Jurgis PAKERYS
Vilnius University

MORPHOLOGICAL ADAPTATION OF ADJECTIVAL BORROWINGS IN MODERN LITHUANIAN¹

Abstract. In this article, the following types of morphological adaptation of borrowed adjectives in Lithuanian are identified: (1) zero adaptation, (2) assignment to inflection class (IC), (3) addition of derivational suffix, (4) substitution of derivational suffix, (5) truncation of derivational suffix. Zero adaptation is very rare in internationalisms, but appears quite frequently in slang borrowings. Assignment to ICs is noted in internationalisms and slang borrowings with nearly complementary distribution of ICs in -us and -as. Addition of derivational suffixes is rare, but available in non-standard use and also possible, but difficult to prove, in internationalisms. Substitution of derivational suffixes is the main strategy for adaptation of internationalisms, the central role being played by the relational suffix -in-is. Truncation of derivational suffixes is very rare and is noted only in internationalisms where affixes of Latin origin can be occasionally deleted.

Keywords: Lithuanian; morphology; borrowed adjectives; morphological adaptation.

1. Introduction

Adjectives are, in general, not frequently borrowed: according to the World Loanword Database, adjectival and adverbial loans, when counted together, make up 15.2% of lexemes, compared to nominal loans (31.2%) and

¹ This article is one of the outcomes of the research project *Morphological adaptation of adjectival borrowings in the Baltic languages*, funded by a grant (No. LIT-9-7) from the Research Council of Lithuania. Part of this investigation was presented during the 12th International Congress of Balticists (Vilnius University, Vilnius, October 28-31, 2015) and I would like to sincerely thank the audience for their questions, comments, and discussion. The pilot questionnaire on slang borrowings would have certainly not been possible without my students from Vilnius University and their help is greatly appreciated, *labai ačiū!* Many sincere thanks to anonymous reviewers, who helped me improve the present version in a number of aspects, and to Caitlin Keenan, for editing the English of my article. Needless to say, all possible errors and misinterpretations are mine.

verbal loans (14%), respectively² (Tadmor 2009, 61; cf. also Matras 2009, 187). Nevertheless, the morphological adaptation of borrowed adjectives can be quite varied and poses some interesting problems for the morphological theory of contact linguistics.

This paper presents a description of morphological adaptation of adjectival borrowings in modern Lithuanian with the further goal of offering a typology of adaptation of loan adjectives in languages that are similar to Lithuanian, i.e. having adjectival inflections and adjectival derivational morphology. In service of this goal, some emphasis is placed on the derivational adaptation of loans, with the aim of demonstrating that derivational morphology may play an important role in the process of borrowing.

The paper is structured as follows. In Section 2, strategies of adjective adaptation are presented (cf. Pakerys 2016a) and later discussed in more detail: zero morphological adaptation (Section 3), assignment to inflection classes (Section 4), addition of derivational suffixes (Section 5), substitution of derivational suffixes (Section 7).

The data used for this paper were collected from the electronic *Dictionary* of *Internationalisms in Lithuanian* (Kinderys 2001)³, the *Dictionary of Non-standard Lithuanian* (Kudirka 2011), and a pilot questionnaire of adjective adaptation⁴. The pilot questionnaire was composed of 21 Lithuanian sentences found on the Internet⁵ which had adjectives with English stems or roots. In each case, the borrowed adjective was omitted and the respondents had to write the form they would choose from a provided list, or any other form they would prefer. The list of options included an orthographically non-adapted form, an orthographically adapted form, orthographically adapted and non-adapted forms with the productive Lithuanian adjectival suffixes *-in-is* and *-išk-as*, as well as with the suffix *-ov-as* (< Russian *-ov-yj* (*-ob-biŭ*)), which occurs in some slang loans and formations. For example, to prompt the use

² Only content words are counted.

³ The term "internationalism" here and further in this paper refers to the words that have been borrowed into a number of languages and which typically contain roots and other morphemes of Greek and Latin origin.

⁴ A similar study was also conducted on Latvian, see Pakerys 2016b with some notes on differences between Latvian and Lithuanian. Due to time constraints, only pilot questionnaires could be used in both studies.

⁵ Google search service was used (https://www.google.lt.).

of the borrowing from English *cool*, the sentence in (1) was given, followed by possible options in brackets:

(1)	Labai jau išsiskiriantis ir _	yra tas br	itiškas stilius!
	(cool, kūl, coolinis, kūlinis,	cooliškas, kūliškas, cool(i)ov	as, kūl(i)ovas)
	'So outstanding and	is that Bri	tish style' ⁶

The list of borrowings used in the questionnaire had a number of subgroups. The items in the first subgroup are most typically used as adjectives and not nouns in English (awesome, awkward, cool⁷, crazy⁸, cute, fancy, hot, smart, super⁹), the second subgroup includes items that can be used as adjectives and sometimes also as nouns (fake, vintage, old(-)school), the third subgroup contains some denominal adjectives in -y (freak-y < freak, funk-y < funk, trend-y < trend), and the last subgroup includes nouns that can be used as attributes and would prompt the users of Lithuanian either to interpret them as adjectives or as nouns in the genitive case (brand, glamour, hacker, hipster, loser, steampunk)¹⁰. The questionnaires were filled out by 59 1st year (mostly 18-19 years old and female) students, enrolled in Lithuanian and Italian philology BA programs at Vilnius University in the autumn semester of 2015.

As far as earlier treatment of adjectival loans in Lithuanian is concerned, the literature is quite limited and the problem of morphological adaptation still lacks a systematic treatment, although many important insights can be found in, e.g., Kniūkšta 1976; Kniūkšta 2001 [1970]; Urbutis 1978; Keinys 1984; Drotvinas 2000; Vaicekauskienė et al. 2014. The morphology of borrowed adjectives adapted by the addition or replacement of suffixes is also briefly commented upon in word-formation chapters of the main grammars of Lithuanian, see Ulvydas 1969, 559–560, 573 and Ambrazas 1994, 207–208, 210. References on adaptation strategies for borrowed

 $^{^6}$ In the original sentence, the form *cool inis* was used (http://banga.tv3.lt/lt/2forum. showPosts/891476.462.1.22338898==(31371316), December 20, 2013).

⁷ The use of the noun *cool* seems to be rare.

 $^{^8}$ From the synchronic point of view, the relation to the noun *craze* does not seem to be relevant.

⁹ The use of the nouns *cute, fancy, hot, smart, super* seems to be rare.

 $^{^{10}}$ I should have included genitives as options in the list of possible forms; this must be recognized as a drawback of the questionnaire.

adjectives in European and some non-European languages will be given in Section 2, largely taken from the volumes Görlach 2002a, and Tadmor, Haspelmath 2009.

2. Strategies of morphological adaptation

When a borrowing enters a certain word class in a recipient language, it should, theoretically, acquire all features of that word class (or the features of respective subclasses, if they are distinguished). This means that, for example, in the case of Lithuanian, a new member of the subclass of qualitative adjectives should have the capacity to express case, number, gender, definiteness¹¹, and degree of comparison marked by the suffixes¹². Cf. the minimal set of features (case, number, and gender) expressed by -a in (2) and the maximal set of features (including degree of comparison and definiteness) expressed by -ausi-oji in (3):

(2) Linksm-a nakt-is
joyful-NOM.SG.F night-NOM.SG
'A joyful night'

(3) Linksmi-ausi-oji nakt-is
joyful-superl-nom.sg.f.def night-nom.sg
'The most joyful night'

In actual use, however, some adjectival borrowings may function without any morphosyntactic adaptation whatsoever. This case will be further referred to as **zero morphological adaptation**, as illustrated in (4), (5), and (6), where English *cool* and *sexy* are either used in their original (4) or an adapted orthographic form $(5 \text{ and } 6)^{13}$:

(4) *labai cool ideja! aisku, kad ir sexy rubais apsirengti kaip sesele...*'a very **cool** idea! and, of course, to put on **sexy** clothes [to look] like a nurse...'¹⁴

¹¹ Definiteness in Lithuanian can be expressed by the morphological form of adjectives, see, e.g., Ambrazas 1997, 142–147.

¹² Some subclasses of adjectives block the expression of degree and definiteness, see, e.g., Ambrazas 1997, 141–142, 146.

¹³ The examples were found via *Google* search service (https://www.google.lt).

 $^{^{14}\} http://www.supermama.lt/forumas/lofiversion/index.php/t690550-600.html (January 22, 2012). The diacritics on the letters are missing in the original.$

- (5) Va čia tai **kūl** pasiūlymas 'Now that's a **cool** offer' 15
- (6) [...] tiesiog mergaitės parodė **seksi** figūrytes '[...] the girls just showed [their] **sexy** figures' 16

The use of indeclinable borrowed adjectives is quite common in many languages, and in some cases, the non-adapted forms tend to occur in predicative use or be interpreted as members of compounds; see Görlach 2002b, 7–8 (in general); Busse, Görlach 2002, 24 (German); Berteloot, Van der Sijs 2002, 48 (Dutch); Graedler 2002, 70 (Norwegian); Kvaran, Svavarsdóttir 2002, 96 (Icelandic); Humbley 2002, 116 (French); Rodríguez González 2002, 139–140 (Spanish); Pulcini 2002, 159 (Italian); Constantinescu, Popovici, Ştefănescu 2002, 182 (Romanian); Maximova 2002, 204 (Russian); Mańczak-Wohlfeld 2002, 223 (Polish); Filipović 2002, 234–235 (Croatian); Alexieva 2002, 250 (Bulgarian); Battarbee 2002, 271 (Finnish); Köödderitzsch, Görlach 2002, 297 (Albanian); Stathi 2002, 319 (modern Greek); Schadeberg 2009, 91 (Swahili); see also Haspelmath 2009, 42 on optionally adapted English loans in Japanese and Russian.

