyklu organizavimu bei użmegzti kontaktus su vietos verslininkais - konservuotos mésos eksportininkais (CCLL). When he arrived in Chicago on 13 November, he wanted to learn about the organisation of the Chicago slaughterhouses and to establish contacts with local entrepreneurs - exporters of canned meat.

```
b. minuo-toj-as, -a 'miner' DL, CCLL \leftarrow minuo-ti 'to mine' /
[ST-SF-IFs]
[ST-SF]
min-inink-as, -e 'id.' DCL, DL \leftarrow min-a 'a mine'
[ST-SF-IFs]
[ST-IF]
```

[...] nedelsdami atvyko minuotojai, ugniagesiai, kriminaliné policija, medikai, civiliné sauga (CCLL). [...] miners, firefighters, criminal police, medics, and civil security officers arrived immediately.
Pagrindinés specialybès - navigatoriai, artileristai, raketininkai, minininkai [...] (CCLL). The main specialities are navigators, artillery fighters, rocket launchers, minersweepers [...].
c. importuo-toj-as, -a 'importer' DSL, CCLL $\leftarrow$ importuo-ti 'to import' /
[ST-SF-IFs]
[ST-SF]
import-inink-as, -e 'id.' DI, DCL, DSL, DL, CCLL $\leftarrow$ import-as 'an import' or 'an imported good'
[ST-SF-IFs]
Jeigu galutinio tyrimo metu buvo nustatyta, kad importas nebuvo žlugdantis, o papildomas muitas už prekiu ịvežima buvo sumokėtas, tai lëšos importuotojui turi būti sugrązintos (CCLL). If the final investigation establishes that the importation was not disruptive and that the additional duty has been paid on the entry of the goods, the funds must be refunded to the importer.
Taip pat imoniu paklausa kreditui padidino Anglijos svaro devalvacija, kuri skatino importininkus grąžinti atpigusias skolas (CCLL). Also, the demand for credit by companies was increased by the devaluation of the British pound, which encouraged importers to repay cheap debts.

According to the CCLL data (see Table 3 below), competition between the hybrid deverbal and denominal derivatives in (12a) and (12c) is weak, e.g. eksportuo-toj-as, $-a \times 1167$ / eksport-inink-as, $-\dot{e} \times 11$, importuo-toj-as, $-a \times 1372$ / import-inink-as, $-\dot{e} \times 9$. The hybrid deverbal derivative in (12b) shows the possible beginning of competition with a denominal one, e.g. minuo-toj-as, $-a \times 36$ / min-inink-as, $-\dot{e} \times 2$. As regards this competing pair, the corpus analysis has revealed some semantic differences ${ }^{22}$ : min-inink-as, $-\dot{e}$ is used 96 times; however, it refers not only to the 'person' but also to the 'escort destroyer'. Only in two instances is it used to denote the meaning of 'miner', i.e. one who mines, lays, or removes mines. Consider more examples of competing hybrid deverbal and denominal derivatives belonging to this pattern: boikotuo-toj-as, -a 'boycotter' (from boikotuo-ti 'to boycott') / boikot-inink-as, - $\dot{e}$ 'id.' (from boikot-as 'a boycott'), debatuo-toj-as, -a 'debater' (from debatuo-ti 'to debate') / debat-ininkas, - $\dot{e}$ 'id.' (from debat-ai 'debates'), etc.

[^8]Table 3: Frequency of hybrid suffixed denominal and deverbal common root derivatives in the CCLL

| Deverbal derivatives | Frequency | Denominal derivatives | Frequency |
| :--- | :---: | :--- | :---: |
| eksportuo-toj-as, $-a$ | 1167 | eksport-inink-as, $-\dot{e}$ | 11 |
| minuo-toj-as, $-a$ | 36 | min-inink-as, $-\dot{e}$ | 2 |
| importuo-toj-as, $-a$ | 1372 | import-inink-as, $-\dot{e}$ | 9 |

Due to the productivity of both suffixes, the frequency of competing derivatives could depend on the frequency of their bases. In the above-mentioned cases (12a-c), the frequency of use of nouns serving as base stems is much higher than that of verbs. In the CCLL, e.g. debatuoti 'to debate' is used only 138 times, including participles, half-participles, gerunds, whereas the common root noun debatai 'debate' is used 2297 times. ${ }^{23}$ In this case, the frequency of use of base stems is not relied on for several reasons. Firstly, nouns are used more often than verbs in the language. Secondly, new concepts and phenomena are more often denoted by nouns (for more on why nouns are borrowed more than other parts of speech, cf. Trask \& Millar 2015: 20 with bibliography).

