# Workshop: Word formation in diachrony

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# The diachrony of diminutive suffixes in Latin: a cognitive/morpho-pragmatic account for - *ellus/-illus*

### Luisa Brucale (University of Palermo)

Latin diminutive suffixes have received considerable attention in the relevant literature (e.g. Petersen 1916-17; Strodach 1933; Hakamies 1951; Hanssen 1952; Fruyt 1989; Haverling 2011), but a morpho-pragmatic diachronic analysis of their uses is still lacking. Based on this observation, I aim at analyzing the behavior of the archaic Latin suffix *-ellus/-illus* within a theoretical framework combining Dressler/Merlini Barbaresi's (1994) morpho-pragmatic model and the cognitive perspective on the pragmatic polyfunctionality of diminutive suffixes (cf. Prieto 2005, Jurafsky 1996).

The suffix *-ellus/-illus* forms nouns (*asellus* vs. *asinus*) and adjectives (*misellus* vs. *miser*), never modifying the lexical category of the base and, therefore, never acting as a morphological head. This is consistent with Scalise's (1984) observation on the specificity of evaluative morphology compared to the general behavior of suffixes. Due to this specificity (as they do not convey any morphosyntactic information), evaluative suffixes are generally considered peripheral with respect to the core of both derivation and inflection (cf. Grandi 2002).

At the semantic level, consistent with its etymology (cf. Magni 1999, Haverling 2011 inter al.), - *ellus/-illus* has a non-evaluative use expressing a relationship of similarity (*anguilla* vs. *anguis*) or belonging/contiguity (*armilla* vs. *armus*) between the derivative and the base.

As an evaluative suffix, it is used with a proper diminutive function adding to the base the semantic component [small] (or [young] and [unimportant], see Dressler & Merlini Barbaresi 1994, Merlini Barbaresi 2015). In many cases, in fact, *-ellus/-illus* (as the etymologically related *-(c)ulus*) play a function related to the complex system of relations between the speaker, the listener and the communicative situation, has scope on the entire speech-act, and is used to express a range of meanings, e.g., imprecision, attenuation, endearment, euphemism, irony, playful or generically an affective attitude (see Szymanek 1988, Hofmann 1951).

According to Dressler/Merlini Barbaresi (1994), evaluative morphology is primarily located in pragmatics and evaluative markers are typical instances of morpho-pragmatics, an area in which morphological rules interact directly with pragmatic conditions (cf. Grandi/Körtvélyessy 2015).

The various uses of *-ellus/-illus* will be described in this morpho-pragmatic perspective. The description will be based on a corpus consisting of texts spanning from the 3rd century BCE to the 4th century CE, representing different literary genres and text types. This choice allows to observe the development of *-ellus/-illus* throughout a wide timespan and to bring to light the semantic features which are responsible for its semantic development.

Moreover, the polysemic and pragmatically polyfunctional network of evaluative suffixes will be described as a radial structure, whose semantic core is the notion of 'related to', while other functions derive from metaphorical mapping and metonymical shifts (Prieto 2005, 2015). A semantic map will be proposed to represent the relationships among the various functions of the suffix *-ellus/-illus*.

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# -Wise, -weise and -vis: a contrastive diachronic study

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Our paper investigates the diachronies of the cognate adverbial suffixes *-wise*, *-weise* and *-vis*, which grammaticalized from homophonous nouns as illustrated in (1) - (3) for the early modern stages of English, German and Norwegian, respectively (cf. Lenker 2002; Opdahl 2003; Kinn 2007a, b; Pittner 2015; Elsner 2015):

- (1) I am come here, *in lyke wyse* as ye see. (c1440, OED) 'I've come here <u>in the same manner</u> as you see'
- (2) Vnd was *in ander weis* geporn wirt vnd *in manichualtiger, vngeordneter, peinlicher weis*, ...(1463, Bonner Frühneuhochdeutschkorpus)
   'And what is born <u>in other wise</u> and <u>manifold</u>, <u>unordered and embarrassing wise</u>'
- han ... ville giøre en ordinantz po heste ... *po then wiiss* som med poster er i Italien (1525, quoted from Kinn 2007a: 12)
  'he wanted to send a decree by horse, <u>in the same manner</u> as with mail in Italy'

Interestingly, Norwegian and German retained the nominal bases *vis* and *Weise* in prepositional manner expressions (albeit to different degrees), whereas English *wise* has been progressively superseded by *manner* (also with synonymous *way*, *fashion*, *style*) as of later Early Modern English:

- (4) Det foregår *på gammeldags vis*, med sauesaks. [Oslo Corpus]
   'This is done <u>in an old fashioned manner</u>, with a sheep shearer.'
- (5) hinzu kommt die Herausforderung, mit dem Leichnam in einer würde- und respektvollen Weise umzugehen. [COSMAS II]
   'in addition, there is the challenge of taking care of the corpse in a dignified and respectful manner/way'
- (6) The Nurse and 2 Maids ... were heard to Skriech out a considerable time, *in a most pitiful manner*. [1704, OED]

Focusing on the rise of adverbial suffixes, we show that *-wise*, *-vis* and *-weise* have embarked on (near)identical grammaticalization paths and display (near)identical degrees of primary and secondary grammaticalization, with the suffixes displaying similar functions in the three related languages, i.e. deriving manner adverbs (7), evidential adverbs (8), evaluative adverbs (9), distributive adverbs (10) and quantifying adverbs (11):

- (7) crosswise, korsvis, kreuzweise
- (8) 'clearly', klarer*weise*, sannsynlig*vis*
- (9) 'regrettably', bedauerlicherweise, beklageligvis
- (10) group-wise, gruppenweise, gruppevis

(11) bucket-wise, eimerweise, bøttevis

The absence of English counterparts for evidential adverbs and evaluative adverbs illustrates that the three languages do not share all developments. Indeed, since the 20<sup>th</sup> century, English *-wise* evolved the exclusive function of viewpoint/domain adverbs 'with respect to' (12), initially targeted by prescriptive criticism (Houghton 1968) but currently gaining in productivity especially in British English since the mid-1990s (Lindquist 2007):

(12) I check that they've got everything they need, toiletry-*wise*... (BNC)

Against this backdrop, the paper seeks to trace the trajectories of change in English, Norwegian and German, identifying similarities and differences with respect to functions, morphological complexity, the nature of the preceding element (noun, adjective), and the degree of condensation and coalescence as a consequence of grammaticalization (cf. Hopper 1991). Of special interest will be the question to what extent competition with other morphological means in the respective languages (e.g. *-ly* in English, *-mäßig/-artig* in German) plays a role in the evolution of new functions.

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# Corpora

BNC. British National Corpus, available at <u>https://www.english-corpora.org</u> Bonner Frühneuhochdeutschkorpus, available at <u>https://korpora.zim.uni-due.de/FnhdC/</u> COSMAS II, avaialbe at <u>https://cosmas2.ids-mannheim.de/cosmas2-web/</u>

Oxford English Dictionary (OED), available at <u>https://www.oed.com</u>

The Oslo Corpus of Tagged Norwegian Texts (bokmål), available at http://www.tekstlab.uio.no/norsk/bokmaal/english.html

### Quid manet? A Diachronic Approach to the Italian Derivational Suffixes -izzare and -eggiare

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Recent years have seen a growing interest in research on the development of Italian verb formation. Most studies investigate suffixes or suffix-residues primarily from a synchronic point of view (cf. Frenguelli 2010; Meul 2009; 2013), without taking into account the diachronic development of the word formation patterns discussed. This is especially true for the verbal suffixes *-izzare* and *-eggiare* (e.g. it. *idealizzare* 'to idealise', it. *guerreggiare* 'to make war'), which originally derive from the Classical Latin form -IZĀRE and its variant -IDIĀRE respectively (Buchi & Chaveau 2015: 1945f). The fact that both suffixes have survived over time and are still productive in contemporary Italian is surprising, as they compete for the same bases. In the research literature a somewhat complementary distribution based on registers is assumed. Grossmann & Bertinetto (2005: 450f.) argue that *-eggiare* is used more frequently in informal registers, while *-izzare* is generally applicable in all registers, leading to greater productivity of *-izzare* compared to *-eggiare* in modern times.

This study sets out to test the existing assumptions about the distribution of the two verbal suffixes from a diachronic perspective. By studying productivity and the lexical and semantic properties of the verbs over time, this study attempts to establish how the continued coexistence of the two suffixes came about. Working with the MIDIA corpus (Gaeta et al. 2013), a diachronic corpus of Italian with morphological annotation, the present study aims to gain further insight into the distribution of the suffixes *-izzare* and *-eggiare*, by focusing on the development of their productivity and the contexts of their application diachronically. Studying type and token frequencies in different textual registers over several centuries, we aim to answer the question of how the two verbalizing suffixes are extracted from the corpus, analysed formally, and classified in terms of the roots they apply to as well as the context they are used in.

Overall, the methodological approach of this study will not only help gain a better understanding of the current (complementary) distribution of the suffixes, but also of how the two suffixes competed in the past and are ultimately still competing in contemporary Italian.