It should also be acknowledged that in cases like (4), the boundary between word-level code switching and lexical borrowing is not easily drawn (see, for example, Thomason 2001, 132–136 and Heath 2013 [1987], 23–24). When one deals with written data, it might be argued that the orthographical adaptation may in principle correspond to phonological adaptation. On the other hand, the original spelling does not exclude the possibility of partial or full phonological adaptation in spoken discourse: i.e., the graphical form of the source may be preserved, while the word is pronounced differently (= adapted) compared to the donor language.

A second strategy of morphological adaptation involves **addition of in-flectional affixes** or **assignment to inflection classes** (= ICs), if the recipient language has them. This is the case for the Lithuanian *absoliut-us*¹⁷

¹⁵ http://balsiai.forumn.org/t21p165-talento-oou (April 21, 2008).

¹⁶http://www.delfi.lt/pramogos/zmones/llapkauskaite-apie-londone-pirktas-studenciu-sukneles-mergaites-parode-seksi-figurytes-savo-moteriskas-linijas.d?id=59993579 (November 15, 2012).

¹⁷ For the sake of brevity, only the nom. sg. masc. form of adjectives of Lithuanian and other languages will be supplied.

'absolute', which is assigned to an IC in $-us^{18}$, or (slang) afig(i)en-as 'great, impressive; big, large', which is assigned to an IC in -as:

- (7) Latin absolut-**us** > Lithuanian absoliut-**us**¹⁹ (Kinderys 2001)
- (8) Russian ofigenn-**yj** (офигенн-**ый**) > Lithuanian (slang) afig(i)en-**as** (Kudirka 2011, 24)

In the case of borrowing from languages with ICs, such as Latin or Russian, the markers of morphosyntactic features are not simply added, but actually replaced (cf. also the replacement of derivational suffixes discussed below). Only if the donor language does not have prototypical ICs for adjectives, like English²⁰, can the pure addition of inflectional affixes or assignment to ICs be distinguished, as in (9):

Yet another possibility is the addition of inflectional markers to existing inflections of the donor language. This happens when, for example, the plural form of a noun is taken as the base for borrowing and the inflections of the recipient language are added to the plural marker of the donor language, cf. (10):

I cannot provide a similar case of adjectival borrowing in Lithuanian, but cf. Latvian in (11) where -ij- (< -ij) marks nom. sg. masc. in the donor Rus-

¹⁸ The adjectival ICs are further referred to by their nom. sg. masc. inflections. The borrowings in Lithuanian are also assigned to certain accentuation paradigms, but they will be left out of the scope of the present paper.

¹⁹ This adjective was borrowed via mediating languages and Latin is indicated as the primary source.

²⁰ English adjectival inflection is limited to some subgroups expressing degree, cf.: good, better, (the) best (suppletion); great, great-er, (the) great-est (affixation); expensive, more expensive, (the) most expensive (periphrasis).

²¹ Cf. also the indeclinable forms fakin, fucking (Kudirka 2011, 168).

²² Cf. also singular-based *geim-as*, *game'-as* (Kudirka 2011, 193).

sian and is retained in the stem of the Latvian borrowing, followed by the native inflection -s which expresses the same set of features (nom. sg. masc.):

Multiple factors may be at work when borrowings are assigned to ICs, such as formal similarity, semantics, productivity of ICs in the recipient language, etc. (cf. the assignment of gender to nouns, see, for example, Winford 2003, 48–50 with further references). Direct addition of inflections to borrowings (or assignment to ICs if they are available) is attested in quite a number of languages (however, it should be noted that only some of the languages listed below use this strategy productively)²⁴; see Busse, Görlach 2002, 24 (German); Berteloot, Van der Sijs 2002, 48 (Dutch); Graedler 2002, 70 (Norwegian); Humbley 2002, 116 (French); Rodríguez González 2002, 139–140 (Spanish); Farkas, Kniezsa 2002, 284 (Hungarian); Köödderitzsch, Görlach 2002, 297 (Albanian); Stathi 2002, 319 (modern Greek); Kossmann 2009, 203 (Tarifiyt); Schulte 2009, 248 (Romanian); Elšík 2009, 284 (Selice Romani).

The following three adaptation strategies involve derivational morphology; this is the main reason why I prefer to speak of *morphological* adaptation in this article rather than specifically *morphosyntactic* adaptation. In the first adaptation strategy involving derivational morphology, a borrowed stem can be supplied with an affix which has a derivational function in the recipient language; this strategy will be further referred to as **addition of a derivational suffix** (other types of affixes are not involved in the adaptation of borrowed adjectives in Lithuanian). Cf. (12), where the Lithuanian adjectival suffixes -*in*- or -*išk*- are augmented with corresponding ICs (vs. the indeclinable forms exemplified in (4) and (5)):

This adaptation strategy for borrowed adjectives is noted in a number of studies, see Görlach 2002b, 7–8 (in general); Kvaran, Svavarsdóttir

²³ A shorter form without the donor inflection is also attested as *riž*-s (B u š s, E r n s t - s o n e 2009, 405).

²⁴ Here, the addition (or replacement) of participial affixes or affixes marking degree are counted as instances of addition of inflectional morphemes.

2002, 96 (Icelandic); Maximova 2002, 204 (Russian); Mańczak-Wohlfeld 2002, 223 (Polish; suffix addition is not explicitly mentioned in this work, but cf. kompatybil-n-y < English compatible); Battarbee 2002, 271 (Finnish); Matras 2009, 189 (Yiddish); Bartels 2009, 321 (Lower Sorbian); Chumakina 2009, 441 (Archi). In Lithuanian, the adaptational function of the suffix -in-is was noted by Urbutis (1978, 28, 115; Urbutis 1999; cf. also Kniūkšta 1976, 7, 47, 49; Keinys 1984, 114; Drotvinas 2000, 4) and termed "adaptational affixation". Urbutis explains that the suffixation of a native affix to a borrowed stem permits the borrowing to conform morphologically to a certain word-class and function as a member of a certain lexico-morphological subgroup (1978, 115)²⁵. However, it should be noted that, in many cases in Lithuanian internationalisms, such native suffixes are not added to the inflected form of the borrowed word, but directly replace the original suffix (Urbutis 1978, 115); more on this process below.

Some languages employ dedicated affixes that are only used for adaptation and not for derivation. Selice Romani, for example, has special affixes (notably also borrowed) for the adaptation of borrowed adjectives from Hungarian; see Elšík 2009, 284. This would be a separate strategy, **addition of a dedicated adaptation affix**; cf. Wohlgemuth 2009, 98–100 on distinct loan verb markers which in a number of cases are also borrowed.

As mentioned briefly above, derivational affixes can be not only added, but actually replaced, as in (13) where the Lithuanian -išk- is used in place of the suffix of the donor language (without a historical study, I cannot point to a particular donor in this and further examples in (14) and (15), but most probably it was Polish or Russian²⁶):

(13) Polish hermet-yczn-y > Lithuanian hermet-išk-as Russian germet-ičesk-ij, germet-ičn-yj (гермет-ическ-ий, гермет-ичн-ый)

²⁵ For example, in the case of the suffix *-in-is*, the subgroup of classifying (derivationally relational) adjectives is most probably borne in mind.

²⁶ Cf. also the German *hermet-isch*. It should be noted that the suffixes in these donor languages also function as replacements; the ultimate source of the borrowing is Medieval Latin *hermet-ic-us* (http://www.merriam-webster.com/dictionary/hermetic, accessed on July 14, 2016).

This strategy, which I will refer to as **substitution of a derivational suffix**²⁷, has been noted in a number of languages, see Görlach 2002b, 7–8 (in general), Busse, Görlach 2002, 24 (on German; cf. also Paul 1920, 90–91 on forms with classical stems); Kvaran, Svavarsdóttir 2002, 96 (on Icelandic); Bartels 2009, 321 (Lower Sorbian). On Lithuanian, see Kniūkšta 1976, 7, 47, 49; Urbutis 1978, 28, 115; Pažūsis 2009c [1979], 87 (fn. 9); Keinys 1984, 114; Urbutis 1999; Mikelionienė 2000, 26, 70; Vaicekauskienė et al. 2014, 19–20²⁸; Inčiuraitė-Noreikienė, Stundžia 2015, 41 (it should be noted that only in some of these studies is suffix replacement explicitly differentiated from suffix addition). In some instances, the suffix can be replaced with another (preferred) form of the borrowed suffix, as, for example, in Hungarian, where English *-ible* is re-latinized to *-ibilis*: kompatibilis < English compatible (Farkas, Kniezsa 2002, 286).

Finally, in rare instances, the **truncation of a derivational suffix** of the donor (or pre-donor) language occurs. The data available at the moment are limited, but truncation seems to happen at a later stage of adaptation and may be related to certain purist attitudes (reduction of non-native elements) and language planning efforts. For example, in (14), the Lithuanian *centralinis* 'central' (not in the current use) may have been first borrowed from Polish or Russian by substituting the suffix (Polish/Russian -n- was replaced by the Lithuanian -in-), with the segment -al- later truncated, resulting in a shorter form:

(14) Polish central-n-y > Lithuanian central-in-is > centr-in-is Russian central'-n-yj (централь-н-ый)

It should be noted, however, that *centr-in-is* can also be interpreted as derived from the noun *centr-as* 'center'; in this case, one gets rid of the non-

²⁷ The attribute "derivational" refers to the main function of the suffix in the donor language, but in many cases of borrowed internationalisms, the suffix in question can also be used for adaptation of loans in the donor language. So, to be precise, sometimes one may speak of replacement of adaptational suffixes (which also serve as derivational in a given donor language and should be distinguished from specialized loan adaptation suffixes not used for derivation).

