**The Role of Conversion in Derivational Networks**

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The model of Derivational Networks, as developed by Körtvélyessy et al. (2020), examines the word-formational potential of lexemes from a unique three-dimensional perspective. However, the original model deliberately excludes all non-affixal word-formation processes, such as conversion, transflexion, and morphological motivation. As noted by Popova (2020), this exclusion results in relatively shallow and sparsely populated networks, particularly in languages where conversion plays a highly productive role in word formation. This paper aims to provide a more comprehensive perspective on the role of conversion in derivational networks by contrasting the findings of Körtvélyessy et al. (2020) with those of networks where conversion is systematically incorporated. To achieve this, the study reconstructs the original English networks, as compiled by Popova (2020), and the Slovak networks, as compiled by Ivanová (2020), integrating conversion, transflexion and morphological motivation. Given that English relies heavily on conversion, while Slovak exhibits limited productivity in this regard, the comparison of these two languages offers valuable insights. The study seeks to determine whether the inclusion of non-affixal processes significantly alters the structure and density of derivational networks, thereby refining our understanding of word-formation patterns across languages.

**Keywords**: derivational networks, derivation, conversion, transflexion.

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**EXOCENTRIC COMPOUNDS IN MABIA LANGUAGES: A SURVEY**

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Bauer (2016) questioned the need for the category of compounds called exocentric compounds because, in his view, the reliance on figures of speech for their interpretation, which appears to be the main reason they are called exocentric, does not make the compounds special, given the pervasive use of figures of speech in the interpretation of other morphological constructions. This view accords well with cognitive approaches to the analysis of such compounds (Benczes, 2006, 2015). To make his case, Bauer (2008, 2010) published the first and only extant typology of exocentric compounds, positing bahuvrihi, synthetic, co-compounds, Metaphorical and Transpositional compounds. Possibly unintended, Bauer’s typology of exocentric compounds provides a framework for studying exocentric compounds both at the individual language level and across languages. Accordingly, the framework has been used to study exocentric compounds in Akan, and a couple of related Kwa languages, Ga and Ewe with proposed further distinctions in the class of bahuvrihi (possessor & location) and synthetic (action & participant) compounds (Appah, 2016, 2017, 2019). We use Bauer’s framework to study exocentric compounds in Mabia (Gur) languages, which are spoken mostly in Northern Ghana and neighbouring countries like Togo, Burkina Faso and Ivory Coast. We explore data from 6 Mabia language – Buli, Dagaare, Dagbani, Gurunɛ, Kusaal and Safaliba, to find out which of the types posited by Bauer and modified by Appah (2016, 2019) are found in the Mabia Languages. The identified exocentric compounds in the Mabia languages are listed in Tables 2-7, while Table 1 sums up the pattern that emerges from the survey. A question mark (?) before the tick (?✔), indicates that the status of the relevant compound in the language is iffy. We discuss the properties of the identified types in the six Mabia languages. Where a type was not found in a language, we show how the relevant meaning is expressed in the language concerned.

Table 1. Summary of the types of exocentric compound in Mabia

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Types** | **Bahuvrihi** | | **Metaphorical** | **Exocentric synthetic** | | | **Transpositional** |
| ***Language*** | *Possessor* | *Location* |  | *Action* | *Participant* | |  |
|  |  |  |  | *Agentive* | *Patient* |  |
| Buli | ✔ | ✔ | ✔ | - | - | - | - |
| Dagaare | ✔ | ✔ | ✔ | ✔ | - | - | - |
| Dagbani | ✔ | ✔ | ✔ | - | ?✔ | - | ✔ |
| Gurenɛ | ✔ | ✔ | ✔ | ?✔ | - | - | ?✔ |
| Kusaal | ✔ | ✔ | ✔ | - | - | - | ?✔ |
| Safaliba | ✔ | ✔ | ✔ | - |  | - | - |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Compound** | **Constituents** | **Element gloss** | **Meaning** | **Pattern** | **Language** |
| bóndí-máál | bóndìríì-máál | food-make | act of preparing food | N-N | Dagaare |
| líbì-dírè | lìbírì-dì | money-spend | act of spending money | N-N |  |
| guleŋmɛ’a | gulego-ŋmɛ-ra | drum-beat | act of drumming | N-V | Gurenɛ |
| yelemaala | yele-maaligɔ | matter-make good | act of mediation | N-V |  |

Table 2. Action exocentric synthetic compounds in Mabia

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Compound** | **Constituents** | **Element gloss** | **Meaning** | **Pattern** | **Language** |
| tokpɛra | toli-kpɛ-ra | mortar-carve-IMPF | one who carves mortar | N-V | Dagbani |
| jintɔra | jina-tɔ-ra | counsel-take-IMPF | one who takes counsel | N-V |  |

Table 3. Agent(ive) exocentric synthetic compounds in Mabia

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Compound** | **Constituents** | **Element gloss** | **Meaning** | **Pattern** | **Language** |
| tù-wɔ̄glà | tūrī-wɔ̄glà | ear-big | person with big ears | N-A | Buli |
| zú-fììrìŋ | zúk-fììrìŋ | head-bald | bald headed person | N-A |  |
| gbɛ-ŋmiilɛ | gbɛri-ŋmiilɛ | leg-thin | person with thin legs | N-A | Dagaare |
| po-kpolee | póɔ̀-kpolee | stomach-protruding | person with protruding stomach | N-A |  |
| zuɁtitali | zuɁ-titali | head-big | person with a big head | N-A | Dagbani |
| zuɁtʃilotʃilo | zuɁ-tʃilotʃilo | head-dangling | person with a dangling head | N-A |  |
| kãwoko | kã-woko | occiput-long | person with a long occiput | N-A | Gurenɛ |
| puyuleŋo | Puurɛ-yuleŋo | stomach-hanging | person with a pot belly | N-A |  |
| nɔyalʋŋ | Nɔɔr-yalʋŋ | mouth-wide | person with a wide mouth | N-A | Kusaal |
| nɔ’ɔnwɛlima | Nɔ’ɔr-nwɛlima | leg-twisted | person with twisted leg(k-legs) | N-A |  |
| barimŋaa | bari-mŋaa | leg-short | person with a short leg | N-A | Safaliba |
| nɔpɔŋsiga | nɔri-pɔŋsiga | Mouth-rotten | person with a smelly mouth | N-A |  |

Table 4. Possessor bahuvrihi compounds in Mabia

Table 5. Location bahuvrihi compounds in Mabia

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Compound** | **Constituents** | **Element gloss** | | **Meaning** | **Pattern** | **Language** |
| dɔ̀gníŋ | dɔ̀k-níŋ | room-front | | name of a town | N-N | Buli |
| tɛ̄ŋ-nàlʊ̀ŋ | tɛ̄ŋ-nàlʊ̀ŋ | land-good | | heaven | N-A |  |
| tanga-zu | tanga-zu | hill-top | | name of a place | N-N/A | Dagaare |
| piiri-zu | piiri-zu | rock-top | | name of a place | N-N/A |  |
| diyɛli | di-yɛli | don't-say | | name of a town | V-V | Dagbani |
| saɁnarigu | saŋa-naɁriŋga-ni | village-valley-Adv | | name of a town | N-Adv |  |
| dapotinduuŋɔ | dapoore-tinduuŋɔ | behind-tinduuŋɔ | | name of a town | A-N | Gurenɛ |
| tan1zuon | taŋa-zuo-n | rock-top-place | | name of a town | N-A |  |
| aba’akuga | a-ba’ar-kuga | god-stones | name of a town | | N-N | Kusaal |
| bibiluŋpo | bibiluŋ-po | childhood-inside | | childhood | N-PostP | Safaliba |
| ŋmamidari | Ŋmaami-dari | shame-day | | town | A-N |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Compound** | **Constituents** | **Element gloss** | **Meaning** | **Pattern** | **Language** |
| nɔ̀ɪ̀ yèŋ | nóáí-jèŋ | mouth-one | unity | N-Num | Buli |
| yók-gbiérí | yók-gbiérí | night-fun | sexual intercourse | N-N |  |
| sù-tólóng | súúrí-tólóng | anger-hot | quick-tempered | N-A | Dagaare |
| nɔ́-fáá | nóɔ́rè-fáá | mouth-bad | rudeness | N-A |  |
| piɛɁuɲɛmari | piɛɁu-ɲɛmari | sheep-nasal mucus | type of plant | N-N | Dagbani |
| saabua | saa-bua | rain-goat | Type of rope (plant) | N-N |  |
| taremanɛnɔ | tarema-nɛnɔ | poor person-meat | mushroom | N-N | Gurenɛ |
| suma’asum | suure-ma’ɛ-sum | heart-cold | peace | N-N |  |
| subʋgʋsʋm | suund-bʋgʋsʋm | heart-soft | peace | N-N | Kusaal |
| kuŋdaka | kuŋ-daka | death-box | coffin | N-N | Safaliba |
| nimbizia | nimbiri-zia | eye-red | seriousness | N-A |  |