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### Challenges and opportunities of reconstructing Proto-Uralic nominal derivation

### Sampsa Holopainen, Juha Kuokkala, Niklas Metsäranta & Ilona Rauhala (University of Helsinki)

The purpose of this presentation is to discuss the derivational processes of the Uralic languages from a diachronic point of view. The reconstruction of Proto-Uralic word-formation has received surprisingly little attention since Lehtisalo (1936), and many of the standard sources (such as Raun 1988) contain mostly outdated information. Especially the functions of the various suffixes that have been reconstructed to Proto-Uralic are poorly known and too little attention has been paid to them (as noted by Helimski 2009: 64–56 and Ylikoski 2016: 34–35). This is clearly seen in the UEW, where many opaque proto-forms have been arbitrarily segmented and are claimed to include *ad hoc* "derivational suffixes" whose function remains entirely unclear: for example, UEW claims that PU \**ipsi* 'smell' contains a suffix \*-*sV*, and that Proto-Ugric \**pBkk3-tt3* 'black' contains a suffix \*-*ttV*, but these suffixes are otherwise unknown in the reconstructed vocabulary and their functions remain uncertain (see also Rauhala 2015: 32–33).

In our presentation we show that it is indeed possible to find undetected derivatives among the Proto-Uralic vocabulary through a more careful analyzis. For example, Metsäranta (2017: 228) points out that the seemingly irregular vocalism in the Permic reflexes of PU \**penä* 'dog' reflects vowel-combinations that have arisen through early derivation in the prehistory of Permic.

Similar examples can be found in other branches, too. In Mari, Proto-Uralic vowel combination \**a-a* is sometimes reflected as Proto-Mari CVCə, e.g. PU \**sala-* 'steal' > PM \**solə* 'thief', and other times as CVC, e.g. PU \**kala* 'fish' > PM \**kol*. A phonological solution for this seeming duality (which is not based on Mari alone) has been to reconstruct two contrasting second-syllable vowel phonemes \**a*<sub>1</sub> and \**a*<sub>2</sub> (Zhivlov 2014: 117–121). However, at least in some of the Mari cases it is advisable to take historical word-formation into consideration. For example, synchronically opaque PM \**solə* 'thief' can be readily analyzed as a derivative PU \**sala-ja* (with the agent noun forming suffix \**-jA*).

Also, with present-day reconstructions, some opaque nouns in Samoyedic languages can be shown to contain the action noun suffix \*-w (?\*-o) known from western Uralic languages: for example, Nganasan *muty* < PSam. \**menü* ~ Finnish *meno* < PU \**meni-w* 'movement, going' and Nganasan *muty* ~ Fi. *elo* ~ SaaN *eallu* < PU \**elä-w* 'life, living' (Salminen 2012: 344; Aikio forthcoming).

Our study focuses on petrified forms, as comparing them rules out the possibility of mistaking a more recent derivational process for an ancient one. E.g. Finnish *kuolema* 'death' and Komi *kulöm* 'id.' are both ultimately \*-*mA* derivations of the same verb stem but although the components are historically the same, the derivational process that formed each of them is more recent. This can be ascertained from the fact that Finnish exhibits a phonological process (Lehtinen's law) in which PU \**a* is lenghtened to PF \**oo* before \**m*, \**n*, \**l*, \**r*, and \* $\delta$  in *i*-stems, PU \**kali*- 'to die' > PF \**koole*-. The effects of Lehtinen's law are blocked by derivation, which clearly shows that *kuolema* has been formed only after the changes took place. Petrified examples of Proto-Uralic derivation of the same stem are Finnish *kalma* 'death; the deceased' and Erzya-Mordvin *kalmo* 'grave' which are synchronically opaque but analyzable as reflexes of PU \**kal-ma*  $\leftarrow$  \**kali*-. We are convinced that by examining petrified word forms new insights into Proto-Uralic word-formation can be discovered.

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### Romance parasynthetic verbs. A comparative diachronic perspective

Claudio Iacobini (University of Salerno – Italy)

Romance parasynthetic verbs are denominal or deadjectival prefixed verbs (Po. Sp. Ca. *embarcar*, Fr. *embarquer*, It. *imbarcare*, Ro. *îmbarca* 'to load, to board' from Po. Sp. *barco*, Ca. It. *barca*, Fr. barque, Ro. *barcă* 'boat'; Po. Sp. *alisar* 'to smooth' from *liso* 'smooth', Ca. *embrutar* 'to dirty' from *brut* 'dirty', Fr. *embellir* 'to make (more) beautiful' from *beau* 'beautiful', It. *invecchiare* 'to get old' from *vecchio* 'old' Ro. *îmbătrâni* 'to get old' from *bătrân* 'old') distinguished by the fact that the non-prefixed verb (Po. Sp. Ca. *barcar*, Fr. *barquer* It. *barcare*, Ro. *barca*) is a possible but not an actual word, and the co-radical nominal form is not well-formed.