²⁸ In an earlier study (Vaicekauskienė 2007, 192–193), some borrowings (*kreiz-in-is, kreiz-išk-as* 'crazy', *suicid-in-is, suicid-išk-as* 'suicidal', etc.) were interpreted as derived.

native affix -al- indirectly, by repairing the derivational link: centr-al-in- $is \leftarrow centr$ -as is not a valid derivational relation (the function of -al- is unclear unless one recognizes the suffix -alin-is) and is replaced by centr-in- $is \leftarrow centr$ -as, which is a productive derivational process in Lithuanian (see Kniūkšta 2001 [1970] and Kniūkšta 1976, 50 for more examples of this type). As a result, the best examples of direct truncation are ones which lack possible nominal derivational bases, cf. cerebr(-al)-in-is 'cerebral' in (15) (both forms are in current use):

(15) Polish cerebral-n-y > Lithuanian cerebral-in-is > cerebr-in-is Russian cerebral'-n-yj (церебраль-н-ый)

According to the morphological complexity of operations, the above-mentioned strategies can be tentatively arranged in the following order (complexity increases from left to right): zero morphological adaptation < assignment to inflection class < addition of a derivational affix (and assignment to an inflection class) < substitution of a derivational suffix (and assignment to inflection class)/truncation of the derivational affix. Zero morphology corresponds to zero adaptational effort, while assignment to inflection class (or addition of inflections) satisfies the minimal requirements for the item to be inflected. The addition of a derivational affix is interpreted here as a step further than minimal adaptation, while substitution is considered even more complex, since it involves analysis of the derivational structure of the donor language (the data on truncation are limited, but this process seems to be comparable to affix substitution, since it involves certain analysis and modification of the derivational structure of the borrowed stem).

3. Zero morphological adaptation

According to the data collected from Kinderys 2001, indeclinable adjectives are extremely rare in the standard register. Such forms can be exemplified by mini 'small' (reflecting the English use of mini, which first reached Lithuanian indirectly) or chaki 'khaki' (used as an adjective and ultimately going back to Urdu $kh\bar{a}k\bar{\iota}$, also borrowed indirectly). On the other hand, in less standardized and non-standard use, one encounters many more cases of indeclinable adjectives; for example, Ryklienė (1999, 28) lists super, ekspres, ekstra, etc., collected from newspapers of the last decade of the 20^{th}

century²⁹. The dictionary of non-standard Lithuanian (Kudirka 2011) includes 9 indeclinable adjectives, many of which are used in the original orthography. Two items in this group have lexicalized *ed*-forms as their sources (*unplugged*³⁰ < E³¹ *unplugged*; *stound*, *stoned* < E *stoned*), one *ing*-form (*fakin*, *fucking* < E *fucking*); the rest are *femeil/female*, *custom*, *kreizi/crazy*, *kūl/cool*, *meil/male*, *super duper* (< E *female*, *custom*, *crazy*, *cool*, *male*, *super-duper*). Of these, only *kreizi/crazy* has a parallel suffixal form *kreiz-išk-as* listed in the dictionary (cf. also *kreizov-as* most probably directly reflecting Russian *krejz-ov-yj* (крейз-ов-ый), which in turn was adapted by the addition of the derivational suffix *-ov-yj* in Russian < E *crazy*). For some additional examples of indeclinable borrowed adjectives and adjectival expressions, see Vaicekauskienė et al. 2014, 7–8, where these forms constitute from 9% to 12% of all lexemes included in the study.

The data from the pilot questionnaire show that zero morphological adaptation is wide-spread: in 59.33% of the responses (not the lexemes!), non-adapted forms were preferred (688.2^{32} out of 1,160) and of those, 76.87% were in the original orthography, cf. *cool, fake, crazy* vs. *kūl, feik, kreizi*, etc. When contrasted with slang borrowings from Slavic (see below), it seems that the tendency to use indeclinable forms may be related to the morphology of English, where adjectives do not bear number, case and gender inflections (vs. full-fledged inflection of the Slavic adjectives). However, it should be noted that these indeclinable adjectives may have periphrastic degree forms

One of the anonymous reviewers correctly points out that these forms may not necessarily function as adjectives, but can also be treated as parts of complex words, cf. Lithuanian *mini-ven-as* < E *mini-van*. The adjectival use can be differentiated by, for example, the ability of these forms to be modified by the intensifier *labai* 'very' in NPs: *labai mini enciklopedija* 'very small encyclopaedia', *labai ekspres* ... *kelionė* 'very quick journey', *labai ekstra atvejis* 'very extraordinary case', etc. (http://www.knyguklubas. lt/valstybe+iliustruota+lietuvos+enciklopedija.html, May 21, 2010; http://tomas.ring. lt/blog/2016/02/ganga-gang-3/, February 26, 2016; http://www.lietuviai.se/frm/viewtopic.php?f=9&t=479&start=45, September 27, 2009).

³⁰ Perhaps also a shortened form *anplag* (in adapted orthography).

³¹ Hereafter, English is abbreviated as E.

³² Some respondents provided a number of forms and their values were evenly divided, for example, if a respondent chose just one form, it was counted as 1, if they provided 3 forms, each was counted as 0.33, if someone wrote as many as 5 forms, they were each counted as 0.2, etc.

expressed by the intensifier *labai* 'very' (comparative *labiau*, superlative *labiausiai*), as in (16) (alongside the regular suffixed comparative *laisv-esn-i* 'more free') and (17):

- (16) kurie [= vaikiški drabužiai] būtų [...] šiek tiek laisvesni, **labiau "crazy"** 'which [= kids' clothes] would be [...] more free, more crazy'
- (17) *pirma eilė koncertuose -- ne labiausiai cool variantas.* 34 'the first row at concerts is not the coolest option'

To conclude, the use of indeclinable borrowed adjectives in the standard register is very rare, but the non-standard register has many more of these forms, especially if one considers the data from the pilot questionnaire. However, it should be acknowledged that some of this use can be also explained as word-level code switching, as explained in Section 2 (for a discussion of code switching and related phenomena in Lithuanian, see Pažūsis 2009d [1980] (on Lithuanian in the USA and Canada) and Vaicekauskienė 2007, 155–162).

4. Assignment to inflection class

Assignment to ICs is productive for both internationalisms and slang/non-standard borrowings, but with varying degrees depending on the donor languages. The dictionary of internationalisms lists 224 adjectives adapted by assignment to ICs in -us, versus none in -as (224 adjectives is equivalent to 14% of all adjectives included in the dictionary; note, however, that some of the suffixed adjectives can also be derived (or interpreted as derived) within Lithuanian, see Section 6). The reason for the assignment of these borrowings to the IC in -us is perhaps the formal similarity of the nom. sg. masc. of Latin and Lithuanian adjectives. It is possible that, at some point³⁵, this

³³http://www.mamyciuklubas.lt/moteru-klubas/versli-mama-ieva-praktiskai-tai-neverslas-o-hobis-31864/ (May 14, 2014).

³⁴ http://www.g-taskas.lt/interestlt-jacky-terrasson/ (May 26, 2008).

³⁵ The adaptation of Latin adjectives in *-us* as *-us* in Lithuanian was suggested already by Bytautas (1912, 116) who also proposed the assignment of Latin adjectives in *-is* to *-is* in Lithuanian (e.g. Latin *social-is* > Lithuanian *social-is*, which would be declined like *didel-is* 'big'), but this type is rare and not attested in standard Lithuanian (but cf. *civil-is* 'civil' in LKŽe; see Pažūsis 2009b [1975], 52–53 for more examples). Bytautas (idem) also notes "unnecessary" suffixes in adjectives of Latin origin (cf. Section 5) and criticizes forms like *konkret-išk-as/-in-is* 'concrete, specific', *social-išk-as/-in-is* 'social', used in his time.

parallelism gave rise to the principle that adjectives with classical stems are assigned to IC in -us regardless of their original IC (cf. Drotvinas 2000, 2). Thus, for example, in the case of Latin *activ-us* 'active' — rendered as Lithuanian *aktyv-us* — one can speak of its assignment to the IC -us based on the formal similarity of the nom. sg. masc. However, in the case of Lithuanian *genial-us* 'genial' (< Latin *genial-is*), only the principle of origin of the borrowing is at work (if the stem is Latin/Greek, then the IC in Lithuanian will be -us).

It should be noted that when new borrowings with classical stems from English enter Lithuanian, their assignment to ICs works according to the principle of etymological origin and analogy, since typically a similar stem already functions as an earlier borrowing. For example, *interaktyv-us*, *metroseksual-us* reflect the English *interactive*, *metrosexual*, which have classical stems; these new forms are accordingly assigned to IC in *-us* just as *aktyv-us* 'active' and *seksual-us* 'sexual' are (by analogy)³⁶. However, in some cases, the derivational suffixes are replaced; for example, *gener-in-is* (*vaistas*) reflects E *gener-ic* (*drug*), which is treated as a classical borrowing (the first consonant is also pronounced as Latin /g/)³⁷. In this case, *-ic* is replaced with Lithuanian *-in-*, following a general pattern of Greek/Latin *-ik-/-ic-* > German *-isch*/French *-ique*, etc. > Lithuanian *-in-is* (or, in some cases, *-išk-as*), cf. *akadem-in-is* 'academic', *empir-in-is* 'empiric', but *autent-išk-as* 'authentic' (see Section 6). There are also infrequent cases in which derivational suffixes are added, as in *pilot-in-is* (*projektas*) < E *pilot* (*project*) (see Section 5)³⁸.

The principle of assignment of classical adjectival stems seems to have been extended to other internationalisms, such as French banal, colossal > Lithuanian banal-us, kolosal-us, etc. However, it should be noted that many of these borrowings, including ones with classical stems, reached Lithuanian indirectly through Polish and Russian (or German) and were first adapted by suffix replacement, cf. Polish solidar-n-y, Russian solidar-n-yj (солидар-н-ый), German solidar-isch (ultimately going back to French solidaire) alongside earlier Lithuanian forms solidar-in-is, solidar-išk-as (listed in LKŽe).

³⁶ See also Vaicekauskienė et al. 2014, 10 (in this study, assignment to IC in *-us* is seen in ca. 10% of the lexemes).