Table 6. Metaphorical compounds in Mabia

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Compound** | **Constituents** | **Element gloss** | **Meaning** | **Pattern** | **Language** |
| gombaŋ | go-mbaŋ | travel-see | a lesson | V-V | Dagbani |
| zonsɔɁi | zo-n-sɔɁi | run-and-hide | an escape | V-V |  |
| iŋɛbisɛ | iŋɛ-bisɛ | do-see | test/examination | V-V | Gurenɛ |
| gurebisɛ | gurɛ-bisɛ | Hold/touch-see | test/exam | V-V |  |
| kpans-gɔs | kpans-gɔs | observe-see | test/examination | V-V | Kusaal |

Table 7. Transpositional exocentric compounds in Mabia

**Keywords**: Exocentric compounds, Mabia Languages, bahuvrihi, synthetic, prepositional

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**How Incel Talk Creeped into the Mainstream**

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In the 1990s, a woman created the lexical blend (a combination of two or more lexical items, one of which at least has been clipped) “incel” by combining “involuntary” and “celibate” to describe her situation and seeking community online (Taylor, 2018). However, over the years, the term got appropriated by men who blamed women for their loneliness. In their forums (and later communities on 4chan and Reddit), these men created a language of their own to describe every aspect of their experience. Yet their language did not stay hidden from the mainstream for too long, and after being frowned upon, it became a way to mock incels on the Internet ironically (Aleksic, 2024). Even though the trend might have lost its steam in recent years, this paper looks at a time when young people’s vocabulary got imbued with a gust of new words stemming from deep hatred towards anyone who was too different or too similar to these men that became Internet memes and jokes among the internauts, by the repeated use of these words and their reappropriation. This paper offers a qualitative and quantitative analysis of such words formed through blending (Coulson & Oakley, 2008; Pena-Cervel, 2022; Pena-Cervel, 2022) (by using the splinters “-cel” and “-maxxing”, as in *mentalcel*, *femcel*, *looksmaxxing*, and *softmaxxing*) and compounding (e.g., those containing the root “-pilled”, as in *blue-pilled*). To this end, online dictionaries, thesauruses, and online sources have been used to focus on the impact of these terms both on social media and on day-to-day vocabulary.

**Keywords***:* lexical blending, incel, irony, Internet talk

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**More on derivational adaptation: derivational affixes as a creative means of highlighting group identity**

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In this paper, drawing on a dataset of 2143 sentences compiled from published and collected data, we aim to contribute to the study of derivational adaptation, understood as borrowing processes involving derivational morphology (Pakerys 2016: 177), by examining key strategies for adapting Romani-origin roots in the ethnolinguistic repertoire[[1]](#footnote-1) of the Romungros (ERR), a non-standard variety of Hungarian enriched by Romani vocabulary and spoken by a group of Hungarian Roma.

Concerning verbs, we find the reinterpretation of the Romani indicative present tense third-person singular marker ‑*el* as an invariant, all-purpose adaptation marker, which aligns with the Hungarian derivational marker ‑*(V)l* while violating vowel harmony and attaching to unexpected stems (e.g. ERR *penel* ‘say’ < Romani *phen-* ‘say’, ERR *hájel/kajel* ‘eat’ < Romani *hāj-/xaj-* ‘eat PFV’, ERR *kulel* ‘shit V’ < Romani *khul* ‘shit N’; cf. Hungarian *csetel* ‘chat V’ < English *chat* V). Another strategy involves the Hungarian denominal suffix ‑*(V)z(ik)*, reinterpreted in ERR as a deverbal adaptation marker, and, in contrast to Hungarian, most frequently containing the vowel component [aː] (e.g. ERR *bes-ázik* < Romani *beš*- ‘sit’).

A subtype of affix secretion (cf. Szymanek 2005: 435–436) or affix extraction (cf. Elšík 2006) from the heritage language is the use of the Romani adaptation suffixes *‑o*, *‑ó*, *‑a*, and *‑i*, ultimately of Greek origin; in ERR, they are exclusively used with Romani-origin words (e.g. ERR *dajó* < Romani *daj* ‘mother’), while in the heritage language they are added to non-Romani nouns when borrowing them into Romani.

In our analysis, we would like to highlight that the innovative features of ERR, such as its flexibility in incorporating Romani roots, the use and the reinterpretation of Romani linguistic features and the violations of the grammatical rules of standard Hungarian are rooted in linguistic creativity and serve to mark group identity.

**Keywords**: derivational adaptation, linguistic creativity, Romani, non-standard Hungarian, derivational affixes, borrowing

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**Derivational Affixes in Maltese:**

**A Study of Word-Formation in a Morphologically Mixed Language**

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The coexistence of introflection and concatenation in Maltese provides valuable insights into how typologically mixed languages shape word-formation processes. Situated typologically between Semitic languages, particularly Arabic, and Romance languages such as Italian and Sicilian (Comrie, 2009; Lucas & Čéplö, 2020), Maltese has been in prolonged contact with diverse linguistic systems. This extensive contact has led to the fossilization of the Arabic morphological system (Mifsud, 1995), marking a shift from the non-concatenative, root-and-pattern morphology typical of Semitic languages to the concatenative morphology found in Romance languages and English. This transition, influenced by geographical isolation and growing European cultural integration, facilitated the incorporation of numerous derivational affixes from Romance languages and English.

Despite this evolution, a comprehensive inventory of Maltese derivational affixes remains absent. Existing compilations, such as those in Bezzina (2023) and Brincat & Mifsud (2016), provide partial lists, but no definitive catalogue has yet been compiled. Lucas and Čéplö (2020) also note this gap in the literature. The lack of a thorough list hinders our understanding of the morphological structure of Maltese and its historical evolution.

To address this gap, I propose to systematically compile a comprehensive list of Maltese derivational affixes, drawing on sources from Arabic, Italian, Sicilian, Spanish, English, and previous compilations, including the table in Bezzina (2023). The compilation will adhere to established criteria in the literature in terms of affix requirements (e.g., Dixon, 2014), while also drawing on insights in relation to borrowed affixes (e.g., Bauer, 2006). The affixes will be presented alphabetically (e.g., Fábregas, 2024; Twardzisz, 2023) or according to their function and semantics (e.g., Grossmann & Rainer, 2004). Additionally, I will analyse each affix using presently available resources such as the MLRS Corpus (v4.0) (Gatt & Čéplö, 2013) and the Aquilina Dictionary (1987–1991). This analysis will yield a deeper understanding of historical borrowing, allomorphy, and the constraints/restrictions governing affix usage in Maltese.

**Keywords**: derivational affixes, mixed language, borrowed morphology, hybrid formations

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**Beyond binary analysis: notion(s) of derivational paradigm and possibilities of its further development**

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The present paper is divided into two parts. The first, introductory part explores the concept or rather concepts of paradigm in word formation and its different types within the field of lexicography (occasionally lexicology) and morphology from the 19th century to the present. Since the paper is not about a term but about a concept, it also considers instances found in different traditions where terms of different provenance were used. The author employs the term of derivational paradigm in its broadest sense, i.e. one that refers to the entire sets of words that are connected by relations *in absentia* of a morphological and derivative nature or by a selected type of these relations (e.g., in terms of topology, sequential relations, as in what is traditionally called “derivational chains” in Slavistics or parallel and descendant, as in the case of sets of direct derivatives of a given base or all at once as in “derivational nests”) ‒ as mentioned, whole sets of words, which as such are units of the word-formation system, not excerpts from them, which constitutes a transgression of binary analysis (base : derivative) in word formation.

Part two invites listeners to a thought experiment. Most cases of paradigmatisation in derivational morphology are obviously driven by analogies to the inflection. What if the statement of these analogies is drawn to what the author perceives as its ultimate consequences, i.e. to the description of a derivational paradigm in the way the inflectional paradigm is described and in which its nexūs would be considered wordforms of a single *archlexeme*?

