

Word-formation theories VI/  
Typology and universals in word-formation V

**Abstracts**

## **General session**

## Are there reduplicative compounds in Bulgarian?

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Reduplication is first understudied in Bulgarian and also considered atypical in the few actual studies. To fill a gap in the study of Bulgarian non-prototypical compounds, the paper presents an exploratory, qualitative, contrastive analysis of reduplicative patterns in English and Bulgarian. Reduplication in English and Bulgarian is reviewed from a lexical typological perspective with the aim of establishing the status of reduplicative constructions in the Slavonic language. Both types - contrastive (pragmatic) and lexical (word-formation) reduplication are discussed. The type of data discussed in the paper can be summarized as in Table 1:

Table 1

Construction	Bulgarian	English
contrastive focus total reduplication	<i>kafe kafe</i> [coffee coffee <sup>1</sup> ], <i>ženeni ženeni</i> [married married], <i>kino kino</i> [movies movies]; b) <i>krasivičâk krasivičâk</i> [beautiful <sub>dim</sub> beautiful <sub>dim</sub> , <i>miličâk miličâk</i> [kind <sub>dim</sub> kind <sub>dim</sub> ];	<i>relationship relationship</i> , <i>date date</i> , <i>rich rich</i> ;
<b>Reduplicative compounds</b>		
fully schematic: [X X] partially specified a) [Adj Adj <sub>dim</sub> ] b) [X prep X], where X can be a member of the noun class or the adjective class	a) <i>gol-goleničâk</i> [naked naked <sub>dim</sub> ], <i>sam-samičâk</i> [alone alone <sub>dim</sub> ]; c) <i>tâp ta tâp</i> [stupid and even stupid, <i>stupidity itslef</i> ], <i>kisel ama kisel</i> [bitter but bitter], <i>magare s magaretata</i> [a donkey with the donkeys, <i>a real donkey</i> ]	
rhyiming compound fully schematic: [X CX], [X ta <sub>prefix</sub> X]  ablaut compounds fully schematic: [X X <sub>mutated</sub> vowel]	<i>patil prepatil</i> [suffered suffered too much]; <i>pil, ta prepil</i> [having drunk, having overdrunk, <i>very drunk</i> ] * <i>vreli nekipeli</i> [boiled not boiled over], <i>praven nedopraven</i> [done not fully done] a) <i>tiptop</i>	<i>fuzzy-wuzzy</i> , <i>handy-dandy</i> , <i>hanky-panky</i> ; a) <i>riff-raff</i> , <i>dilly-dally</i> , <i>tip-top</i>
Yiddish pattern fully schematic: Bulg.: [X <sub>dim</sub> mX <sub>dim</sub> ]; Engl. [X <sub>sh/schm</sub> X]	<i>birichki-mirichki</i> [beer <sub>dim</sub> , <i>meer</i> <sub>dim</sub> ], <i>tintiri-mintiri</i> , <i>kompyutri-mompyutri</i> [computers -momputers]	<i>fancy-shmancy</i> , <i>money-shmoney</i> , <i>chilly-shmilly</i>

<sup>1</sup> The square brackets are used to render a literal translation of the Bulgarian examples. No natural English equivalent is provided because these are uniform “the real X”. If an equivalent is required, it is provided in italics within the square brackets.

After analyzing the semantic and formal properties of the constructions in the two languages, it is established that:

- a) there is a marked tendency for reduplicative constructions in Bulgarian to be associated with the semantics of identity enhancement or intensification;
- b) surprisingly this is the case even in cases when reduplication is accompanied by diminutivization (a pattern not found in English);
- c) in English the prevalent semantics is derogatory in nature or at least these compounds encode reduced identity corresponding to “somewhat X, resembling X” and actually express some degree of subversion to the prototype or identity (to the exclusion of ones that have undergone secondary lexicalization);
- d) derogatory semantics in Bulgarian (in contrast to the prevalent intensification semantics) is exclusively encoded by the so-called Yiddish pattern, which in Bulgarian is marked by the phoneme /m/;
- e) outstanding formal contrasts are the presence of preposition/particle constructions in Bulgarian and ones where diminutivity intervenes (which are lacking in English).

The conclusion is drawn that the category of compounds in Bulgarian should be enlarged to include various reduplicative constructions which are traditionally not recognized as compounds by Bulgarian scholars.

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## Inherent affix polysemy and inducers of dot objects in word formation

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This study looks into affixal meaning patterns that give rise to morphologically complex *dot objects*. In addition to encoding a productive connection between two senses, the dot objects are known to trigger *copredication*, which allows ascribing deverbal nominals to this class (Pustejovsky 1995, Melloni 2012, Ježek & Melloni 2011). In (1), the predicate “took forever” selects for the event meaning of *translation* and “is full of typos” selects for the result meaning.

(1) The *translation* [took forever]<sub>EVENT</sub> but (it) [is full of typos]<sub>RESULT</sub>.

We dealt with a different group of derived words —denominal nouns in Spanish—, wherein we identified 11 clusters of related suffixal meanings with a total of 20 sense combinations. In an extensive corpus search based on specific syntactic selectors for each sense, we found that only 9 of these combinations yield consistent copredication patterns, three of which are included in (2).

- (2) a. [Set of N] • [Location of set of N]  
Desde la estación [bajan los viajeros a]<sub>LOCATION</sub> la [frondosa]<sub>SET</sub> *alameda*.  
‘The passengers go down from the station to the lush poplar grove.’
- b. [Organization of N] • [Practice/event performed by N]  
El consistorio [encargó]<sub>EVENT</sub> una *auditoría* que [hizo sugerencias sobre la licitación]<sub>ORGANIZATION</sub>.  
‘The city council commissioned an audit, which made suggestions regarding the tender.’
- c. [Blow performed with N] • [injury inflicted by N]  
Le [asestó]<sub>ACTION</sub> una [profunda]<sub>INJURY</sub> *puñalada* en el estomago.  
‘She landed a deep stab on his stomach.’

The results of this study suggest that semantic relations giving rise to bona fide dot objects are predicated of different aspects of the same entity rather than of different (albeit related) entities. Furthermore, affixes involved in dot formation can be defined as *dot inducers*: they derive words encoding a primary semantic type tightly linked to the meaning of the base and a secondary semantic type that is not as clearly defined and shows considerable variation even for semantically related words. This inherent asymmetry differentiates morphologically complex dots from morphologically simple dots, where the directionality of the relation between both meanings cannot always be established. A detailed analysis of the connection between the semantic type of the base, the affixal meaning and the kind of dot objects that they yield suggests that dot formation is a lexical rather than general conceptual phenomenon.

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## The semantics, structure and distribution of adjectives based on active participles in Polish and Irish

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The purpose of this paper is to look into the relationship between active participles and homonymous adjectives on the basis of data from in Polish and Irish.

According to Cetnarowska (2007) when present participles in Polish are converted into adjectives, they give rise to classificatory adjectives (i.e. they are non-eventive and “kind” denoting) and they differ from other adjectives in allowing (optional) direct NP complements (i.e. they retain the ability to check case), as in:

(1)

<i>pasta</i>	<i>wybielająca</i>	<i>(zęb)</i>
paste.NOM.SG.FEM	whitening.NOM.SG.FEM	teeth.ACC
‘whitening tooth-paste (lit. paste whitening teeth)’		

According to Bloch-Trojnar (2006: 80–90), the form which traditional grammars regard as the genitive case of the verbal noun (VN) is not a case ending, but rather a positional variant of the present participle used to modify a noun. Active participles are distinguished from perfective participles, with which they are homonymous, by the obligatory presence of the object in the genitive case (2a). They can also act as *bona fide* adjectives (devoid of an object), as in (2b).

(2)

- a. *gléas maraithe daoine*  
device kill.VN.GEN people  
‘a device for killing people’
- b. *gléas maraithe*  
device kill.VN.GEN  
‘lethal weapon’

A detailed semantic analysis of the forms in *-qcy* in Polish and forms in *-t(h)a/t(h)e* in Irish will reveal a capacity for expressing a similar range of canonical non-episodic meanings, i.e. habitual, modal and dispositional (see Fábregas 2016). The structures proposed for Irish and Polish participial adjectives occupy a mid-position on the continuum stretching from verbal participles via adjectivised participles to deverbal adjectives and behave like a hybrid category showing verbal and adjectival properties.

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## **Out-applicatives are comparatives**

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The productive applicative prefix *out-* turns adjectives, nouns, and intransitive verbs into transitive verbs, e.g. to outsmart, to out-Trump, to outrun. Kotowski (2021) argues that such verbs lie on a cline between a resultative meaning (e.g. the baby outgrew his clothes) and a comparative meaning, in which both participants engage in an event of the same kind, and the subject argument exceeds a threshold determined by the object argument (e.g. Smith outswam Jones). We argue that out-applicatives are uniformly concealed comparatives, whose interpretation is determined by the role of the applicative argument (the syntactic object). The event degree interpretation arises when the two participants engage in the same type of activity. It compares the degree of the two events along some dimension (time, distance, quality). Modal comparatives compare the degrees along some dimension of events in the actual world and in a domain of alternative worlds. Only the subject argument participates in the event in all worlds; the applicative argument determines the modal threshold indirectly. Unlike event degree outapplicatives, they have no equivalent overt comparative paraphrases; they are akin to modal comparative *enough* and *too* constructions (Meier 2003, von Stechow et al. 2005, Nadathur 2019). Evidence that both types of out-applicatives are comparatives is that they allow the types of measure phrases that are diagnostics of comparatives, such as *by*-phrases. (1) a. Event degree comparatives: Smith outdistanced Jones by a country mile. b. Modal comparatives: Smith outlived his money by decades. c. Ambiguous: He far out-performed his critics. Event degree comparatives have exactly the same interpretations as the corresponding overt comparatives, and obey the complex commensurability conditions on compared events identified by Doetjes 2010. (2) a. to outrun an eagle = to run faster than an eagle (#runs/moves) b. Can you really outrun a volcano? = Can you really run faster than a volcano (#runs/flows)? c. #Can a volcano outflow you? = Can a volcano #run/#flow faster than you? The resultative interpretation arises inferentially from event degree comparatives. (3) a. Mary outran Bill. ‘Mary ran faster than Bill’, Mary prevailed over / defeated Bill If the degree of ev2 is understood in context to also be the degree required for a salient goal of ag1 to be realized, then if the degree of ev1 exceeds the degree of ev2 it also exceeds that modal threshold. Together with the basic comparative reading this yields a modal inference. Kotowski, S. (2021). The semantics of English out-prefixation. *English Language and Linguistics* 25(1), 61-89.

## **An analysis of derivational networks of the Romanian verbs expressing the six basic emotions**

Szymon Czarnecki, Adam Mickiewicz University, Poland

Word-formation in Romanian has not received much attention in latter-day literature and a systemic approach based on its synchronic derivational networks (nests) is a very recent line of research with a few publications. The paper presents a research project that aims to describe the formal and semantic structure of derivational networks of emotive verbs in Romanian, the main representative of the Balkan Romance group. The paper explores the possibility of modelling derivational networks on the basis of *generalized* word-formation types, that is, the types that focus on exponence of semantic categories in two-member formal structures that abstract from the occurrence of a particular derivational formative, limiting themselves to stating its type (i.e. whether it is a suffix, alternant etc.) and taking into account also the type of derivational stem. The approach will be illustrated with a sample of six underived Romanian verbs expressing the basic emotions (based on Ekman's 1971 classification) and their direct and indirect derivatives, for example: *se supăra*<sub>VB</sub> 'to be annoyed' → *supărare*<sub>SF</sub> 'annoyance', where the latter can be analysed as an action noun derived on the basis of an infinitive stem with a suffixal formative: *Nomen actionis* ⇔ *supăra-r(e)* ⇒ R<sub>INF</sub> + F<sub>SUF</sub>. The derivatives will be extracted from current dictionaries of Romanian (mainly DEX 2009). The study will be based on the methodology developed in the Polish tradition of descriptive and nest derivatology and on the above-mentioned, our own methodological solutions regarding network modelling. The use of the methodology developed in Slavic studies to describe a Romance language is intended to internationalise the theory of word-formation

## Reduplication and deduplication in Baure: two competing forces?



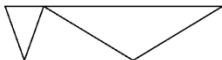
Swintha Danielsen, Europa-Universität Flensburg, Germany

The highly endangered Baure language of lowland Bolivia has been investigated in language documentation projects since 2003. The latest participation in the onomatopoeia project is only one of the many approaches to the analysis of the language. While that project mainly looked at the functions of sounds and their repetition that play an onomatopoeic role in this polysynthetic Arawakan language, this presentation aims to look at the connection between intentional and accidental doubling of sounds and the relation between the symbolism of word structure and grammatical concepts of the same.