The Romance parasynthetic verbs are therefore characterized with reference to their nominal or adjectival base as the result of the co-occurrence of both a prefix and a suffix (typically of a conversion process, i.e. non-overt derivational marking). Due to their peculiar structure, parasynthetic verbs have been matter of investigation even for non-specialists of Romance languages, especially from a synchronic (or, better said, achronic) point of view.

Parasynthesis has been a much debated topic in the last 20 years of the 20<sup>th</sup> century – mostly by scholars adopting Item and Process frameworks – because of the difficulties encountered in providing an adequate interpretation of their structure, since Item and Process frameworks entail the application of one process at a time and tend to refuse possible but not actual words as bases for derivational processes (cf. Corbin 1980, Scalise 1986 and Serrano-Dolader 2015 for a review).

Conversely, Word and Paradigm frameworks deal more easily with parasynthetic patterns without being undermined neither by gaps in derivational patterns nor by the concomitant addition of prefixes and suffixes (cf. Booij 2007, Masini & Iacobini 2018). In the Word and Paradigm theoretical perspective, Romance parasynthetic verbs lose their exceptionality. In fact, the formation of parasynthetic verbs can be seen as the unification of two schemas (verb prefixation and verb conversion from noun or adjectives) into a complex schema that starts a life of its own.

Parasynthetic verbs have been in the Romance languages since their earliest stages and have shown constant productivity and diffusion in all the Romance varieties (much more than in the Latin language), thus differing from verb prefixes, which underwent a strong reduction in number and productivity with respect to Latin verb prefixes.

The origins of the Latin parasynthetic verbs and their passage to the Romance languages have been outlined in several works (Allen 1981, Brachet 1999, 2000, Crocco Galèas & Iacobini 1993, Iacobini 2010), much less investigated is the diachronic story of the Romance verbs in the Romance languages, despite the fact that this pattern is characterized by a continuous productivity in both major and minor Romance varieties, differently from other prefixal patterns (Iacobini 2019).

With the exception of the masterly work of Malkiel (1941) and the recent contributions of Šinková (2017) and Lopes (2018), research adopting a diachronic perspective includes a limited number of publications dedicated to individual languages (Pharies & Pujol Payet 2015, Pujol Payet & Rost Bagudanch 2017, Pujol Payet 2012a, b, Serrano-Dolader 1995). A comparative picture of the diachronic trend of the parasynthetic patterns in the Romance languages is still lacking.

The present contribution aims to fill this gap by trying to make a first survey in a comparative diachronic perspective of the specific features of individual languages, of the common tendencies and of the reciprocal influences between the Romance languages. In particular, the meanings expressed by the parasynthetic verbs, the productivity of the individual prefixes over time and the

correlations between the prefixes and the flexible classes of the parasynthetic verbs will be investigated.

From a theoretical point of view, we will show that the diachronic events that have led to the emergence and spread of Romance parasynthetic verbs can be well accommodated in a Word and Paradigm framework.

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# The diachronic productivity of the derivational suffix -legur in Icelandic

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The study of diachronic productivity can give us some valuable insights into the forces that shape and expand the vocabulary of a language (see Katamba 1993, Bauer 2001 and Haspelmath 2002). In this paper I present a study of the diachronic productivity of the derivational suffix *-legur* in Icelandic. Using data from Icelandic texts in the period 1600-1900 one can get a fairly clear picture of the productivity of the suffix. It seems to have been very productive in the whole period and the paper aims at finding out why the productivity has been so steady compared to other derivational suffixes in Icelandic in the same period. Another aim is to find out if the base types of the suffix have changed in the period.

The suffix was originally an independent word in the proto-nordic period but through grammaticalization it delveloped into a derivational suffix (a collection of such suffixes can be found in Iversen 1973). The suffix forms adjectives from mostly nouns like 'blóm' (flower), 'tröll' (troll) and 'bóndi' (farmer), and adjectives like 'lasinn' (sick). The bases can have more complex structures like linking elements (genitive endings) as in 'kuld-a' gen.sg. (cold), 'gikk-s' gen.sg. (choosy person) and 'heift-ar' gen.sg. (spite) and the bases can be derivations themselves, like 'ötull' (energetic) and 'röggsamur' (enterprising).

