

## **DERIVATIONAL-borrowing: A typological overview**

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### *Abstract*

To date, there is no comprehensive work on the wide range of phenomena which occur under the heading of contact-induced morphological change. Numerous cases of both derivational and inflectional borrowing have become known during the last few decades, but they are scattered in myriad publications dealing mostly with single languages, such as grammars. Recent efforts to collect the data in unified publications, such as Gardani (2008) and Gardani (2012) for inflectional borrowing, and Seifart (2013) for both inflectional and derivational borrowing, are by far not comprehensive enough. The aim of the paper on which this talk is based, is to provide the first systematic survey of instances of borrowed derivational formatives, from both nominal and verbal morphology, based on evidence from a number of typologically distinct languages.

### **1. Introduction**

The fact that bound morphology is more resistant to change than other areas of grammar, has led scholars of language contact to view the borrowing of morphology as a reflex of very strong pressure that one language, the source language (SL), exerts over another, the recipient language (RL). This has motivated linguists to design a number of borrowing scales (or scales of borrowability), most prominently Moravcsik (1978), Thomason & Kaufman (1988), Field (2002), in all of which morphology ranks quite high, when it comes to the intensity of contact which is deemed necessary, for morphological borrowing to occur (see Wohlgemuth 2009: 11–17, for a good overview). However, acknowledging this does not amount to say that morphology is an insurmountable block of marble, in two respects: firstly, we know that morphology is borrowed; secondly, the concept of morphology covers a rather wide range of phenomena, ranging from compounding to inflection, which have to be distinguished in terms of the place they occupy in grammar; different areas of morphology have been claimed to have different degrees of borrowability.

While the borrowing of inflectional categories has recently been covered in some detail (Gardani 2008, 2012), as of today, no survey of the great amount of borrowed derivational formatives in the languages of the world has been produced. In fact, while everybody agrees on the fact that derivational borrowing is not infrequent, we do not have an exact idea of the global size of the phenomenon. The goal of this paper is to analyze a sample of derivational borrowing found in about 50 typologically diverse recipient languages and to test two approaches to the morphosyntactic continuum, Dressler 1989, 1997) vs Bauer (2004), in order to establish which makes more adequate predictions concerning the borrowability of derivational morphology.

## 2. What is morphological borrowing?

A first fundamental distinction concerns the type of the borrowed entity, in terms of its being an actual morpheme or an abstract pattern. This distinction is not new: the first type has traditionally been referred to as ‘borrowing’, but also ‘direct transfer’, ‘direct diffusion’, ‘transfer of fabric’; the second type has often been called ‘replication’, ‘indirect transfer’, ‘indirect diffusion’, ‘loan-formation’, ‘calque’, etc. (to my knowledge, there is no terminological survey in the literature, to which the reader could be referred). More recently, Sakel (2007) has introduced the term pair MAT-borrowing and PAT-borrowing, which has successfully been adapted and has become neutralizing the terminological proliferation that had gripped the field. In this paper, I adopt these terms, too.

In morphology, PAT-borrowing implies that a recipient language rearranges its own inherited morphological structure in such a way that it becomes structurally closer to the source language and that structural convergence results. In this paper, I will only deal with MAT-borrowing. A straightforward instance of PAT-borrowing is found in Ghomara Berber, which has borrowed Berber the Arabic diminutive formation via apophony. This pattern applies to nouns of both Arabic and Berber origin (data from Mourigh 2015: 116, 117, 118, 121; analysis by Kossmann 2013: 187).

(a)

Ghomara Berber			DIM	
	<i>l-qirtaš</i>	‘bullet’	<i>lə-qriṭəš</i>	(< Arabic)
	<i>a-ḡəlzim</i>	‘pick-axe’	<i>a-ḡlizəm</i>	(< Berber)
	<i>l-meqqəš</i>	‘scissors’	<i>le-mqiqəš</i>	(< Arabic)
	<i>tasammərt</i>	‘sunny open space’	<i>tasmimərt</i>	(< Berber)
	<i>n-nəšš</i>	‘half’	<i>n-nšəyyəš</i>	(< Arabic)
	<i>a-γəšš</i>	‘bone’	<i>a-γšəyyəš</i>	(< Berber)
	<i>l-mus</i>	‘knife’	<i>lə-mwəyyəs</i>	(< Arabic)
	<i>a-zar</i>	‘root’	<i>a-zwəyyər</i>	(< Berber)