³⁷ See also Pažūsis 2009c [1979], 87 (fn. 9).

 $^{^{38}}$ *pilot-in-is* cannot be interpreted as derived from *pilot-as* 'pilot' due to semantic incompatibility.

Only at a later point were shorter forms (like *solidar-us* in modern Lithuanian) introduced, following the motivation that a suffix is not needed when a corresponding Latin or French form without a suffix exists³⁹ or the argument that longer forms in *-in-is* do not actually distinguish (classify) the objects they characterize (this feature is typical of the adjectives in *-in-is*)⁴⁰.

Mediated borrowing from languages with suffixed stems is most probably the reason why a number of loans in IC -us have variants with the suffixes -in-is or, rarely, -išk-as. In Kinderys 2001, ca. 50 borrowings in -us have suffixal variants, cf. alternatyv-us, dekoratyv-us, fatal-us, lokal-us, stacionarus alongside alternatyv-in-is, dekoratyv-in-is, fatal-išk-as, lokal-in-is, stacionar-in-is, etc. Kniūkšta (2001 [1970], 414) provides a synchronic semantic explanation for the co-existence of parallel forms in -in-is and -us, suggesting that adjectival internationalisms in Lithuanian are usually adapted by assigning them to the IC -us and that the suffix -in-is is (or should be) used in cases when adjectives classify objects. However, the need to prescribe the use of non-suffixed forms (Kniūkšta 2001 [1970], 415) shows that either the classifying semantics of -in-is was not strong enough to block its use as a replacement in non-classifying cases (it was simply chosen as the most productive and salient adjectival suffix) or that it was not blocked because the adaptation occurred when the donor language adjectives were also (used as) classifying⁴¹. More historical data are needed to clarify the details of this process.

For borrowings in the non-standard/slang register, IC assignment proceeds quite differently. The source of loans in this register is primarily Russian, with occasional borrowings from Polish, and all these loans are assigned an IC in -as. Kudirka 2011 lists ca. 200 items in -as out of 237 adjectives in total (84.4%), for example: blatn-as 'special, smart, experienced', čiotk-as 'nice', falšyv-as 'fake' < Russian blatn-oj (блатн-ой), čiotk-ij

³⁹ Bytautas 1912, 116.

⁴⁰ Kniūkšta 2001 [1970], 414-415.

⁴¹ Cf. Kniūkšta 1976, 88 on some terminological phrases where he notes that the suffix *-in-is* could be added during the process of borrowing: *absoliut-in-is nulis* 'absolute zero', *dekoratyv-in-is augalas* 'decorative plant', *iracional-ini-ai skaičiai* 'irrational numbers' etc. (I believe that this is what actually happened rather than derivation from nonsuffixed adjectival forms, as suggested by Kniūkšta 2001 [1970], 414 and Kniūkšta 1976, 87). Some of these adjectives were subsequently replaced by definite (i.e. also classifying) non-suffixed forms in current use: *absoliut-usis nulis*, *iracional-ieji skaičiai*, etc.

(четк-ий), fal' šiv-yj (фальшив-ый), vilensk-as 'related to/from Vilnius' < Polish Wileńsk-i. Very few assignments to the IC in -as from English are attested: kreiz-as, fakin-as < E crazy, fucking.

The IC in -as should probably be regarded as the productive and default IC for borrowed adjectives, since the IC in -us is limited by the feature [+internationalism]⁴². It is not entirely clear why English borrowings are almost never assigned to ICs. If one compares English with Russian and Polish, it is evident that English adjectives do not have case, number and gender inflections, whereas Slavic adjectives do. When the latter are borrowed, the speakers prefer to replace Slavic inflections with native ones⁴³. On the other hand, English adjectives are understood to be able to function without inflections (as bare stems). When, eventually, bare adjectival stems come under pressure from the Lithuanian morphological system to acquire inflections, this is done indirectly via suffixation and subsequent inflectivization (the suffixes select certain ICs); see Section 5. It should be noted, however, that even though English nouns only mark plurality, when borrowed, they show a strong tendency to acquire Lithuanian inflection; this indicates that case marking of arguments ranks as more important than marking of agreement on adjectives in Lithuanian. Finally, note that the widespread colloquial fainas 'nice, cool' (IC in -as) is also sometimes interpreted as an English borrowing⁴⁴, but it actually goes back to German fein, reaching Lithuanian via the Polish fajn-y (mediation of Belarussian loan fajn-y (файн-ы) is also possible) (Kregždvs 2016, 291)⁴⁵.

⁴² In the pilot questionnaire, one case of assignment to the IC *-us* was also mentioned: E *awkward > awkward-us* (alongside non-adapted form *awkward*). Two BA students also confirmed that they would occasionally use this form.

⁴³ This may also be the reason why German loans are inflected, cf. *vertas*, *liuosas* (< German *wert*, *los*), etc. Borrowings from English do not seem to be inflected in the language of Lithuanian immigrants in the USA (data of 1872–1949), cf. *braun*, *ful*, *l(i)ūs*, *saur*, *streit*, *strikt*, *šiur*, *teribal*, *vaiz* < E *brown*, *full*, *loose*, *sour*, *straight*, *strict*, *sure*, *terrible*, *wise*, etc. (Margeris 1956).

http://nsdb.sociolingvistika.lt/zodziai.htm?zodis=fainas&id=922&search=fainas (accessed on December 12, 2015); see also Margeris 1956, 209.

⁴⁵ As far as the emigrant language is concerned (Margeris 1956, 209), speakers may have brought the borrowing from Lithuania, but further research is needed to prove this; a parallel borrowing in the USA could have occurred and given an indeclinable form as expected, namely, fain ($si\bar{u}las$) < E fine (thread). At a later stage, interference could have occurred, causing the real English borrowing to also acquire inflections.

The fact that Slavic borrowings are assigned to an IC in -as demonstrates that this class should be regarded as productive (cf. Wurzel 1989, 158–163). However, during the development of the Lithuanian language, many adjectives shifted from IC -as to -us (see, e.g., Zinkevičius 1981, 22–23). This shift indicates a seeming contradiction: since a productive IC regularly receives new members from other classes, one would expect it to receive borrowings as well. Perhaps it should be concluded that the shift from the IC in -as to the IC in -us was a temporary tendency which worked only for some time; currently, there is no significant fluctuation between adjectival ICs. Zinkevičius (idem) argues that the assignment of internationalisms to the IC in -us demonstrates the productivity of this class. I consider this hypothesis doubtful, however, since this assignment can be governed by the principle of formal identity between the Lithuanian and Latin forms in -us (see above).

5. Addition of derivational suffix

In the case of internationalisms, there are no reliable examples of direct addition of derivational suffixes to borrowed stems. At first glance, loans from French, German and English may seem to be adapted by adding a suffix, but in many cases the borrowing was mediated through Slavic, where native suffixes were added and later replaced by Lithuanian ones (cf. Section 6). For example, the German matt or French mate 'frosted', French courtois, federal, galant, piquant are reflected in Lithuanian as suffixed stems (more often in -in-is, less so in -išk-as): mat-in-is, kurtuaz-in-is, federal-in-is, galant-išk-as, pikant-išk-as. All of these forms correspond to Slavic adaptations with added derivational suffixes, cf. Polish mat-ow-y, federal-n-y, pikant-n-y, Russian mat-ov-yj, kurtuaz-n-yj, federal'-n-yj, galant-n-yj, pikant-n-yj (мат-ов-ый, куртуаз-н-ый, федераль-н-ый, галант-н-ый, пикант-н-ый).

In a similar fashion, Latin lexemes, such as *civil-is, capital-is, local-is, material-is* are reflected in Lithuanian as the suffixed stems *civil-in-is, kapital-in-is, lokal-in-is, material-in-is* due to Slavic mediation; cf. Polish *cy-wil-n-y, kapital-n-y, lokal-n-y, material-n-y,* Russian *civil'-n-yj, kapital'-n-yj, lokal'-n-yj, material'-n-yj* (ушвиль-н-ый, капиталь-н-ый, локаль-н-ый, материаль-н-ый), etc. In some cases, however, suffixless variants occur, such as *kapital-us, lokal-us, material-us,* etc. These forms were suggested by some language experts because the suffix *-in-is* was argued to be unnecessary in non-derived lexemes (cf. Bytautas 1912, 116) and in lexemes which

do not bear the classifying semantics expected from the adjectives in -in-is (Kniūkšta 2001 [1970], 414). As a result, standard internationalisms in Lithuanian cannot be interpreted as adapted by the addition of derivational suffixes, unless distinct examples are found which can be proven to be adapted directly, without the mediation of Slavic (or other) languages.

As far as non-standard Lithuanian is concerned, evidence for morphological adaptation by adding derivational suffixes is scarce, but more frequent than the very rare cases of adaptation of English borrowings by assignment to ICs (see Section 4). For example, English *crazy* can be used not only as an indeclinable form (*crazy*, *kreizi*), but also as *kreiz-išk-as*⁴⁶; in a similar fashion, English *stock* 'regularly used; usually available for sale' is represented as suffixed *stok-in-is/stock-in-is* (Kudirka 2001, 280, 541). However, it should be noted that English nouns and adjectives sharing the same stem are frequently borrowed together and it is hard to determine whether the suffixed adjectives are adaptations or independently derived items, cf. *mainstream* > *mainstream*-as, *meinstrym-as* (N) alongside *default-in-is* (Adj). In Kudirka 2011, there are more than 10 such instances. These pairs could also be considered one of the factors influencing the addition of adaptational suffixes to borrowed adjectival stems when no corresponding borrowed nouns are available (by analogy).