The duplication of syllables can be found in onomatopoeic animal names, such as *sirisiri* ‘falcon sp.’. In addition, reduplication marks iterative, strong, or fast action in Baure verbs. Many forms are lexicalized with no simplex counterpart, such as *-yoporoporok-* ‘shiver’, but we also identify productive reduplication (Danielsen 2007):

- |   |   |
|---|---|
| <p>(1) <i>rivekow</i><br/> <i>ri=ve-ko-wo</i><br/>         3SG.F=speak-ABS-COP<br/>         ‘She speaks.’</p> | <p>(2) <i>rivevekow</i><br/> <i>ri=ve~ve-ko-wo</i><br/>         3SG.F=speak~INTS-ABS-COP<br/>         ‘She speaks a lot.’</p> |
|---|---|

Opposed to this strategy seems to be deduplication (or haplology), which prevents the accidental doubling of sounds at the beginning of words, like in (3), where /ni/ can be the *ni=* ‘1SG’ and the initial part of the verb *-nik-* ‘eat likewise. Deduplication avoids that sounds are doubled by accident. Haplology may apply where a word could be perceived as badly produced, as stuttered or a slip of the tongue. However, it underlies completely different factors in Baure and cannot be taken as a reversed process of reduplication, as has once been suspected (Danielsen 2016). Here, we actually have an example of ambimorphemicity (Nevins 2010):

- |  |   |   |
|--|---|---|
| <p>(3) n i k<br/> <br/> <i>ni=nik</i><br/>         1SG=eat<br/>         ‘I eat’</p> | <p>(4) n i n i s a w<br/> <br/> <i>n(i)=inisa-wo</i><br/>         1SG=fish.v-COP<br/>         ‘I am fishing’</p> | <p>(5) n a r o ' i n o k o w<br/> <br/> <i>n(i)=aro'inok-wo</i><br/>         1SG=be.sad-COP<br/>         ‘I am sad’</p> |
|--|---|---|

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Glosses: ABS = absolute, COP = copula; F = feminine; INTS = intensive, SG = singular  
 Inflectional and derivational morphology of the Abui verb

## Conversion, compounding and their interaction within head nouns

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The analysis of English compounds like *heartbeat*, *mouse click* or *gunfight* reveals complexities because, despite an apparently straightforward noun+noun structure, their internal constituency may be misleading. One of the reasons is that their right-hand noun has previously undergone verb-to-noun conversion, which implies that such units may also be seen as synthetic compounds. The chain of word-formation would go from deverbal conversion ( $click_V > click_N$ ) to noun+noun compounding ( $[mouse] + [click_N] = [mouse\ click]_N$ ):

The label *non-affixal (de)verbal compounds* (NDVCs) is coined in Lieber (2010), and subsequent allusions have been occasional (Bauer et al. 2013, Lieber 2016, Bauer 2017: 79-82). Three types of NDVCs are customarily distinguished based on their subject- (1a), object- (1b) or prepositional object-orientation (1c):

- |     |     |                   |                             |
|-----|-----|-------------------|-----------------------------|
| (1) | (a) | <i>heartbeat</i>  | ‘the heart beats’           |
|     | (b) | <i>mouseclick</i> | ‘somebody clicks the mouse’ |
|     | (c) | <i>gunfight</i>   | ‘a fight by means of guns’  |

This article explores a selection of units from Adams (2001), Bauer & Renouf (2001), Jackendoff (2010), Lieber (2010, 2016) and Bauer et al. (2013). This initial sample was enlarged to c. 800 units by use of the BNC (Davies 2004) and was inspected in the light of their corpus frequencies, type of orientation and dominant corpus register. The preliminary results point to:

- i) The role of the extralinguistic context for the interpretation of the NDVC.
- ii) A connection between the spelling of the compound and its underlying syntactic and semantic features.
- iii) The existence of a group of NDVCs which may be interpreted at the same time as primary/root and as synthetic.

The present study tries to reply to the above questions by paying special attention as well to recent related findings in the field (Bauer 2017, Sanchez-Stockhammer 2018).

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## **Multiple Prefixation and the case of Greek**

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In this research, I argue that, unlike Slavic languages, multiple prefixation (i.e. more than one prefix attaches to a verb) is possible in Greek, providing two generalizations for the formation of multiply prefixed verbal complexes. Svenonius (2004) points out that lexical prefixes cannot co-occur in Slavic, strongly arguing for their structural uniqueness. Since lexical prefixes are generated in the predicative position for resultative predicates, he indicates that they are unique, as the syntactic position for resultatives is unique. Gribanova (2013) also demonstrates that in Russian, multiple prefixes can co-occur under no circumstances. However, Greek show that this restriction is not universal, and two prefixes can surface in one verb: (1) a. apo- sym-piezo b. epi-syn- apto from-with-press to- with-touch ‘to decompress’ ‘to attach’ Crucially, there seems to be a requirement for multiple prefixation: all verbs, from the base verb to each prefixed verb at each level of prefixation, must exist independently (e.g. aposym-piezo ‘to decompress’ > sym-piezo ‘to zip’ > piezo ‘to press’, en-dia-fero ‘to interest’ > dia-fero ‘to differ’ > fero ‘to carry’). This observation can be captured under the following generalization: (2) Generalization 1 For a multiply prefixed verbal complex P1-P2-V to be formed, the existence of a simply prefixed verbal complex P2-V is required. Interestingly, Generalization 1 leads to Generalization 2, under which a verbal complex with two prefixes does not allow a simpler prefixed verbal complex with just the outer prefix to be formed (e.g. apo-sym-piezo ‘to decompress’ > \*apo-piezo, en-dia-fero ‘to interest’ > \*en-fero). (3) Generalization 2 Regarding a multiply prefixed verbal complex P1-P2-V, no verbal complex can be formed as P1-V. I also offer an analysis for the formation of multiply prefixed verbal complexes, using the mechanism of Generalized Head Movement (Arregi & Pietraszko 2018, 2019).

## **Semantic processes as part of word-formation**

Hans Götzsche, Aalborg University, Denmark

New words in a language or a dialect may be created, or generated, by different processes and the question is to what extent such processes are universal or by the typological features of specific languages. I might have added the option that genealogical features may also play a part in such processes, in that inherited features may take on new functions. It is a little like what is well known from evolutionary biology where almost redundant physiological elements adopt new functions; e.g. the inner ear bones *malleus*, *incus*, and *stapes* developed from jaw bones. In this context one may ask to what extent the meanings of existing words undergo processes in which the outcome is a new word, a LEXEME, or if this should be described in some other way.

In this presentation the issue will be illustrated by a lexical case in which the demands on semantic accuracy are especially high: legal terminology. The point of departure is the question of the meaning of the phrase *outstanding shares* mentioned in the thesis by Slávka Janigová: *Comparative terminology in legal translation* of which I had the privilege of being a member of the review panel. The phrase and the word *outstanding* is mentioned on p. 110 *et passim*, and the mechanism of its counterparts in Slovak is handled by the thesis. This paper will take up the etymology of *outstanding* and its cognates in some Germanic languages in order to elucidate the word's legal semantics and its influence on legal terminology. Contrasting to this, one may investigate the origin and use of the Danish and Scandinavian lexeme *kirkegård* 'church yard' the referent of which has no common Germanic label. The presentation will conclude by some considerations on the question posed by the title of the conference: 'universals vs. typology'.

## Mobile Affixes Undergo Movement: An Argument from Extended Exponence

Jelena Grofulovic, Universität Leipzig

Phonologically-conditioned mobile affixation in Huave (language isolate; Oaxaca State, Mexico) has received significant attention (Noyer (1993, 2003), Paster (2006; 2009), Kim (2008; 2015a; 2015b), Zukoff (2021), a.o.). While phonological effects on surface order remain uncontroversial, it remains largely undetermined whether mobile affixes are truly underspecified for the edge they attach to, or undergo true phonologically-conditioned movement upon insertion. This work makes an argument for the latter claim, supported by the evidence from cases of partially superfluous extended exponence (Caballero & Harris (2012)) in the San Francisco del Mar (SFM) variety of Huave, where a morphosyntactic feature is realized more than once in a single word-form. In SFM, a subset of verbal affixes can surface either as a prefix or a suffix, as exemplified in (1) where the morphological exponent /t/ realizing completive aspect attaches either to the right or the left of the stem. This mobility has been analyzed as the avoidance of consonant clusters and their epenthetic repairs (Kim (2008; 2010)). To the best of our knowledge, previous research has analyzed mobile affixes as directly inserted in the position where they surface. However, a closer inspection of instances of partially superfluous extended exponence in SFM, given in (2) and (3) and unexpected under most morphological theories, points to the fact that mobile affixes do undergo phonologically-conditioned movement, namely from the suffix position where they tend to surface by default (i.e. in the absence of phonotactic triggers for mobility, Kim (2008; 2010), Zukoff (2021)). The contribution of this work is twofold: i) it shows how phonology can work to derive unexpected patterns of extended exponence, ii) and it adds to the extensive research on Huave affix order by offering an analysis which both preserves the strict modularity of grammar, and does away with potential redundancies of the suppletive allomorphy approach. (1) a. t-a-hÜ-jus CP-TV-give-1 'I gave' b. pahk-a-t-u-s face.up-V-CP-ITR-1 'I laid face up' (2) a. S-i-n-a-hÜ 1-FT-1SB-TV-give 'I will give' b. S-i-Üut-u-n 1-FT-sit-V-1SB 'I will sit' (3) a. i-m-e-r-u+c FT-SB-2-2I-TV-eat 'You will eat' b. i-m-e-wic-i-r FT-SB-2-rise-V-2I 'You will get up' 1

## Non-morphemic word formation as a crowbar for cognition

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Normally, morphology is not often associated with research into human language capacity. The notion of productivity is associated with it, but we usually do not get much further. This paper will show how study of non-morphemic word formation can shine a light on processes of cognition.

Four processes will be discussed:

- Suffix reinterpretation
- Pseudo embellished clipping/hypocoristics
- Libfixing
- Blending

Data that will be discussed are mainly English and Dutch

It turns out that in all these processes the naïve language user thinks to recognize an element to which he himself assigns such a structure that he can use it productively in new word formation processes. This element is called a confusivum by Ludwik Zabricki (1962).

One of the most striking aspects of this confusivum is that it does not have to adhere to the morpheme boundaries. Where it is used for word formation it is therefore about non-morphematic word formation.

An example of English clippings and embellished clippings can show how the process works.

### Clipping

- (1) pres < president  
vet < veterinarian  
guv < gouvernor

### Embellished clippings (with an independent clipped form)

- (2) bevvv < beverage (bev)  
browie < brother (bro)  
ciggie < cigarette (cig)

### Embellished clippings (without an independent clipped form)

- (3) commie < communist (\*com)  
hanky < handkerchief (\*hank)  
granny < grandmother (?gran)

### Pseudo embellished clippings

- (4) blooky < bloke  
foody < food  
chappie < chap

The data presented here show how the cognitive process works:

- Clipping is/becomes an accepted process resulting in nouns
- Thus, clipped nouns may be supplemented with a diminutive or endearment suffix
- The next step is that suppletion with the suffix may become obligatory
- Subsequently, the naïve language user does not require a monosyllabic clipped form to create embellished clippings; monosyllabic nouns satisfy.



The most fundamental cognitive process here is between stage (2) and (3), where the naïve language user recognizes the disyllabicity of these specific forms ending in -y/-ie, which leads to stage (3) where he/she simply skips the separate clipping phase. Subsequently, all clipping appears to be given up in stage (4).

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## **Knowledge-driven compound interpretation. A case study on German compounds headed by -stoff**

Matthias Irmer, OntoChem GmbH, Halle & Olav Mueller-Reichau, Leipzig University, Germany

This paper presents a case study on German compounds which have -stoff ('stuff/material/matter') as head. The basic claim is that the head noun narrows down the range of interpretations by introducing a pragmatic scaffold which we pin down as a conceptual script. We obtain a data set by querying a large corpus selecting 4,026 nominal Stoff-compound lemmas. Using the 100 most frequent compounds as development set, we observe 72 substance-denoting, five fabric-denoting and 11 information-denoting compounds (corresponding to the basic meanings of Stoff in isolation according to standard dictionaries). From the observation that substance compounds (e.g. Farbstoff 'colouring agent'; Impfstoff 'vaccine') cluster around two events, synthesis and application, we induce a script consisting of these two event frames connecting three kinds of states. A Stoff-compound may thus be expected to denote an entity which is either the starting material of a synthesis (Rohstoff 'raw material'), an addendum in synthesis (Süßstoff 'sweetening agent'), the product of synthesis and, at the same time, an occasion for application (Kunststoff 'synthetic material'), or the instrument of application (Sprengstoff 'explosive'). As for fabric compounds (e.g. Seidenstoff 'silk fabric'), we argue that fabrication is a special kind of synthesis. Information compounds (e.g. Lesestoff 'reading material') arguably result from a metaphoric transfer to the immaterial domain, with the two events acquisition (counterpart of synthesis) and contribution (counterpart of application). We test the obtained model against two test sets comprising 50 compounds with medium and low frequencies, respectively. Since it turns out that almost all test items successfully integrate into the script, our study provides support for pragmatic theories of compounding, according to which the interpretation of a compound is crucially guided by stereotype knowledge associated with the compound's constituents

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This paper presents a new analysis of the morphological and derivational make-up of the Abui verb (Timor-Alor-Pantar family, Eastern Indonesia), refining and modifying previous analyses (cf. Kratochvíl 2007; 2011; 2014; Kratochvíl and Delpada 2015; Saad 2020; Kratochvíl et al. 2021).

The Abui verb morphology employs affixation, stem mutation (cf. Merrill 2018), subtraction, and reduplication. It is highly agglutinative with some elements of fusion of person-number-applicative categories in prefix slots -2 and -3. complex. The verb complex often consists of two parts: (i) a lexical verb (inflected for person-number, aspect, and mood) and (ii) a light verb (inflected for person-number only). Both parts share the aspect-mood categories and form a phrase whose continuity cannot be interrupted by any morphosyntactic operation. The maximum template of the lexical and light verb complex is given below:

LIGHT VERB			LEXICAL VERB										
-2	-1	root	-4	-3	-2	-1	root	+1	+2	+3	+4	+5	
		t											
U <sub>APP</sub>	U <sub>L</sub>		APPL	U <sub>APPL.</sub>	U <sub>APP</sub>	PAT		INCP	INC	STA	MOOD	MOOD	
L	v		2	2	L				H	T	1	2	
				APPL		N <sub>incorporat</sub>		STA	PFV	PRO			
				1		ed		T		G			
				CAUS					PRF				

The light verb appears when the valency frame of the lexical verb includes typically human undergoers in roles other than patient (goal, benefactive) or when the valency frame of the lexical verb does not include a patient (a feature typical for many Papuan languages, cf. Foley 1986; 2018:908). The slot -1 is reserved for patientive direct objects (cf. Klamer and Kratochvíl 2018) and incorporated objects and together with the root can be reduplicated. Given the morphological complexity of the verb, we rely on mathematical methods (Bayesian networks) to investigate the plausibility and mutual interdependence of the inflectional slots listed above. The results indicate that the direct object slot (-1) is independent of the preceding applicative slots but interacts with the aspectual values of the verb.