Often formatives that crossed the boundaries between two languages in contact do not apply to native vocabulary of a recipient language. However, cases are attested in which native lexemes of a recipient language inflect by means of borrowed formatives, or new lexemes are formed through borrowed derivational morphemes. I term this kind of cases ‘canonical borrowing’, following the constraint in (b):

- (b) Morphological borrowing is the occurrence in a recipient language of foreign morphological entities with native lexemes of the recipient language.<sup>1</sup>

## 3. The borrowability of morphology

Morphology is as subject to borrowing as other parts of grammars are, even though to a different extent. Also, different areas of morphology seem to differ in the extent to which they are borrowed. In virtue of the fact that different components of morphology have different degrees of

<sup>1</sup> A weaker version of this constraint would include extension to loanwords from other source languages, too. This usually happens in languages which have different strata of lexical borrowings.

borrowability, we have to draw a further distinction, between derivational borrowing and inflectional borrowing.<sup>2</sup> It is widely assumed that derivation is borrowed more frequently than inflection; for example, Thomason & Kaufman (1988: 74–75) situate derivational borrowing at level 3 of their borrowing scale, whereas inflectional borrowing occurs at level 4.

In previous publications, I have shown that formatives realizing inherent inflection are borrowed more frequently than formatives realizing contextual inflection (Gardani 2008, 2012). In particular, based on the distinction between contextual and inherent inflection (Booij 1996), Gardani (2012) has demonstrated that the value of plural on NPs has a higher-than-average borrowing rating, and explained this from the fact that plural in the NP is a prototypical category of inherent morphology, thus closer to derivation (and the lexicon) than contextual inflection, and as such characterized by a higher semantic load.<sup>3</sup> This claim is also supported by evidence found in code-switching research. In the *4-M model*, (Myers-Scotton 2002: 16–18); (Myers-Scotton 2006: 267–270) maintains that plural morphemes are ‘early system morphemes’, which are activated immediately after content morphemes and before late system morphemes, such as the English formative *-s* for the third person singular indicative present. Early system morphemes are more susceptible to various kinds of change than late system morphemes, and in codeswitching, sometimes they come along with their embedded language (i.e., the source language). Thus, the borrowing of plurals is in line with the maintenance of plural inflection observed in bilinguals during codeswitching (see Myers-Scotton 2002: 91–93).

As of today, no survey of the great amount of borrowed derivation in the languages of the world has been produced—such work is indeed an urgent desideratum. In fact, while everybody agrees on the fact that derivational borrowing occurs, and not infrequently, we do not have an exact idea of the global size of the phenomenon. The scarce interest not as much in this topic, as in a comprehensive cross-linguistic coverage, is possibly due to two reasons: firstly, the impressionistic observation that derivational borrowing isn’t infrequent (probably due to the prominent presence of derivational borrowings in (Middle) English from French, combined with the overall disproportionate concern of linguists with the English language) may have silenced the linguists’ conscience and prevented scholars from investigating other languages more properly, in this respect; secondly, the entrenched belief that the diffusion of derivational categories has no true impact on the recipient language and “is hardly different in kind from the mere borrowing of words” (Sapir 1921: 216) has undoubtedly made derivational borrowing a less coveted topic. However, the papers in Matras & Sakel (2007) and, in particular, Seifart’s (2013) *AfBo* database collect quite a many instances of derivational borrowing, in terms of MAT-borrowing, and thus can be considered a good basis to promote work in this direction.

#### **4. The borrowability of derivation—hypotheses**

It is well known that, when two (or more) languages are in contact, the transfer of lexical material is very common, even when the level of bilingualism in the contact situation is low. Therefore, it

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<sup>2</sup> There is no disguising the fact that the distinction between inflection and derivation is neither obvious nor uncontroversial. Born out in linguistic studies focusing on Indo-European languages, the distinction between inflection and derivation has proved “particularly elusive” to capture (Laca 2001: 1215). Some scholars (e.g., Bybee 1985; Dressler 1989; Plank 1994) have advocated a non-discrete, gradual distinction along a continuum which matches that ranging from the syntax to the lexicon, whereas others (e.g. Behrens 1996; Haspelmath 2013) challenge the validity of this distinction as a universally applicable comparative concept (see Laca 2001: 1215–1218, for an insightful discussion).