### 4.3 Competition between common root material borrowings: the third pattern

The third pattern showing competition between common root material borrowings and also covering two sub-patterns is rare in Lithuanian.

### 4.3.1 Competition between common root material borrowings with different suffixes

The first rare sub-pattern shows competition between two common root material borrowings having different suffixes, e.g. archyv-ist-as, - $/ \mathrm{I}$ archyv-ar-as, $-\dot{e}$ 'archivist' (from archyv-as 'archive'), strateg-ist-as, $-\dot{e} /$ strateg-ik-as, - $\dot{e}$ 'strategist' (from strategij-a 'strategy'), nobel-ist-as, $-\dot{e}$ / nobel-iat-as, $-\dot{e}$ 'Nobelist' (from Nobel-is 'Nobel prize winner'). The corpus data show signs of strong competition between nobel-iat-as, $-\dot{e} \times 21$ and nobel-ist-as, $-\dot{e} \times 16$, and weak competition between archyv-ist-as, $-\dot{e} \times 20$ and archyv-ar-as, $-\dot{e} \times 167$. Strateg-ist-as, $-\dot{e} /$ strateg-ik-as, $-\dot{e}$ are found only in internet usage. These examples can be compared with the further ones ( $7 \mathrm{~b}, 7 \mathrm{c}, 14$ ) provided with contexts for more cases of the said pattern of competition.

### 4.3.2 Competition between suffixed and simplex common root material borrowings

Only in the internet examples does the second sub-pattern show competition between suffixed borrowed denominal personal nouns, e.g. liberal-ist-as, - é 'a liberal, ${ }^{24}$ and simplex common root borrowings, in this case, liberal-as, -e 'id.' (see 13 for the contexts). The competing derivatives are partial synonyms. In the CCLL, liberal-ist-as, $-\dot{e}$ is used in the meaning of 'a supporter of liberalism', whereas liberal-as, $-\dot{e}$ is used about 10119 times, usually in the sense of 'a member of the Liberal Party':

[^9]
#### Abstract

Esu liberalus anarchistas arba anarhiškas liberalistas ${ }^{25}$. I am a liberal anarchist or anarchic liberalist Esu liberalas labiau pasaulèžiūros, o ne partine prasme ${ }^{26}$. I am a liberal more in the worldview than in the party sense. I am a liberal with a lowercase ' $l$ ' (in terms of worldview) rather than with a capital ' $L$ ' (in the sense of belonging to a political party with this name).