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## A distributional approach to inflection vs. derivation in Czech

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Delineating the border between inflection and derivation is an old but unsolved issue in morphology. While some insist on a categorical distinction and look for corresponding criteria (Anderson 1982), many have argued that the border is elusive, and that the distinction is best seen as gradient and/or multidimensional (Dressler 1989; Booij 1996; Haspelmath 1996; Corbett 2010; Spencer 2013; Štekauer 2015). Recent work has attempted to leverage computational methods from distributional semantics (see e.g. Boleda 2020) to operationalise a gradient between inflection and derivation (cf. Bonami et Paperno 2018, Rosa et Žabokrtský 2019), but consider smaller sets of morphological categories. In this work, we approach the issue building on the extensive morphological and corpus resources available for Czech (MorFlexCZ, Hajič et al. 2020; DeriNet, Vidra et al. 2021). We obtained a distributional vector space by applying word2vec (Mikolov et al. 2013) to the SYN v9 corpus (Křen et al. 2021), and examine a collection of 24 types of morphological contrasts exemplifying canonical inflection (e.g. grammatical case contrasts on nouns), canonical derivation (e.g. verbs vs. agent nouns), and different types of intermediate cases, including diminutive formation, aspectual pairs, masculine-feminine pairs of human nouns, deadjectival property nouns, deverbal event nouns, etc. Our results corroborate the view that the inflection-derivation divide is both gradient and multidimensional. They confirm that inherent inflection and category changing, denotation changing derivation (e.g., agent nouns) stand at the extremes, while the allowing for useful exploration of the typology of intermediate cases and of the properties of the same category across parts of speech (e.g., number on nouns or adjectives, negation on verbs and adjectives).

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## **Compound-internal anaphora: evidence from acceptability judgements on Italian argumental compounds**

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The particular properties of argumental compounds in Italian pose interesting theoretical challenges: these constructions, in fact, where an argumental relation ties the two elements, show features that make them more accessible to syntax than other types of compounds, challenging the notion of argumental compounds as morphological objects. However, while their permeability to syntax is highly documented, the acceptability of pronominal reference to the argument element of the compound is debated. Often based on their theoretical assumptions, some researchers exclude the possibility that pronouns can refer to the argument element, while others do not. The present study aims to experimentally determine the degree of acceptability of compound-internal pronominal reference. Three different types of Italian argumental compounds have been investigated: those with a VerbPREDICATE + NounARGUMENT structure (e.g., *apri+scatole* "can opener"); those with a NounPREDICATE + NounARGUMENT structure (e.g., *trasporto latte* "milk transportation"); and those with a NounARGUMENT + NounPREDICATE structure (e.g., *autonoleggio* "car rental"). The referential expressions under investigation are null subject pronouns and direct object pronouns. Drawing on the results of an acceptability judgement task, we provide evidence that Italian argumental compounds allow pronominal reference to the argument element depending on compound structure and referential expression. The position of the head plays a decisive role, and while compound-internal anaphora is accepted with left-headed compounds and, to a minor extent, V+N compounds, the same is not true with right-headed compounds. Moreover, it has been found that left-headed compounds allow null-subject anaphora to a greater extent. An experimental approach made it possible to single out detailed variables that would not have otherwise been possible to observe. These results provide new evidence on compound-internal pronominal reference and give important insights into the processing of argumental compounds. Moreover, the present study shows the benefit of the integration of experimental methods with theoretical considerations. Keywords— compounds, in-word anaphora, Italian compounds, pronominal anaphora, argumental compounds. Compound-internal anaphora: evidence from acceptability judgements on Italian argumental compounds

## Interjection as a word-formation process

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This presentation aims at exposing some of the results of a defining enterprise on interjections and onomatopoeias. We will propose an analysis of interjections (and some items often called “expletives”, like “the fuck” in “what the fuck”) in terms of word-formation processes. We will focus on a word formation strategy that we call “reshaping”, which consists in adding an element to a vocal production to make it more conventionally acceptable (for instance, [a:] + [tʃ] = *ouch*). This element can be a consonant cluster or a morpheme. This process is a lexicogenic matrix that can be observed at the phonemic (*oh, ouch, oops*) and at the syntactic level ([*fuck* + *-ing*; *damn* + *-ed* + NOUN]). At the syntactic level, this process consists in incorporating interjections into syntactic structures: we call it “Syntactic Adjustment” (“SA”, henceforth). We will compare our analysis with other hypotheses in the literature, like Potts’ “multidimensionality of meaning” (Potts, 2008) and compare this SA with adjectives and degree adverbs (Paradis, 2008; Cacciani, 2017). Then, we will expose some of the rules that restrict the use of the SA. To do this, we will compare the SA with converted interjections (*yuck!* > *yucky* ; *oh God!* > *to be oh-Godding at something*) and will show the difference between an adjective converted from an interjection (*yucky*) and what we call the “reshaped interjection” (*fuckin*). We will make use of concepts developed in different theoretical frameworks, mainly in Cognitive Grammar. This analysis reveals that interjections have different definitions “en langue”, “en parole” and “en corpus”. “En langue”, these words are tools, “en parole”, they are performances, and “en corpus”, interjections are imprints. The primary function of interjections is to enable the speaker to reduce the distance between their actual speaking performance and their intended speech.

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## **Advances in Morphological Theory: Morphology of Construction and Morphology of Relationships**

Riccardo Minasi, UNIDA, Italy

Construction-based methods to morphology have gained traction in the scholarly community in recent years. The premise in this paradigm is that the mental lexicon is big and richly structured, holding not only a huge number of stored words but also a wide variety of generalizations in the form of schemas. Construction Morphology and Relational Morphology are two construction-based theories examined in this analysis. Following an overview of the fundamental theoretical architecture, the paper shows a variety of current applications of a construction-based approach to morphological phenomena in diverse languages. Furthermore, it provides views on difficulties and prospects for future research. The review focuses on features of the theory that have been especially useful in accommodating both the regularities and idiosyncrasies that are typical of word grammar.

## **A Minimalist Account of Genitive Compounds**

Makiko Mukai, University of Kochi, Japan

In this study we propose a novel analysis of genitive compounds in English, Japanese and Mainland Scandinavian (e.g., *Mother's Day*) in the framework of Labeling Algorithm (Chomsky 2013, 2015). It is well attested that genitive compounds appear to involve phrasal category inside words, the genitive case marking in the given language. This leads one to argue that two roots are never directly merged to derive a word (Nöbrega 2020, Harðarson 2020 *contra* Zhang 2007, Bauke 2014, 2016, de Belder 2017). I will first look closely at the behaviors of genitive compounds and argue that they are similar to two-member compounds. I will then argue against Bauke's analysis (2014, 2016) in German where each of the two roots is independently merged with a categorizing x-head. The proposed analysis takes the idea from Saito's (2016) analysis of anti-labeling head, which is the linking element between the genitive compounds functional category LINK (i.e., the element which looks like genitive case marker in the given language) is invisible to a labeling procedure when it is merged with categorizers. As a result, the label of the structure for genitive compounds is successfully identified as N. A similar insight is also found in Holmberg's (1992) analysis of recursive compounds. Our attempt is along the lines of these preceding approaches. At the end of this paper, I will provide further support for the proposed analysis with the properties of genitive compounds and recursive compounds.

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## **Semantic categories for Turkish derivational morphemes**

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In Turkish linguistics, many resources describe inflectional and derivational morphemes. However, those descriptions are usually either incomplete, non-formalised (Bazin, 1994; Göksel & Kerslake, 2005) or solely focused on the formal description of morphemes (Korkmaz, 2014). And, there is no resource dedicated to computational treatment of derivational morphology in Turkish. This communication is part of a wider project aiming to automatically describe Turkish nominal word-formation through equivalences with French word-formation patterns, in a didactic perspective. It focuses on the creation of an open-source computational resource composed of derivational morphemes in Turkish defined by semantic categories, more precisely morphemes that derive nouns into new nouns. Turkish and French being typologically different languages, we established the hypothesis that they can be linked at a more abstract level, that is to say at a semantic level. First, we base our work on semantic categories described in (Bagasheva, 2018) and reused in a cross-linguistic project, including both Turkish and French (Körtvélyessy et al., 2020). However, they seem to be insufficient because they are not exclusive to nominal derivation. In addition, the categories are not defined in detail and can be difficult to interpret. Therefore, an important part of our project is to evaluate the use of these categories for the multilingual description of nominal derivation. We test these categories on the morphemes in our resource, which can be polysemous, in order to see if they match the meaning of the morpheme in the derived word in comparison to French word-formation patterns. We notice that there are morphemes with no match which is why new semantic categories are potentially created and added to the previous selected ones. Thereby, we create an ontology with all these categories in order to link them to our computational resource of derivational morphemes.

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## **Word-formation types in Albanian**

Rrahman Paçarizi, University of Pristina, Kosovo

The capacities of Albanian in creating new words by using its internal means are wide and various. But, these capacities are not used appropriately. Word formation is considered a part of morphology that gives word formation marginal importance. Then, Albanian still relies on a printed dictionary created in 1980 and only partly updated by revising (in 2006) some ideological explanations very much present there. It means, Albanian, still don't have an electronic dictionary of open type, where new words could be included and gain formal status as new entries. Thus, the word-formation capacities of Albanian weren't promoted sufficiently, to become known and natural for average speakers.

This work presents the research of more than ten years on word-formation issues, after comparing word-formation types in Albanian, with word-formation types in other languages, especially in English, German, Italian, and some Slavic languages, based on representative authors and books dealing with word-formation processes within these languages.

Since Albanian linguistics paid more attention to the affixal word formation, the main focus of this work will be on exploring and presenting conversion, compounding, and coinage in Albanian. In this regard, I tried to develop a combined approach: morphological, syntactic, semantic, and cognitive approaches, especially concerning conversion and composition. On conversion, it is worth presenting cases when the creation of a new lexical entry doesn't employ the change in word class, unlike present theories giving too much importance to this feature. In this regard, I rely on theories on zero derivation introduced by Bauer, Stekauer, Lieber, etc. I find also interesting compounding which because of the dynamic topics of Albanian phrases needs to rely on some features that are not very common in other languages, based on work done by Aronoff, Bauer, Marchand, Plag, Sanchez-Stockhammer, Scalise, Stekauer, Kortvelyessy, etc.

As far as coinage is concerned I'll present cases of such a word-formation type in Albanian, which is very rich, unlike in the other languages, where the sociolinguistic approach will be dominant.

## The analysis of *-ation* and its variants in German

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The suffix *-ation* in German is often treated as having allomorphs such as *-ition*, *-tion* or *-ion*. Fleischer & Barz (2012: 242) treat *-ion* as the base form. We investigated the relationships between the allomorphs on the basis of the word list DeReWo (2012) and the corpus DeReKo (2005-2022).

From the word list we extracted all nouns ending in *-ion*, which results in a list of 6244 nouns. We eliminated cases that do not reflect the suffix, e.g. *Million*, and compounds that do not have a corresponding verb, e.g. *Umweltorganisation* ('environmental organization'). This resulted in 976 nouns. Then we divided this list according to the individual allomorphs.

The verbs corresponding to nouns in *-ion* end in *-ieren*. In many cases, the nouns in *-ion* and also the verbs in *-ieren* were originally borrowings from French. However, German also has an alternative nominalization suffix, *-ung*. This means that the two suffixes are in competition. We mapped out this competition by verifying whether both nouns were attested, using dictionaries, corpora and native speaker intuitions. In DeReKo, we also recorded the frequency of the nouns in *-ion* and the corresponding verbs in *-ieren* and nouns in *-ung*.

On the basis of frequency data and attestation of different forms, we argue that whereas *-ation* is a suffix in German, variants such as *-ition* and *-ion* are only parts of borrowed words. This is visible in the comparison with nouns in *-ung*. We propose a model of word formation for *-ion* and its variants so that, whereas for *definieren* and *Definition*, speakers only see a relation between borrowed words, for *organisieren* and *Organisation* there is an actual word formation rule. The analysis based on allomorphs is not supported by the German data.

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## **Directionality in affixation: testing the applicability of Marchand's (1964) semantic criteria**

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This paper presents a study of directionality in word-class changing affixation. It addresses the various semantic criteria proposed in Marchand (1963, 1964) for directionality in conversion as applied to a sample of affixed words in English. The aims are: i) to see whether the criteria prove applicable in overt affixation, where directionality does not seem to pose a problem (because the affix typically signals the directionality of the process), or whether the criteria fail to apply even for these cases, and ii) to test how measurable the criteria are at the level of senses or lexemes. The data sample includes 30 underived bases, classified as simple in 40 European languages by participants in an international research project with a focus on crosslinguistic investigation into derivational networks (Projekt Monika, cf. Körtvélyessy et al. 2020, and specifically Popova 2020, dealing with the study of derivational paradigms in English). For each base, the derivational paradigms by word-class changing affixation were extracted, resulting in a total of 317 derived lexemes, to which Marchand's criteria were applied. Specifically, the criteria of semantic dependence, semantic pattern, restrictions of usage, and semantic range, based on information from the Oxford English Dictionary, were studied at the level of sense (following Plank 2010). Additionally, register and frequency of occurrence were considered for the lexemes, based on data from the British National Corpus. The results show that some criteria based on the semantics of the lexemes indicate a base>derivative direction of derivation for most cases in our paradigms, while other criteria prove useful only for very specific cases. It is also suggested that criteria which rely on corpus data may serve as a useful diagnostic after a more fine-grained analysis by senses is carried out for the lexemes under investigation.