<sup>3</sup> Gardani (2012) shows that also other properties play a fostering role in the process of inflectional borrowing, viz. morphotactic transparency and biuniqueness.

would seem plausible to assume that those parts of the morphology of a language that have more similarities with the lexicon than with the syntax are borrowed more frequently. There are different models of morphology.<sup>4</sup>

*The morphological world after Dressler* (Dressler 1989, 1997)

(c) prototypical derivation < non-prototypical derivation < non-prototypical inflection < prototypical inflection

(d) Dressler (2013)

Prototypical derivation: deadjectival nouns (e.g. *respectability*, *small-ness*); negative adjectives (*un-*); deverbal result nouns (e.g. *approv-al*); denominal adjectives (e.g. *wood-en*, *silk-y*)

Non-prototypical derivation: agent noun formation; deverbal agentive (*-er*); action noun formation; adverbial *-ly*; *-able* adjective formation; deadjectival adverbs; diminutive.

Based on the classification in (c-d), one could hypothesize that affixes or categories of prototypical derivation are more prone to borrowing than those of non-prototypical derivation.

*The morphological world after Bauer* (Bauer 2004)

(e) “[...] we might wish to say we are dealing with not two classes of morphology (inflectional versus derivational) but six: *contextual*, *inherent*, *valency-changing*, *transpositional*, *evaluative*, *lexicon-expanding*” [my emphasis, FG]

Based on the classification in (e), one could hypothesize that affixes or categories of lexicon-expanding derivation are more prone to borrowing than those of evaluative derivation, and that the latter are more prone to borrowing than those of transpositional derivation.

## 5. Methods

Recipient languages (#17): Albanian (IE), Azari (Turkic), Basque, Central Nahuatl (Uto-Aztecan), Middle English (IE), Khanty (Ugric), Kalderash Romani (IE), Kashmiri (Indic), Kayardild (Tangkic), Kurux (Northern Dravidian), Maltese (Semitic), Mari (Finnic), Meglenoromanian (IE), (Cajamarca) Quechua, Sakha (Turkic), Semelai (Aslian), Turkish (Turkic)

Source languages: Anglo-Norman (IE), Chuvash (Turkic), Greek (IE), Hindi (IE), Italo-Romance (IE), Komi-Zyrian (Finnic), Latin (IE), Macedonian/Bulgarian (IE), Malay (Austronesian), Mongolian (Mongolic), Northern Nyungic (Pama–Nyungan), Persian (IE), Serbo-Croatian (IE), Spanish (IE), Turkish (Turkic)

Categories of derivation:

6.1 SYNTACTICAL TRANSPOSITION

6.1.1 action nouns

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<sup>4</sup> Both views are elaborations on Kurylowicz (1936) bipartite distinction between *dérivation syntaxique* (a change in the primary syntactic function) and *dérivation lexicale* (additional semantic components come into play, changing the lexical meaning of a content word), and Dokulil’s (1962) tripartite distinction in a transpositional type, a modificational type, and a mutational type (Lehmann 2015).

- 6.1.2 status nouns
- 6.1.3 quality nouns
- 6.1.4 denominal relational adjectives

## 6.2 EVALUATIVE MORPHOLOGY<sup>5</sup>

- 6.2.1 augmentatives
- 6.2.2 diminutives
- 6.2.3 pejoratives
- 6.2.4 intensification
- 6.2.5 negation
- 6.2.6 repetition

## 6.3 SEMANTIC RECATEGORY (MUTATION/LEXICON-EXPANDING)

- 6.3.1 agent nouns / personal nouns
- 6.3.2 individualizing nouns
- 6.3.3 patient nouns
- 6.3.4 instrument nouns
- 6.3.5 gender marking
- 6.3.6 place nouns
- 6.3.7 singulative
- 6.3.8 collective nouns
- 6.3.9 inhabitant names
- 6.3.10 hierarchy nouns
- 6.3.11 adjectives of resemblance (similative)
- 6.3.12 possessive adjectives
- 6.3.13 deverbial adjectivizer: modal-marking on adjectives
- 6.3.14 verbalizers

## 6. Data

### 6.1 SYNTACTICAL TRANSPOSITION

#### 6.1.1 action nouns

- (1) Basque < Latin *-(g/k)unde, -undia, -kune*  
*zabalkunde* ‘diffusion, advertising’ (*zabal* ‘wide’)
- (2) Basque < Latin/Romance: *-antza, -antzia, -entzia*  
*gorantza* ‘praise’ (Segura Munguía & Etxebarria Ayesta 1996: 81–82)
- (3) Basque < Latin: *-keta*  
*erosketa* ‘purchase, shopping’ (from *eros(i)* ‘buy’) (Hualde 2003a: 342–343)