In the pilot questionnaire, forms like fancy'-in-is, crazy'-išk-as, smart-in-is, etc. are quite common: in total, 37.18% of the responses included forms with suffixes⁴⁷. However, to get a minimum possible figure of unambiguous adaptations, cases that can be interpreted as derived from borrowed nouns (such as E fake (N) > Lithuanian (N) $feik-as \rightarrow$ (Adj) feik-in-is (derivation) vs. E fake (Adj) > Lithuanian (Adj) feik-in-is (adaptation)) had to be excluded. This significantly reduced the figure of possible adaptations to 4.65% of all responses, or 10.16% of responses when only the borrowings without possible nominal derivational bases are included in the total figure (this number is further indicated in brackets)⁴⁸. Of these forms, 3.73% (8.16%) of the responses had the suffix -in-is, while 0.91% (2%) had -išk-as.

 $^{^{46}}$ Here and in the case of *kreiz-in-is*, suffix addition to the truncated stem *kreiz-* < E *crazy* is assumed. If English -*y* in *craz-y* could be shown to be perceived by the speakers as a suffix, this would be an instance of suffix replacement.

⁴⁷ See Vaicekauskienė et al. 2014, 19–20 for some additional examples (*posh-in-is* < E *posh*, *perfekt-išk-as* < E *perfect*).

⁴⁸ Forms in *-ov-as* were also not counted as they could be direct loans from Russian, cf. *kreizovas* mentioned earlier.

From a semantic point of view, when the suffix -in-is is added, speakers treat the borrowed stems according to the general scheme of relational derived adjectives: -in-is means 'related to X', where X would normally be a base noun (cf. med-is 'tree' \rightarrow med-in-is 'wooden', viet-a 'place' \rightarrow viet-in-is 'local', etc.). However, in the case of borrowing, when X is not available in the recipient language, the stem is included in the group of classifying adjectives without a derivational base. As a result, these borrowings typically mark the 'kind' of the object and may correspond to the classifying use of the lexeme in the donor language, for example, stock-in-is garsiakalbis 'stock speaker' (Kudirka 2011, 541), kraft-in-is alus 'craft beer',49, etc. (cf. similar notes on suffixal internationalisms in -in-is functioning without nominal derivational bases in Ulvydas 1969, 573 and Kniūkšta 1976, 47). However, in some cases the use of the adjective in the donor language cannot be interpreted as classifying (cf. English cool thing, super time, etc.), but -in-is is nevertheless chosen as the most productive adjectival suffix. When this happens, the expressions become classifying due to the semantic character and corresponding grammatical properties of the suffix chosen; cf. Lithuanian cool-in-is dalykėlis 'cool thing (diminutive)'50, super-in-is laikas 'super time (spent)⁵¹, etc.

A natural question arises: why should a language bother with suffixation instead of simply assigning these borrowings to ICs, as is done in the case of loans from Slavic languages? There seem to be some structural reasons and some language-specific preferences. First of all, it should be mentioned that in rare cases, English borrowings can be assigned to ICs (cf. *fakin-as* above). Also, as was mentioned above, Slavic languages are morphologically very close to Baltic languages, so that when adjectives are borrowed from Slavic, their inflections are naturally replaced by Baltic counterparts (with some rare exceptions, cf. Latvian in (11) where native inflections are added to existing donor inflections). When English (or other) adjectival stems which are not inflected in the donor language are borrowed, they can be used in the recipient language as indeclinable items, and this is a crucial difference from borrowed English nouns which normally acquire inflections⁵². There seems to be

⁴⁹ http://www.alausgidas.lt/suzinok/alaus-zodynelis/ (accessed on December 12, 2015).

⁵⁰ http://www.g-taskas.lt/vilniaus-knygu-muge-2011-vykti-ar-ne/ (February 25, 2011).

⁵¹ https://www.facebook.com/razmaite/activity/1215334168484863 (May 20, 2016).

⁵² Pažūsis 2009c [1979], 137 suggests that the principle of least effort may be at

a language–specific preference to morphologize these indeclinable lexemes by adding derivational suffixes with certain semantics and by assigning the borrowings to, e.g., classifying or qualitative subclasses (as in Lithuanian)⁵³ rather than just adding the inflections. Lithuanian belongs to the group of languages which demonstrate some preference for suffix addition to English and indeclinable adjectival borrowings from other languages (note that cases of suffix addition are still not very frequent) vs. assignment to ICs. A similar phenomenon is attested in some Slavic languages, cf. adaptation of *super*, *cool* by suffix addition in Polish as *super-ow-y*, *cool-ow-y* and Russian as *super-n-yj*, *kul'-n-yj* (*cynep-u-ый*, куль-*u-ый*) (Internet search data).

As far as the suffix -išk-as is concerned, it is a productive qualitative suffix typically used in similative formations, for example: draug-as 'friend' → draug-išk-as 'friendly, characteristic of a friend', ital-as 'Italian (person)' → ital-išk-as 'Italian, characteristic of Italians', etc. (see Ambrazas 1994, 207)⁵⁴. In cases like *kreiz-išk-as* (< E *crazy*), the speakers also seem to follow the derivational scheme 'X-like' associated with the suffix -išk-as, and when X is not available in the recipient language, the borrowed stem is assigned to the subclass of qualitative adjectives without the derivational base. The use of the suffix -išk-as for this purpose seems to relate to its high productivity among non-relational suffixes (just as -in-is is the most productive relational suffix). The qualitative character of the borrowed adjective is clear, of course, but can these lexemes also be interpreted as similative in some way? The data on suffixal adaptation are limited, but it seems that two suffixes (-išk-as vs. -in-is) serve first and foremost to differentiate between the qualifying and classifying use of these borrowed stems (cf. Kniūkšta 1976, 47, 183–184 on internationalisms) and any further semantic implications are secondary. Further research into these borrowed adjectives is needed to determine if any additional semantic properties can be discerned.

work when indeclinable adjectives are used, since agreement inflections in Lithuanian duplicate the grammatical properties coded by the noun they agree with.

⁵³ In a similar fashion, verbal borrowings in some languages can be introduced into transitive classes of predicates by employing factitive/causative affixes (see Wohlge-muth 2009, 97–98 on adaptive use of factitive/causative morphology).

⁵⁴ Some native formations in $-i\dot{s}k$ -as may be close in their meaning to those in -in-is, cf. senov- \dot{e} 'antiquity' $\rightarrow senov$ - $i\dot{s}k$ -as 'antique, characteristic of antiquity' vs. senov-in-is 'antique, related to antiquity' (K n i \bar{u} k št a 1976, 182–183; A m b r a z as 1994, 208).

Lastly, there are some rare cases with a suffix of Russian origin -ov-. cf. fank-ov-as 'funky', kreiz-ov-as 'crazy' (Kudirka 2011, 169, 280)⁵⁵. Adjectives of this type must have been directly borrowed from Russian together with the adaptational suffix -ov-, cf. fank-ov-vj, krejz-ov-vj (фанк-ов-ый, крейз-ов-ый) < E funky, crazy. However, note that the suffix -ov- is independently used in Lithuanian slang to derive adjectives from nouns, cf. jėg-a 'force, power; great thing' $\rightarrow j\dot{e}g$ -ov-as 'cool', led-as 'ice; great, impressive thing' $\rightarrow led-ov-as$ 'cool, great' alongside jeg-in-is/-išk-as, led-in-is, which are derived by native suffixation and have the same meanings (Kudirka 2011, 235, 298). It is not impossible that in some cases -av-/-ov- may be used as an occasional adaptational suffix in Lithuanian, but no reliable cases have been found that lack correspondences in Russian (cf. Lithuanian cool-ov-as 'cool'⁵⁶ corresponding to Russian kul-ov-yj ($\kappa y\pi-os-bi\breve{u}$)⁵⁷ < English cool). English spelling of the root may actually hint at independent adaptation occurring in Lithuanian, but the original orthography can occasionally be retained in Russian as well, cf. cool-ov-yj (cool-ов-ый)⁵⁸, or can be later restored (i.e. anglicized) in Lithuanian.

6. Substitution of derivational suffix

Substitution of derivational suffixes is the main strategy for adapting internationalisms: in Kinderys 2001, I found 224 adaptations by assignment to the IC in -us vs. 1,144 items with the suffix -in-is, 205 items in -išk-as and some small groups of adjectives with the suffixes -ing-as and -uo-tas. The main problem is that quite a number of adjectives in this group are (or can be synchronically interpreted as) derived within Lithuanian rather than borrowed and adapted by suffix substitution. For example, baz-in-is 'basal',

⁵⁵ Stems with the suffix -av-(as) will not be discussed separately, since the suffix represents an unstressed variant of Russian -ov- or belongs to an earlier layer of borrowings. It should be noted that the distribution of -av-/-ov- is in some cases free and does not always correspond to the stress placement in Russian.

⁵⁶ *labai coolovas nika*s 'a very cool nickname' (http://banga.tv3.lt/lt/2forum.show-Posts/313932.61.3-= (2016691958, May 7, 2004).

⁵⁷ mega-epik-super-kulovyj fil'm (мега-эпик-супер-куловый фильм) 'mega epic super cool movie' (http://www.kinopoisk.ru/user/27380/comment/2242267/, May 28, 2015).

⁵⁸ *COOLovyj rajončik (COOLовый райончик*) 'cool neighbourhood (diminutive)' (https://new.vk.com/topic-3829130_6230832?post=319, December 7, 2009).

cikl-in-is 'cyclic', elektr-in-is 'electric', kapiliar-in-is 'capillary', automat-išk-as 'automatic', epizod-išk-as 'episodic', etc. have possible nominal derivational bases cikl-as 'cycle', elektr-a 'electricity', kapiliar-ai 'capillaries', automat-as 'automaton', epizod-as 'episode'. On the other hand, binar-in-is 'binary', chton-in-is 'chthonic', emfat-in-is 'emphatic', autent-išk-as 'authentic', chaot-išk-as 'chaotic', kompetent-ing-as 'competent', etc. must have received their suffixes by replacement only, since there are no fitting nominal derivational bases for them in Lithuanian.