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## **Compounds in Czech Sign Language: preliminary description and typology**

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Compounding is among the core processes in sign language (SL) word-formation (Quer et al. 2017, Sandler and Lillo-Martin 2006). While compound is a relatively straightforward notion in spoken languages, it is more complicated in SLs due to an ongoing discussion about definitions of morphemes, stems and affixes (Zwitslerlood 2012), as well as the modality-specific possibility of simultaneous articulation by two hands. SL compounds are understood as morphologically complex, consisting of two (or more) independent lexemes that may introduce a new meaning (Quer et al. 2017). The distinction from set phrases is the phonological reduction/assimilation: shortening or loss of stress, deletion of the movement repetitions, assimilation of movement or place (Zeshan 2004). Among several typological classifications proposed (Klima and Bellugi 1979, Brennan 1990, Vercellotti and Mortensen 2012), the most thorough is Santoro (2018) on French and Italian SL. Santoro categorizes SL compounds wrt: (i) syntax: subordinate (complement and attributive) vs coordinate (coordinated and hypernym); (ii) semantics: endocentric vs exocentric; (iii) prosody: sequential vs simultaneous; (iv) lexicon: native (core signs, classifiers, size and shape specifiers) vs non-native (fingerspelled or name signs, loans) vs mixed. The current work aims to apply Santoro's typology to (deeply understudied) Czech Sign Language (ČZJ). Only Mladová (2009) comments on ČZJ compounds, but her typology is insufficient and needs to be elaborated further. We will utilize the online sign language dictionary Dictio, the largest database of ČZJ signs to date, and categorize all the compounds (and set phrases for their formal closeness) into their respective types. Thus, the contribution of this work is threefold: (i) empirical: an extensive systematic typology of ČZJ compounds; (ii) theoretical: an attempt to answer questions raised by Santoro about the cross-linguistic nature of the combinatorial gaps in compound production; (iii) applied: classification and possible correction of compounds and set phrases in Dictio.

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## **Word-formation in Ngarla (Ngayarta, Pama-Nyungan): Reduplication and further derivation**

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Words in any one Australian Aboriginal language should not be studied in isolation, the reason being the strong word taboo which bans the use of a dead person's name, and of words similar to the name, for a period of roughly 20 years after the death has occurred. This taboo has caused a constant flux of words. Does this mean that we cannot say anything about word formation in Australian languages? No, but it does mean that the vocabularies of the languages of groups that were in close contact ought to be studied together.

In the northernmost part of the Pilbara region of Western Australia, the patrilocal groups that spoke the three Pama-Nyungan languages Ngarla, Nyamal and Nyangumarta not only exchanged brides with each other, but also vocabulary. Ngarla and Nyamal are closely related languages, and the frequent use of the nominal suffix *-karra* to create new words in both languages means that we cannot say in which language many such words originated.

However, in Australian languages, reduplication is used for many different functions. The three languages mentioned above mostly use full reduplication, and for example many animal names, such as names for birds and insects, are reduplicated. A comparison of words in all three languages shows that Ngarla has a productive derivation, by which words with adjectival and adverbial meanings are created through the reduplication of (non-reduplicated) nominal roots. But what does one do if a word is already reduplicated, and one wants to derive another nominal from that? In Ngarla, there is a solution. One simply adds the nominalizer *-ra*. This nominalizer also derives new nominals from verbs and phrases, and will be introduced in the presentation alongside the reduplication strategy.



## **The type frequency of nominalizing circumfixes – A diachronic approach**

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It was recently argued that, while circumfixes express a wide variety of meanings crosslinguistically, they show a particular affinity for the domains of negation and nominalization (cf. Zingler 2022). Yet, while Zingler (2022) offers a thorough explanation of why there might be a strong link between negation and circumfixation, he does not provide a comparable account for nominalization and circumfixation. The present contribution aims to shed light on the latter relationship by outlining a diachronic scenario. It is agreed upon that circumfixes arise from the reanalysis of previously independent prefixes and suffixes as a single affix (e.g., Harris 2010). Based on this approach, the question as to why there are comparatively many nominalizing circumfixes might reduce to the question of why there are more nominalizing prefixes than predicted by the general rarity of nominal prefixation (Cutler et al. 1985: 730; Seifart et al. 2018: 5723). However, two facts are crucial here. First, a prefix that is eventually absorbed into a nominalizing circumfix might originally have expressed a function that is different from nominalization. Second, the data in Zingler (2022) suggest that nominalizing circumfixes usually appear in word forms that have verbal roots. Hence, it stands to reason that the prefixal parts of nominalizing circumfixes began as verbal prefixes, which are of course less typologically unusual. This development is particularly likely in light of grammaticalization data. Specifically, Kuteva et al. (2019: 334, 433-434) show that nominalizers often emerge from participial constructions, which suggests that the prefixal parts of nominalizing circumfixes were originally participial markers on verbs. Overall, this account aligns with the view that participles are a category halfway between nouns and verbs (e.g., Hopper & Thompson 1984: 704). As such, this diachronic approach can naturally explain an otherwise puzzling synchronic pattern.

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## **Workshop: Conversion**

## Theoretical and empirical descriptions of conversion/zero-affixation

Cristina Fernández-Alcaina, Salvador Valera

After a good two decades when only a stronghold of very few morphologists defended or even considered the possibility of derivational zeroes (cf. Don 2005), zero-affixation has recently taken the stage of workshops at international conferences again, both past (Iordăchioaia & Melloni, SLE 2020) and to come (Vasile, forthcoming). The discussion aroused by these and other events as well as by recent publications on the issue (e.g. Dahl & Fábregas 2018) has taken the form of revisions, both theory-oriented, e.g. in Gaeta (2013) or ten Hacken (2019), and data-driven, e.g. in Melloni & Iordăchioaia (2020) or Ševčíková (2021), and brings to the fore past controversies and renewed insights on the process and on its most adequate interpretation.

This workshop presents contributions on conversion/zero-derivation in the two regards, theoretical and empirical. Following Jan Don's plenary lecture *Going back to my roots: Can we get rid of zero morphemes?*, this workshop presents theoretical and empirical contributions by:

Livio Gaeta, University of Turin  
Pius ten Hacken, Leopold-Franzens-Universität Innsbruck  
Hana Hledíková, Charles University, Prague  
Rocío Jiménez-Romero, University of Granada  
Magda Ševčíková, Charles University, Prague  
Carmen Mîrzea Vasile, University of Bucharest

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## Between derivation and multifunctionality: in search of evidence for conversion

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Conversion is crucially related to or even presupposes the identification of word-classes, i.e. whether and to what extent a language displays well distinct word-classes (Gaeta 2014). Typically, isolating languages which display poor morphology offer less clues for the identification of word-classes. For instance, it is not trivial to identify an adjective in a language like Chinese, because it shares with verbs the position and the modification via negation. Should we claim that Chinese verbs convert into adjectives? Or vice versa? Or are they simply multifunctional? On the other hand, in fusional languages like for instance Latin, where a certain solidarity between word-class membership and morphology occurs, it is also not trivial to understand where to assign certain phenomena. Does adverb formation like *bonus* ‘good’ → *bonē* ‘well’ represent affixal word-formation or inflection resembling in this regard multifunctionality? On the other hand, the occurrence of morphology is not a reliable cue for identifying word-classes either, insofar as rigid vs. flexible languages have been identified where shifting from one word-class to the other is more or less possible independently of the morphological type (Hengeveld 1992).

One important piece of evidence to unravel this puzzle might come from those languages where massive processes of change due to language contact have taken place. In this regard, it has traditionally been suggested that the widespread diffusion of verbal conversion in English is due to massive reductive changes (Jespersen 1912: 165, Vogel 2000), resulting from the overwhelming processes of contact which have characterized its history (McWhorter 2002). In this light, an interesting scenario can be depicted for two Alemannic varieties spoken in linguistic islands in Italy which display clear differences in terms of the impact of the contact environment. In one variety where contact can be argued to have led to a creolization scenario verbal abstracts are nowadays only possible via conversion while in the other variety where no creolization can be assumed suffixation is highly productive. Thus, creolization might be argued to favor (morphological) simplification which in its turn enhances multifunctionality (and conversion) and the loss of affixal derivation.

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## Conversion and zero affixation in Parallel Architecture

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Conversion and zero affixation are two different approaches to a pair such as (1) in Dutch.

- (1)    *stuur*                      *sturen*  
      ‘steering wheel’        ‘steer’

The verb in (1b) has the same stem as the noun in (1a). If we treat the relationship between the two as conversion, we say that (1b) is derived from (1a) without any phonological change. If we treat it as zero affixation, we say that (1b) has an affix that has no phonological form. The meaning of the verb in (1b) can be described as an action involving the noun in (1a).

In Jackendoff’s (2002) Parallel Architecture (PA), phonological, syntactic and conceptual structures of an expression are representations that are linked but not derived from each other. In ten Hacken (2019), I argue for a separate word formation component, because naming new concepts is crucially different from building up a complex expression from lexical entries. I will assume this version of PA as a background here.

For the relation between the words in (1), we can assume a rule that changes the syntactic category without changing the phonology. The conceptual structure of the resulting word depends on both the rule and the naming process (onomasiological coercion). As this rule is similar to (other) affixation rules, we can call it zero affixation. However, as the perspective is rule-based rather than affix-based, we can also call it conversion. A somewhat different example is (2).

- (2)    *koop*                              *kopen*  
      ‘purchasen’                    ‘buy’

Phonologically and syntactically, the pair in (2) is parallel to the one in (1). However, the two words in (2) refer to the same process. The noun in (2b) is what I call a transposition. As transposition does not involve naming, the relation in (2) is not covered by a word formation rule.

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## Patterns of polysemy in V/N conversion in English and Czech

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The paper deals with the semantics of verb/noun conversion in English and Czech. This includes both English pairs, where the citation form of the base and the derivative are identical (1)-(2), and Czech, where the citations forms of the nouns and verbs differ in overt inflectional affixes (3)-(4):

(1)	<i>run.v</i>	<i>run.N</i>
(2)	<i>salt.N</i>	<i>salt.v</i>
(3)	<i>běhat/běžet</i>	<i>běh</i>
	'run.v'	'run.N'
(4)	<i>sůl</i>	<i>solit</i>
	'salt.N'	'salt.v'

A wide variety of semantic relations has been reported between verbs and nouns in conversion pairs (cf. *run.n–run.v*, *salt.n–salt.v*, *bottle.n–bottle.v*, *pilot.n–pilot.v*, *feel.n–feel.v*). Due to the polysemy of verbs and nouns, there is often more than one semantic relation between the verb and the noun in a single conversion pair (cf. *sand.n–sand.v*, where the noun can denote the GOAL, THEME or INSTRUMENT of sanding).

In this paper, we compare the frequency of different patterns of polysemy (i.e., multiple relations existing between the verb and the noun in one conversion pair in English and Czech) on a semantically annotated corpus sample of 300 V/N conversion pairs in English (extracted from the *British National Corpus*) and Czech (extracted from *SYN2015*). To that end, the paper classifies semantic relations based on:

- i) individual senses, so as to account for polysemy, and
- ii) a cognitive approach – specifically, the relation between the verb and the noun in a conversion pair is described as a relationship between an event schema and one of its elements.

The results are used for a contrastive study of the patterns of polysemy in V/N conversion in English and Czech.

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## Secondary word-classes: what counts?

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Unmarked changes in secondary word-classes, e.g. *walk*<sup>INTR</sup> vs. *walk*<sup>TR</sup>, raise the question whether this type of changes has fundamental implications on the classification of lexical items as one or two different words (following Bauer & Valera 2005: 21). They have been approached in terms of conversion (e.g. Leech 1974: 217) or metasemantic processes (e.g. Tournier 2007: 199 et passim). However, unmarked changes have also been regarded as pertaining to the realm of contextual use, as it is the case of *glass*<sup>UNCOUNT</sup> vs. *glass*<sup>COUNT</sup> or *British*<sup>NON-GRADABLE</sup> vs. *British*<sup>GRADABLE</sup> (e.g. Payne & Huddleston 2002: 334–337, Pullum & Huddleston 2002: 531). This divergence ultimately responds to the question whether secondary word-classes supply grammatical or semantic information of primary word-classes, or whether they involve particular uses of lexical items in specific linguistic contexts.

This paper examines primary word-class subclassifications throughout academic references with the purpose of identifying what counts as secondary word-classes and to what extent, in other words:

- i) how relevant such a subclassification is for the identification of lexical items in the literature,
- ii) which criteria have been used in the literature, and
- iii) which subclasses have been identified in the literature.

Point i) above addresses the description of secondary word-classes. Points ii) and iii) review divergent interpretations concerning the effect of unmarked changes on lexical items. The paper then relates the suitability of type coercion as a proposal with a potential for the description of these and related cases.

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## Conversion of action nouns to verbs: Insights from Czech

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Although actions are prototypical verbal concepts, there are verbs that are assumed to be derived or converted from nouns with action meanings, cf. *apology* > *to apologize* or *attack.n* > *to attack*. Conversion of action nouns to verbs, discussed as the PERFORMATIVE category by Plag (1999) or Bauer et al. (2013), has been attested since the earliest period documented by the *Oxford English Dictionary* and, remarkably, have become predominant among verbs converted from nouns in English during the 20th century (Gottfurcht 2008).