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<sup>5</sup> “In descriptions of word-formation the term “modification” is widely used for operations that do not affect the essentials of the meaning of the motivating word. For Dokulil, it is by means of modification that “the content of a given concept acquires a supplementary modifying mark [feature]” (Dokulil 1962: 229). The addition of a meaning component is the most frequent, but not the only way to realise modification. Defined as a functional operation, modification refers to the changes in meaning that arise by adding or substituting a component in the motivating meaning without altering the conceptual prototype.” Lehmann (2015: 1024–1025)

- (4) Basque < Latin: *-dura*  
*ebakidura* ‘cut’ (from *ebaki* ‘cut’) (Hualde 2003a: 342–343)
- (5) Kalderash Romani < Greek: *-imata*  
*marimata* ‘brawl’ (Boretzky & Iglá 1991: 16)
- (6) Kashmiri < Persian *-gi:*  
*ga:nigi:* ‘the act of procurer’ (Koul 2005: 157–158)
- (7) Sakha < Mongolian: *-ltA*  
*terilte* ‘organization’ (from *terij-* ‘to equip, organize’) (Seifart 2013)
- (8) Sakha < Mongolian: *-A:ččI*  
*hulu:spa-l-a:ččĭ-lar* ‘soldiers’ (Pakendorf 2015: 165)
- (9) Sakha < Mongolian: *-A:hIn*  
*hakka:s-t-a:hĭn-a* ‘his ordering’ (Pakendorf 2015: 165)

### 6.1.2 status nouns

- (10) Kashmiri < Persian: *-i:*  
*ma:sṭari:* ‘teachership’ (cf. *ma:sṭar* ‘teacher’) (Koul 2005: 157–158)
- (11) Middle English < Anglo-Norman: *-erie*  
*aldermanrie* (Dalton-Puffer 1996; Palmer 2008, 2009)

### 6.1.3 quality nouns

- (12) Basque < Spanish: *-duria*  
*jakinduria* ‘wisdom’ (*jakin* ‘to know’) (Eliasson 2012: 294)
- (13) Basque < Latin: *-era, -kera*  
*luzera* ‘length’ (from *luze* ‘long’) (Hualde 2003: 342)
- (14) Basque < Latin *-gura*  
*logura* ‘sleepiness’ (*lo* ‘to sleep’) (Eliasson 2012: 294)
- (15) Basque < Latin *-keria*  
*erokeria* ‘foolishness’ (from *ero* ‘fool’) (Hualde 2003: 340)
- (16) Basque < Latin: *-(t)za, -(e)zia*  
*erregetza* ‘royalty’ (*errege* ‘king’) (Eliasson 2012: 295)
- (17) Kalderash Romani < Greek: *-imos*  
*barvalimos* ‘richness’ (Boretzky & Iglá 1991)
- (18) Mari < Chuvash: *=lâk*  
*kül-eš=lâk* ‘necessity’ (cf. *kül-eš* ‘it is necessary’, prs.3sg) (Kangasmaa-Minn 1998: 244)

- (19) Meglenoromanian *-ealǎ*  
*nigrealǎ* ‘blackness’ (Capidan 1925: 188)
- (20) Middle English < Anglo-Norman *-ite*  
*scantetee* (Dalton-Puffer 1996; Palmer 2008, 2009)
- (21) Semelai < Malay: *-an*  
*j?ji?-an* ‘dirtiness, filth’ (Kruspe 2004)

#### 6.1.4 denominal relational adjectives

- (22) Azari < Persian: *-I* ‘pertaining to N, having the quality of N’  
*tarixi* ‘historical’ (from *tarix* ‘history’) (Dehghani 2000: 87–96)
- (23) Basque < Latin: *-os(o)*, *-ts(u/a)*, *-z(u/a)*  
*menditsu* ‘mountainous’ (*mendi* ‘mountain’) (Eliasson 2012: 295)
- (24) Maltese < Italo-Romance adjectives: *-iż*  
*Norvegiz* ‘Norwegian’ (Mifsud 2009: 314)
- (25) Maltese < Italo-Romance adjectives of provenance *-an*  
*Kuban* ‘Cuban’ (Mifsud 2009: 314)
- (26) Mari < Chuvash ‘denominal adjectivizer’ *=le ~ =lö ~ =lo*  
*lüm=lö* ‘famous’ (Kangasmaa-Minn 1998: 244)