**Keywords**: derivational paradigm, derivational nest, derivational network, word family

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**Revisiting Word Formation in Romani: Typological and Theoretical Implications**

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This paper investigates word-formation in Romani from a diachronic, cross-theoretical and typological perspective, focusing on how the structure of Romani challenges or complements established models of word-formation. Romani, an Indo-European language, belonging to Indo-Aryan branch, spoken throughout Europe, resp. world-wide, exhibits a highly productive morphological system shaped by both its core Indo-Aryan origin and intense areal contact with a variety of European languages. This contact-induced dynamism—especially the integration of borrowed derivational patterns—makes Romani an important test case for word-formation theories.

Drawing on data from several dialects (primarily North Central Romani, but also from Vlax and several other varieties), the paper examines the formation of complex words via compounding, affixation, and conversion. It analyzes both native and borrowed affixes, hybrid formations, and the interaction between inflectional and derivational morphology. Particular attention is paid to the productivity and transparency of word-formation processes and their diachronic development under conditions of multilingualism.

The analysis is framed within multiple theoretical models, in order to highlight their explanatory potential and limitations when applied to Romani. Additionally, the paper explores how paradigmatic relations, morphological schemas, and analogical extensions operate in a language with limited standardization and significant dialectal variation.

Ultimately, the paper argues that Romani provides valuable empirical evidence for rethinking the boundaries between derivation and inflection, the role of grammaticalization, lexicalization, and the importance of language contact in shaping word-formation processes. It contributes to the broader discussion of how word-formation theories can account for typologically diverse and socially dynamic languages.

**Keywords**: Romani, Diachrony, Word-formation, Derivation, Language contact, Dialect variation

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**Attention to non-morphemic word formation**

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This presentation draws attention to a non-canonical form of word formation, i.e. word formation that does not use morphemes and/or words. This is done by analysing three phenomena: clipping, libfixing and blending. In all three cases, prosodic and syllabic factors are found to play a decisive role in word formation.

Traditionally, word formation is associated with words and morphemes. That there is also such a thing as non-morphemic word formation is seen as a fringe phenomenon. This presentation calls attention to three forms of word formation in which the non-morphemic aspect is prominent (Hamans 2021, 2023) and which are becoming increasingly common (Cannon 1986, 1989, Bauer 1994, 2001, Frandrych 2008). These three processes are clipping, libfixing and blending.

**Clipping**

Clipping is a non-concatenative word-formation process by which a word is truncated down to a predictable form which is describable with the help of the categories of prosodic structure (Alber & Arndt-Lappe 2023). For instance, the clipped results of *saxophone* and *Chevrolet* are *sax* and *Chev*, both monosyllabic forms.

So called embellished clipping (Bauer and Huddleston 2002) is a next step. In examples such as *lesbo* or *journo* from *lesbian* and *journalist* the first part *lesb* and *journ* is again not a morpheme but a monosyllable. To get the correct result, however, some form of concatenation is then required, adding a possible new suffix *-o*.

**Libfixing**

Libfixing is a process in which suffix-like elements are ‘liberated’ from a longer formation and that can productively be used to coin novel words (Zwicky 2010). For example, the libfix -*cation*, from *vacation*, can be used to form the novel words *staycation*, *gaycation*, etc.

What is striking is that neither part *va*- nor part -*cation* consists of morphemes. Then the new suffix-like part (libfix) -*cation* starts functioning in a concatenation process as if it were a suffix. The process resembles the one of embellished clippings in this respect, but what is far more interesting is that the novel words follow the prosodic structure of the model form *vacation*.

**Blending**

Lexical blending is a process that combines (parts of) two source words into one single form, losing some phonological material in the process (Moreton et al. 2017). See for example *boat* *+hotel > boatel*. The truncated and the non-truncated parts of the source words are not morphemes. Of course, what is at play here is that the remaining parts of the source words are linked together via concatenation.

What is striking is that the right-hand part of the blend is the head of the new word. In this respect, blends correspond to compounds. But what is even more characteristic is that blends follow the prosodic and syllabic structure of the right word, the basis for the head of the blend.

These three processes show that there should be room for non-morphemic aspects of word formation.

**Keywords**: Non-morphemic word formation, clipping, libfixing, blending

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**Distributional analysis of changes in the argument structure of Czech and German prefixed verbs**

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Prefixation is a frequent way of forming verbs in Germanic and Slavic languages (cf. Körtvélyessy 2016, Müller et al. 2016). Aside from an effect on the meaning of the base verb, the prefix may also change the verb’s argument structure, i.e., the syntactic elements required by the verb, and analogical changes were observed for Slavic and Germanic languages (cf. Biskup 2019, McIntyre 2003, Ramchand 2008, Svenonius 2004, Stiebels 1996, Uher 1987, Zeller 2001).

The availability of large syntactically annotated data makes it possible to quantify these changes in argument structure in a more robust way. We use a sample of Czech and German pairs of prefixed verbs and their base verbs in combination with large automatically parsed data (Ginter et al. 2017) to extract the syntactic dependents (e.g., object in accusative, prepositional phrase with locative etc.) that the verbs appear with and their frequency.

We compare the dependents that appear with the base vs. prefixed verbs using KL-divergence, a metric for comparing two probability distributions. We compute the divergence for prefixed verbs in general and for prefixed verbs containing a specific form of the prefix, which makes it possible to rank prefixes in terms of how much they change the argument structure overall. We also look into which dependents exhibit the largest differences. The results are compared across the two languages. One of the main results of the analysis is that the addition of an object, which is well described in the literature and was also revealed as most prominent by a previous metric based on averaging percentage differences in individual verb pairs, is not equally strong in all prefixes – in fact, some may even lead to the prefixed verbs having a smaller probability of appearing with an object than the base verbs.

**Keywords**: prefixation, argument structure, Czech, German

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**SONDE: A lexical database for exploring the semantics of verb-to-noun derivation in French**

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Interest in the semantics of derivational processes has increased in recent years (see, e.g., Rainer et al. 2014, Bauer et al. 2015, Lieber 2016, Kotowski and Plag 2023). Common topics of investigation include the polysemy of derivational processes, semantic differences between competing processes, the transfer of cross-categorial semantic properties between bases and derivatives, and the semantic organization of derivational paradigms. Providing reliable answers to research questions on the semantics of derivation requires detailed semantic information about large amounts of data. However, the data used to analyze the semantic aspects of derivation are often limited in the number of complex words or processes considered, or are too coarse to adequately address key research questions. In this presentation, we introduce the SONDE database, which was developed to explore the semantics of nouns derived from verbs in French. The database relies on the manual analysis of 5,272 deverbal nouns, annotated for their semantic type (accounting for the lexical ambiguity of both bases and derivatives), the lexical aspect of the verbs and nouns, and the semantic roles assigned to their arguments. We first provide details on the creation of the database, including sample selection, the annotation scheme, and the quality of the annotations. We then analyze the collected data, with a particular focus on the semantic organization of morphological families formed by verbs and deverbal nouns. A soft clustering analysis of these families reveals notable variations in the availability of nominal semantic types depending on the base verb. Distinct family structures can be identified based on the alignment of semantic types across families, with varying degrees of defectiveness. These structures are largely determined by the semantic properties of the base verbs. Deverbal families also include a considerable number of *n*-tuplets, whose potential indistinguishability may not be accidental, but rather an inherent consequence of morphological productivity.

**Keywords**: lexical resource, derivational semantics, nominalization, morphological family

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**A Construction Morphology account of denominal personal nouns suffixed with -ist- in contemporary Lithuanian**

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We analyze denominal personal nouns suffixed with *-ist-* in contemporary Lithuanian from the perspective of Construction Morphology (CxM). Denominal personal nouns have been chosen because they represent one of Lithuanian's major categories in derivational morphology, referring to people based on their beliefs, professions, occupations, expertise, or other characteristics. The data come from the electronic Dictionary of Internationalisms, Interleksis (DI). A total of 129 denominal personal nouns suffixed with -ist- were collected from this dictionary.

We focus on two related issues that a proper analysis has to face when dealing with borrowed denominal personal noun stems suffixed with -ist- (with inflectional endings -as, -ė)*.* First, affixation rules (ARs) do not always explain the systematic correlation between form and meaning. For instance, fašistas, -ė ‘fascist’ has no corresponding base stem faš- in Lithuanian (for similar Dutch data, cf. Booij & Audring 2018: 61). Instead, faš- is a bound stem that only gains meaning when combined with suffixes like -ist- or -izm-, as in faš-izm-as ‘fascism’. Typically, ARs presuppose that the base word is morphologically simpler than the derived word, which is morphologically more complex due to the addition of an affix. Secondly, ARs may not always properly account for the direction of the derivational relation between nouns, such as fašistas, -ė ‘fascist’ and fašizmas ‘fascism’.