To get approximate minimal numbers of adaptations vs. possible derivations, I have manually reviewed 20% of all the suffixed adjectives and marked as possibly derived those that have corresponding borrowed nouns in Lithuanian. In the case of *-in-is*, I reviewed 229 adjectives, 139 of which (61%) had no nominal derivational bases. If nouns ending in *-ij-a* and *-ik-a* (like *arter-ij-a* 'artery', *didakt-ik-a* 'didactics', etc.) are excluded as possible derivational bases⁵⁹, then an additional 34 adjectives can be considered as underived — 173 in total (76%). This means that 24% to 39% of adjectives in *-in-is* can be considered synchronically derived, while the rest (61% to 76%) must be interpreted as adapted by suffix substitution⁶⁰.

In the case of adjectives in $-i\dot{s}k$ -as, the situation is rather different. 41 lexemes were checked for their derivational status and only 12 (29%) of them had no derivational bases — less than half as many as in the case of -in-is. If nouns containing the sequences -ij- and -ik- are not counted as possible derivational bases, the other 7 lexemes can be interpreted as underived, for a total of 19 altogether (47%). These numbers and the type frequency (1 144 lexemes

These derivational bases imply truncation if one synchronically derives administrac-in-is 'administrative' from administrac-ij-a 'administration', aerodinam-in-is 'aerodynamic' from aerodinam-ik-a 'aerodynamics', etc. However, it should be noted that in some cases truncation does not occur, cf. klas-ik-a 'classics', lin-ij-a 'line' $\rightarrow klas$ -ik-in-is 'classical', lin-ij-in-is 'linear', etc. (some of these forms can be explained as avoidance of homonymy, cf. klas-in-is 'related to classes (of society)', lin-in-is 'made of flax', etc. (see K n i ū k š t a 1976, 21–24; A m b r a z a s 1994, 210)). Historically, it is likely that many cases with implied synchronic truncation of the derivational bases with -ij- and -ik- were actually borrowed and not derived (cf. K n i ū k š t a 1976, 22–23), but this possibility needs to be investigated in more detail.

⁶⁰ Suffix addition is also possible, but can be proven only in a detailed historical study, which may also show that adaptation could have occurred in the cases which now are straightforwardly derivable, since the corresponding nouns were also borrowed.

in -in-is vs. 204 lexemes in -išk-as) show that -in-is is the main adaptational suffix while -išk-as is a second and not very frequent choice in modern Lithuanian⁶¹. Some adjectives in -in-is also have variants in -išk-as (ca. 70 in Kinderys 2001), the main difference being the classifying vs. qualifying character of the lexeme, cf. chronolog-in-is, -išk-as 'chronological', egzot-in-is, -išk-as 'exotic', poet-in-is, -išk-as 'poetic', etc. In a number of cases, the meanings can be differentiated, at least in some uses, especially if derivational bases are available, cf. heroj-in-is 'heroic, related to heroes' (e.g. herojinis epas 'heroic epos') vs. heroj-išk-as 'heroic, characteristic of heroes' (e.g. herojiškas poelgis 'heroic act, act of heroism'). Some adjectives in -išk-as may also be relics of earlier adaptations of internationalisms, from the time when -išk-as was much more widely used; this use has since diminished due to certain prescriptive efforts (cf. Kniūkšta 1976, 184 with further references).

The remaining suffixes play a very marginal role in terms of type frequency in internationalisms. In the case of -ing-as, 2 lexemes out of 8 (out of 39 in total) cannot be considered to be derived (cf. elast-ing-as 'elastic'), 3 adjectives have possible derivational bases if truncation of -ij- is accepted (cf. ambic-ing-as 'ambitious' \leftarrow ambic-ij-a 'ambition') and the remaining 3 have corresponding nouns which can serve as their derivational bases (cf. autoritet-ing-as 'authoritative' \leftarrow autoritet-as 'authority'). Finally, of the 6 items (ca. 20% of 28 in total) with the suffix -uot-as that I examined, only 1 had no possible derivational base (deklas-uot-as 'declassed'⁶²); 3 items had corresponding nouns (cf. diplom-uot-as 'having a diploma' \leftarrow diplom-as 'diploma'), while the remaining 2 could be linked to corresponding verbs and can be interpreted as lexicalized past passive participles, just as they are in the corresponding donor languages (cf. determin-uot-as 'determined \leftarrow determin-uo-ti 'determine')⁶³.

⁶¹ The dominant position of *-in-is* (vs. *-išk-as*) in adjectives with borrowed stems has been noted in a number of studies, cf. Mikelionienė 2000, 70, 83; Žilinskienė 2004, 172; Vaicekauskienė 2007, 192; Vaicekauskienė et al. 2014, 18.

 $^{^{62}}$ Only the reflexive *deklasuoti-s* 'declass (itr.)' seems to be attested in Lithuanian. This cannot serve as a derivational base, and I cannot find any examples of the use of transitive **deklasuoti*.

⁶³ From the perspective of adaptation, suffix -t- replaces the marker of the past passive participle of the donor language, while -uo- stands in place of verbal (thematic, derivational or adaptational) suffix of the donor language, cf. German *determin-ier-t*,

I suggested in Section 5 that the suffix -in-is assigns the borrowing to the class of classifying adjectives, while -išk-as assigns the borrowing to the class of qualifying adjectives; furthermore, -in-is is derivationally more productive than -išk-as. The high productivity of -in-is combined with widespread classifying use of sources of borrowings is responsible for a high type frequency of adaptations in -in-is vs. -išk-as and other minor suffixes. A detailed historical study is needed to determine direct sources of borrowings and to shed light on the scale of influence of corresponding suffixes in the donor languages, i.e. to what extent the choice of suffix in the recipient language is determined by the function of a corresponding suffix in the donor language.

Turning to non-standard/slang borrowings, no clear cases of suffix replacement are found in Kudirka 2011; and in every case, borrowed nominal derivational bases are available, cf. *chaliav-in-is* 'free of charge' alongside Russian *chaliav-n-yj* (халяв-н-ый) 'idem' (Kudirka 2011, 102). The pilot questionnaire was not specifically aimed at exploring suffix replacement in English borrowings⁶⁵ and as in the Russian cases, borrowed derivational bases are always available whenever replacement might be suspected, cf. *freak-in-is*, *-išk-as* 'freak-y', *trend-in-is*, *-išk-as* 'trend-y' alongside *freak-as* 'freak, strange person, odd thing', *trend-as* 'trend' < E *freak*, *trend*, etc.

7. Truncation of derivational suffix

As mentioned in Section 2, truncation seems to occur at a later stage of adaptation, but a precise description of this process would require more historical data than is currently available. As a result, only the cases where a longer form and a possibly truncated form co-exist synchronically will be mentioned; I set aside for the future discussion of adjectives like *central-in-is* 'central', which currently has already been ousted by the shorter variant *centr-in-is* 'idem'. (As noted in Section 2, one may argue that some adjectives

Polish determin-owa-n-y, Russian determin-ir-ova-nn-yj (детермин-ир-ова-нн-ый). The verbalizing suffix -uo- is the default adaptational suffix for borrowed internationalisms in Lithuanian and belongs to the indirect insertion strategy (see Wohlgemuth 2009, 95–97 on this strategy in general).

⁶⁴ This adjective was also directly borrowed and adapted by assignment to IC: *chaliavn-as* (Kudirka 2011, 102).

⁶⁵ See Vaicekauskienė et al. 2014, 19–20 on possible suffix replacements with -in-is and -išk-as.

were actually derived — or can be interpreted as derived — from these nouns rather than truncated, as in the case of *centralinis/centrinis*, since *centr-as* 'center' can serve as a derivational base for *centr-in-is* 'related to the center, central'. See Kniūkšta 1976, 50; Drotvinas 2000, 4; Kniūkšta 2001 [1970], 416 for more examples and further discussion).

Truncation may be suspected in the following adjectives included in the dictionary of internationalisms (listed here alphabetically according to possibly deleted affixes): cerebr-al-in-is 'cerebral', aliment-ar-in-is 'alimentary, related to nutrition', parceli-ar-in-is 'divided into small pieces of land', vestibiuli-ar-in-is 'vestibular', iliuz-or-in-is/-išk-as 'illusory', imploz-vv-in-is 'implosive', *progres-yv-in-is* 'progressive' alongside the shorter forms *cerebr-in-is*, aliment-in-is⁶⁶, parcel-in-is⁶⁷, vestibiul-in-is, iliuz-in-is, imploz-in-is, progres*in-is*⁶⁸. The best cases to prove truncation are those that lack a possible corresponding noun, since they simply cannot be treated as derived. This pertains, for example, to *cerebr(-al)-in-is*, *aliment(-ar)-in-is*, and *vestibiuli(-ar)-in-is*. It should be noted that shorter forms derivable from borrowed nouns are favored from the prescriptive point of view, because (1) they have a transparent derivational structure, (2) the derivational affix is native, (3) they contain no meaningless "formants" (Kniūkšta 2001 [1970], 416; Kniūkšta 1976, 49-50). However, in the case of cerebr(-al)-in-is and similar examples, no derivational bases are available, and the shortening must have occurred by analogy with words with possible derivational bases to avoid "unnecessary" elements⁶⁹. All the truncated affixes are, etymologically, Latin adjective-forming suffixes (-al-is, -ar-is, -iv-us), except for -or-, which is used to derive nouns.

8. Conclusions

1. The morphological adaptation of borrowed adjectives in Lithuanian can be described using a five-facet typology: (1) zero morphological

⁶⁶ Cf. *aliment-ai* 'alimony' which can only serve as a derivational base for *aliment-in-is* 'related to alimony', but not for *aliment-in-is* 'alimentary'.

 $^{^{67}}$ parcel-in-is can also be argued to be derived from parcel- \dot{e} 'small piece of land'.

The last three examples can also be argued to be derived from iliuz-ij-a 'illusion', imploz-ij-a 'implosion', progres-ij-a 'progression' (truncation of -ij- of the derivational base must be assumed).