## 6.2 EVALUATIVE MORPHOLOGY

### 6.2.1 augmentatives

- (27) Basque < Latin: *-ote*  
*lodikote* ‘kind of fat’ (from *lodi* ‘fat, thick’) (Hualde 2003: 331)
- (28) Central Nahuatl < Spanish augmentative: *-ote*  
*huēy-ote* (big-aug) ‘enormous’ (Hill & Hill 1986: 197)

### 6.2.2 diminutives

- (29) Azari < Persian: *-čA*  
*käläkča* ‘small boat’ (from *käläk* ‘boat’) (Dehghani 2000: 87–96)
- (30) Basque < Latin: *-ila*, *-ilo*  
*neskatila* ‘little girl’ (from *neska* ‘girl’) (Hualde 2003: 331)
- (31) Basque < Latin: *-(i)no*, *-(i)na*, *-(i)ño*, *-(i)ña*, *-ño*  
a. *emekiñio* ‘very softly’ (from *emeki* ‘softly’)  
b. *batño* ‘a little one’ (from *bat* ‘one’) (Hualde 2003: 331); (Segura Munguía & Etxebarria Ayesta 1996: 89)

- (32) Basque < Latin: *-nda* ‘diminutive female’  
*oilanda* ‘young hen’ (from *oilo* ‘hen’) (Hualde 2003: 331)
- (33) Cajamarca Quechua < Spanish: *-itu ~ -ita ~ -situ ~ -sita*  
*wasi-situ* [house-dim] ‘little house’ (Muysken 2012: 490)
- (34) Kalderash Romani < Greek *-icî*  
*kotoricî* ‘little piece’ (Boretzky & Igla 1991: 12)
- (35) Kalderash Romani < Turkish *-uljeco* (+ allomorphs)  
*foruljeco* ‘little town’ (Boretzky & Igla 1991; Boretzky 1994)
- (36) Khanti < Komi-Zyrian: *-kîm ~ -kem ~ -kim ~ -kam ~ -kâm*  
*lelkam* ‘smallish’ (Sauer 1967: 171–188)
- (37) Meglenoromanian < Macedonian/Bulgarian: *-atš*  
*ghiumatš* ‘small brass pitcher’ (Capidan 1925: 186)
- (38) Meglenoromanian < Slavic: *-aș*  
*cupilas* ‘little baby’ (Capidan 1925: 187)
- (39) Meglenoromanian < Macedonian/Bulgarian: *-eașcă*  
*dumineșcă* ‘little Sunday’ (Capidan 1925: 189)
- (40) Meglenoromanian < Macedonian/Bulgarian (cf. *-iko*): *-ic*  
*aric* ‘yard [lit. little area]’ (Capidan 1925: 190)
- (41) Meglenoromanian < Macedonian/Bulgarian: *-ică*  
*baltiică* ‘little lake’ (Capidan 1925: 190)
- (42) Meglenoromanian < Macedonian/Bulgarian: *-ițșcă*  
*căsițșcă* ‘little house’ (Capidan 1925: 190)
- (43) Meglenoromanian < Macedonian/Bulgarian: *-oșcă*  
*baroșcă* ‘little puddle’
- (44) Meglenoromanian < Macedonian/Bulgarian: *-ușe*): *-uțș*  
*fratutș* ‘little brother’ (Capidan 1925: 194)
- (45) Meglenoromanian < Macedonian/Bulgarian: *-tșoc* (*-tșe-oc*)  
*căptșoc* ‘small head’ (Capidan 1925: 188)

### 6.2.3 pejoratives

- (46) Maltese < Italo-Romance: *-azz(o)*  
*sakranazz* ‘drunkard’ (root S-K-R) (Stolz 2008: 22)



#### 6.2.4 intensification

- (47) Albanian < Serbo-Croatian: *-icë*  
*tulicë* ‘tender meat’ (from *tul* ‘meat, flesh’) (Demiraj 1988: 123)
- (48) Basque < Latin: *super-*  
*superneska* ‘impressive girl’ (Segura Munguía & Etxebarria Ayesta 1996: 100–101)
- (49) Cajamarca Quechua < Spanish adjectivizer *-nyentu ~ -chintu ~ -lyentu*  
*qishya-chintu* [ill-CHAR] ‘sickly’ (Muysken 2012: 484)
- (50) Kalderash Romani < Romanian *-icios*  
*kalitšoso* ‘blackish’ (Boretzky & Iгла 1991; Boretzky 1994)
- (51) Khanti < Komi-Zyrian: *-kis*  
*warkis* ‘light red, reddish’ (Sauer 1967: 171–188)