We argue that CxM (Booij 2010) has advantages over ARs (as used in Urbutis 1978, Aronoff 1976, Marchand 1969). By accounting for affixation through morphological schemas, CxM resolves the issues of the systematic correlation between form and meaning relation between words with the same (cf. ex. 3) or higher degree of morphological complexity (cf. ex. 4). Most borrowed denominal personal nouns suffixed with -ist-as, -ė follow the schema in (1). Nouns such as propagand-ist-as, -ė ‘propagandist’ and epigram-ist-as, -ė ‘epigrammatist’ show a complex morphological structure that is systematically linked to their form and meaning with corresponding nouns, such as propagand-a ‘propaganda’ and epigram-a ‘epigram’:

1. [Ni-ist-as, -ė]Nj ↔ [Person with relation R to SEMi]SEMj

[[p*ropagand*]Ni*-ist-as, -ė*]Nj ↔ [PERSON who spreads PROPAGANDASEMi]SEMj

[[*epigram*]Ni*-ist-as, -ė*]Nj ↔ [PERSON who writes EPIGRAMSSEMi]SEMj

However, there are nouns whose interpretation depends on a paradigmatic relationship with a complex word of the same degree of complexity, e.g., *faš-izm-as* ‘fascism’, faš-ist-as, -ė ‘fascist’. Such nouns do not have a corresponding base word, but the meaning of one member of the pair can be understood in relation to the other, e.g., *faš-izm-as* ‘ideology of a fascist’, faš-ist-as, -ė ‘supporter of fascism’. According to Booij (2017: 8), we can establish a paradigmatic relationship between two constructional schemas:

1. [x-ism]Ni ↔ SEMi ≈ [x-ist] ≈ [x-ist]Nj↔ [PERSON with relation R to SEMi ]SEMj

It has been observed that, in particular, the meaning of the word in -*ist* can often be paraphrased as ‘person with the ability, belief, ideology, etc. denoted by the word in ‑*izm*’, e.g., utilitar-ist-as, -ė ‘a follower of utilitarianism’, *s*ad-ist-as, -ė ‘one inclined toward sadism’ (cf. Booij, 2017: 8):

1. [X-ist-as, -ė]Nj ↔ [PERSON with relation R to SEMi ]SEMj ≈

[X-izm-as]Nj ↔ SEMj

[sad*-ist-as, -ė* ]Nj **↔** [PERSON related to SADDISM]SEMj ≈

[*sad-izm-as*]Ni ↔ [SADDISM]SEMi

There are nouns such as beletr-ist-as, -ė ‘fiction writer’ where the interpretation depends on a paradigmatic relationship with a complex word of a higher degree of complexity, such as *beletr-ist-ik-a* ‘fiction’:

1. [X-ist-as, -ė]Nj ↔ [PERSON with relation R to SEMi ]SEMj ≈

[X-ist-ik-a]Nj ↔ SEMj

[*beletr-ist-as, -ė*]Nj ↔ [PERSON related to SEMi]SEMj

[*beletr-ist-ik-a*]Ni ↔ [WORK of FICTION]SEMi

Even though some denominal personal nouns have no corresponding simplex base words, the meaning of one member of a pair can be defined in terms of that of the other member having the same or even a higher degree of complexity. Moreover, by using paradigmatically related morphological schemas, there is no choice required of a specific direction of derivation: the noun in -*ist* can be derived from the word in -*ism* or vice versa. The CxM framework provides the means to systematically examine the relationship between form and meaning.

**Keywords**: construction morphology, denominal personal nouns, morphological schemas, contemporary Lithuanian

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**Direct Modifier Doublets in English:**

**Unveiling Differences between Synonymous Pairs**

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This study challenges the widely held assumption of complete synonymy between noun-form (NF) direct modifiers and their relational adjective (RA) counterparts (e.g., {*president* vs. *presidential*} *company*) (Levi 1978; Beard 1995). Building on Ishida and Naya’s (2022) observation of the broader semantic range of NF over RA, this research integrates Nagano’s (2013) work and the Lexical Semantic Framework (LSF) (Lieber 2004, et seq.) to investigate the underlying factors. For example, *president company* allows multiple interpretations (*R*-relation (Allen 1978)), whereas *presidential company* struggles to specifically mean ‘a company with (ex-)presidents as members’ (Ishida and Naya 2022: 23).

Nagano (2013) posits that direct modifiers are morphological variants of prepositional phrases (e.g., {*president* / *presidential*} *company*: *company of the president*). Crucially, NFs are derived through conversion, whereas RAs are derived from suffixation, resulting in ‘direct modifier doublets’ (cf. Nagano 2013: 133). Employing the LSF, we propose that the perceived synonymy between these doublets stems from the shared semantic skeleton in (1):

(1) [–dynamic, –scalar ([i ], α material ([i ]))]

This skeleton defines direct modifiers as stative (–dynamic), non-scalar, with concrete or abstract bases (α material, underspecified), raising the question: why are NFs more versatile than RAs?

Nagano (2013) identifies conversion as the default process for direct modifier formation, with suffixation being less general. We contend that this default derivational pattern correlates with a broader semantic range; NFs typically possess a wide range of meanings than RAs. This is mirrored in the N-to-V derivation, where the default conversion also tends to yield more diverse readings compared to suffixation (Plag 1999; Nagano 2008). Additionally, our analysis is reinforced by the diachronic shift from synthetic to analytic structures in English, and the distinct semantic roles of Germanic and Latinate suffixes (Giegerich 1999; Rainer 2013).

***Keywords***: denominal adjective, lexicalist morphology, default word-formation process, lexical strata

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**Complexity of Function Words in a Cross-lingual Perspective**

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Our study examines how function words are structured, both in terms of their internal morphological composition and their frequency distributions within part-of-speech categories. While primarily data-driven, the study also includes qualitative analyses.

In mainstream corpus linguistics, function words (also called synsemantic or grammatical words) are typically treated as atomic units belonging to closed classes, without internal structure (e.g. Bentz et al.). However, many function words are not truly opaque. Some originated from inflected forms of autosemantic words, derivations, compounds, or syntactic phrases. Some of these forms are now fully grammaticalized and fossilized, while others remain analyzable synchronically (Nagata et al.). We adopt a dynamic, diachronic perspective to explore these formation channels.

We focus on prepositions, subordinating conjunctions, and coordinating conjunctions in three pairs of related languages: Czech and Polish, Italian and Spanish, and English and German. We extracted all lemmas tagged as ADP, SCONJ, or CCONJ, with a relative frequency above 1 instance per million from InterCorp corpora (Rosen and Čermák) tagged using the Universal Dependencies scheme (Nivre et al.). The 18 resulting lemma lists were manually segmented into morphemes (e.g. por+que, up+side, po+międz+y) using etymological dictionaries and similar resources. Each complex (multi-morpheme) item was classified according to the type of the original construction as mentioned above.

We derive several types of empirical observations from our unique data collection. First, we explore the probability distribution of individual function words; as expected, the distributions have roughly Zipfian shapes (see Bentz et al.), but more specific regularities can be observed too. Second, we study individual subtypes of function words composed (diachronically) of more than one morpheme. Third, we explore the relationship between the internal complexity of function words in terms of the number of morphemes, and their synchronic corpus frequency. In all three cases, we study the observed distributions within and across the three part-of-speech classes and the six languages.

**Keywords:** function words, morphological change, diachronic morphology

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**A cognitive onomasiological model of word-formation**

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The aim of the presentation is to introduce a recent development in the onomasiological theory of word-formation, an onomasiological model grounded in the paradigm of Cognitive Linguistics.

The model adheres to the fundamental principles of the onomasiological approach to word-formation, namely the perspective of coining words from concept to form, where a concept is first mentally processed in the mind of the coiner, the result of which is paired with a morphological form.

The starting point for the development of the model is the basic framework of Dokulil’s (1962) onomasiological theory. The proposed model further elaborates on the process of conceptualization, which Dokulil conceived in terms of high-level conceptual categories only, by incorporating the role of metonymy and metaphor and replaces Dokulil’s notion of the word-formation type with the more elaborate, yet fully compatible, notion of the schema as proposed by Jackendoff and Audring (2020). Hence, the novelty of the proposed model lies particularly in integrating current cognitive approaches to conceptualization (Barcelona 2003; Langacker 1987/1991; Lakoff 1987; Radden & Kövecses 1999; Radden & Panther 2004) with a cognitive approach to morphology (Jackendoff & Audring 2020) into a coherent model of word-formation from concept to form.