The corpus used in this study is a compilation of words from excerpted texts, i.e. the *Ritmálssafn* ('written language corpus,' see Rögnvaldsson 1986 and Svavarsdóttir et al 1993). All printed matter from the middle of the 16th century to the 18th century was excerpted in addition to numerous texts from the 19th and 20th century. Below are some examples from the corpus showing new derivations with *-legur* in the period fram the 17th century to the 19th century where the suffix forms adjectives with different kinds of bases:

17th century	18th century	19th century
blómlegur 'blooming'	flaslegur 'hasty'	broslegur 'ridiculous'
laslegur 'sick'	asn-a-legur 'silly'	skól-a-legur 'scholarly'
gikk-s-legur 'choosy'	hetj-u-legur 'heroic'	drusl-u-legur 'shabby'
kuld-a-legur 'chilly'	feikn-ar-legur 'gigantic'	fegurð-ar-legur 'beautiful'
heift-ar-legur 'virulent'	mjólk-ur-legur 'milky'	sigranlegur 'vincible'
önuglegur 'grumpy'	höstuglegur 'gruffy'	kunnuglegur 'familiar'
freklegur 'pushy'	sterklegur 'strong'	ötullegur 'dilligent'
röggsamlegur 'enterprising'	öldung-s-legur 'elderly'	bindindi-s-legur 'abstinent'

Examples of new derivations with -legur in the period 1600-1900.

In the paper, the productivity of the *-legur* suffix will also be compared to the productivity of several other derivational suffixes which have had a rather different development, varying in productivity in the period mentioned.

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# The development of tonal head markers in Mande compounds: between phonology and grammar

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Grammatical, or inflectional, tones are used in specific morphosyntactic contexts in some tone languages. Cross-linguistic patterning of grammatical tones has been little studied to date, and even less is known about their diachronic development. It is generally understood that they arise from segmental morphemes (Palancar & Léonard 2016; Konoshenko 2017). In this talk, we discuss the diachronic development of grammatical tones marking head nouns of compounds in Mande, a West African language family comprising more than 60 languages.

Mande languages generally have isolating morphology with fixed word order, and their use of compounding in word formation is pervasive. Structurally, Mande compounds are quite uniform across the family in that they are invariably left branching and that the tones of head nouns are neutralized. However, language-specific rules of tonal head marking are strikingly diverse at the surface level. For example, in Bamana (Western Mande>Manden), the head noun is marked by a default high tone: /nónó/ 'milk' + /kùmún/ 'sour'  $\rightarrow$  [nónó#kúmún] 'sour milk', b) /nègé/ 'iron' + /jùrú/ 'rope'  $\rightarrow$  [nègè#júrú] 'iron thread' (Green 2018:70). In Dan-Gwɛɛtaa (Southern Mande), it is marked by an extra-low tone: /bāā/ 'manioc' + /dı̃u / 'plant': /bāā/ + {dı̃u }  $\rightarrow$  [bāā#dı̃u ] 'manioc plant' (Vydrine & Kessébeu 2008:75).

In this talk, we argue that all synchronic patterns of tonal head marking in Mande can be traced back to a single proto-pattern, namely tonal lowering of the head noun. There is no direct evidence to reconstruct a segmental head marker even at the family level, suggesting that tonal head marking is not a recent innovation in the family.

We also argue that various surface realizations attested in modern Mande compounds can be attributed to different tonal features associated with the grammatical tone in particular languages. In Soso-Southwestern and Southern Mande, the original grammatical lowering of the head noun was retained although it was opacified by further phonological modifications: tone split in Southern Mande and high spread in Southwestern Mande. In Central Mande, tonal head markers are synchronically underspecified for any particular features, so they are filled in "by default". The formal realization of tone head markers in Mande crucially depends on language-specific phonological properties and their downstream application rules. This supports the more general idea that tonal morphology differs from segmental markers in that tones are more mobile and subject to surface phonological modifications (Hyman 2011).

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### Changing function and productivity in Greek derivation: the -ev- verbalizer

### Io Manolessou (Academy of Athens) & Angela Ralli (University of Patras)

In the diachrony of word formation, the function and productivity of affixes can change through time. Examples of this case are offered by the Greek language which, in its long history, depicts instances of affixes expanding, narrowing or even completely changing their status and productivity degree.

This presentation deals with the diachronic trajectory of the Greek verbal derivational suffix -*ɛv*- [ew] ([ev] in Modern Greek), which, in its origin, is the result of reanalysis, more specifically conglutination (Debrunner 1917: 104-8, Haspelmath 1995: 7, Macqueira 2013: 433). In Classical Greek, this suffix was the most productive verbalizer, used to build verbs from nouns (Chantraine 1945). It remains productive today, and still keeps its original/prototypical semantic function, that is, the denotation of "being or behaving, or acting as an X" (Moulton 1963), e.g. *proedr-ev-o* 'to chair' < *proedr-os* 'chair' (-*o* and -*os* are the inflectional suffixes). Nevertheless, for the formation of new verbs, its high productivity has been superseded by that of another verbalizer, -*iz*-. For instance, while in the reverse index of Modern Greek (Anastasiadi-Symeonidi 2002), 1207 -*ev*- forms are recorded, there are 3507 forms with -*iz*- (Efthymiou 2011).