#### 6.2.5 negation

- (52) Azari < Persian: prefix *bi-*  
*biädäb* ‘impolite’ (from *ädäb* ‘politeness’) (Dehghani 2000: 87–96)
- (53) Basque < Latin *anti-*  
*anitherritar* ‘unpopular’ (Segura Munguía & Etxebarria Ayesta 1996: 100–101)
- (54) Basque < Latin: prefix *des-*  
*desegoki* ‘inappropriate’ (from *egoki* ‘appropriate’) (Hualde 2003: 349)
- (55) Khanti < Komi-Zyrian: *-tem ~ -tim ~ -tam ~ -täm*  
*öččäm* ‘unintelligent, stupid’ (Sauer 1967: 171–188)

#### 6.2.6 repetition

- (56) Basque < Latin *erre-, arra-*  
*arraeraiki* ‘lift up again’ (Segura Munguía & Etxebarria Ayesta 1996: 99)

### 6.3 SEMANTIC RECATEGORY

#### 6.3.1 agent nouns / personal nouns

- (57) Albanian < Turkish: *-qar*  
*nihmaçar* ‘helper’ (from *ndihmë* ‘help’) (Boretzky 1975)
- (58) Albanian < Turkish: *-xhi/-çi*  
*djathëxhi* ‘cheese maker’ (from *djathë* ‘cheese’) (Boretzky 1975: 265–270)
- (59) Azari (Turkic) < Persian: *-ban*  
*jängäl-ban* ‘forester’ (from *jängäl* ‘forest’) (Dehghani 2000: 87–96)
- (60) Azari < Persian *-baz* ‘the person whose occupation involves N’

- gušbaz* ‘bird keeper’ (from *guš* ‘bird’) (Dehghani 2000: 87–96)
- (61) Azari < Persian: *-dar* ‘the person who owns N’  
*eldar* ‘the head of tribe’ (from *el* ‘tribe’) (Dehghani 2000: 87–96)
- (62) Azari < Persian: *-saz*  
*sahatsaz* ‘watch maker’ (from *sahat* ‘watch’) (Dehghani 2000: 87–96)
- (63) Basque < Latin: *-duru*  
*zorduru* ‘debtor’ (*zor* ‘debt’) (Eliasson 2012: 294)
- (64) Basque < Latin: *-er(o), -ier*  
*zurruero* ‘drinker’ (*zurru* ‘sip(N)’) (Eliasson 2012: 294)
- (65) Basque < Latin: *-(l)ari, -kari, -tari ~ -lari*  
*hizkuntzalari* ‘linguist’ (*hizkuntw* ‘language’) (Hualde 2003: 335); (Segura Munguía & Etxebarria Ayesta 1996: 83)
- (66) Cajamarca Quechua < Spanish: *-dor*  
*michidor* [herd-ag] ‘shepherd’ (Muysken 2012: 486)
- (67) Cajamarca Quechua < Spanish: *-iru*  
*yamt-iru* [firewood-ag] ‘firewood gatherer’ (Muysken 2012: 485)
- (68) Central Nahuatl < Spanish  
*cuah-tero-s* [wood-ag-pl] ‘those who cut and sell firewood’ (Hill & Hill 1986: 143)
- (69) Kalderash Romani < Turkish: *-tori*  
*diiliba-tori* ‘singer’ (Boretzky & Iгла 1991)
- (70) Kalderash Romani < Turkish: *-twára,*  
*farmečtwára* ‘witch’ (Boretzky & Iгла 1991)
- (71) Kashmiri < Persian (Iranian) *-gor*  
*g'avangor* ‘one who sings’ (Koul 2005: 157–158)
- (72) Kashmiri < Persian *-ci:*  
*tabalci:* ‘one who plays on tabla’ (Koul 2005: 157–158)
- (73) Turkish < Persian: *-dar*  
*bayraktar* ‘standard-bearer’ (from *byrak* ‘flag’) (Seifart 2013)
- (74) Turkish < Persian: *-kar*  
*koçkar* ‘a ram that was raised for fighting’ (from *koç* ‘ram’) (Seifart 2013)

### 6.3.2 individualizing nouns

- (75) Albanian < Serbo-Croatian: *-avec*

*qullavec* ‘person who is slow and clumsy’ (from *qull* ‘porridge, get soaked, soggy’) (Demiraj 1988: 122)

(76) Middle English < Anglo-Norman: *-ard*  
*dotard* (Dalton-Puffer 1996; Palmer 2008, 2009)

(77) Middle English < Anglo-Norman: *-our*  
*worshippour* (Dalton-Puffer 1996; Palmer 2008, 2009)