As for the Relational Morphology theory (Jackendoff & Audring 2020), the proposed model thus addresses the question of what precedes the process of unification when instantiating the variables in schemas within their generative function.

The presentation will introduce individual aspects of the model, which will be illustrated with examples taken from English as well as other languages where appropriate.

**Keywords:** onomasiology, word-formation, cognitive linguistics, Relational Morphology

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**Theoretical stances shape empirical generalizations on inflection vs. derivation: quantitative evidence from Czech**

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The distinction between inflection and derivation remains unresolved in morphology (Anderson 1982; Dressler 1989; Booij 1996; Haspelmath 1996; Corbett 2010; Spencer 2013; Štekauer 2015). Recent computational approaches have addressed this by contrasting the properties of sets of word pairs standing in the same morphological relation.

We point out that the studies in question differ in how they sample morphological relations, reflecting different theoretical stances on morphology. Bonami & Paperno (2018) adopt a fully paradigmatic view in the spirit of Bonami & Strnadova (2019), defining contrasts by content rather than form (Štekauer 2015), with no priority given to a ‘reference form’. Copot et al. (2022) rely on morphosemantic contrasts but limit attention to contrasts between a ‘reference form’ (the citation form or the base form) and another form (another inflected form or a derivative). Rosa & Žabokrtský (2019) and Haley et al. (2024) use a mixed approach: content-based contrasts to a reference form for inflection (e.g., word pairs like *hrad~hrad-u* ‘castle.nom.sg~gen.sg}’ and *stroj~stroj-e* ‘machine.nom.sg~gen.sg’ are lumped together), individual processes for derivation (e.g. word pairs *přítel~přítel-kyně* ‘male~female friend’ and *učitel~učitel-ka* ‘male~female teacher’ are kept apart despite parallelism of content.).

In this study, we examine how these decisions influence conclusions about the inflection-derivation divide by applying Haley et al.'s methodology to Czech data with different ways of sampling morphological relations. Using extensive morphological resources of Czech (MorfFlexCZ, Hajič et al. 2020; DeriNet, Vidra et al. 2021; Word embeddings, Kyjánek & Bonami 2022), we analyze over 20 types of morphological categories, exemplifying canonical inflection (e.g., grammatical case contrasts), derivation (e.g., verbs vs. agent nouns), and intermediate cases (e.g., diminutive formation, aspectual pairs, masculine-feminine pairs of human nouns).

**Keywords**: inflection, derivation, boundary, morphological relations, Czech

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**Losing transitivity boundaries?**

**Verb formation based on loanwords in Palestinian Arabic**

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The study examines doublets in verb formation in Palestinian Arabic (PA) based on loanwords, as demonstrated by the online examples below. Both verbs are derived from *malyo:n* ‘million’ and denote ‘become a millionaire’. While *malyan* (1) is formed in the *CaCCaC* pattern, *tmalyan* (2) is formed in *tCaCCaC*.

(1) baʕref na:s **malyana-t**

‘I know people **became millionaires**’ <https://www.facebook.com/search/top/?q=%D9%85%D9%84%D9%8A%D9%86%D8%AA%20>

(2) **tmalyan-et** min il-Ɂazme

‘I **became a millionaire** from the crisis’ <https://twitter.com/DrBehbehaniAM/status/1393332301459857412>

Semitic morphology relies highly on non-concatenative formation, where verbs are formed in patterns. The patterns determine the phonological shape of verbs: vowels, prosodic structure and affixes (if any) (Berman 1978, Bolozky 1978, Schwarzwald 1981, McCarthy 1981, Ravid 1990, Bat-El 1994, Aronoff 1994, Benmamoun 2003). Many studies examined the criteria for pattern selection based on loanwords (see Holes 1995, Younes 2000, Watson 2002, Henkin 2009, Versteegh 2009, Ouhalla 2014, among others). Out of ten existing patterns, only *CaCCaC* and *tCaCCaC* are productive. *CaCCaC* hosts mostly transitive verbs, while *tCaCCaC* hosts intransitive verbs.

Examination of new data based on web searches, reveals that the distinction between the patterns has become less stable, where transitivity boundaries are not clear. This results in doublets of intransitive verbs in two patterns, e.g. *hastar-thastar* ‘‘become hysterical’ and *banšar -tbanšar* ‘become punctured’.

This phenomenon that is subject to variation. However, some generalizations emerge.

(i) While *tCaCCaC* hosts only intransitive verbs, *CaCCaC* can host both types. This is also motivated by avoiding phonological complexity. *tCaCCaC* consists of an initial consonant cluster, which is partially avoided in some dialects.

(ii) Unification is possible only if there is no contrast between transitive/ intransitive verbs of the same concept. For example, *makyaj* (*CaCCaC*) ‘put makeup on X’ and *tmakyaj* (*tCaCCaC*) ‘put makeup on oneself’ differ in transitivity, and this is morphologically marked.

**Keywords:** transitivity, Semitic morphology, Arabic, pattern, verb, loanwords

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**The equivalence between German compounds and Slovak collocations**

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In German, many nominal compounds are used for naming, e.g. *Apfelbaum* (‘apple tree’) and *Liebeslied* (‘love song’). In many other languages, such concepts are named by various types of collocations. Slovak has nominal compounds, e.g. *vodopád* (‘waterfall’) and *rýchlovlak* (‘fast train’), but in most cases German nominal compounds correspond to collocations. Examples of such correspondences are given in (1).

(1) a. Verhandlungstermin termín rokovania (‘hearing date’)

b. Lieblingslehrer obľúbený učiteľ (‘favourite teacher’)

c. Einzelpreis cena za kus (‘unit price’)

In (1a), a genitive noun renders the non-head of the compound, in (1b) a relational adjective does this, in (1c) a prepositional phrase is used. We analysed a set of German compounds with *Preis* (‘price’ or ‘award’), *Lehrer* (‘teacher’) and *Verhandlung* (‘negotiation’) as either heads or non-heads and a set of Slovak collocations with the equivalent nouns *cena*, *učiteľ* and *rokovanie*. As a basis for the German compounds, we used the list of analysed compounds described in Henrich & Hinrichs (2011), and for Slovak collocations, we used Ďurčo & Majchráková (2017). The samples were taken independently for each of the two languages. The total size of the sample we analysed is 633 compounds in German and 446 collocations in Slovak. By investigating the correspondence between the German compounds and the Slovak collocations, we aimed to find generalizations to predict in which cases a Slovak collocation should be rendered as a compound in German and how the choice between the three types of Slovak collocations for the German compounds can be determined.

**Keywords**: nominal compounds, collocations, equivalence, German, Slovak

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**Competition and attraction in verbal doublets in English**

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This paper addresses the competition of deadjectival verb pairs in English derived from the same base by both conversion and -*en* suffixation. Specifically, it provides a diachronic description of the doublets *black*/*blacken*, *white*/*whiten*, *red*/*redden* and *pink*/*pinken*, which are identified in the literature as examples of verbal synonymous doublets (Fischer, 2000; Kjellmer, 2001; Bauer et al., 2010).

Previous studies on the factors governing the competition of deadjectival verbalizing processes have obtained inconclusive results (Kjellmer, 2001; Bauer et al., 2010). However, recent research (De Smet et al., 2018; Dukic & Palmer, 2024) points out that this may be a consequence of the theoretical limitations imposed by the metaphor struggle for existence, which necessarily restricts the outcomes of such coexistence to two: disappearance or specialization. Such theoretical narrowness leaves unanswered questions concerning the possibility of forms gradually becoming similar over time (e.g., scented becomes more similar to both fragrant and perfumed, Pettersson-Traba, 2022), a phenomenon De Smet et al. (2018) refer to as attraction. Its role has been described for synonymous syntactic constructions (De Smet et al., 2018; Zehentner, 2019) and lexical units (Pettersson-Traba, 2022), but to the best of our knowledge, its relevance has not yet been discussed in studies on morphology.

This paper thus explores the semantic development of the abovementioned pairs from a diachronic perspective. To do so, the analysis relies on a sample of around 15,000 concordance lines extracted from historical (English Historical Book Collection, EHBC; Corpus of Historical American English, COHA) and contemporary corpora (British National Corpus, BNC; Corpus of Contemporary American English, COCA). The sample will be both manually and automatically tagged at a sense level in order to explore the relations between the synonymous verbs over time.

**Keywords**: attraction, competition, conversion, deadjectival verbs, semantic annotation, suffixation -*en*

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**Variable morpheme order: the case of Dënë Sulıné verbs**

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In this talk, we look at variation in morpheme order in a corpus of Dënë Sulıné (Dene/Athapaskan) as spoken in Clearwater River Dene Nation and La Loche in northern Saskatchewan (Canada), where Dënë Sulıné is still used as the main language of communication by most individuals older than 20.