### 4.4 Competition between hybrid derivatives and common root material borrowings: the mixed pattern

The mixed pattern is possible only when the internet data are included. This pattern embraces a broad scale of rivalry between hybrid derivatives and material borrowings, cf. competition among hybrid suffixed derivatives strateguo-toj-as, -a / strateg-inink-as, - $\dot{e}$ 'strategist', correlative derivatives strateg-ist-as, $-\dot{e}$ 'id.' / strateg- $i k-a s$, $-\dot{e}$ 'id.', and a common root simplex borrowing strateg-as, $-\dot{e}$ ‘id.’. Competing deverbal hybrid derivatives belong to the derivational category of agent nouns, whereas denominal common root hybrid and correlative derivatives belong to the derivational category of personal nouns. The deverbal hybrid derivative is based on a suffixed borrowed verb, while the correlative derivatives are based on simplex borrowed common root nouns. The competing derivatives are partial synonyms. The denominal base of competing derivatives is morphologically indecomposable in comparison with the deverbal base of hybrid derivative that has a morphologically decomposable stem. The suffix -uo- in strateg-uo-ti 'strategise' fulfils a derivational function. The borrowed formant $-i j$ - in hybrid and correlative derivatives is simply omitted, cf. strateg-ï-inink-as, - $\mathrm{e} /$ strateg- $-\dot{j}-i k-a s,-\dot{e} /$ strateg-ij-ist-as, -e.e. Example (14) demonstrates competitors and contexts from the IS:
(14) strateguo-toj-as, -a 'strategist' CCLL $\leftarrow$ strateguo-ti 'strategise' / strateg-inink-as, -ė [ST-SF-IFs] [ST-SF] [ST-SF-IFs]
'id.' IS $\leftarrow$ strategij-a 'strategy' /
[ST-IF]
strateg-ik-as, -e 'id.' DL / strateg-ist-as, -e 'id.' IS $\leftarrow .$. strategij-a 'id.' /
[ST-SF-IFs] [ST-SF-IFs] [ST-IF]
strateg-as, - $\dot{e}$ ‘id.' DI, DCL, DL, CCLL
[ST-IFs]
Lietuvos užsienio politikos strateguotoju sprendimas atidaryti Taivaniečiu atstovybę Vilniuje signalizuoja pasirengima būti kartu su kitomis demokratinėmis pasaulio

[^10]valstybèmis ${ }^{27}$. The decision of Lithuanian foreign policy strategists to open a Taiwanese Representative Office in Vilnius signals the readiness to stand together with other democracies.
Tačiau jis buvo genialus karo strategininkas. ${ }^{28}$ But he was a brilliant military strategist.
Gediminas kaipo valdovas, savo viešpatavimo metais atsižymėjo didele tolerancija ir diplomatiška išmintimi, o kaipo kariautojas jis buvo sumanus strategikas, išmintingas ir teisingas ${ }^{29}$. As a ruler, Gediminas was distinguished by great tolerance and diplomatic wisdom during his reign, and as a warrior he was a clever strategist, wise and fair.
Vèliau komunikacijos strategistas Vaidotas Valantiejus pasidalino ǐžvalgomis apie reklamos kūrima ir jos ịtaka visuomenei ${ }^{30}$ Later, communication strategist Vaidotas Valantiejus shared his insights on the creation of advertising and its impact on society. Edwardas Luttwakas yra vienas paklausiausių šiu laiku kariniu strategu, konsultuojančiu Pentagona, prezidentus ir ministrus pirmininkus visame pasaulyje ${ }^{31}$. Edward Luttwak is one of the most sought-after military strategists of our time, advising the Pentagon, presidents and prime ministers around the world.

When hybrid, correlative derivatives, and simplex borrowings compete, the rivalty is often won by the latter ${ }^{32}$. In its frequency of use, the simplex noun strateg-as, $-\dot{e} \times 890$ from the CCLL is significantly ahead of the hybrid common root derivative strateguo-toj-as, $-a \times 16$. The hybrid common root derivative strateg-inink-as, $-\dot{e}$ and the correlative ones strateg-ik-as and stateg-ist-as, -e are found only in internet usage (see Table 4).

Table 4: Frequency of hybrid derivatives and common root material borrowings in the CCLL

| Hybrid derivatives | Frequency | Suffixed and simplex <br> material borrowings | CCLL |
| :--- | :---: | :--- | :---: |
| strateguo-toj-as, $-a$ | 16 | strateg-ik-as, $-\dot{e}$ | - |
| strateg-inink-as, $-\dot{e}$ | - | strateg-ist-as, $-\dot{e}$ | - |
|  |  | strateg-as, $-\dot{e}$ | 890 |

The most frequent seems to be the first pattern (approx. 90\%, see Figure 1 above) demonstrating competition between hybrid and correlative common root denominal or deverbal derivatives, e.g. automobil-inink-as, - $\dot{e} /$ automobil-ist-as, -e 'motorist' (from automobil-is 'car'), reformuo-toj-as, -a / reform-ator-ius, -e 'reformer' (from reformuo-ti 'to reform'). The second pattern seems to be quite rare (approx. 8\%): competition between hybrid suffixed deverbal and denominal common root derivatives, e.g. reketuo-toj-as, - a 'racketeer'