### 6.3.3 patient nouns

(78) Turkish < Persian: *-zede*  
*depremzede* ‘earthquake victim’ (from *deprem* ‘earthquake’) (Seifart 2013)

### 6.3.4 instrument nouns

(79) Basque < Latin: *-gailu, -ailu, -kailu* [< *-aculum*]  
*berogailu* ‘heater’ (from *bero(tu)* ‘heat’) (Hualde 2003: 341–342)

(80) Khanti < Komi-Zyrian: *-an*  
*šestän* ‘pole for pushing a boat along’ (Sauer 1967: 171–188)

### 6.3.5 gender marking

(81) Basque < Latin: *-(e)sa, -(t)sa*  
*jainkosa* ‘goddess’ (from *jainko* ‘god’) (Eliasson 2012: 295)

(82) Middle English < Anglo-Norman: *-esse*  
*hunteresse* (Dalton-Puffer 1996; Palmer 2008, 2009)

### 6.3.6 place nouns

(83) Albanian < Serbo-Croatian: *-ar* ‘nominal derivation’  
*lumare* ‘riverbanks’ (from *lumë* ‘river’) (Xhuvani & Çabej 1962: 18)

(84) Albanian < Serbo-Croatian: *-inë*  
*botinë* ‘swampland’ (from *botë* ‘earth, world’) (Demiraj 1988: 123)

(85) Albanian < Serbo-Croatian: *-ishtë*  
*ahishtë* ‘beech forest’ (from *ah* ‘beech-tree’) (Demiraj 1988: 123)

(86) Albanian < Serbo-Croatian: *-kë* ‘nominal derivation’  
*vickë* ‘perverseness’ (from *vithe* ‘crupper, ramp’) (Svane 1992: 290)

(87) Albanian < Serbo-Croatian: *-nik*  
a. *danik* ‘special purpose room’ (from *daj* ‘to divide’)  
b. *drithnik* ‘granary’ (from *drithë* ‘grain’) (Demiraj 1988: 123)

(88) Azari < Persian: *-dan* ‘standard container for N’  
*güldan* ‘flower pot’ (from *gül* ‘flower’) (Dehghani 2000: 87–96)

- (89) Azari < Persian: *-Istan* ‘a place designed to contain N’  
*güliüstan* ‘rose garden’ (from *gül* ‘flower’) (Dehghani 2000: 87–96)
- (90) Meglenoromanian < Macedonian/Bulgarian: *-iști*  
*băniști* ‘bathing place’ (Capidan 1925: 191)
- (91) Meglenoromanian < Macedonian/Bulgarian: *-niță*  
*valturniță* ‘place where eagles nest’ (Capidan 1925: 193)
- (92) Turkish < Persian *-(h)ane* ‘place noun derivation’  
*balıkhane* ‘fish market’ (from *balık* ‘fish’) (Seifart 2013)

### 6.3.7 singulative

- (93) Basque < Latin: *-kada* ‘blow with N’ or ‘heap of N’  
*eskukada* ‘blow with the hand, handful’ (from *esku* ‘hand’) (Hualde 2003: 334)
- (94) Maltese < Italo-Romance: *-ata*  
*ksuħata* ‘(act of) snobbery’ (from *ksuħa* ‘snobbery’) (Borg & Azzopardi-Alexander 1997: 280)
- (95) Maltese < Italo-Romance: *-u* ‘singulative masculine’  
*fu:lu* ‘bean’ (Borg 1994: 57)

### 6.3.8 collective nouns

- (96) Basque < Latin/Spanish: *-aje, -aia, -aie*  
*zuraje* ‘woodwork’ (Segura Munguía & Etxebarria Ayesta 1996: 81–82)
- (97) Basque < Latin/Spanish: *-eria*  
*umeteria* ‘group of children’ (from *ume* ‘child’) (Hualde 2003: 333)
- (98) Basque < Latin: *-eta* ‘grove’  
*zumareta* ‘elm forest’ (*zumar* ‘elm-tree’) (Eliasson 2012: 294) 99) Meglenoromanian < Macedonian/Bulgarian: *-utină*  
*erbutinină* ‘grassland’ (Capidan 1925: 195)