⁶⁹ See also Kniūkšta 1976, 50 (with further reference), who notes that borrowed adjectives having no derivational bases should be used with corresponding formants intact: *astral-in-is* 'astral', *rektal-in-is* 'rectal'.

- adaptation, (2) assignment to inflection class (IC), (3) addition of derivational suffix, (4) substitution of derivational suffix, (5) truncation of derivational suffix.
- 2. Zero morphological adaptation is very rare in standard internationalisms, but quite frequent in slang, where indeclinable borrowings from English comprised almost 60% of the responses in the pilot questionnaire. The tendency to use indeclinable forms may be related to the fact that adjectives in English do not bear number, case or gender inflections (vs. inflecting adjectives in Slavic and other languages). It should be recognized that indeclinable forms can also be interpreted as cases of word-level code-switching.
- 3. Assignment to ICs occurs with both internationalisms and slang borrowings, with nearly complementary distribution of ICs in -us vs. -as. The IC in -us is almost exclusively limited to internationalisms and constitutes 14% of all adjectives listed in K in derys 2001. The principle of assignment to the IC in -us seems to have arisen based on the similarity of the adjectival nom. sg. masc. -us in Latin and Lithuanian, and was later generalized to other stems of classical origin and some internationalisms coming from non-classical languages. In the area of slang borrowings, assignment of Russian loans to IC in -as prevails (up to 85%), with occasional borrowings from English. The IC in -as should be treated as a productive and default IC for borrowed adjectives, since the IC in -us is limited by the feature [+internationalism].
- 4. The addition of derivational suffixes is rare, despite the fact that a number of internationalisms seem to have been formally adapted following this strategy. Direct suffix addition is difficult to prove, since many borrowings could have reached Lithuanian via mediating languages, with adaptational suffixes added and later replaced in Lithuanian. The dictionary of non-standard Lithuanian and the pilot questionnaire reveal that two suffixes, -in-is and -išk-as, are used occasionally with slang borrowings, but are not frequent (at least 4.65% of the questionnaire responses can be interpreted as adapted by suffix addition). Both suffixes are productive in modern Lithuanian: -in-is is the main relational suffix and -išk-as typically marks similative derived adjectives. The choice of the suffix is determined by productivity (-in-is and -išk-as are both productive, but -in-is is more productive than -išk-as)

- and by the interpretation of the borrowing: if it is treated as a classifying adjective, -in-is is added, if it is treated as a qualifying adjective, -išk-as is chosen. The interplay of productivity and semantic interpretation still needs to be researched in more detail.
- 5. Substitution of derivational suffixes is the main strategy for adaptation of internationalisms, although the dominance of the strategy depends on the suffix in question. Borrowed adjectives are adapted via replacement of (Slavic, Germanic or Romance) derivational suffixes at least in 60% of lexemes with the suffix -in-is and at least in 30% of lexemes with the suffix -išk-as. This pattern of derivational productivity clearly demonstrates the dominant position of -in-is and, thus, a tendency to treat borrowings as classifying adjectives.
- 6. Truncation of derivational suffixes is very rare and was noted only in internationalisms, where affixes of Latin origin (-al-, -ar-, -or-, -yv- in Lithuanian) can be deleted.

MORFOLOGINĖ SKOLINTŲ BŪDVARDŽIŲ ADAPTACIJA DABARTINĖJE LIETUVIŲ KALBOJE

Santrauka

Straipsnyje siūloma skolintų dabartinės lietuvių kalbos būdvardžių morfologinę adaptaciją aprašyti remiantis penkianare klasifikacija, kurią sudaro: (1) nulinė adaptacija (skolinys morfologiškai neadaptuojamas ir nekaitomas), (2) priskyrimas kaitybos klasei (skolinys gauna tam tikros linksniuotės galūnes), (3) darybinės priesagos pridėjimas (prie skolinto kamieno jungiama darybinė priesaga ir jos reikalaujamos galūnės), (4) darybinės priesagos keitimas (kalbos donorės darybinė priesaga keičiama kalbos recipientės priesaga), (5) darybinės priesagos trumpinimas (skolintame kamiene trumpinamas arba visai pašalinamas svetimos kilmės darybinis afiksas). Tyrimo duomenys buvo surinkti iš elektroninio tarptautinių žodžių žodyno "Interleksis" (Kinderys 2001), nenorminės leksikos žodyno (Kudirka 2011) ir bandomosios studentų apklausos.

Nustatyta, kad nulinė tarptautinių būdvardžių adaptacija labai reta, bet slenge ji įprasta, kur neadaptuoti anglų kalbos kamienai vartojami gana dažnai (iki 60 % apklausos atsakymų). Viena vertus, tokią vartoseną gali skatinti anglų kalbos būdvardžių nekaitomumas (išskyrus laipsnį, kitų formų nėra), kita vertus, tos formos gali būti laikomos ir žodžio lygmens kodo kaitos atvejais, o ne tikrais skoliniais. Kaitybos klasėms priskiria-

mos ir tarptautinės, ir slengo leksemos – čia matyti iš esmės papildomoji linksniuočių u ir a distribucija. Pirmajai priskiriami iš esmės vien tarptautiniai būdvardžiai (taip adaptuota 14 % visų tirtojo žodyno būdvardžių), o istoriškai šis principas, atrodo, yra kilęs iš lietuvių ir lotynų būdvardžių nom. sg. masc. galūnės –us formalaus sutapimo, tik vėliau apibendrintas plačiau. Slenge vyrauja rusų (ir pavienių lenkų, anglų) kalbos skolinių priskyrimas a linksniuotei (taip adaptuota iki 85 % visų būdvardžių), o ši linksniuotė laikytina nežymėtąja, nes u linksniuotė ribojama požymio [+tarptautinis].

Darybinės priesagos adaptuojant tirtus skolinius pridedamos retai, nors nemažai tarptautinių būdvardžių formaliai ir gali atrodyti pritaikyti prie lietuvių kalbos morfologinės sistemos būtent taip. Įrodyti tiesioginę pridėtinę adaptaciją kol kas sunku todėl, kad daug tarptautinių skolinių lietuvių kalbą galėjo pasiekti netiesiogiai: priesagos buvo pridėtos, pavyzdžiui, slavų kalbose, o lietuvių kalboje jos buvo tik pakeistos (šį procesą bus galima patikslinti atlikus detalesnį istorinį tyrimą). Priesagų pridėjimas slenge (kaip adaptacijos būdas) pasitaiko nedažnai ir sudaro mažiausiai 4,65 % anketos atsakymų (dažnesnė priesaga –in-is, rečiau vartojama –išk–as). Priesagų parinkimą nulėmė jų darybinis produktyvumas (abu afiksai yra darūs, bet –in-is produktyvesnis) ir skolinio vartosenos interpretacija: jei skolintas kamienas interpretuojamas kaip klasifikuojantis, parenkama priesaga –in-is, jei kaip kokybinis – -išk–as. Produktyvumo ir semantinės interpretacijos sąveika parenkant priesagas iki galo nėra aiški ir turėtų būti tiriama toliau.

Darybinių priesagų keitimas laikytinas pagrindiniu tarptautinių būdvardžių adaptavimo būdu. Nustatyta, kad apytikriai bent 60 % priesagą –in-is ir bent 30 % priesagą –išk-as turinčių būdvardžių turėjo būti adaptuoti keičiant priesagas, nes šios leksemos lietuvių kalboje neturi galimų pamatinių žodžių. Čia taip pat matyti, kad vyrauja priesaga –in-is, o jos dažnas parinkimas irgi sietinas su produktyvumu ir klasifikacine skolintų kamienų vartosenos interpretacija.

Darybinės priesagos trumpinimas pasitaiko labai retai ir pastebėtas tik kai kuriuose tarptautiniuose būdvardžiuose, kur gali būti atmetami lotyniškos kilmės afiksai (-al-, -ar-, -yv-, -or-).

ABBREVIATIONS

<, > = direction of borrowing or truncation

 \leftarrow , \rightarrow = direction of derivation

E = English

IC = inflection class

SOURCES

Bušs, Ojārs, Vineta Ernstsone 2009, *Latviešu valodas slenga vārdnīca* [Dictionary of Latvian slang], Rīga: Zvaigzne ABC.

Kinderys, Algimantas (ed.) 2001, *Kompiuterinis tarptautinių žodžių žodynas "Interleksis*" [Computer dictionary of [Lithuanian] internationalisms], CD-ROM, Vilnius: Alma littera (2001), Fotonija (2002).

Kudirka, Robertas 2011, *Lietuvių kalbos nenorminės leksikos žodynas* [Dictionary of non-standard Lithuanian], Kaunas: Technologija.

LKŽe – *Lietuvių kalbos žodynas* 1–20 [Dictionary of Lithuanian, Vol. 1-20], 1941–2002, electronic edition, ed. by Gertrūda Naktinienė (editor in chief), Jonas Paulauskas, Ritutė Petrokienė, Vytautas Vitkauskas, Jolanta Zabarskaitė, Vilnius: Lietuvių kalbos institutas, 2005–2008, available online: http://www.lkz.lt/.

Margeris, Algirdas 1956 [1958], *Amerikos lietuviai ir angliškųjų skolinių žodynas*, 1872–1949 [The American Lithuanians and the dictionary of English borrowings, 1872–1949], Chicago: Naujienos.

REFERENCES

Alexieva, Nevena 2002, Bulgarian, in Görlach 2002a, 241–260.

Ambrazas, Vytautas (ed.) 1994, *Dabartinės lietuvių kalbos gramatika* [Grammar of modern Lithuanian], Vilnius: Mokslo ir enciklopedijų leidykla.

Ambrazas, Vytautas (ed.) 1997, Lithuanian grammar, Vilnius: Baltos lankos.

Bartels, Hauke 2009, Loanwords in Lower Sorbian, a Slavic language of Germany, in Tadmor, Haspelmath 2009, 304–329.