[^11](from reketuo-ti 'to racket') / reket-inink-as, -e 'id.' (from reket-as 'racket'), boikotuo-toj-as, $-a$ 'boycotter' (from boikotuo-ti 'to boycott') / boikot-inink-as, - $\dot{e}$ 'id.' (from boikot-as 'a boycott'). The third pattern (approx. 1\%) shows competition between material borrowings (e.g. archyv-ist-as, - $\dot{e} /$ archyv-ar-as, $-\dot{e}$ 'archivist', from archyv-as 'archive') and the fourth mixed pattern (approx. 1\%) that includes a broad scale of competition between hybrid derivatives and two different types of material borrowings (e.g. strateguo-toj-as, -a 'strategist' [from strateguo-ti 'strategise'] / strateg-inink-as, -e 'id.' / strateg-ist-as, - $\dot{e}$ 'id.' / strateg-ik-as, $-\dot{e}$ 'id.' [from strategij-a 'strategy'] / strateg-as, $-\dot{e}$ ‘id.') seem to be infrequent.

It seems that nouns formed with productive suffixes -inink-as, $-\dot{e}$ (personal nouns) and -toj-as, $-a$ (agent nouns) have a general tendency to compete more than personal nouns suffixed with the productive suffix -iet-is, $-\dot{e}$. The reason could lie in the derivational capacities of suffixes. Denominal personal nouns suffixed with -iet-is, - $\dot{e}$ are narrower in their scope than denominal personal nouns suffixed with -inink-as, $-\dot{e}$ and deverbal agent nouns suffixed with -toj-as, -a (cf. Urbutis, 1965: 411-412).

## 5. Conclusions

1. The most frequent rivalry takes place among suffixed hybrid and correlative common root personal and agent nouns, i.e. between synonymous derivatives having both native and foreign suffixes. The frequency of competing patterns of the personal and agent common root nouns seems to be predetermined by the following factors:
1.1. The competitors belonging to the same derivational (semantic) category, e.g. the first pattern, covering rivalry between suffixed hybrid and correlative personal common root nouns (approx. 90\%) predominates. In contrast, the patterns that include the members of different but close derivational categories are rare or extremely rare, e.g. the second pattern covering the competition between suffixed personal and agent common root nouns (approx. $8 \%$ ) and the fourth one that shows a broad scale of rivalry between hybrid derivatives and common root material borrowings (approx. 1\%). Even though the third pattern contains members of the same derivational category, its rarity of occurrence (approx. $1 \%$ ) could be explained by the fact that it covers the rivalry between correlative common root derivatives that have different foreign suffixes.
1.2 The productiveness of the affixes of competitors, e.g. denominal personal hybrid derivatives formed with the productive indigenous suffix -inink-as, - $\dot{e}$ often compete with correlative denominal personal common root hybrid derivatives formed with the productive foreign suffix -ist-as, $-\dot{e}$, whereas hybrid deverbal agent derivatives formed with the productive indigenous suffix -toj-as, $-a$ also frequently compete with correlative common root derivatives formed with the productive foreign suffix -ator-ius, $-\dot{e}$.
1.3 The type of synonymy. The competing nouns of a frequent pattern are, as a rule, absolute synonyms. The pattern is less frequent or infrequent when the competing nouns are partial synonyms.
2. A distinction can be made between strong and weak competition according to the frequency of use. Strong competition occurs with a similar frequency of use of competing derivatives but not more than a third, whereas weak competition manifests itself with a large difference in the frequency of use of competing derivatives.
2.1 Cases of weak and strong competition have been suggested for competing hybrid suffixed derivatives and common root borrowings.
2.2 The suggested criteria for the distinction between strong and weak competition are preliminary and have to be based on statistically reliable criteria.

## Acknowledgements

This research was presented at the 8th International scientific conference Linguistic, Educational and Intercultural Research 2021 (Vilnius University, Vilnius, 21 October 2022), and we would like to sincerely thank the audience for their questions and comments. We thank Hannah Shipman-Griciene for proofreading the English text. We would like to thank anonymous reviewers for their constructive comments and suggestions that helped improve the article in multiple ways. Needless to say, we alone are to blame for any remaining errors.