The present paper deals with Czech conversion pairs, where both the noun and the verb denote an action (e.g. *řez* ‘cut.n’ – *řezat* ‘to cut’, *test* ‘test.n’ – *testovat* ‘to test’). Elaborating on our previous research on word formation without derivational affixes in Czech, phonological and morphological features of nouns and verbs are employed to determine the direction of conversion in individual pairs. Special attention is paid to the category of grammatical aspect, namely to the question whether the aspectual counterpart of the given verb is formed by changing the thematic suffix, which is characteristic of deverbal conversion in Czech (cf. *řez-a-t* : *říz-nou-t* ‘to cut.IPFV:PFV’), or whether the suffixed counterpart is not available and prefixation is used instead, which is typical of denominal verbs (cf. *test-ova-t* : *o-test-ova-t* ‘to test.IPFV:PFV’). The analysis, based on a corpus sample of more than one thousand pairs of action nouns and related verbs, demonstrates that pairs with native roots mostly conform to the deverbal pattern, whereas the denominal direction applies to a smaller subset of the native data but clearly prevails in the data with foreign roots. The denominal direction ascribed to foreign pairs is consistent with the typological hypothesis that verbs are borrowed as nouns and only subsequently turned into verbs in the target language (Moravcsik 1978).

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## Delimitating conversion in Romanian

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Contemporary Romanian is characterized by at least a (comparatively) average productivity of conversion. Putting aside past participle adjectivization (1a) and adjective nominalization (1b), its distinctive features are the systematic use of supine nominalization (1c) and of adjective adverbialization (1d) (Coteanu 2007, Grossman 2016).

- (1)
- |   |   |                          |
|---|---|--------------------------|
| a. <i>mîncat</i> .PPLE (< (a) <i>mînce</i> .VB) | → | <i>mîncat</i> .ADJ       |
| ‘(to) eat’                                      |   | ‘eaten’                  |
| b. <i>frumos</i> .ADJ                           | → | <i>frumosul</i> .N./MASC |
| ‘the beauty’                                    |   | ‘the beautiful (boy)’    |
| c. <i>plecat</i> .SUP (< (a) <i>pleca</i> .VB)  | → | <i>plecat</i> .N.NEUT    |
| ‘(to) leave’                                    |   | ‘leaving’                |
| d. <i>corect</i> .ADJ                           | → | <i>corect</i> .ADV       |
| ‘correct’                                       |   | ‘correctly’              |

Other less “grammaticalized” (cf. Dindelegan 2003: 27) patterns of conversion than the ones aforementioned are of note too:

- (2)
- |                         |   |  |
|-------------------------|---|--|
| a. <i>izvor</i> .N.NEUT | → | (a) <i>izvor-î</i> .V                          |
| ‘spring’                |   | ‘(to) spring’                                  |
| b. <i>ușor</i> .ADJ     | → | (a) <i>ușor-a</i> .V                           |
| ‘light’                 |   | ‘(to) lighten’                                 |
| c. <i>foc</i> .N.NEUT   | → | ( <i>frumoasă</i> .ADJ.FEM.SG) <i>foc</i> .ADV |
| ‘fire’                  |   | ‘very (beautiful)’                             |

The paper examines conversion(like) regarding type of (sub)categorial shift, input-output formal identity, productivity, synchronic-diachronic issues, and types of “converters”. This includes processes labelled otherwise in the current Romanian literature, e.g. back-formation (3a) and overt suffixation (2a, b), and theoretically inextricable cases of conversion(-like), e.g. formally identical adjectival participles with modal meaning (3b) and the relation between *-esc* adjectives and *-ește* adverbs without semantic change (3c).

- (3)
- |                              |   |                          |
|------------------------------|---|--------------------------|
| a. (a) <i>rua</i> .V         | → | <i>ruă</i> .N.F          |
| ‘(to) ask, pray’             |   | ‘request’                |
| b. <i>vorbă nespusă ieri</i> | → | <i>frumusețe nespusă</i> |
| ‘unspoken word yesterday’    |   | ‘unspeakable beauty’     |
| c. <i>nebunesc</i> .ADJ      | → | <i>nebunește</i> .ADV    |
| ‘foolish’                    |   | ‘foolishly’              |

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## **Workshop: Onomatopoeia**

## **Subjectivity, perception and convention in iconicity: An initial semantic model**

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The perception of iconicity appears to be influenced by language experience and speaker perception (cf. Occhino et al. 2017; Sehyr & Emmorey 2019), as well as social and cultural conventions (cf. Dingemanse 2011). The approach outlined in this research is an initial attempt to semantically formalise these aspects of iconicity in lexical items. Originally designed to account for cases of faultless disagreement in ideophones, the approach can easily be extended to other cases of lexical iconicity, such as onomatopoeia and phonasthemes. Within this analysis, the iconic mapping of a lexical item to the depicted referent or event is partially dependent on the speaker's judgement of iconicity, which is modelled using a judge parameter per Lasersohn (2005) and perceptual tuples as in (1), adapted from the epistemic alternatives proposed by Stephenson (2007).

(1)  $PERC_{w,t,j}$  = the set of tuples  $\langle w,t,j \rangle$  such that  $w$  is compatible with  $j$ 's perception in  $w$  at  $t$ .

The use of an iconic item therefore implies that in all world, time, judge tuples compatible with the judge's perception, the item iconically maps to the referent or event. The felicitous use of an iconic item, however, appears to also be dependent on certain standards, which are likely dictated by language and culturally specific iconic conventions. For example, for the German ideophones *holterdiepolter* or *rumpeldipumpel*, a certain amount of noise and chaotic movement would need to be present in the reported event to felicitously use either ideophone, while the choice of exactly which of the ideophones to use would depend on the judge's perception of which ideophone best iconically maps to the event. This approach therefore offers a starting point from which to begin to formalise iconicity and in particular its dependence on both an individual's perceptions and various language and culturally specific conventions.

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## Looking into Formational, Functional, and Cognitive Complexities of Onomatopoeic Expressions Used in the Bengali Language

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We attempt to understand formational, functional, and cognitive complexities of onomatopoeic expressions used in modern Bengali texts. To address these challenges, we (a) locate exact position of onomatopoeic expressions in the Bengali language system, (b) understand the complexities involved in their phonological, morphological, syntactic, and semantic representations, (c) describe their linguistic and extralinguistic roles in impactful communication, (d) investigate how the use of these expressions becomes a part of regular unmarked linguistic exercise of Bengali speakers, and (e) explore how the use of these expressions help us encode a different types of information in texts thereby enhance cognitive processing skills of language users. It is estimated that there are more than 3000 onomatopoeic expressions in modern Bengali many of which are quite frequent in use in regular speech and writing (Chaudhuri 2010, Dakshi 2001). Due to their unique form, function and usage, these are considered as ‘distinct lexical stock’ marked with potentials for context-based change in parts-of-speech and meanings (Datta 1961). There are various reasons behind the use of these expressions in Bengali (Tagore 1909, Sugahara 2010). They represent senses of sounds created in the external world; refer to those sounds that are associated with items, objects, and instruments; and indicate various states or manners of human and non-human actions, perceptions, sensations, movement, and state (Ráčová 2014). Based on the contexts of use in texts, they become polysemous and ask for direct reference to co-texts for extracting their contextualized meanings. In essence, with their unique lexical identity, distinct phonological construct, complex morphological structure, and strong sound-symbolizing feature, these expressions sharply differ from words of other parts-of-speech used in Bengali. In this paper, we attempt to address all these issues and aspects with a desire to understand their identity and position on the lexical canvas of the language. Theoretical relevance of this study lies in its attempt in understanding linguistic and cognitive aspects in revising the existing descriptions and theories of onomatopoeic expressions used in the Bengali language.

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## **Sound symbolism in Korean onomatopoeia and ideophones**

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Onomatopoeia and ideophones in the Korean language (hyungnaemal – imitating words) are mainly treated as one group of words because they are sharing many features, especially sound symbolism and frequent occurrence of reduplication. Korean onomatopoeias and ideophones are normatively classified as a subgroup of adverbs due to the prevailing syntactical function, nevertheless, the group is very numerous and distinctive. The research on Korean onomatopoeias and ideophones dates from the beginning of the 20th century, however, the main research has been done in recent years and is still ongoing.

This paper will present the most distinctive features of Korean onomatopoeias and ideophones, especially sound symbolism. This demonstrates in two main ways. The sound symbolism of vowels, which are very numerous in Korean, creates wide space for plentiful types of variants of a certain onomatopoeia or ideophone carrying specific meaning according to the used vowel, which is especially well developed in the semantic group of onomatopoeia and ideophones depicting smile and laughter in Korean. The other main phenome is sound symbolism of consonants, especially on the scale of Korean plain, intensive and aspirated consonants that demonstrate in variants of Korean onomatopoeias but more often in ideophones. Those variants differ mainly in strength or intensity, the vowel variants, however, differ on a much wider scale of specific characteristics. As a vital part of the phonetic symbolism of Korean onomatopoeias and ideophones, reduplication and its main forms and functions will be also mentioned.

## Universality of onomatopoeic words decreases with de-iconization

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Onomatopoeic words are words with an iconic link between form and meaning, *iconicity* being a relationship of resemblance (Peirce, 1940). A diachronic study of English imitative lexicon (Flaksman, 2017) has revealed that onomatopoeic words change over time. Regular sound changes affect their form and semantic shifts affect their meaning. Thus, the original iconic form-meaning correlation becomes weaker until it disappears completely. This process I termed '*de-iconization*'. It is a "gradual loss of iconicity caused by simultaneous acting of regular sound changes and regular sense development of the word" (ibid.: 23).

I distinguish four stages of de-iconization (SDs). The criteria for the classification are: (1) system integration (phonological, morphological, and syntactic integration), (2) presence of regular sound changes, and (3) presence of the original (sound-related) meaning. On a synchronous level one finds:

- **\_SD-1** words (onomatopoeic interjection/ideophones, with no inflectional morphology, often violating language's phonotactic constraints): *zzz!* *ka-boom!*;
- **\_SD-2** words (onomatopoeic nouns, verbs, etc. which have not yet undergone any form or meaning changes): *plop*, *clap*;
- **\_SD-3a** words (affected by regular sound changes): *laugh* /la:f/ < OE *hlahhan*;
- **\_SD-3b** words (which have lost their original meaning): *cliché* < a French word imitating a hissing of molten metal;
- **\_SD-4** words (which have lost both their original form and meaning): *cloak* < medieval Latin *cloche* 'bell' (OED).

Universality of onomatopoeic words is based upon their iconicity. Therefore, it decreases with each de-iconization stage: first, system-integration imposes (arbitrary) rules of phonotactics, then sound changes eliminate the phonemic features involved in imitation, and, finally, the development of (abstract) meanings and the loss of the meaning related to sound completely breaks up the iconic link. Morphological integration (in synthetic and agglutinative languages) completes the task.

The study is conducted on the *material* of English (1500 words), Russian (550 words), and Icelandic (420 words). The research *methods* are the methods of etymological and phonosemantic (Voronin, 2006) analyses.

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## **An Acoustic Analysis of the Sample of English and Ukrainian Onomatopoeia. A pilot study**

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Generally speaking, onomatopoeia can be defined as a verbal imitation of the sound from the extralinguistic reality. Much has been written about the position of onomatopoeia in languages (see, for example, Sasamoto & Jackson 2016, Körtvélyessy 2020 or Gregová 2021), nevertheless the sources dealing with the phonetic nature of these sound-echoing words are very rare. Some notes about the phonetic substance of onomatopoeia can be found in Bredin (1996) and more detailed phonetic investigation of sound-imitating expressions in relationship to real sounds is offered by Tsur (2001). Tsur (2001) states that human acoustic coding of sounds is quite limited predominantly due to the fact that in languages, there is a finite number of speech sounds, but in nature, there is an infinite number of noises. On the basis of the acoustic analysis of an onomatopoeic expression /ku:ku:/ and of the real sound the bird *cuckoo* produces, Tsur comes to the conclusion that humans use those speech sounds for the imitation of the sounds from the extra-linguistic reality whose acoustic properties are the most similar to the natural sounds. In other words, in languages, those speech sounds are used as equivalents of natural sounds/noises whose phonetic properties (pitch and vowel formants play the most important role) the best fit the imitated natural sounds. To evaluate this assumption, a pilot acoustic study of the sample of onomatopoeia from English and Ukrainian was carried out. In this study, selected English and Ukrainian verbal imitations of natural sounds were pronounced by native speakers, recorded and acoustically processed in terms of the structure of their sound spectra to be compared with the sound spectra of natural sounds they imitate. Our contribution will present the details and the results of this acoustic evaluation of natural sounds and their verbal imitations in two languages.

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## Promiscuous onomatopoeias. The role of theoretical context in linguistic classifications

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Promiscuous realism (cf. Dupré 1993) is the view that similarities and differences between phenomena captured by scientific classification are real, but there is not single privileged way of classifying phenomena independent of broader theoretical context. For example, from the promiscuous realist point of view, the English word *cuckoo* may or may not be onomatopoeic, iconic, motivated, or non-arbitrary, depending on what a particular theory has to say about onomatopoeia, iconicity, motivation, and arbitrariness. For example, *Course in General Linguistics* (Saussure 1966 [1916]) lacks a clear explication of the term *arbitrariness* and the use of the term throughout the book appears somewhat inconsistent (cf. Kowalewski 2016). Thus, de Saussure would probably classify *cuckoo* as onomatopoeic, also partially arbitrary and completely unmotivated (cf. Saussure 1966 [1916], 69), which tends to conflict with how linguists classify *cuckoo* presently. The departures from the Saussurean classification are typically presented as relatively simple improvements of the faulty theory, but they, in fact, consist in replacing the entire theoretical context in which classifications are made. Since it is far from obvious whether different theoretical contexts are comparable in the first place (cf. Feyerabend 1967; Kuhn 1996 [1970]), it may be rather difficult to judge what counts as a genuine improvement over de Saussure's proposal. While promiscuous realism does not offer an easy solution to this conundrum, it suggests comparing theoretical contexts supporting alternative classifications, rather than comparing putative successes and failures of the classifications themselves.