### 6.3.9 inhabitant names

- (100) Albanian < Turkish: *-li/-lli*  
a. *vendali* ‘inhabitant’ (from *vend* ‘place’)  
b. *Tiranalli* ‘inhabitant of Tirana’ (Seifart 2013)
- (101) Meglenoromanian < Slavic (cf. South Slavic *-jan-ino, ěn-ino*): *-ean*  
*cătunean* ‘someone who lives in a village’ (Capidan 1925: 189)
- (102) Meglenoromanian < Macedonian/Bulgarian: *-ineț*  
*Cupineț* ‘someone from Cupa’ (Capidan 1925: 191)
- (103) Basque < Latin: *-tar*

*ofiatiar* ‘Ofiatian’ (from *Ofiati*) (Hualde 2003: 339)

### 6.3.10 hierarchy nouns

- (104) Basque < Latin *erre-*, *arra-*  
*arraseme* ‘grandson’ (Segura Munguía & Etxebarria Ayesta 1996: 99)

### 6.3.11 adjectives of resemblance (similative)

- (105) Albanian < Serbo-Croatian: *-ac*  
*sqepac* ‘beak-shaped’ (from *sqep* ‘beak’) (Boretzky 2004: 1647) (Demiraj 1988: 122)
- (106) Albanian < Turkish: *-çe*  
*derrçe* ‘pig-like’ (from *derr* ‘pig’) (Boretzky 1975)
- (107) Albanian < Serbo-Croatian: *-ik*  
*baltik* ‘muddy, marshy’ (from *baltë* ‘swamp, dirt’) (Boretzky 2004: 1647)
- (108) Kurux < Hindi: *-yā*  
*banyā* ‘wild’ (from *ban* ‘forest’) (Mishra 1996: 98)
- (109) Turkish < Persian: *-vari*  
*yengeç-vari* ‘crab-like’ (example by Dina El Zarka, p.c. 2014)

### 6.3.12 possessive adjectives

- (110) Albanian < Serbo-Croatian: *-ash*  
*gjumash* ‘sleepy’ (from *gjumë* ‘sleep’)
- (111) Azari < Persian: prefix *ba-*  
*baädäb* ‘polite’ (from *ädäb* ‘politeness’) (Dehghani 2000: 87–96)
- (112) Kashmiri < Persian: *-ba:z*  
*do:khiba:z* ‘deceitful’ (Koul 2005: 157–158)
- (113) Kashmiri (Indic) < Persian *-da:r*  
*ləʃ'da:r* ‘with tail’ (Koul 2005: 157–158)
- (114) Kashmiri < Persian: *-mand*  
*phə:ydimand* ‘useful’ (Koul 2005: 157–158)
- (115) Kayardild < Northern Nyungic: *-kuru* ~ *-wuru*  
*wara-wuran-kuru-* [mouth-food-propriative] ‘having food in its mouth’ (Round 2013: 58)
- (116) Khanti < Komi-Zyrian: *-ja*  
*wŭ'rja* ‘fat [of bears]’ (Sauer 1967: 171–188)
- (117) Khanti < Komi-Zyrian: *-tek*, *-tak*  
*šitak* ‘peaceful’ (Sauer 1967: 171–188)

- (118) Maltese < Italo-Romance: *-uż*  
*nkejjuż* ‘annoying, spiteful’ (Mifsud 2009: 314)

### 6.3.13 deverbial adjectivizer: modal-marking on adjectives

- (119) Middle English < Anglo-Norman *-able*  
*knowable* (Dalton-Puffer 1996; Palmer 2008, 2009)

### 6.3.14 verbalizers

- (120) Kalderash Romani < Turkish: prefix *des-*  
*dezmekljol* ‘melt’ (Boretzky & Iglá 1991; Boretzky 1994)
- (121) Maltese < Italo-Romance: *-ja*  
*sfa'dinya* ‘to ape’ (*sa'din* ‘monkey’) (Mifsud 1995: 231)
- (122) Sakha < Mongolian: *-ryA:*  
*kü.hürge:* ‘consider oneself strong’ (from *kü:s* ‘strength’) (Pakendorf 2015: 166)

## 7. Conclusion

On the basis of the evidence presented, I have shown that agent/personal nouns (17), adjectivizers, diminutives (17), place nouns (10), quality nouns (10), action nouns (9), possessive adjectives (9) are the most frequently borrowed categories of derivation. This does not conform with the prediction made on the basis of Dressler’s scale. On the contrary, the linguistic facts go quite well with the prediction made on the basis of Bauer’s scale. The classification is: syntactical transposition (26), evaluative morphology (30), semantic recategorization (66).

Although we are still far away from having a clear picture of derivation borrowing and hypotheses need to be tested on a larger database, I hope that this paper has been a step forward towards a better understanding of contact-induced morphological change.

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