## References

Adams, Valerie. 2001. Complex words in English. Longman: London.
Darwin, Charles. 1871. The descent of man, and selection in relation to sex. London: John Murray.
Fernández-Alcaina, Cristina. 2017. Availability and unavailability in English word-formation. In Santana-Lario, Juan \& Valera, Salvador (eds.), Competing Patterns in English Affixation, 163206. Bern: Peter Lang.

Fowler, Henry Watson. 1926. A dictionary of Modern English usage. Edited with an introduction and notes by David Crystal. [Repr. 2009]. Oxford: Oxford University Press.

Fradin, Bernard. 2019. Competition in derivation: what can we learn from French doublets in -age and -ment? In Franz Rainer, Francesco Gardani, Wolfgang U. Dressler, Hans Christian Luschützky (eds.), Competition in inflection and word-formation, 67-93. Cham: Springer.

Gaivenis, Kazimieras. 2002. Lietuvių terminologija: Teorijos ir tvarkybos metmenys. Vilnius: Lietuvių kalbos instituto leidykla.

Haspelmath, Martin. 2009. Lexical borrowing: Concepts and issues. In Haspelmath, Martin \& Tadmor, Uri (eds.), Loanwords in the world's languages: A comparative handbook, 35-54. Berlin: Mouton de Gruyter.

Huyghe, Richard \& Varvara, Rossella. 2023a. Quantitative approaches to affix rivalry. Thematic issue. Word Structure 16.1. Edinburgh: Edinburgh University Press.

Huyghe, Richard \& Varvara, Rossella. 2023b. Affix rivalry: Theoretical and methodological challenges. In Huyghe, Richard \& Varvara, Rossella (eds.), Word Structure 16.1. 1-23. Edinburgh: Edinburgh University Press.

Inčiuraitė-Noreikienė, Lina. 2022. Hibridinių vedinių ir skolinių konkurencija. Baltistica (57)1. 149174.

Inčiuraitė-Noreikienė Lina \& Stundžia, Bonifacas. 2015. On word formation patterns of hybrid neoclassical nouns and adjectives in Lithuanian. In Kessler, Stephan \& Judžentis, Artūras (eds.), Contributions to Syntax and Morphology, 27-50. Berlin: Logos.

Inčiuraitė-Noreikiené, Lina \& Stundžia, Bonifacas. 2016. Searching for competing patterns in morphological derivation: The case of adjective borrowing. Skase Journal of Theoretical Linguistics 13(2). 189-214.

Keinys, Stasys. 2005. Dabartiné lietuvių terminologija. Vilnius: Lietuvių kalbos instituto leidykla.
Marchand, Hans. 1969. The categories and types of present-day English word formation: A synchronicdiachronic approach. München: C. H. Beck.

Matras, Yaron \& Sakel, Jeanette. 2007. Grammatical borrowing in cross-linguistic perspective. Berlin: Mouton de Gruyter.

Miliūnaité, Rita. 2009. Dabartinés lietuvių kalbos vartosenos variantai: monografija. Vilnius: Lietuviụ kalbos institutas.

Pakerys, Jurgis. 2013. Naujưjų skolinių duomenų bazės veiksmažodžiu morfologija. Taikomoji kalbotyra 3 (www.taikomojikalbotyra.lt.)

Rainer, Franz \& Gardani, Francesco \& Dressler, Wolfgang U. \& Luschützky, Hans Christian (eds.). 2019. Competition in inflection and word-formation. Cham: Springer.

Santana-Lario, Juan \& Valera Salvador (eds.). 2017. Competing patterns in English affixation. Bern: Peter Lang.

Stundžia, Bonifacas. 2016. Word-formation in Lithuanian. In Peter O. Müller, Ingeborg Ohnheiser, Susan Olsen, Franz Rainer (eds.), Word-Formation: An International Handbook of the Languages of Europe, Vol. 5, 3089-3106. Berlin: Mouton de Gruyter.