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## Onomatopoeia – a unique species? 2<sup>nd</sup> edition

Lívía Körtvélyessy

Everyone dealing with onomatopoeias is familiar with the idea about their unique nature. Linguists try to illustrate various remarkable features of this special group of words in individual languages. In 2020 two papers (Körtvélyessy, Körtvélyessy and Štekauer) were published with the aim to prove the opposite. English and Slovak onomatopoeias were compared at the level of phonetics and morphology while proving that they behave in a normal way. At the same time, both papers pointed out the semiotic specificity of onomatopoeias.

Thus, are or are not onomatopoeias unique species? This problem is a driving question of our cross-linguistic research into onomatopoeias. We investigated the semiotic nature of onomatopoeias to specify those features that make them different from standard vocabulary. Generally, onomatopoeias are understood as words that oppose the idea of arbitrariness. This view, however, puts arbitrariness in contrast to motivation. In this paper it is claimed that this opposition should be replaced with that between arbitrariness and causality. This changes the understanding of the semiotic nature of onomatopoeia: they are both causal and conventionalized. As a result, they represent words with unique semiotic nature.

Obviously, this unique nature must be reflected at the language level. Our preliminary results show that it is possible to identify a list of features that are cross-linguistically typical of onomatopoeia. Languages differ in degree to which individual features are present but each feature has a potential to be realized within the specific group of onomatopoeias. By implication, what is needed is a comprehensive, multilevel, crosslinguistic analysis of onomatopoeias.

Our data indicate that the answer to the initial question is yes.

Körtvélyessy, Lívía. 2020. Onomatopoeia – a unique species? *Studia Linguistica* 74(2). 506-551.  
Körtvélyessy, Lívía & Pavol Štekauer. 2020. Onomatopoeia: on the crossroads of sound-symbolism and word-formation. In: Lívía Körtvélyessy & Pavol Štekauer (eds.), *Complex words: advances in morphology*, 335-361. Cambridge: Cambridge University Press.

## Onomatopoeia in Abui

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This paper describes onomatopoeia in Abui (Timor-Alor-Pantar family, Eastern Indonesia). Onomatopoeia is understood as a subclass of ideophones that imitates sounds (cf. Dingemanse 2011:33). We are aware that some take the imitation in the narrow sense while others include any words bearing a sign of sound imitation and address the issue using the Abui data (cf. Körtvélyessy 2020).

Cross-linguistically, onomatopoeic inventories show similar make-up due to the shared articulatory physiology, vocal configurations imitating non-speech sounds, and co-articulated consonants (Assaneo et al. 2011). The integration of onomatopoeia into the language is constrained by the following factors:

- (i) Phonology (phonotactics, inventory, etc.);
- (ii) Cultural semantics (degree of elaboration of various domains, e.g. pervasive use of onomatopoeia in bird names in Aguaruna and Huambisa, two Jivaroan languages of Peru (cf. Berlin and O'Neill 1981); or the 'auditory hallucinations' of Orang Sakai in Sumatra describing various spirits (cf. Porath 2008) illustrating the cross-modal association between auditory, visual and abstract categories);
- (iii) Morphosyntax (inclusion of onomatopoeic roots into the grammatical system – cf. Körtvélyessy 2020).

We examine the above constraining factors in Abui onomatopoeia, which forms a salient class with a native label. Abui onomatopoeia is characterised by a high frequency of reduplication (otherwise rare). The largest subset is associated with the human body and human actions followed by onomatopoeia describing animal sounds, nature, or elements. Sounds produced by inanimate entities are less likely to be imitated. Instead, the producer is cast as the subject of the verb *damoida* 'make sound'. In discourse, onomatopoeic roots are treated as direct speech quotes and marked with quotatives. A subset of onomatopoeic roots enters derivation and combines with various affixes to form fully inflected predicates.

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## Suffix *-t* in Lithuanian ideophones: semelfactivity and onomatopoeization

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Part of ideophones in Lithuanian are onomatopoeic in origin and have no morphemic structure, e.g. *am* ‘voice of a dog’, *bum* ‘sound of hitting, exploding’, *cak* ‘sound of a drop, a step or a clock’. However, there are also cases when potential suffixes can be segmented when one compares purely onomatopoeic ideophones *am*, *bum*, *cak* with *am-t*, *bum-t*, *cak-t* bearing identic or similar meanings (Ambrazas 1997: 442; Wälchli 2015: 509). The same suffix *-t* is found in deverbal ideophones marking semelfactive actions where it serves a derivational role, for example: *link-t* ‘(sudden) action of nodding, bending’ ← *link-ti/lenk-ti* ‘bend (itr./tr.)’, *kryp-t* ‘(sudden) action of tilting’ ← *kryp-ti/kreip-ti* ‘tilt (itr./tr.)’, *tūp-t* ‘(sudden) action of squatting’ ← *tūp-ti* ‘squat’. The function of suffix *-t* in onomatopoeic ideophones mentioned earlier (*am-t*, *bum-t*, *cak-t*), however, is not as easily characterized.

First of all, the suffix *-t* in onomatopoeic ideophones can be seen as a marker of semelfactivity, cf. Ambrazas 1997: 443. Historically it could have been transferred from the deverbal ideophones to the onomatopoeic ones when the speakers felt the need to provide both derived and non-derived ideophones of similar semantics with the same marker (for alternative view, see Wälchli 2015: 509, 511 where *-t* is seen as a phonological marker of ideophones). When suffixed, such ideophones are no longer purely onomatopoeic and cannot be qualified as primary; still, they cannot be qualified as secondary due to the absence of derivation, see definitions of primary/secondary onomatopoeia in <http://www.skase.sk/onomatoproject/files/glossary.docx>. A possible solution in this case would be to recognize onomatopoeia that are structurally complex (= containing non-onomatopoeic elements), but not derived.

Finally, it should be noted that due to the suffix brevity and plosive character of the consonant, it is possible that /t/ can be also perceived as onomatopoeic, cf. *bum* and *bumt*. In this case we are dealing with the process of onomatopoeization when originally meaning-bearing (or at least non-onomatopoeic) segment is reinterpreted as part of onomatopoeia.

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**The dog barks *wùúf* or *wúh*:**  
**A contrastive study of onomatopoeia in Babanki and Kambaata**  
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There are so far only few dedicated studies on onomatopoeia (words that imitate natural sounds) in individual African languages or from a comparative perspective. The relation between onomatopoeia and the well-studied class of ideophones often remains insufficiently clarified in the literature. Some authors may consider the classes to be congruent and the terms synonymous, others may consider onomatopoeia to be central examples or a salient subclass of ideophones (e.g. Akumbu 2016), and yet others may posit two discrete word classes of onomatopoeia and ideophones (e.g. Roulon-Doko 2008). In this paper, we (preliminarily) delink the study of onomatopoeia from that of ideophones and take the semantic field of animal cries as the starting point to carry out a contrastive investigation of sound-imitating lexemes in two unrelated languages from different geographical regions, namely Babanki (Grassfields Bantu) of North-West Cameroon and Kambaata (Cushitic) of Ethiopia. Once the lexicon of the chosen semantic field has been established, we determine the formal similarities and differences between onomatopoeia in these languages. For this, phonological, morphological and syntactic characteristics of onomatopoeias are considered.

We find that certain onomatopoeia in both languages are surprisingly similar, cf. Babanki *wùúf* and Kambaata *wúh* for the barking of a dog. Onomatopoeia in both languages contain sounds that do not qualify as phonemes (or only as marginally phonemic) in the prosaic lexicon; the reduplicative (or repetitive) realization of onomatopoeia is frequent; and onomatopoeia are syntactically integrated with quotative verbs or quotative markers. We argue that onomatopoeia are best considered a subclass of ideophones in Babanki, whereas they are found across different word classes in Kambaata – even though especially concentrated in the ideophone word class.

In the final part of our paper, we discuss methodological difficulties in determining objectively what counts as onomatopoetic in a language. [293 words]

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## Word-formation potential of ideophones and onomatopoeia in Mongolian and Sibe

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This paper discusses, on the example of Mongolian and Sibe, the similarities and differences in the grammatical behavior of two sound-symbolic phenomena: ideophones and onomatopoeia. Ideophones, (“an open lexical class of marked words that depict sensory imagery“, Dingemanse 2019: 16), do not form a classical lexical category (ie. defined in structural oppositions to other POS) cross-linguistically. This also holds for Mongolian (cf. Oberfalzerová 2010) and Sibe. In Mongolian, they occur in a variety of POS settings: the ideophonic root (which does not work on its own) forms different POS derivations: a verb (and its derivations), an adjective or a noun within a predicate slot (1).

- (1) (a) V *pamba-i-* (b) Adj *pamba-gar*  
be.plump-VBZ- be.plump-ADJ  
‘to appear soft-and-plump’ ‘soft-and-plump’  
(b) N *pamba-ga pamba-ga hii-*  
be.plump-NMZ be.plump-NMZ do-  
‘to move repeatedly of something plump’  
(c) V *pamba-ga-na-*  
be.plump-NMZ-VBZ  
‘to move repeatedly of something plump’

Onomatopoeia (words formed in imitation of the sound, e.g., Matthews 2014) seem to be more restricted in terms of word formation. They typically occur within a predicate slot as a reduplication of the root + verbs ‘to say’ / ‘to do’ (2a), although derivations are also potential (2b-c).

- (2) (a) root *tor tor hii-*  
rustle rustle do-  
‘to rustle’  
(b) V *tor-čigno-* (c) Adj *tor-čgor*  
rustle-VBZ- rustle-ADJ  
‘to rustle’ ‘rumbling’

In Sibe, based on our data, ideophones and onomatopoeia seem to work more similarly to each other than in Mongolian. Basic means of expression for both ideophones and onomatopoeia is reduplication of the root + verbs ‘to say’ / ‘to do’ (3).

- (3) (a) root *sak-sak o-*  
(b) root *kileng-kalang ze*  
entangled be- clink-clank say  
‘to be entangled’ ‘to be clanking’

We argue that in Mongolian grammar ideophones and onomatopoeia should be kept apart, whereas for Sibe, such treatment may not be justified.

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## **On the peculiarity of Sakha ideophones**

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Sakha/Yakut ideophones stand apart from other words described by this term in that they are a class of verbs. There is a large variation in the productivity of consonantal gradation among them and verbal morphosyntax puts certain restrictions on their behaviour but the iconic principle is applicable, they do have holophrastic uses and other features typical of ideophones, mimetics and onomatopoeia are also present. The presentation frames Sakha ideophones in relation to Japanese mimetics and Czech onomatopoeia. We exemplify the differences on the Sakha words of the

b-l-t pattern (e.g. "baltayar", approx. meaning roundness of face; more information on this pattern, e.g., Vlasáková & Vlasák & Židek in print).

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**Workshop: Towards a competition-based word-  
formation theory**

## Affixation or Conversion? Studying Denominal Verbs in Present-Day English

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Within the onomasiological approach (Štekauer, 2005, 2017), different word-formation processes used to express new concepts can create an overabundance of well-formed terms. However, to account for the dearth of exact lexical synonyms, the principle of “competitive exclusion” borrowed from evolutionary biology (Darwin, 1889, Gause, 1934) has been introduced in morphology (Aronoff, 2019): two species (here, linguistic forms) competing for the same resources (i.e., meaning and distribution) cannot coexist. Either the less efficient form becomes extinct or both forms coexist with an ecological niche differentiation (such as semantic specialisation, geographical uses, register differences, etc.). Before the resolution occurs, competing forms may coexist in temporary equilibrium.

While previous studies were often restricted to suffix rivalry (Kaunisto, 2009, Lindsay, 2012) or specific meanings (Fernández-Alcaina & Čermák, 2018), my research focuses on affixed and converted denominal verbs in Present-Day English. I postulate that when no morphological or phonological properties of the base prevent the formation of competing forms, the rivalry will resolve itself either with a distinction into niches or the disappearance of one form.

Using a dataset collected from the *Oxford English Dictionary* since 1950 and the Corpus of Contemporary American English for more recent data from a wide variety of genres and registers, I have analysed the morphological and phonological properties of the base nouns, the meanings of the outputs using my semantic labelling, and variations in genres, registers, and varieties of English, to reveal new tendencies in the resolution of competition in affixed and converted denominal verbs in PDE. Previous studies on converted and affixed verbs have highlighted morphological and phonological constraints and a semantic complementary distribution (Plag, 1999, Nagano, 2008); however, my analyses of more up-to-date and varied data show that some of these restrictions can be reviewed.

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## Diminutive formation in Modern Greek: variation and competition

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Modern Greek has a quite large number of diminutive morphological means (prefixes, prefixoids, suffixes, etc.) at its disposal: e.g. *spit-aki* ‘house-DIM’, *erotis-oula* ‘question-DIM’, *nostim-útsikos* ‘tasty-DIM’, *psilo-ádjos* ‘DIM-empty’, *psilo-víxo* ‘DIM-to cough’.

The basic characteristics of diminutive morphemes include, among others, the following (cf. Scalise 1984, Sifianou 1992, Stump 1993, Grandi 2005, Melissaropoulou & Ralli 2008): a) They change the semantics of the base by expressing some deviation from its normal or standard meaning, b) Their meaning frequently contains referential and pragmatic values, which co-occur (e.g. *spit-áki* ‘house-DIM’: where DIM = ‘small size’, ‘endearing attitude of the speaker toward the house’, ‘the speaker’s contempt’, ‘mitigation’, etc.), c) They form lexemes which belong to the same lexical category as their base, d) They allow recursive application, e) They can often function as free variants, hence it is possible to find examples where these morphemes are interchangeable: e.g. Modern Greek *kutso-vlépo* ‘DIM-to see’, *psilo-vlépo* ‘DIM-to see’, *miso-vlépo* ‘DIM-to see’.