Battarbee, Keith 2002, Finnish, in Görlach 2002a, 261–276.

Berteloot, Amand, Nicoline van der Sijs 2002, Dutch, in Görlach 2002a, 37–56.

Bytautas, Ramūnas (Romanas) 1912, Kaip tarti ir rašyti svetimžodžius [How to pronounce and write borrowings], *Aušrinė* 17, 115–117.

Busse, Ulrich, Manfred Görlach 2002, German, in Görlach 2002a, 13–36.

Chumakina, Marina 2002, Loanwords in Archi, a Nakh-Daghestanian language of the North Caucasus, in Tadmor, Haspelmath 2009, 430–446.

Constantinescu, Ilinca, Victoria Popovici, Ariadna Ștefănescu 2002, Romanian, in Görlach 2002a, 168–194.

Drotvinas, Vincentas 2000, Tarptautinių būdvardžių aplietuvinimas [Lithuanization of adjectival internationalisms], *Gimtasis žodis* 9, 2–5.

Elšík, Viktor 2009, Loanwords in Selice Romani, an Indo-Aryan language of Slovakia, in Tadmor, Haspelmath 2009, 260–303.

Farkas, Judit, Veronika Kniezsa 2002, Hungarian, in Görlach 2002a, 277–290.

Filipović, Rudolf 2002, Croatian, in Görlach 2002a, 229–240.

Görlach, Manfred (ed.) 2002a, English in Europe, Oxford: Oxford University Press.

Görlach, Manfred 2002b, Introduction, in Görlach 2002a, 1–12.

Graedler, Anne-Line 2002, Norwegian, in Görlach 2002a, 57-81.

Haspelmath, Martin 2009, Lexical borrowing: Concepts and issues, in Tadmor, Haspelmath 2009, 35–54.

Heath, Jeffrey 2013 [1987], From code-switching to borrowing: Foreign and diglossic mixing in Moroccan Arabic, London, New York: Routledge.

Humbley, John 2002, French, in Görlach 2002a, 108–127.

Inčiuraitė-Noreikienė, Lina, Bonifacas Stundžia 2015, On word formation patterns of hybrid neoclassical nouns and adjectives in Lithuanian, in Artūras Judžentis, Stephan Kessler (eds.), Contributions to morphology and syntax. Proceedings of the 4th Greifswald University Conference on Baltic Languages, Berlin: Logos, 27–50.

Keinys, Stasys 1984, Lietuvių kalbos hibridai (sąvoka, rūšys ir normiškumas) [Hybrid words in Lithuanian (the concept, the types, and the prescriptive aspect)], *Lietuvos TSR mokslų akademijos darbai*, A serija, 3(88), 113–125.

Kniūkšta, Pranas 1976, *Priesagos* -inis *būdvardžiai* [[Lithuanian] adjectives in suffix -*inis*], Vilnius: Mokslas.

Kniūkšta, Pranas 2001 [1970], Būdvardžiai su formantais *-alinis*, *-arinis*, *-yvinis*, *-atinis* [[Lithuanian] adjectives with the formants *-alinis*, *-arinis*, *-yvinis*, *-atinis*], in Idem, *Kalbos vartosena ir tvarkyba* [The use and planning of the [Lithuanian] language], Vilnius: Lietuvių kalbos instituto leidykla, 413–417.

Ködderitzsch, Rolf, Manfred Görlach 2002, Albanian, in Görlach 2002a, 291–300.

Kossmann, Maarten G. 2009, Loanwords in Tarifiyt, a Berber language of Morocco, in Tadmor, Haspelmath 2009, 191–214.

Kregždys, Rolandas 2016, *Lietuvių kalbos polonizmų žodynas* [Dictionary of Polish loanwords in Lithuanian], Vilnius: Lietuvių kalbos institutas.

Kvaran, Guðrún, Ásta Svavarsdóttir 2002, Icelandic, in Görlach 2002a, 82–107.

Mańczak-Wohlfeld, Elżbieta, 2002, Polish, in Görlach 2002a, 213–228.

Matras, Yaron 2009, Language contact, Cambridge: Cambridge University Press.

Maximova, Tamara 2002, Russian, in Görlach 2002a, 195–212.

Mikelionienė, Jurgita 2000, Naujoji lietuvių kalbos leksika (1991–1996 m. kompiuterinio periodikos tekstyno pagrindu), daktaro disertacija (rankraštis) [New lexis in Lithuanian (based on the electronic corpus of periodicals of 1991–1996), unpublished PhD manuscript], Kaunas: Vytauto Didžiojo universitetas, Lietuvių kalbos institutas.

Paul, Hermann 1920, *Deutsche Grammatik* 5(5): *Wortbildungslehre*, Halle, Saale: Verlag von Max Niemeyer.

Pakerys, Jurgis 2016a, On the derivational adaptation of borrowings, *SKASE Journal of Theoretical Linguistics* [online] 13(2), 177–188, http://www.skase.sk/Volumes/JTL32/pdf_doc/10.pdf.

Pakerys, Jurgis 2016b, Morphological adaptation of adjectival borrowings in modern Latvian, *Vārds un tā pētīšanas aspekti* 20(1), 147–162.

Pažūsis, Lionginas 2009a, Šiaurės Amerikos lietuvių kalba (dvikalbystės sąlygojamų reiškinių tyrinėjimai) [The Lithuanian Language in North America (studies of linguistic phenomena related to bilingualism)], Vilnius: Vilniaus universiteto leidykla.

Pažūsis, Lionginas 2009b [1975], Vadinamieji tarptautiniai žodžiai Šiaurės Amerikos lietuvių kalboje [The so-called internationalisms in the language of Lithuanians of North America], in Pažūsis 2009a, 50–56.

Pažūsis, Lionginas 2009c [1979], Priesagos -inis būdvardžių ir priesagos -(in)iai prieveiksmių aktyvizacija Šiaurės Amerikos lietuvių kalboje [Activation of adjectives in -inis and adverbs in -(in)iai in the language of Lithuanians of North America], in Pažūsis 2009a, 84–95.

Pažūsis, Lionginas 2009d [1980], Kodo keitimo lingvistiniai aspektai [Linguistic restriction of code-switching], in Pažūsis 2009a, 124–140.

Pulcini, Virginia 2002, Italian, in Görlach 2002a, 151–167.

Rodríguez González, Félix 2002, Spanish, in Görlach 2002a, 128-150.

Ryklienė, Asta 2000, Nauji nekaitomi žodžiai dabartinėje lietuvių kalboje [New indeclinable words in modern Lithuanian], *Acta Linguistica Lithuanica* 42, 22–32.

Schadeberg, Thilo C. 2009, Loanwords in Swahili, in Tadmor, Haspelmath 2009, 76–102.

Schulte, Kim 2009, Loanwords in Romanian, in Tadmor, Haspelmath 2009, 230-259. Stathi, Ekaterini 2002, Modern Greek, in Görlach 2002a, 301–329.

Tadmor, Uri 2009, Loanwords in the world's languages: Findings and results, in Tadmor, Haspelmath 2009, 55–75.

Tadmor, Uri, Martin Haspelmath (eds.) 2009, *Loanwords in the world's languages: A comparative handbook*, Berlin: De Gruyter Mouton.

Thomason, Sarah G. 2001, *Language contact: An introduction*, Edinburgh: Edinburgh University Press.

Ulvydas, Kazys (ed.) 1969. *Lietuvių kalbos gramatika* 1: *Fonetika ir morfologija (daiktavardis, būdvardis, skaitvardis, įvardis)* [Grammar of Lithuanian 1: Phonetics and morphology (noun, adjective, numeral, pronoun)]. Vilnius: Mintis.

Urbutis, Vincas 1978, Žodžių darybos teorija [Word-formation theory], Vilnius: Mokslas.

Urbutis, Vincas 1999, Adaptacinė afiksacija [Adaptational affixation], in Kazys Morkūnas, Vytautas Ambrazas (eds.), *Lietuvių kalbos enciklopedija* [Encyclopedia of Lithuanian], Vilnius: Mokslo ir enciklopedijų leidybos institutas, 15–16.

Vaicekauskienė, Loreta 2007. Naujieji lietuvių kalbos svetimžodžiai: kalbos politika ir vartosena [New borrowings in Lithuanian: Language policy and usage], Vilnius: Lietuvių kalbos instituto leidykla.

Vaicekauskienė, Loreta, Ineta Dabašinskienė, Laura Kamandulytė-Merfeldienė 2014, Naujųjų skolinių morfologinis adaptavimas: produktyvumo modeliai [Productivity patterns of derivational and inflectional adaptation of new borrowings], *Taikomoji kalbotyra* 2013–2014 (3) [online], http://mif.vu.lt/ojs/index.php/taikomoji-kalbotyra/article/view/24/18.

Winford, Donald 2003, *An introduction to contact linguistics*, Malden, MA: Blackwell Publishing.

Wohlgemuth, Jan 2009, *A typology of verbal borrowings*, Berlin, New York: Mouton de Gruyter.

Wurzel, Wolfgang U. 1989, Inflectional morphology and naturalness, Dordrecht: Kluwer.

Zinkevičius, Zigmas 1981, *Lietuvių kalbos istorinė gramatika* 2 [Historical grammar of Lithuanian 2], Vilnius: Mokslas.

Žilinskienė, Vida 2004, Skolintos šaknies žodžių vartojimas dalykinio stiliaus tekstuose [Loanwords in texts of administrative style in Lithuanian], in Jurgita Girčienė (ed.), *Skoliniai ir bendrinė lietuvių kalba* [Loanwords and standard Lithuanian], Vilnius: Lietuvių kalbos instituto leidykla, 162–176.

Jurgis PAKERYS
Department of Baltic Studies
Vilnius University
Universiteto 5
LT-01513 Vilnius
Lithuania
[jurgis.pakerys@flf.vu.lt]