Stundžia, Bonifacas \& Inčiuraitè-Noreikienė, Lina. 2022. Vardažodiniụ hibridiniụ priesagụ vedinių, pavadinančiu asmenis, ir bendrašaknių skolinių konkurencija dabartinėje lietuvių kalboje., Baltistica (57)2. 239-261.

Štekauer, Pavol. 2017. Competition in natural languages. In Santana-Lario, Juan \& Valera, Salvador (eds.). Competing Patterns in English Affixation, 15-32. Bern: Peter Lang.

Suseeva, Danara, A. 2016. Mongolic. In Peter O. Müller, Ingeborg Ohnheiser, Susan Olsen, Franz Rainer (eds.), Word-Formation: An International Handbook of the Languages of Europe, Vol. 5, 3468-3488. Berlin / New York: Mouton de Gruyter.

Trask, Robert Lawrence \& Robert McColl Millar. 2015. Trask's historical linguistics. London: Routledge.

Urbutis, Vincas. 1965. Daiktavardžių daryba. In Ulvydas, Kazys (ed.). Lietuviu kalbos gramatika I: Fonetika ir morfologija, 251-473. Vilnius: Mintis.

Urbutis, Vincas. 2005. Daiktavardžių daryba. In Ambrazas, Vytautas (ed.). Dabartinés lietuvių kalbos gramatika, $4^{\text {th }}$ edition, 86-167. Vilnius: Mokslo ir enciklopediju leidybos institutas.

Urbutis, Vincas. 1978. Žodžių darybos teorija, Vilnius: Mokslas; ${ }^{2} 2009$. Vilnius: Mokslo ir enciklopedijų leidybos institutas.

Župerka, Kazimieras. 1995. Kalbos priemonių konkurencija kaip lietuvių kalbos stilistikos objektas. Šiauliai: ŠPI.

Vaskelienė, Jolanta. 2022. Dėl bendrašaknių lietuvių kalbos daiktavardžių su priesagomis -(i)acija ir imas. Respectus Philologicus 41(46). 94-106.

## Sources

CCLL - Corpus of Contemporary Lithuanian Language, Kaunas: Vytauto Didžiojo universitetas, 2011, http://tekstynas.vdu.lt/tekstynas/ (Accessed 2022-06-14).

DCL - Stasys Keinys (ed.), Dabartinès lietuvių kalbos žodynas [Dictionary of Contemporary Lithuanian], $8^{\text {th }}$ edition (revised and updated) Vilnius: Lietuviu kalbos institutas, 2021, elektroninis variantas, 2021 (https://ekalba.lt/dabartines-lietuviu-kalbos-zodynas) (Accessed 2023-06-06)

DI - Kompiuterinis tarptautinių žodžių žodynas [Computerised Dictionary of Internationalisms] 'Interleksis', Vilnius: Alma littera, Fotonija, 2008.

DL - Lietuvių kalbos žodynas [Dictionary of Lithuanian], 1-20 (1941-2002): electronic version, Gertrūda Naktinienė (ed.), Vilnius: Lietuvių kalbos institutas, 2005 (updated 2018) (www.lkz.lt) (Accessed 2023-06-01).

DNL - Rita Miliūnaitè, Agnė Aleksaitė, Lietuvių kalbos naujažodžių duomenynas [the Database of Lithuanian Neologisms] [tęstinis internetinis žinynas nuo 2011 m.], compiled by Rita Miliūnaitè, Vilnius: Lietuvių kalbos institutas (https://ekalba.lt/naujazodziai/) (Accessed 2023-04-01).

DSL - Danutė Liutkevičienė (ed.) Bendrinės lietuvių kalbos žodynas [Dictionary of Standard Lithuanian] (https://ekalba.lt/bendrines-lietuviu-kalbos-zodynas) (Accessed 2023-03-14).

The internet search engine Google.com was used to search for competing hybrid derivatives and common root borrowings.