Existing diminutive morphemes tend to be renewed in the course of time. The renovation is necessary because of the “bleaching-out” of the evaluative meaning in existing derivations, as a result of extensive use (see Mutz 2015: 152): e.g. the prefixization of full lexical items like *psilo-* ‘slim’ (see among others Giannoulopoulou 2003).

In this paper I will investigate variation in Modern Greek diminutive morphological means by focusing on their selectional restrictions (phonological, morphological, semantic, pragmatic, etc.) and their competition with other available diminutive morphemes: e.g. π.χ. *erotis-oula* ‘question-DIM’- *erotimat-aki* ‘question-DIM’ *psilo-xondros* ‘DIM-fat’ – *xondr-oulis* ‘fat-DIM’ (cf. among others Daltas 1985, Melissaropoulou & Ralli 2008, Efthymiou 2015, Vassilaki 2019). Given that the presence of all Greek diminutive morphemes (suffixes, prefixes, prefixoids) demands selectional restrictions, it will be shown that the variation we find in diminutive derivational morphemes can be explained with reference to their particular restrictions and their multifunctional character. Furthermore, it will be demonstrated that the domain of Modern Greek diminutive morphemes can be thought of as a complex ecosystem structured around a fairly complementary distribution (rather than competition) (for the terms ‘ecosystem’ and ‘competition’ see among others Aronoff 2019, Renner 2020). The empirical data on which the semantic and morphological analyses are extracted from modern lexicographic resources and corpora.

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## Competition of Lexicon vs. Pragmatics in Word Formation: Japanese Lexical V-V Compounds and Argument Synthesis

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This paper demonstrates that competition of lexical vs. pragmatic factors (speaker choices) generates complex outcomes in word-formation, Japanese lexical V-V Compounds in particular.

ARGUMENT SYNTHESIS (AS) in V1-V2 compounds exhibits subtle but semantically significant ARG-ST alternations, e.g. (1) *Kazoku-ga/ie-gane-sizumat-ta*. (Family-NOM/house-NOM sleep-become.quiet-PAST) ‘A family became quite due to (their) sleeping.’ (V1 ARG-ST<NP<sub>i</sub>>, V2 ARG-ST<NP<sub>i</sub>>) or ‘A house became quite due to (someone’s) sleeping.’ (V1<NP>, V2<NP<sub>j</sub>>). With *Kazoku* (sleepers) being the subject referent, the arguments of intransitive V1 and V2 are matched and inherited into ARG-ST of the compound (V1-V2 ARG-ST<NP<sub>i</sub>>), while with *ie* (a non-sleeper) as the subject, the compound’s ARG-ST has to exclude V1’s argument with no explicit sleeper mentioned (V1-V2 ARG-ST<NP<sub>j</sub>>). Thus, a reference choice affects AS and proper semantic interpretation.

Accounting for (1): Dowty’s (1991) THEMATIC PROTO-ROLES are employed with ‘proto-agent’ (PA entailments: volition, sentience, causer, movement) and ‘proto-patient’ (PP entailments: undergoing-change-of-state, incremental-theme, affectee, being-stationary-relative-to-mover). AS is head-driven, i.e. V2-dominant. Arguments are matched based on shared PROTO ROLE entailments. First (default straight lexical compounding), with no special speaker referent, V2’s change-of-state (PP) does not match V1’s sentience (PA), leading to dismissal of non-head V1’s subject argument. Second (non-default speaker-driven compounding), when the family is the speaker’s referent, sentience can be pragmatically invoked for V2 (a family can be aware of quieting, i.e. sentience is *compatible* with but not entailed for V2), enabling a match between the subjects of V1 and V2.

In addition, case-marking alternations like *mati-detofu-ouri-aruk* (town-in tofu-ACC sell-walk) vs. *mati-o tofu-dake uri-aruk* (town-ACC tofu-ONLY sell-walk), and unusual mirror-image AS seen in *yuziri-uke* ‘yield-receive’ (V1 <NP<sub>k</sub>, NP<sub>j</sub>, NP<sub>i</sub>-ni>, V2 <NP<sub>i</sub>, NP<sub>j</sub>, NP<sub>k</sub>-kara>) are also accounted for based on the speaker’s argument choice and perspective adjustment, respectively. Lexical vs. pragmatic factors, then, are in competition to influence the outcomes of word-formation.

## **A diachronic perspective on competition in Italian denominal verb formation**

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Italian denominal verbs provide a testing ground for the study of the rivalry between three different word-formation processes: conversion, suffixation, parasynthesis. From a diachronic point of view, the competition between processes seems to be moving towards a resolution, as in the current stage of the language the number of verbs derived from the same noun is smaller than in earlier stages of the language (a tendency that Italian shares with the other Romance languages, cf. Malkiel 1941). However, the rivalry between processes has not led to one prevailing over the others: in the current synchronic stage all three processes are in fact productive and can derive verbs from the same noun.

The aims of our work are: a) to reconstruct the dynamics and proportions of the use of the different processes in a wide-ranging diachronic perspective; b) to identify the reasons underlying the preference for one process over the others; c) to account for differences in productivity of the three processes over time, with reference to the morphological and semantic features of the base noun.

Our research is based on a corpus (collected from the GDLI historical dictionary) consisting of about 1000 Italian verbs derived from the most frequent nouns (about 900) listed in the Basic Vocabulary of the Italian language (De Mauro 1980). The analysis of the data shows that about 60% of the nouns are a base for verbal derivation. Of the nouns from which verbs are derived, about 50% derive one verb, 30% two verbs, 15% three, 5% four or more.

Conversion and parasynthesis derive each about 40% of the verbs in the corpus, suffixation the remaining 20%. The diachronic trend shows an overall increase in suffixation, though not to the extent that it prevails over the other processes, not even in the 20<sup>th</sup> century.

Our work (inspired by Bauer 2006; Aronoff 2016; Renner 2020) is compatible with the constructionist framework adopted in a recent article on three Germanic languages by Van Goethem & Koutsoukos (2022), whose results can be fruitfully compared with ours.

At a macro level, our results allow for a long diachronic reconstruction of the rivalry between the three processes of verb formation.

At a micro level, the number of verbs derived from each noun, the period of coinage of each verb and their use in the current synchronic stage allow us to identify the conditions affecting each derivational process and their variation over different diachronic stages.

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## When [N + N] prevails over [N + A]: Relational Subordinate Constructions in French

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This research focuses on the fact that [Noun + Noun] constructions are sometimes more competitive than [Noun + Adjective] in French.

Compared to English binominals, French [N + N] constructions are more restrictive in terms of their constituent combinations. While the forms such as *?entraîneur foot* are hardly observed (cf. *entraîneur de foot* ‘football coach’), there are numerous productive combinations where one of the two constituents is lexically underspecified, such as [*consultant* + N]: *consultant foot* ‘football commentator’, *consultant santé* ‘health commentator’, etc. They are relational subordinate constructions, where the second element (N2 = non-head) has similar syntactic and semantic functions as relational adjectives.

There would be a competition when this N2 has its corresponding relational adjective. In Booij’s (2002) analysis of Dutch [A + N] phrases and [N + N] compounds, one of the two competing forms is often blocked by the other preexisting form. In French, generally it is [N + A] constructions that block the [N + N] (e.g. *compte bancaire* (A) ‘bank account’ vs. *\*compte banque* (N2)).

However, in some cases, the N2 option is preferred, despite the presence of its corresponding adjective. For instance, a “music gift card” is represented as *chèque musique* (N2) rather than *?chèque musical* (A); a “student discount” should be *réduction étudiant(s)* (N2), whereas the adjective *estudiantin* seems to be much less frequent in standard French.

We will investigate the following factors, analyzing the data from corpora and website texts, to explain this preference for the N2: 1) semantic properties; 2) availability of the adjectival form, and 3) influence of other productive binominal constructions.

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## Competing patterns of loanwords adaptation: Morphological and periphrastic formation in Palestinian Arabic

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This study examines variation in possession and dual formation of loanwords in Palestinian Arabic (PA).

- (1) tiftaḥi il-watsab tabaṣoh ... bitku:ni mraqbe watsab-oh  
'open his WhatsApp... and you follow his WhatsApp'  
(<https://www.facebook.com/admitNajah/posts/3056471841080120>)
- (2) a. aṣmelak layk-e:n  
'I will give you two likes'  
(<https://ask.fm/Elmado/answers/61212134252>)
- b. ma fi: ḥilla itnen layk:at  
'there are only two likes'  
(<https://www.youtube.com/watch?v=FQND7X6-JKw>)

One possession form of 'WhatsApp' is periphrastic, using the genitive exponent *tabaṣoh*, and the other is morphological, using the suffix *-oh* (1). Similarly, the dual form of 'like' is based on either the *-e:n* suffix (2a) or using *itnen* 'two' before the plural form (2b). Modern Standard Arabic relies almost exclusively on morphological formation, while many dialects show variation (Blanc 1970, Owens 2002, Sayahi 2015, Poplack et al. 2015, among others). Native words tend to take morphological patterns, while loanwords demonstrate variation. We show that the selection of either strategy can be predicated by morpho-phonological constraints. We discuss here three such constraints.

Number of syllables. Words that exceed two syllables tend to take periphrastic patterns (e.g. *ilinstagram btaṣtak* 'your Instagram'). PA words are typically monosyllabic/disyllabic, unless they consist of derivational affixes (*madrase* 'school'). Monosyllabic/disyllabic loanwords are partially perceived as native, and therefore are integrated more easily and take morphological patterns (*imeyl-ak* 'your email', *imeyl-e:n* 'two emails'). Words with more syllables are treated as foreign and the more syllables there are, the more likely they are to take the periphrastic pattern.

Vowel-ending words. Words ending with vowels other than *a* also tend to take the periphrastic patterns. Such words are relatively rare in PA, and attaching suffixes requires phonological alternations. For example, attaching the *-ak* suffix to *biano* 'piano' would render either vowel deletion or *h* insertion (*\*biano-k/\*bian-ak/\*biano-hak*) to avoid the *oa* sequence (*\*biano-ak*). This renders morphological complexity and speakers tend to select periphrastic patterns (*il-biano, btaṣtak*).

Non-native affixes. Loanwords with non-native suffixes like English *-er* (*uzer* 'user') take periphrastic patterns. PA speakers identify such words as typical loanwords, and they are less likely to be integrated into the morphological system.

When selecting possession/dual patterns, the morphological mechanism examines morphophonological properties of loanwords and selects either strategy. This suggests that loanwords are not treated as one group of non-integrated words with opaque structure. The study adds to previous studies that examine the competition between morphological and periphrastic formation, and offers criteria that play a role in selecting either pattern.

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## The competition between *-er* and zero-affixation for the expression of INSTRUMENT

Cristina Lara-Clares, University of Granada, Spain

Morphological competition has received increasing attention as of late, but its extent is still debated. It seems however that competition and its resolution may be governed by a principle of synonymy avoidance as it would not be economical for the system to keep more than one form to express exactly the same range of meanings (see, e.g., Bréal 1897: 311; Bauer et al. 2010; Lindsay 2012; Lindsay & Aronoff 2013).

This paper considers forms to be competitors and, thus, part of a cluster, if:

- i) they share the same base (*clipV*),
- ii) are derived with different affixes (*-er*, zero-affix),
- iii) take affixes that express the same semantic category(s) (INSTRUMENT),
- iv) operate in the same domain, and
- v) no constraints (e.g., phonological, morphological) apply.

After identification of c. 40 competing patterns from a sample from the *British National Corpus* (see Lara-Clares 2017), the pattern *er* vs. zero-affixation for the expression of the sense INSTRUMENT was selected for further analysis. The *Oxford English Dictionary*'s advanced search was used to identify as many clusters as possible of the chosen competing pattern. This allowed for selection of entries from the dictionary according to their language of origin (English), to the affix (*\*er*) and to the keywords used in their definition (here, *that which*, *thing which*, *device for*, and *used for*). This search yielded 1,367 hits, and it allowed the identification of 34 clusters of competition over time and 24 clusters in Present Day English (PDE).

The PDE clusters were further analysed by semantically classifying the concordances of the competitors in order to test whether or to what extent the forms are actually competing or not for the expression of the sense INSTRUMENT. The sample thus obtained was further analysed in later stages in order to explore the possibilities of resolution of this competing pattern.

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**The segmentation of the semantic space in affixal rivalry.**  
**The example of denominal / deadjectival verbs in Italian and French**  
Fabio Montermini, CNRS & Université de Toulouse Jean Jaurès, France

This talk has a double goal. Methodologically it aims at showing how low-frequency words in corpora may be taken as indicators of the creative use of derivational processes. On the other hand, it discusses how two closely related languages with partially different derivational systems organize their semantic space. In particular, it is focused on aspectual properties of verbs derived by suffixation in Italian and French. Both Italian and French possess two concurrent suffixes for this derivation (-izz(are)/-is(er) vs. -ific(are)/-ifi(er)) (Lignon 2013, Grossmann 2004). Italian, for its part, possesses a third suffix, -eggi(are), which displays a certain degree of productivity (~25% of the derivatives in my dataset, cf. Figure 1 below). This research, in particular, is based on the hapaxes containing one of the suffixes in question extracted from the Wac corpora for Italian and French (Baroni et al. 2009), which were manually cleaned and annotated. The distribution of the suffixes in the two languages is provided in Figure 1.