The study of *-ev-* is of particular interest for the following reasons: (a) from the ancient period until today (Psaltes 1913) it shows different frequencies and changes in function (reduction, specialization), allowing the possibility of interesting diachronic observations over a long time-span and a very extensive corpus of data; (b) it constitutes an important feature in Modern Greek dialectology, since its form, *-ev-* or *-evy-* in certain dialects, is one of the main morphological criteria for Modern Greek dialect classification (Trudgill 2003); (c) during the late roman period, it acquired a new function, that of adaptating Latin verbs (e.g. Latin *adorare ->* Greek *adorevo* 'to adore') or the creation of verbs from Latin nouns (e.g. Latin *obsequium* 'compliance' -> Greek *opsikevo* 'to conform').

Interestingly, the function of loan adaptation has been lost from Modern Greek and most of its dialects, as for instance from the Asia Minor Cappadocian, being replaced by that of *-iz-* (e.g. Turkish *kazanmak* 'to gain, earn' -> Cappadocian *kazadizo*). However, it is retained in two Modern Greek dialects affected by different languages: Pontic, spoken in the Black Sea area and being in contact with Turkish (Turkish *kazanmak* 'to gain, earn'

-> Pontic kazanevo), and Grekanico, the Greek dialect of South Italy which has been in

contact with Italo-Romance since ancient times (Salentino *kuntare* 'to narrate' -> Griko (variety of Grekanico) kunte(v)o).

This study tries to elucidate the different behavior and productivity degree of *-ev*through time and across the different dialectal varieties of Modern Greek. At the same time, a considerable attempt is made to fill the huge gap in the investigation of derivation during the medieval period of Greek (for an overview see Manolessou & Ralli 2015) -at least with respect to *-ev*- forming verbs- since the studies on this period do not usually include information on derivational morphology (see for instance the recent *Cambridge Grammar of Medieval and Early Modern Greek* (Holton et al. 2019).

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# Emerging evaluative meanings in Neoclassical Combining Forms: the diachronic case studies of *para-* and *semi-*

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Neoclassical Combining Forms (henceforth, NCFs) are widely spread in Standard Average European, not only in combination with each other in scientific terminology (e.g. Eng. *photograph*, Germ. *Morphologie*, It. *biologia*, Fr. *microcéphale*, Cz. *logopedie*, Rus. *gidrookis*), but also combined with free native words in common language (e.g. It. *ecodisastro*, Germ. *Ökofreak*, Pol. *ekobomba*, Sp. *ecosistema*; cf. Eins 2015: 1571). The increasing use of these bound elements in ordinary language has led to the emergence of new meanings (as opposed to the original meanings they had in Greek and Latin), whose development can be reconstructed through a diachronic perspective.

In this contribution, we outline the diachrony of two NCFs, i.e. para-, which can be traced back to the Ancient Greek preposition pará 'close to', and semi-, from the Latin noun/adjective semis 'half'. Both NCFs show the development of a more subjective or evaluative meaning (in the sense of Traugott 1995) in some European languages. For instance, in Modern Greek, paracan convey "temporal continuity" (paramenó 'to remain'), "violation or divergence" (parerminévo 'to misread'), and the intensifying meaning "excess" (paracimáme 'to oversleep'; Efthymiou, Fragaki & Markos 2015: 449). In Contemporary Italian, para- occurs both in specialized domains (especially in medical language, e.g. sindrome parainfluenzale 'flu-like syndrome'), where it expresses 'closeness, similarity', and in ordinary language, where it can indicate 'something that is lower in quality' (paraletteratura 'low quality literature', parascientifico 'not really scientific, pseudoscientific'), or express an intentionally vague / unclear concept (paracorteggiatore 'a sort of suitor'), often with a derogatory nuance (fabbricazioni para-artigianali 'fake craft products'). Such an evaluative function is also shown by semi- which conveys an attenuative or derogatory value (figure semioniriche 'dreamish characters', *semithriller* 'thriller-like movie', *messaggio di semi-scuse* 'fake apology message') that coexists with the original quantitative meaning 'half', especially attested in scientific vocabulary (also as emi-, e.g. semi/emiacetale 'hemiacetal').

We will focus on the uses of *para-* and *semi-* which may be (broadly) defined as belonging to the semantic domain of evaluative morphology (see Grandi & Körtvélyessy 2015): specifically, those instances of *para*- and *semi*- indicating 'approximation'/'attenuation' and 'contempt'. On the basis of both semantic and formal parameters, we shall first analyse a sample of formal and informal written Italian and sketch a classification of the different senses of para- and semiconstructions, highlighting the difference in their use in different registers of the contemporary language. We then propose a diachronic study of para- and semi- complex words in Italian, in the period between the 18<sup>th</sup> century (i.e. the time when Neoclassical compounding became common; see Iacobini 2004, 2015) and the present time, in order to reconstruct the semantic evolution of these NCFs. Following Rainer (2008), we shall also analyse a sample of Neo-Latin texts, in order to detect possible models for the modern uses of para- and semi-. Lastly, we will sketch a comparison with para- and semi- constructions in some other Romance (i.e. French, Portuguese and Spanish) and Germanic (i.e. English and German) languages, in order to highlight the differences in the semantics for these NCF. Particularly, we shall be looking at French data, given the strong influence that the French language has had on Italian word formation (and beyond).