## Abbreviations and symbols

Eng = English
E.g. = for example

GEN = genitive
$\mathrm{Gr}=$ Greek
IF(s) = inflectional formative(s)
NOM = nominative
PF = prefix
PL = plural
Rus = Russian
SF = suffix
SG = singular
ST = stem
/ = competition
$\leftarrow=$ derivational relation between a hybrid derivative and its base stem
$\leftarrow \cdots=$ derivational relation between a correlative derivative and its base stem

Bonifacas Stundžia
Vilnius University
Faculty of Philology
Department of Baltic Studies
Universiteto St. 5
LT-01513 Vilnius, Lithuania
[bonifacas.stundzia@flf.vu.lt]
Lina Inčiuraitė-Noreikienė
Vilnius University
Faculty of Philology
Department of Baltic Studies
Universiteto St. 5
LT-01513 Vilnius, Lithuania
[lina.inciuraite@flf.stud.vu.lt]

In SKASE Journal of Theoretical Linguistics [online]. 2023, vol. 20, no. 2 [cit. 2023-06-30]. Available on web page http://www.skase.sk/Volumes/JTL53/03.pdf. ISSN 1336-782X


[^0]:    1 This project has received funding from the European Social Fund (project No. 09.3.3-LMT-K-712-23-0106) under a grant agreement with the Research Council of Lithuania (LMTLT).

[^1]:    2 In our article, we distinguish between two types of material, or matter, borrowings (for more on terminology, see Matras \& Sakel 2007; Haspelmath 2009: 37 ff.), i.e. between simplex (e.g. strateg-as, - $\dot{e}$ 'strategist') and affixed (e.g. strateg-ist-as, $-\dot{e}$ 'id.') material borrowings. Our proposed terms helped us express our ideas on the competing nouns more accurately and precisely.
    ${ }^{3}$ Inflectional formative -us after palatal consonants.
    ${ }^{4}$ Sometimes competition occurs among several members, cf. examples 7b-c, 10, 14.

[^2]:    5 In Lithuanian, personal and agent nouns, as a rule, constitute pairs of two genders marked by inflectional formatives (IFs) -as, -ius, -is (masculine), $-\dot{e},-a$ (feminine).
    6 They constitute a significant part of the international words that have entered the Lithuanian language (cf. Keinys 2005; Gaivenis 2002).
    7 A dashed arrow shows a derivational relation between a correlative derivative and its base stem.
    8 A simple arrow shows a derivational relation between a hybrid derivative and its base stem.

[^3]:    $9 \quad$ A large number of personal and agent nouns are closely related and function as synonyms. In order to find out if the competing nouns, e.g., eksportuo-toj-as, -a 'exporter' / eksport-inink-as, $-\dot{e}$ 'id.' are synonymous, the entire sentences or excerpts from sentences with these nouns are compared (cf. example 12a).
    10 For more on the derivational and adaptational function of the Lithuanian verbal suffixes -uo- and -in-, see Pakerys 2013.

[^4]:    11 The borrowed suffix - $i j$ - in the hybrid derivative is omitted (for more on cases of stem disintegration and omission of affixes, see Urbutis ${ }^{2}$ 2009: 239).
    12 The choice of the CCLL may have an effect on the results obtained. The corpus includes data from ca. 1990 to 2011.
    13 https://ekalba.lt/naujazodziai/apie/ND\%20\%C4\%AEvadas\%20EN (Accessed 2023-05-08).

[^5]:    14 Of course, words need not necessarily to compete especially if they have found their niche, e.g. hybrid derivatives in (ia-c) belong to the personal (ia-b) and agent nouns (ic) and have no rival pairs in Lithuanian:
    (i) a. disk-inink-as, $-\dot{e}$ 'discus thrower' CCLL $\leftarrow$ disk-as 'disc' [ST-SF-IFs] [ST-IF]
    b. egipt-iet-is, - ee 'Egyptian' DL $\leftarrow$ Egipt-as 'Egypt' [ST-SF-IFs] [ST-IF]
    c. tatuiruo-toj-as, -a 'tattooist' CCLL $\leftarrow$ tatuiruo-ti' 'tattoo'
    [ST-SF-IFs]
    [ST-SF]
    Similarly, as hybrid suffixed derivatives, simplex (iia) and suffixed material borrowings (iib) might not have a rival pair in Lithuanian. The reasons for the absence of a competitor in (iia-b) could be the rare use of a simplex borrowing (iia), which is used in the context of art, or the suffixed material borrowing (iib) functions as a term, especially in the field of science (see iia-b):
    (ii) a. choreg-as 'choregus, a person who produces or finances a dramatist's work in Ancient Greece' DI
    [ST-IF]
    b. komun-ist-as, -e 'communist' DI, DCL, DSL, DL $\leftarrow$ komun-a 'commune' [ST-SF-IFs]
    [ST-IF]
    ${ }^{15}$ Strong competition would involve an (almost) equivalent number of hits (Fradin 2019: 84).
    16 Miliūnaite proposes five degrees of competition between variants: 1) the beginning of variation, 2) increasing competition, 3) strong competition, 4) weakening competition and 5) the complete end of competition. Our