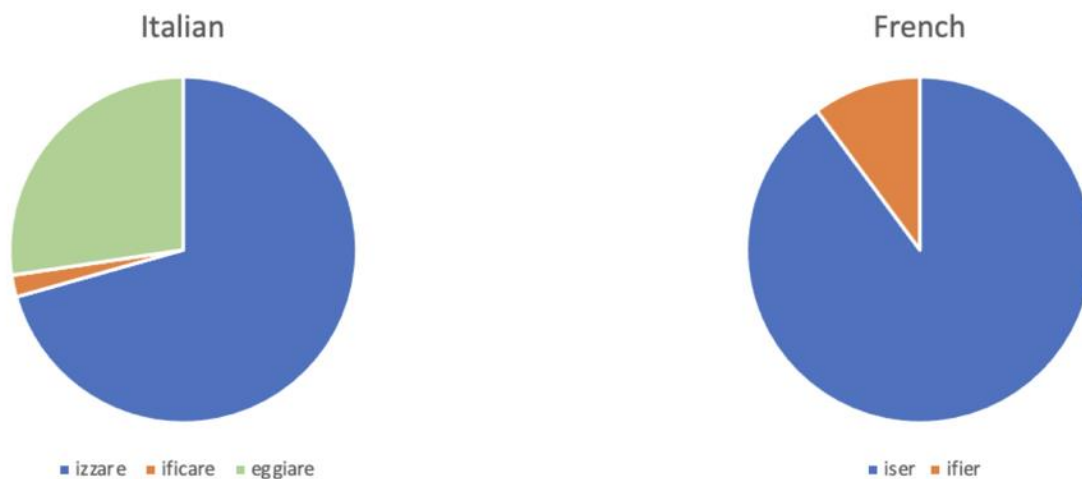


Figure 1: Distribution of verbal suffixes in Italian and French

The suffix *-eggi(are)* in Italian is often described as forming atelic verbs (e.g. *festeggiare* ‘party’), unlike the other two suffixes, who typically form telic transformative verbs. This is confirmed by my data, as shown in Figure 2.

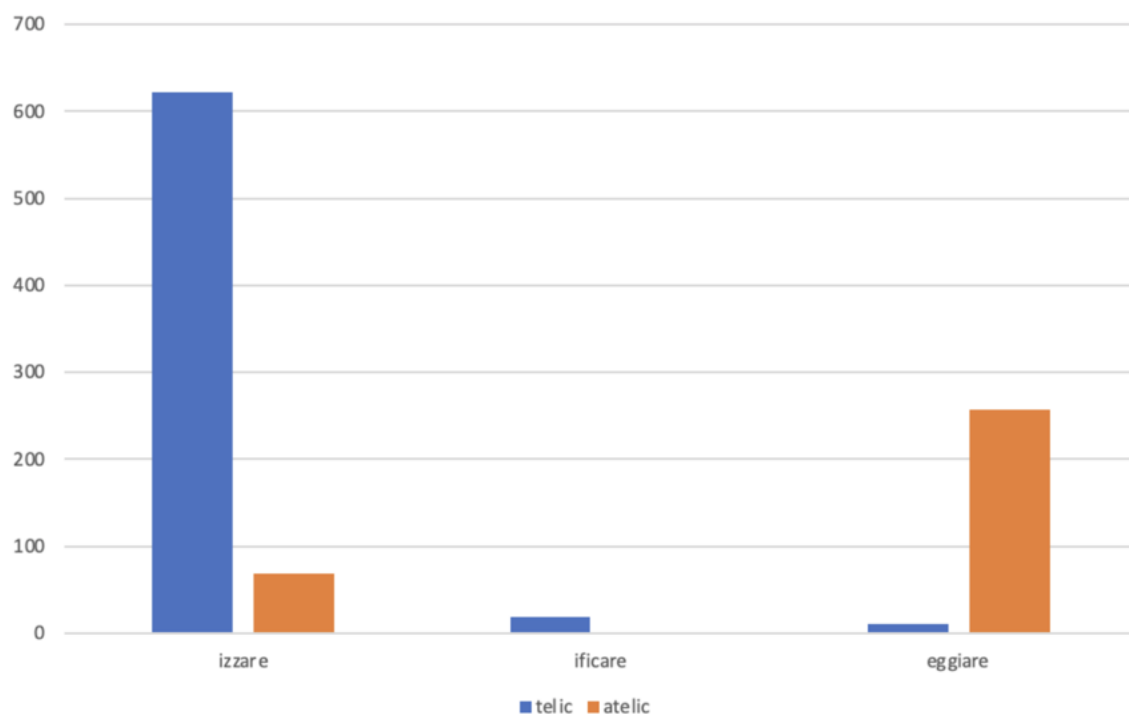


Figure 2: Distribution of aspectual properties of suffixed verbs in Italian

The absence of an exponent specifically devoted to the construction of atelic verbs in French might result either in a less rigid semantic instruction for the existing suffixes, or in the absence / rarity of derived atelic verbs. The data collected show that it is this second option which is active in French, since the proportion of telic verbs is even slightly higher for *-is(er)/-ifi(er)* than for the corresponding Italian suffixes (94.05% vs. 90.06%). These observations raise interesting questions concerning the self-organization of derivational systems concerning, among others, the lexicalization of morphological schemas and the semasiological vs. onomasiological basis of morphological competence.

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## **Blending vs. Compounding in Distributed Morphology**

Makiko Mukai, University of Kochi, Japan

Blends are lexemes combining a whole word and part of another word or parts of two words, and behave similar to compounding. Blending is preferred to compounding, when they are morpho-conceptually synonymous (Rainer 2020). For example, the ‘true blended words’ (Plag 1993), such as zonkey is preferred over their corresponding compounds, like zebra-donkey. In this presentation I will attempt to provide reasons for this, taking on the Distributed Morphology (Harley 2014).

As for the semantics of the words, one can find that the true blended words like zonkey have properties of both of the source words, zebra and donkey and they are a newly created word. From this, we propose that the structure consists of one root and one categorizer. On the other hand, pseudo-blended words, like motel, have subordinative interpretation and are derived from a combination of two existing roots, motor and hotel, and the clipped segments are not externalized in the Vocabulary Insertion. They thus are semantically more similar to two-member subordinative compounds (Plag 1993, Beliaeva 2014). The extra-linguistic aspect of word formation is that speakers who use blended words have them in their list of Encyclopedias and blocking occurs in the Encyclopedia (c.f. Harley 2014). At the end of this presentation, I will argue that our analyses can account for blending and compounding in other languages across the world.

‘True blending’

- (1) solunar > solar + lunar ‘relating to the combined influence or conjunction of the sun and moon’
- (2) meld > melt + weld ‘blend; combine’ or ‘a thing formed by melding; a combination’

‘Pseudo-blending’

- (3) breathalyzer > breath + analyzer ‘a device used by police for measuring the amount of alcohol in a driver’s breath’
- (4) sci-fi > science + fiction ‘fiction based on imagined future scientific or technological advances and major social or environmental changes’

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## The English suffix *-y* and the French suffix *-eux* from a competition-based perspective

Akiko Nagano, University of Shizuoka, Japan

Theoretically speaking, two suffixes may exhibit equal productivity in two languages if they carry an identical word-formation function (in the sense of Renner (2020)). For example, the distribution of suffix *x* from Language A could be identical with the distribution of suffix *y* from Language B if both *x* and *y* are trans-categorical nominalizers. However, such a theoretical possibility does not seem to well materialize itself in the real world. This paper considers why so and proposes that it is because each language constitutes a field of morphological competition (Aronoff 2021). According to Aronoff's theory of affixal rivalry, the competition for survival strongly influences (if not "determines") the competitors' productivity. Thus, the distribution of suffix *x* depends on other nominalizing suffixes found in the field of Language A. Suffix *y* also faces its own competitors in the field of Language B. Crucially, the linguistic ecosystems in which *x* and *y* are embedded are different, so that the two cases of rivalry should lead to different outcomes.

This paper attempts to provide a concrete case of the above scenario based on Nagano's (2021, in press) study of adjectivalizing suffixes. English adjectivalizing suffix *-y* (e.g., *milk* > *milky*) and French adjectivalizing suffix *-eux* (e.g., *lait* > *laiteux*) clearly show the interaction between word-formation process per se and its embodiment and development in different ecological fields. To be specific, this perspective can account for the following distributional facts: First, *-eux* can attach to both abstract and concrete nouns, but *-y* is limited to concrete nouns (barring exceptions). Second, while *-y* is very productive on eventive verb bases (e.g., *to run* > *runny*), *-eux* does not attach to this base type. English and French differ in this way because *-y* and *-eux* each developed their distributions (or ecological niches) under different conditions for survival.

(300 words)

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## Competition between Conversion and Compounding: A Competition-Theoretic Approach

Kazuya Nishimaki, Niigata Agro-Food University, Japan

Bauer (1983: 226) observes that conversion is extremely productive in English, where almost all categories are its possible inputs and outputs. For example, English allows both N-V (e.g. *to hammer* (< *a hammer*)) and V-N (e.g. *a call* (< *to call*)) conversion. In contrast, compounding is limited in English, given its limited types of root compound. The opposite is found in Japanese, where compounding is much more preferable than conversion. This is corroborated by the behavior of so-called *ren'yoo* forms of verbs (e.g. *nom-i* 'a drink' (< *nom-u* 'to drink')). These forms are assumed to be Japanese converted nouns because of their nominal usage without any derivational suffix. However, in fact, only a limited number of *ren'yoo* forms are possible nouns, as pointed out by Yumoto (2016). Interestingly, impossible *ren'yoo* forms are compounded to be well-formed:

- (1) a. \* (yoohuku)-erab-i 'clothes choosing'
- b. ara-i -\* (mono) 'lit. wash-thing = the wash'

Also, Japanese can productively create the types of compound that are unattested in English, including V-V (e.g. *tataki-nobasu* 'lit. to pound-spread = to pound something flat') and coordinated (e.g. *hu-hu* 'lit. husband-wife = husband and wife') compounds. Given these facts, we would like to propose that conversion and compounding compete in the same language. Furthermore, we claim that this competition follows from Competition Theory (Ackema and Neeleman (2004)); the conversion-compounding competition results from syntax-morphology competition. Its core assumption is that syntax and morphology compete for structural realization, which results in cross-linguistic variations; languages are divided into syntax-preferring ones, which prefer to syntactically realize a morphosyntactic structure, and morphology-preferring ones, which prefer morphological realization of the same structure. Nishimaki (2014, 2018, 2022) analyzes English and Japanese as syntax-preferring and morphology-preferring, respectively. Adopting this analysis, we demonstrate that conversion and compounding are parameterized options for syntactic and morphological realization, respectively.

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## Measuring affix rivalry as a gradient relationship

Justine Salvadori, Rossella Varvara, Richard Huyghe, University of Fribourg, Switzerland

Affixes are known to compete for morphosemantic functions in many languages. For instance, event-denoting nouns can be derived from verbs using a variety of suffixes in Italian, French, and English (see e.g. Gaeta, 2004; Martin, 2010; Bauer et al., 2013). What is less common knowledge, however, is that affix competition constitutes a gradient relationship, in particular because of affix polyfunctionality. The fact that “several distinct, related or unrelated, meanings and distinct functions coincide in a single form” (Prčić, 2019, p. 158) may condition degrees of rivalry. On the one hand, affixes may not always compete for the same number of functions. For example, based on Lieber’s (2016) account, English suffixes *-ment* and *-ation* compete for almost all of their functions, whereas *-ment* and *-ery* only do so for a small number of them. On the other hand, the realization frequency of shared functions may vary across competing suffixes. For example, it can be suspected that *-ment* competes strongly with *-ation* because they both form many event-denoting nouns, whereas *-ment* competes only marginally with *-ery* because it less frequently forms location-denoting nouns. An accurate evaluation of affix competition requires a measure that accommodates both dimensions: the number of shared functions between two affixes, and the realization frequency of these shared functions. In this talk, we discuss how to quantitatively assess affix rivalry by introducing various measures drawn from studies in ecology (Legendre & Legendre, 2012; Baselga, 2013): the Sørensen index, which does not consider frequencies, the Bray-Curtis coefficient, which does, and further adaptations of the Bray-Curtis coefficient, which account for more subtle differences in the frequency and distribution of functions. Using as a case study the semantic competition between deverbal suffixes in French, we show how these measures suit the quantification of affix rivalry and capture different aspects of the phenomenon.

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## ***Tigraffe, Giger or Tigergiraffe? Experimental Insights into the Blending – Compounding Competition***

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In Romanian, new words are internally created either by lexical derivation or by compounding, the latter increasing its productivity during the last two centuries (Stoichițoiu-Ichim 2013). Blending, i.e., coining new words by fusing together (at least) two source-words, has been largely ignored by Romanian linguists, acknowledging only the creativity of unintentional blending, i.e., of speech errors (an overview in Moroianu, Vasileanu 2019).

However, empirical observations have suggested that Romanian blending has become more productive in everyday language, maybe due to the pervasive English influence, indicating a possible change in Romanian word-formation patterns (Vasileanu, Niculescu-Gorpin 2021).

Building on previous work by Borgwaldt, Kulish and Bose (2012) and Borgwaldt and Benczes (2011), we designed and applied an elicitation experiment to test whether this is indeed the case.

111 subjects (BA or MA students from the University of Bucharest, mean age = 21.48), studying English and another language, were shown 50 images of hybrid objects, e.g., a half-orange, half-apple fruit. Subjects were asked to name the objects in Romanian (25 images) and in English (25 images) using a single word. The subjects either audio-recorded themselves (59 people) or wrote the answers (52 people).

Our (preliminary) data analysis shows that 62% of the words elicited in English were blends and 16% compounds, findings that are in line with Renner (2020) who states that in English blending is the preferred naming process for hybrid entities. More surprising were the Romanian results: 68% were blends, and only 11% compounds, thus challenging the mainstream Romanian word formation literature, but supporting our empirical observations and initial hypothesis. We plan to administer the experiment to other demographic groups, i.e., different age groups and English level, to see whether this tendency is specific to Romanian young subjects who are more exposed to English or is more widespread.

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