Dene languages are renowned for their morphological complexity particularly in the verbal domain (see e.g. Rice 2000). The lexical entry of a Dene verb consists of a verb stem and at least one but often several discontinuous lexical prefixes; derivation using additional prefixes is common. Inflectional prefixes are interspersed between lexical/derivational ones. (1) shows an inflected form of one such discontinuous lexical entry: *há-O-u-në-ł-tën* ‘teach O’; the third person subject is formally unexpressed.

(1a) há-dá-**noh**-u-**në**-ł-tën (EZA, born 1973)

LEX-DIST-1/2DPL.O-LEX-LEX-VV-teach:IPFV

‘they taught us/you PL’

We observe that speakers born after 1980 use different morpheme orders than older speakers do. Many speakers born between 1980 and 2000 switch the relative order of the lexical *në*- prefix and the object marker (1b), while speakers born after 2000 often move the direct object prefix to the left edge of the word—the oblique object position (1c).

(1b) hádá**nënoh**ë́łtën (OTR, born 1984) ‘they taught us/you PL’

(1c) **noh**ádó**në**tën (UTL, born 2001) ‘they taught us/you PL’

Using a corpus of more than 70 hours of naturalistic speech from the *Talking Dene* project (Lovick et al. 2019-2024), a study of age-based variation involving 105 speakers born between 1934 and 2009, we show that the variation patterns illustrated in (1) are systematic and common in verbs with multimorphemic lexical entries. We discuss the role of analogy and reanalysis in the creation of such forms, and explore what this type of variation can tell us about the acquisition of highly complex morphological structures.

**Keywords**: Verbal morphology, variability, corpus study, Dene languages

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**Novel Compound Nouns in English and Japanese:**

**Grammatical but Awkward in Japanese**

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Ever since Snyder (1995), there has been extensive research on the cross-linguistic generalization that a language allows adjectival resultatives (ARs) iff it permits a fully “creative” process of bare-stem endocentric compounding (or noun-noun compounding (NNC)) (Wang et al. 2022). A prominent account advocates for The Compounding Parameter (TCP); a language allows Generalized Modification (GM) or not (Snyder 1995, i.a.). GM is the process proposed to derive both ARs and NNC. This accounts for the overwhelmingly strong correlation between ARs and NNC. However, among the languages argued to have a positive setting of TCP, the empirical picture is not uniform. In this study, we compare English and Japanese, both commonly assumed to allow creative NNC (Kageyama 1982, i.a.). We focus on an empirical fact that has received very little attention; while English NNC is unrestricted, we find Japanese speakers to be reluctant to create new compounds (so no problems with lexicalized compounds).

1. a. [A rabbit that loves to play the guitar]

[English:] *guitar rabbit* [Japanese:] (?)*gitā usagi* (guitar rabbit)

b. [A bicycle made of ice]

[English:] *ice bicycle*  [Japanese:] (?)*kōri jitensha* (ice bicycle)

We do not claim that NNC is not a creative and productive process in Japanese; Japanese speakers judge the compounds in (1) to be grammatical. What we observe is that they show a reluctance in uttering them themselves. This is not specific to the examples above; Japanese speakers avoid creating compounds, unless with a well-established compound forming noun, *kōjō* (factory) for instance. (*gitā kōjō* (guitar factory), *jitensha kōjō* (bicycle factory), etc.)

This is not surprising if we consider how among [+TCP] languages, GM must interact with other points of crosslinguistic variation (the NP/DP parameter (Bošković 2008, i.a.), the Nominal Mapping Parameter (Chierchia 1998, i.a.), etc.). In the presentation, we will focus on the major difference in the nominal domain between English and Japanese; only English has a definite article. We will discuss how this point of variation interacts with GM and gives rise to the observed difference in NNC.

**Keywords**: Nominal Compounding, Syntax, Semantics

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**Productivity of Lithuanian diminutives in relation to other denominal and deverbal categories of nouns**

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Lithuanian is among the languages where diminutives are claimed to be highly productive (see Stundžia 2016: 3095–3096; Dabašinskienė & Voeikova 2015: 204–206; etc.). In this study, we examine the productivity of the most salient Lithuanian diminutive suffixes using a 1.3 billion-token corpus (Dadurkevičius 2020a; Dadurkevičius 2020b) and propose that the degree of productivity of diminutives in Lithuanian and other languages can be assessed by comparing it to the productivity of other denominal and deverbal categories of derived nouns.

We studied the following suffixes: *-el-, -ėl-,* and *-(i)uk-*,all of which occur with both masculine and feminine inflectional paradigms, consider the following nom. sg. forms: *-el-is* (masc.), *-el-ė* (fem.), *-ėl-is* (masc.), *-ėl-ė* (fem.), *-(i)uk-as*, *-(i)uk-ė* (fem.). The suffixes *-el-* and *-ėl-* are in complementary distribution with respect to the length of the base and one may argue that they represent allomorphs of a single suffix (Ambrazas 1994: 90).

The productivity of diminutives and other derived nouns was evaluated based on their type and hapax counts in the aforementioned corpus, and preliminary results are presented in Table 1 and Table 2 below. The productivity measures of *-el-* and *-ėl-* may be summed due to their complementary distribution mentioned above.

We conclude that the diminutive suffixes in Lithuanian are not as productive as those of action nominals and quality nouns. However, they can be meaningfully compared to person denoting categories, such as personal and agent nouns. It should be noted, however, that personal and agent nouns refer to humans (agent noun suffixes used to derive instruments are excluded from the counts below), whereas diminutives are derived from nouns that may have either animate or inanimate referents.

|  |  |  |
| --- | --- | --- |
| Suffix | Types | Hapaxes |
| -*(i)uk-as* (masc.) | 3,708 | 968 |
| -*(i)uk-ė* (fem.) | 711 | 227 |
| *-ėl-is* (masc.) | 1,978 | 580 |
| *-ėl-ė* (fem.) | 1,064 | 264 |
| *-el-is* (masc.) | 753 | 78 |
| *-el-ė* (fem.) | 650 | 71 |

Table 1. Productivity of Lithuanian diminutive suffixes

|  |  |  |  |
| --- | --- | --- | --- |
| Category | Most productive suffix | Types | Hapaxes |
| Personal nouns | *-inink-as* (masc.) | 2,737 | 710 |
|  | *-inink-ė* (fem.) | 727 | 141 |
| Quality nouns | *-um-as* | 6,043 | 1,612 |
| Action nominals | *-im-as* | 15,274 | 2,855 |
| Agents | *-toj-as* (masc.) | 2,402 | 447 |
|  | *-toj-a* (fem.) | 1,901 | 69 |
| Instruments | *-tuv-as* | 488 | 87 |

Table 2. The most productive suffixes of some denominal and deverbal categories of nouns in Lithuanian

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**New words from stock – Secondary word-formation constructions**

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A word-formation construction (see Booij 2010; Jackendoff and Audring 2020) can be defined as a schema by which language users extend conventional form-meaning correspondences to new ones via analogy (see Bybee 2010: 57–75). In the presentation, word-formation processes are investigated for which speakers exploit only the formal aspects of morphological correspondences to create new ones (see Dutch *gaan* ‘go’ : *gang* ‘going’ :: *afgaan* ‘fail’ : x ‘failure’; x = *afgang*). Patterns from Dutch, English, French, Hungarian and Italian are presented in which the formal elaboration of a new word (e.g. *afgang*) is regulated by an already existing formal correspondence (*gaan* ↔ *gang*). In the case of these secondary word-formation constructions, the formal relations between simple(r) words extend to (more) complex ones. Secondary word-formation constructions are formally underspecified, they might involve various suffixes (cf. Hathout and Namer 2019), and even distinct word-formation types, such as conversion and back-formation (see Booij 2015; Iacobini 2014). Such variation is epiphenomenal, however, since the same analogical process underlies them (Palágyi 2024). The striking form-meaning mismatch in these words (cf. Booij 2015; Nagano 2007) can be described in a network: the new word (e.g. *afgang*) is linked to its base (e.g. *afgaan*) by a semantic connection, but its form is motivated by another (semantically irrelevant) word as well (e.g. *gang*). The lack of transparency is motivated by the fact that secondary word-formation constructions result in economical, “speaker-friendly” new words (cf. Štekauer 2005, 2016). Although the constructionist approach aims at describing form-function pairings, these constructions highlight that new words are not understood in isolation but rather as members of an associative network.