The data for Contemporary written Italian come from the web-based corpus *itTenTen2016* (Killgarriff et al. 2014), whereas the diachronic Italian data were collected from both corpora (i.e. Midia corpus, cf. Grossmann & D'Achille 2017) and historical dictionaries (i.e. TLIO dictionary, Crusca's online dictionaries, GDLI dictionary).

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# The role of derivational morphology in the shaping of the Ancient Greek verbal system

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The main issues discussed in our proposal concern the evolution of inflectional systems, the divide between regular and irregular lexemes, and the inflection / derivation interplay. We focus primarily on Ancient Greek (AG), and on the contribution of denominal (or deadjectival) derivational processes in the shaping of its verbal system. For our analysis we adopt a Word-and-Paradigm, abstractive (Blevins 2006; 2016) exemplar-based model of morphology. Lexemes are viewed as complex structures formally corresponding to sets of stems (Bonami & Boyé 2003; 2014). Each stem is linked to a portion of the inflectional paradigm, and can be independently stored or connected to the others by systematic relations. All the lexemes sharing the same relations may be grouped into homogeneous sets (or, more traditionally, 'classes'). Since frequency plays a major role in the predictability of stem relations, the more a class is populated, the more it may be considered as regular.

For our analysis, we extracted 1,115 verbal lexemes from the resource <u>https://github.com/gcelano/POStaggedAncientGreekXML</u> (selecting only texts by Attic authors of the 5<sup>th</sup>-4<sup>th</sup> centuries b.C). The verbs in our database may be divided into 10 types according to the stem relations they display. Figure 1 shows the proportion of verbs encountered for each type (indicated according to the last segment(s) of the present stem).



Figure 1: inflectional types of AG verbs

From these data a striking property of the AG verbal system emerges: all the most frequent inflectional types are those that massively contain derived verbs. This is not surprising *per se*: in languages with complex inflectional systems it is common that the most frequent classes tend to function as attractors for new lexemes, including those constructed by derivation. AG is exceptional, however, in that derived lexemes represent the vast majority of verbs, and seem to have played a key role in the definition of verb classes and of what counts as a regular verb (cf. Chantraine 1945: 172, Duhoux 2000: 69). As a verification, we coded each verb in our database according to its derivational complexity, obtained from Montanari (2013). Overall, 76,3% of the lexemes appear to be denominal / deadjectival. Figure 2 shows the recorded proportion of derived (in blue) and underived (in orange) verbs. As in Figure 1, classes are presented in descending order.



Figure 2: proportion of derived and underived items in AG verb classes

Our talk will be primarily devoted to discuss the role of derivational morphology in the shaping the AG verbal system. First, we show how derivational constructions acted as a major force towards the regularization of the system. Second, we propose a formal analysis in which the exponent of a derivational construction is not viewed as a discrete string of segments (an affix) attached to a stem. Rather, it corresponds to a set of templates defining the optimal shape each stem of the derived lexeme should have. More generally, we discuss how the AG data clearly show the role of grammaticalization / conventionalization in the (re)structuring of inflectional systems.

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### Nomina actionis in the diachrony of Italian: a paradigm-based model of competition

### Jan Radimský (University of South Bohemia) & Pavel Štichauer (Charles University, Prague)

It is a well-known fact that some word-formation rules (or *patterns* or *Constructions*) exhibit interesting cases of unpredictable competition between invidual means (affixes etc.). In Italian, action nouns are derived by means of a range of suffixes, *-mento* and *-zione* being the most productive (cf. Gaeta 2004: 323; Dardano 2009: 69–71, see also Thornton 1990; 1991). While we have in-depth studies on their synchronic productivity (cf. Gaeta – Ricca 2002; 2003; 2006), only few studies address the productivity of these suffixes in a diachronic perspective (cf. Štichauer 2009a; 2009b). The aim of this paper is thus to take up the same issue of the diachrony of the action nouns in Italian and to analyze the derivational series, including the interesting class of "zero-derived" or "converted" deverbal nouns (such as *utilizzo*), which are sometimes claimed to be direct competitors both to *-mento* and *-zione* derivatives (see Thornton 2004). We intend to investigate the frequencies of the invidual items, such as *utilizzare – utilizzazione – utilizzo*, *noleggiare – noleggiamento – noleggio* within the time span that goes from 1800 well into the end of the 20th. cent.