[^6]:    understanding is that such a scale of evaluation of competitors can be applied when a time dimension is included when examining pairs or series of variants.
    17 It could also be the end of competition. The data of the Soviet period (1945-1990), as well as of recent internet usage, can help determine the beginning or end of competition.
    18 We have not found this sub-pattern in the CCLL, whereas the internet usage, according to the preliminary research, exhibits a small sample of suffixed and simplex common root borrowed personal nouns. This pattern is widespread in the competition of borrowed adjectives, cf. a hybrid suffixed derivative lokal-in-is, $\dot{e}$ 'local' and a common root simplex adjective lokal-us, -i 'id.' (for more, see Inčiuraitè-Noreikiené \& Stundžia 2016).
    19 In the sense of respecting different types of beliefs, being tolerant, etc.
    ${ }^{20}$ Competing nouns in a mixed pattern can be analysed in a binary way, i.e. by dividing them into pairs.

[^7]:    ${ }^{21}$ In order to keep the article concise and maintain its readability, these further examples of competing nouns belonging to a particular pattern are provided without contexts from the CCLL and internet use.

[^8]:    22 The explanation could lie in derivational meaning that is typical of "a group of derivatives united by common word class of their bases as well as by the structural and semantic similarities of their suffixes" (Suseeva 2016: 3471).

[^9]:    ${ }^{23}$ These numbers indicate the total number of word tokens in the CCLL.
    ${ }_{24}$ Accepting and respecting different opinions, tolerant.

[^10]:    25 https://www.delfi.lt/veidai/zmones/a-mamontovas-atvirai-apie-verktinius-naujaji-albuma-ir-kitusdalykus.d?id=68152108 (Accessed 2023-02-01).
    26 https://www.lrt.lt/naujienos/lietuvoje/2/25811/e-jakilaitis-gedimino-prospekte-sveikinuosi-su-kas-penktuzmogumi (Accessed 2023-02-01).

[^11]:    ${ }^{27} \mathrm{https}: / / \mathrm{www} .1 \mathrm{rt} . \mathrm{lt} /$ naujienos/nuomones/3/1615359/alvydas-nikzentaitis-istorine-klaida-ar-galimybe-diletanto-pasvarstymai-apie-lietuvos-uzsienio-politika (Accessed 2023-05-21).
    28 https://www.svietimotaryba.org/wp-content/uploads/2017/08/augustasii.pdf (Accessed 2022-05-16).
    29 http://www.spauda.org/dirva/archive/n1939/1939-12-08-DIRVA.pdf (Accessed 202204 01).
    ${ }^{30} \mathrm{https}: / /$ sa.ktu.edu/news/trikampio-mokymuose-kaip-kokybiskai-organizuoti-renginius/ (Accessed 2022-0401).
    ${ }^{31} \mathrm{https}: / / \mathrm{www} . l \mathrm{lt} .1 \mathrm{lt} /$ naujienos/pasaulyje/6/1722174/su-putinu-susitikes-karo-strategas-turi-sprendima-ukrainai-kissingerio-pasiulymas-ir-patarimas-kovoti-iki-galo-yra-beverciai (Accessed 2023-05-21).
    ${ }^{32}$ This outcome is common in the three pairs analysed; no further examples of that pattern were found.