**Keyword***s*: construction, schema, analogy, conversion, back-formation

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**Multiverbal constructions in Arabic – amending the picture of Arabic word-formation**

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Colloquial varieties of Arabic possess a range of constructions in which two or more verbs are combined into one complex predicate, as in (1a-d).

1. Syrian Arabic
2. *ṭlǝʕ-ǝt rakǝḍ / ǝrkāḍ mǝn ǝl-bēt*

leave.pf-1sg run.msd / run.msd from def-house

1. *ṭlǝʕ-ǝt ʔǝ-rkuḍ mǝn ǝl-bēt*

leave.pf-1sg 1sg-run.ipf from def-house

1. *ṭlǝʕ-ǝt rākiḍ mǝn ǝl-bēt*

leave.pf-1sg run.ptcp.m.sg from def-house

1. *ṭlǝʕ-ǝt (w-)ʕam-ʔǝ-rkuḍ mǝn ǝl-bēt*

leave.pf-1sg and-prog-1sg-run.ipf from def-house

‘I left home running (hastily/to go for a run…).ʼ

While the different strategies are mostly approached from the perspective of the syntactic bond between the verbal forms involved (leading to the notions of serial verbs (Haspelmath 2016), or pseudocoordination (Ross 2022) and others), they in fact offer important insights into Arabic word-formation - they shed light on the actual morphosyntactic status of the forms, which are otherwise mostly considered outside multiverbal contexts. For example, the form *rakǝḍ* ‘run’, which is traditionally classified as a deverbative noun (*masdar*) has a verb-modifying function in (1a), which raises the question of its actual part-of-speech status and the possibility of applying the notion of zero-derivation or conversion (e.g. Lieber 2005). Similar interesting issues arise also with other verbal forms, namely that of the bare prefixed conjugation (1b), which serves as a (co-)subordinated form (Foley & Van Valin 1984) and that of the so called active participle (1c), which operates on the boundary between finite and non-finite forms. Furthermore, certain types of the multiverbal constructions represent strategies close to compounding.

In this paper, I will approach the existing strategies from the perspective of word-formation, offering an amended picture of Arabic verbal system, and discuss the contribution it can bring to word-formation theory in typological perspective.

The analyses are based on natural data from several Arabic varieties (Syrian, Palestinian, Algerian and Moroccan) and consultations with native speakers.

**Keywords**: colloquial Arabic grammar, multiverbal constructions, word formation, motion verbs, deverbal forms

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**From diverse syllable structures to morphological systematicity in Hebrew nouns**

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A major typological property of Modern Hebrew is its rich morphology in terms of systems, structures and semantics. However, the nominal lexicon is a patchwork of words with some, little or no morphological structure (Ravid, 2006, 2019), including borrowed nouns (e.g., *rádyo*), native Hebrew nouns without any discernible morphology (e.g., *cipóren* ‘(finger)nail’), and many nouns with partial morphological markers (e.g., *tmuna* ‘picture’). This chaotic picture can hardly be reconciled with the literature underscoring morphological innovations of nouns by Hebrew-speaking children (Berman et al., 1982), nor the important effect of morphological patterns on the acquisition of Hebrew reading (Deutsch et al., 2005), spelling (Gillis & Ravid, 2006; Ravid, 2012), and awareness of nominal morphology (Ravid & Bar On, 2005; Ravid & Schiff, 2006). This discrepancy has led to the current study, which aimed to model the relationship between phonology, semantics and nominal word formation based on an analysis of nouns in a corpus of 156 Hebrew children’s books.

All 1,698 noun lemmas in the corpus were coded for grammatical gender, number and type of syllables, stress placement, and the presence of affixes, yielding 256 distinct syllable categories. A set of nine criteria covering category size, morpho-phonological structure and allomorphy, semantic coherence, and type and token frequency ranked each category. A combination of statistical and computational methods (Cluster Analysis, Principal Component Analysis, Logistic Regression, Semantic Similarity Measures, and Association Rule Mining) was applied to the ranking scores to assess each category’s contribution towards morphological systematicity. This analysis identified groups of nouns with similar forms as well as underlying patterns and associations, highlighted key factors contributing to morphological systematicity, predicted the presence of morphological markers, and quantified the semantic relatedness of words within the same category. This approach enabled us to draw meaningful conclusions about the morphological nature of the Hebrew nominal lexicon.

|  |  |  |
| --- | --- | --- |
| **Category: Masculine di-syllabic penultimately stressed CéCeC** | | |
| **Criterion Label** | **Assessment** | **Examples and Comments** |
| Tri-C skeleton | Yes | bérez ‘tap’, béged ‘garment’ |
| Presence of prefix or suffix | No |  |
| Vowel diversity | No |  |
| Type frequency | 95, large | out of 1,698 lemmas |
| Token frequency | 1,341, large | out of 17,923 tokens |
| Semantic coherence | No | No shared semantic content |
| Coherent morpho-phonological inflection | Yes | Sg *CéCeC* 🡪 Pl *CCaC-im* |
| Internal structural coherence | Yes | All 1,341 members share form |
| Coherent allomorphy | Yes | Systematic variants |

Illustration of the 9 criteria indicating morphological systematicity in one category

**Keywords** Nominal morphology, Hebrew, morpho-phonology, language development, storybook language

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**Directionality in English noun/verb conversion: A sense-based study**

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This paper presents a corpus-based study of directionality in a sample of English noun/verb conversion. It tests Marchand’s (1963, 1964) semantic and quantitative-distributional criteria, and following Plank’s (2010) proposal for a sense-based analysis, the study offers new insights into the long-standing issue of directionality in English conversion.

Drawing on a manually annotated sample from the *British National Corpus*, with senses classified according to the *Oxford English Dictionary*, the study shows that methodological decisions—such as the level of analysis, the interpretation of the criteria, and the choice of lexical resources—shape the conclusions on derivational direction. The results question the reliability of traditional lexeme-based approaches, especially for polysemous pairs, where directionality typically varies across individual senses.

The findings reveal that conversion is often neither unidirectional nor derivationally ambiguous, but instead exhibits recursive, context-dependent patterns of sense derivation for polysemous pairs. Among the criteria tested, semantic ones–particularly *semantic dependence* (SD) and *semantic pattern* (SP)–prove the most applicable, though not always conclusive. The quantitative-distributional criteria of *frequency of occurrence* (FO) and *range of register* (RR) offer insights on usage but show limited reliability for establishing directionality. Other semantic criteria like *semantic range* (SR) or *restrictions of usage* (RU) apply to a smaller number of cases.

This study supports the claim that directionality in conversion is better conceptualized as a property of related senses rather than lexemes. This has descriptive and theoretical implications, particularly for frameworks that aim to model word-formation processes with greater granularity.

**Keywords**: lexical semantics, directionality, criteria, conversion, lexical senses

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**The shape of meaning: A network analysis of ambiguity in French deverbal nouns**

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Deverbal nouns are well known for their frequent ambiguity and for displaying regular sense alternations, such as event/result (*building*) or agent/instrument (*printer*) (Melloni, 2011; Schulte 2015; Lieber 2016; a. o.). However, the systematic organization of these ambiguities—their distribution, frequency, and underlying structure—remains largely underexplored. This study addresses this gap with a twofold objective: (i) to systematically describe and quantify the semantic patterns characterizing ambiguous French deverbal nouns; (ii) to investigate the respective contributions of morphological derivation and semantic extension—via metaphor and metonymy—to the emergence of these ambiguities.

The analysis builds on a new database specifically designed for studying the semantics of French deverbal nominalizations (Huyghe *et al*., submitted). It comprises 5,272 nouns derived from 1,709 verbs, all manually annotated for semantic type, lexical aspect, and argument structure. Leveraging this resource, the study adopts a two-step, data-driven approach. We first apply association rule mining (Agrawal *et al.*, 1993) to detect significant co-occurrences of semantic types. These rules—e.g., {Artefact-result} ⇒ {Event-transposition}—reveal regular patterns of semantic extension, often of a metonymic nature. Second, we model these findings as a semantic network (Wasserman & Faust, 1994), where nodes represent semantic types and edges encode rule-based links.

The analysis uncovers 33 regular, directed patterns of ambiguity, including well-attested cases (e.g., event/result) and novel configurations (e.g., event/collective event). Some nouns exhibit bipartite (agent/instrument) or tripartite (event/instrument/result) polysemies, suggesting the existence of semantic microparadigms. The resulting network displays a hierarchical, star-like structure centered on the Event- transposition type, which highlights the central role of verbal semantics in shaping derived nominal meaning. Overall, this study proposes a new empirical framework for analyzing polysemy in deverbal nominalization, shedding light on its underlying mechanisms and systemic architecture.