We will base our investigation on the data drawn form Google n-grams. Google n-grams represent very large frequency word lists based on the Google books corpus which contains approximatively 4% of all books ever printed (Michel et al., 2011). Italian data have been included in the second version (2012) of Google n-grams that contains, separately for each year, single word forms and frequency counts (i.e. absolute frequency of the word form and the number of books the word form appeared in). While acknowledging some of the limitations of this corpus (such as the fact that the POS tagging was performed automatically using a small training corpus in modern language, so its accuracy – estimated to 90% for contemporary texts – is expected to decrease for older time spans, and the fact that the data sets in Google n-grams discard *hapax legomena*), we will demonstrate some interesting facts about the diachronic behaviour of selected formations.

We will start from an exhaustive list of 6124 verbs drawn from *MorphIt* (cf. Zanchetta – Baroni 2005). For each of these verbs, we have "created" a corresponding *-mento*, *-zione* and *zero-derived* deverbal nouns, regardless of whether they are or not actually attested. In a second step, however, we have checked the existence of the corresponding derived noun. We have thus obtained a database where all existing, non-existing and potential formations can be searched. We intend to explore, on the one hand, the interesting group of doublets in *-zione/-mento*, as well as the individual group of zero-derived formations. We will show that the attested competition between these two (or three) processes is actually very low. At the same time, we intend to explore the diachronic evolution of those doublets which, synchronically, seem to be real competitors to one another.

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# Nouns becoming longer? The question of nominal complexity increase in the history of German.

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A well-known joke from the English-speaking world says that native speakers of German do not like to play Scrabble, because the words of German are simply too long for that. Long nouns (so-called *"Bandwurmwörter"* 'tapeworm words' in German) such as *Bun¬des¬präsi¬den¬den¬ten¬stich¬wahl¬wie¬der¬ho¬lungs¬ver¬schie¬bung* 'delay of the repetition of the federal president's runoff', which has become popular as the "Word of the Year 2016 in Austria", are, from a typological point of view, a peculiarity of German: other languages would preferably use a phrase (cf. e.g. in English as *delay of* ...) despite the possible existence of similar types of word formation in the respective language (such as compounding or derivation in English). In terms of its multiply compounded nouns and despite isolated examples in other languages, German long nouns form serial patterns (cf. 1) in which they significantly differ from other languages, even closely related languages such as Dutch (Schlücker 2012: 2).

(1a) Straßenunterhaltungsdienst lit. '[[street maintaining-N] service]'

(1b) Studentenkrankenversicherungsmeldeverordnung ,student health insurance registration act'

(1c) Fußballweltmeisterschaftsqualifikationsspiel 'soccer world championship qualifier'

Since such long noun structures have also not been attested in earlier language stages of German and the other Germanic languages (cf. Wilmanns 1896, Henzen 1965), they must be a result of morphological change which needs further explanation (see also Wurzel 1996 for a first approach).

In this light, the talk will come from a formal point of view located at the syntaxmorphology interface by arguing that two factors can be identified for being crucial for the diachronic word lengthening in German (Werner 2018), namely: a) the integration of verbal constituents in the word formation processes (especially as regards newly emerging patterns in derivation and compounding) and b) the intertwining of the two existing word formation processes in the nominal domain, namely compounding and derivation. Factor a) (integration of verbal constituents) firstly comprises the emergence of deverbal suffixes (such as G. -ung, -(er)ei) from originally deadjectival or denominal suffixes (cf. Waldung 'forest' from Wald 'forest') at the level of derivation (Kluge 2011, Henzen 1965). Secondly, it includes the emergence of V+N compounding (such as G. Fahr-dienst lit. 'drive-service', 'shuttle service') in late Old High German (OHG) /early Middle High German (early MHG) from earlier N+N and A+N compounding (such as G. N+N Haustür 'house door', A+N Sauerrahm 'sour cream'; cf. Carr 1939). Factor b) (intertwining of compounding and derivation) first refers to the integration of nominal suffixations (such as Abkürz-ung 'cutoff' from V abkürzen 'take a short cut') as non-heads into the pattern of N+N compounding (such as G. Abkürzungsweg lit. 'short cut way') which was restricted in OHG and decreased in MHG (Wilmanns 1896: 514). Second, it refers to the development of compound bases, especially with argument structure, of deverbal bases in nominalizations from the type Wascherei 'washing' into Händewascherei 'hand washing' (Werner 2018). The talk outlines the particular morphological changes, its intersections, and consequences for the length of German nouns with the support of data from different historical corpora of German (such as DDD, Referenzkorpus Mittelhochdeutsch).

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