**Keywords**: deverbal, nominalization, French, lexical ambiguity, association rule mining, network analysis

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**Russian prefixes of attitude: a distributional semantic approach**

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Linguistic factors have been the object of numerous studies in derivational morphology, while little attention has been paid to social aspects (Körtvélyessy & Štekauer 2015). The focus on structures of words has dominated the field of morphology, whereas the interest in the use of morphological phenomena has been low (Schmid 2016). This talk presents a study that aims to investigate the relation between the use of prefixes of attitude and their functions in the Russian socio-political context. The Russian antonymous prefixes *anti*- ‘anti-’ and *pro*- ‘pro-’ are both borrowed and express attitude or opinion. They are most often attached to nominal and adjectival bases in order to show specific attitudinal meanings with the respect to the base. The meaning of *anti*- is related to the concept of opposition, while the meaning of the prefix *pro*- expresses support. Both prefixes are activated because they convey semantics that are socio-culturally meaningful (Zemskaya 1996).

This work uses computational methods from distributional semantics (e.g. Boleda 2020) and a large corpus compiled of Russian media texts from the 21st century. A vector space is obtained by using fastText (Bojanowski et al. 2017) on the available corpus. In this interdisciplinary approach, I have analyzed diachronic changes of the linguistic associations of the prefixes and investigated their links to extra-linguistic knowledge qualitatively to reveal tendencies in the word formation system. Previous research has showed that both *anti*- and *pro*- are active and productive in Russian (e.g. Ryazanova-Clarke & Wade 1999, Zemskaya 1996) and that *anti*- has a notably increased activity in contemporary Russian (Ratsiburskaya et al. 2015). In contrast to previous research, my analysis utilizes methods from computational science and are used on more recent data.

**Keywords**: distributional semantics, prefixes of attitude, Russian language

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**Word-formation of singular-only nouns: A pilot study in four languages**

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While reference works describe word-formation means used to create collectives and other nouns with a preference for—or even restriction to—the singular (cf. Mihatsch 2021, 2015; Nagórko 2010; Furdík 2004; Daneš 1967, among others), the present paper adopts a data-driven perspective to examine the word-formation characteristics of nouns that exhibit defective number paradigms in corpus data. Using large text corpora from two Slavic languages (Czech and Slovak) and two Germanic languages (English and German), each containing at least 100 million words, we first extract nouns that are attested exclusively in the singular form. The aim of the analysis is to determine whether these singular-only nouns display specific word-formation features.

In the corpus data, singular forms are roughly three times more frequent than plural ones. While most singular-only nouns are proper names, even after excluding these (where orthography allows it straightforwardly) and limiting the datasets to nouns with at least twenty occurrences, we find that singular-only nouns account for more than one-third of all common nouns. The picture depicted by the corpus data is contrasted with the grammars of the languages under study, where singularia (and pluralia) tantum are considered outliers, as the majority of nouns are assumed to have both singular and plural forms.

Across all four languages, many of these nouns are morphologically opaque, but language-specific word-formation patterns emerge: Whereas compounds with heads like *-work* or *-graphy* stand out among English singular-only nouns, specific derivational suffixes can be found in the other three languages, and corresponding loan suffixes recur across all four datasets (e.g. the English *-ity* and its counterparts). The paper examines whether these word-formation means are specialized for singular-only nouns or are also productive in forming nouns with both singular and plural forms.

**Keywords**: number, singularia tantum, word-formation, Slavic, Germanic

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**Multiple exponence of reflexivity in Czech: A Construction Grammar perspective**

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*Multiple*/*extended exponence* (ME) refers to cases “in which a category […] would have exponents in each of two or more distinct positions” (Matthews 1974: 149). While this phenomenon has been invoked in various theoretical debates (cf. Harris 2017; Bauer 2019), it has not been discussed in Czech linguistics. The only Czech example given in the literature is that of compound demonstratives such as *tenhleten* ‘this/that,’ in whose forms the case and number ending appears twice, as in the singular genitive/accusative form *to****ho****hleto****ho*** (an analogous example is given in Harris 2017: 60). This example, however, clearly does not present a generalizable (let alone productive) pattern of ME.

A hundred years ago, a short text was published in Czech which strongly condemns attested verbs such as *sebevzdělávat se* ‘self-educate oneself’ (Horňanský 1921), which do appear to be instances of ME in which reflexivity is expressed redundantly by both the reflexive prefix *sebe*- and by the reflexive morpheme *se*. In my paper, I will present a corpus-based study of this type of Czech verbs and use Harris’s (2017) criteria to show that it can indeed be considered as a case of ME. While ME is discussed in the literature as challenging to various theoretical frameworks, it will be shown that this morphological construction involving ME can be accounted for unproblematically in a constructional/relational approach to morphology (cf. Audring & Jackendoff 2025).

**Keywords**: Czech, Construction Grammar, Construction Morphology, multiple exponence, reflexivity, Relational Morphology

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# **An Alternative Explanation for Blocking Effects**

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In this paper, we take a critical look at blocking and propose an alternative principle to explain the data it was designed to account for. Blocking is used to account for the non-occurrence of certain forms that would be a regular result of the application of a word formation rule. It was first proposed as such by Aronoff (1976: 43) in a discussion of the use of the nominalizing suffix *-ity* for adjectives in *-ous*, illustrated in (1).

(1) a. curious curiosity

b. glorious \*gloriosity glory

Whereas *-ity* is in general possible for adjectives in *-ous*, as in (1a), it is blocked in (1b), because there is a noun underlying the adjective in *-ous*. An imperfection of this reasoning is that *-ness* is not blocked in the same way as *-ity*. Both *curiousness* and *gloriousness* are possible. Aronoff argues that this is because *-ness* is productive in a way *-ity* is not.

Although blocking in this form has been taken over in many accounts of word formation, it has a number of problems associated with it. A well-known problem is that *\*decentness* is blocked by *decency*, as noted by Aronoff (1976: 55). A less often discussed problem concerns the meaning of the nominalizations. *Curiosity* has two basic meanings. One of them can be described as the property of being curious, the other as an object that people may be curious about. *Curiousness* only has the former meaning.

We propose the principle of onomasiological motivation as an alternative explanation for these data (ten Hacken & Panocová, 2024). This principle says that word formation rules are only applied if there is a need for the resulting word. We will show how this principle offers a better explanation for these effects as well as some others for which blocking has often been invoked.

**Keywords:** blocking, competition, onomasiological motivation

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**A multilingual derivational database for related languages:**

**What to account for?**

|  |  |
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We report on the development of a format for morphological databases documenting cross-linguistic similarity at the level of relations across the members of morphological families. Recent research on word formation (Štekauer 2014, Bonami & Strnadová 2018, Hathout & Namer 2022, etc.) illustrates complex paradigmatic networks connecting members of morphological families within one language, as well as recognising it as a valuable resource for assessing morphological similarity (Hathout 2014). We argue that paradigmatic morphological analysis has a lot to offer for comparative purposes (Körtvélyessy et al. 2020), in the special case of comparison of related languages. As a concrete example, we report on a database that focuses on verbs and morphologically related nouns in three Slavonic languages: Russian, Polish and Ukrainian.

Existing databases document relevant linguistic dimensions but fail to link them in a way that allows for the kind of study we have in mind. WordNet (Miller et al., 1990) and EuroWordNet (Vossen, 1997) are centered on lexical semantics, while CLDF (Forkel et al., 2018) improves data accessibility but is restricted to semantic content. Etymological resources, including Gerard de Melo’s Etymological Wordnet and Johann-Mattis List’s work on cognate detection, remain disjointed. Morphological databases, such as UniMorph 4.0 (2022) and MorphyNet (2021), provide valuable morphological annotations, yet they do not sufficiently cover derivational processes. Although Demonette (2019) and Derinet (2022) are not designed for cross-linguistic analysis.

We hence set out to develop a format for documenting paradigmatic structures within and across languages. Within each language, the format distinguishes lists of lexemes and their associated information from morphological relations between lexemes. Across languages, lexemes are aligned semantically. In the talk we will report in more detail on both the design of the database and semi-automatic methods which can be deployed to alleviate manual work by relying on existing resources, including data from Wiktionary.

**Keywords**: Database construction, word formation, morphological relations, paradigms, cross-linguistic analysis

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1. The concept of ethnolinguistic repertoires is defined by Benor (2010). [↑](#footnote-ref-1)