

Dissecting Morphological Theory 1: Diminutivization Across Languages and Frameworks

Stela Manova, Boban Arsenijević, Laura Grestenberger & Katharina Korecky-Kröll
(University of Vienna, University of Graz, University of Vienna & University of Vienna)

Keywords: morphological theory, diminutives, form-meaning mismatches, affix (re)analysis, end/beginning of word

This workshop is planned as the first of a series of workshops that challenge morphological theory with data from diminutivization and addresses three basic issues of diminutive morphology: A. Demarcation, B. Status in grammar, and C. Theoretical description.

Diminutive(-related) meanings and forms have received much attention in the literature (overview in Grandi & Körtvelyessy 2015) and some authors have claimed that we cannot account for peculiarities of diminutives with the regular mechanisms of grammar but need an additional component: *evaluative morphology* (Scalise 1986), *morphopragmatics* (Dressler & Merlini Barbaresi 1994). Do we? Or is everything a matter of method (Jurafsky 1996)?

A. Demarcation

Diminutives and hypocoristics often use the same formal means, express affection and are considered overlapping categories (Doleschal & Thornton 2000). For theoretical purposes, do we need to differentiate between them and is a sharp distinction possible? The following list contains properties of hypocoristics that *do not* seem characteristic of diminutives:

1. *Phonology*

Phonological word and *phonological templates* play an important role in hypocoristic formation (Prosodic Morphology in Lappe 2007); hypocoristics involve *shortening of form*: stressed syllables tend to be preserved, unstressed syllables tend to be deleted; hypocoristic affixes select *monosyllabic bases*.

2. *Morphology*

Hypocoristics (and all types of shortening/clipping) are hard to analyze in terms of morphemes and exhibit variation (*Thomas - Tom(my)*).

3. *Semantics*

Hypocoristics are not (necessarily) related to smallness. The base and the derivative in hypocoristic formations have the same referential meaning and differ only in terms of pragmatic function (Alber & Arndt-Lappe 2012).

4. *Pragmatics*

Hypocoristics serve for calling and in languages such as Russian where the phenomenon affects all proper nouns in informal style (i.e. seems obligatory) hypocoristics have even been labelled Vocative case by some scholars (discussion in Manova 2011).

B. Status in grammar

Diminutives are considered an in-between category, i.e. between derivation and inflection (Scalise 1986, Dressler 1989). But does this tell us something significant about diminutives? In Distributed Morphology (DM, Halle & Marantz 1993, and Bobaljik 2017) both derivational and inflectional affixes can serve as heads; in Paradigm Function Morphology (PFM, Stump 2001) inflection and derivation are both paradigm-based (Bonami & Strnadová 2019). For the morphological parser (C3 below), diminutive suffixes are inseparable from the inflection that follows them. Based on the literature (*relevance*, Bybee 1985; *scope*, Rice 2000; *closing suffix*, Aronoff & Fuhrhop 2002): Is a positional control (internal/external affix; distance from the root; word-final) more useful than derivation/inflection for research on diminutives?

C. Theoretical description

1. *Types of bases*

DM assumes that all morphological derivations start from the $\sqrt{\text{root}}$; PFM recognizes only *stems* as bases; still other theories postulate a parallel existence of roots, stems and words as bases (Natural Morphology, Dressler et al. 1987). There are two types of stems: (i) *uncategorized* (*morphemes*, Aronoff 1994), they are in use in a-morphous morphology (PFM) (in the main-stream DM only $\sqrt{\text{roots}}$ can be uncategorized); (ii) *categorized*: stems in DM are of this type but affixes that derive them are either heads or modifiers, the latter do not categorize or change the category or grammatical features of the base (Steriopolo 2009 in relation to diminutives).

2. *Form-meaning mismatches*

DM and PFM treat form and meaning separately: roughly, we first produce what we want to say in terms of semantics (combination of abstract morphemes (syntactic terminal nodes) in DM versus ready-made sets of morphosyntactic properties associated with paradigm cells in PFM); having produced the semantic word, we look for form to express it (DM *late insertion*). Such architecture does not have space for form-meaning mismatches, at least not at the level of the morpheme (Manova et al. 2020). Thus, how do form-meaning mismatches associated with pieces of structure smaller than words arise? One way in which mismatches arise is via *diachronic reanalysis/semantic bleaching*, by which diminutive suffixes lose their diminutive meaning, e.g. the Bugarian *barče* ‘café’, originally a diminutive from *bar* ‘bar, discoteque’, has lost its diminutive meaning in some contexts; *barče* in (1) is larger than *bar*:

- (1) *bar-če* *sās* *sobstven* *bar*
café [bar-DIM] with its own bar

Diminutive suffixes in Slavic can be stacked/queued (2), Manova (2015). See also De Belder et al. (2014) on "high" and "low" diminutive affixes.

- (2) *bar* ‘bar, discoteque’ → *bar-če* ‘small bar & café’ →
→ *bar-č-ence* ‘very small bar & small café’ →
→ *bar-č-enc-ence* ‘very very small bar & very small café’

With the reanalysis of *bar-če* as ‘café’, the diminutive suffix moves one position away from the root, nothing gets lost but a new non-diminutive suffix was born. *Bar-če* still has

diminutive connotation meanings: (i) part of a furniture set used for drinks; (ii) small piece of furniture. And *-če* is also a non-diminutive derivational suffix: *dimitr-ov-če* ‘chrysanthemum’ (flower that blooms around St. Dimitar’s day).

3. *Affix (re)analysis*

Derivatives relate to other derivatives through their bases and through their affixes, which results in priming effects in psycholinguistics. Lázaro et al. (2016) researched suffix priming on lexical decision of suffixed (ero-JORNAL-ERO ‘laborer’) and pseudosuffixed (ero-CORD:ERO ‘lamb’; *cord* is not the root of *cordero*) Spanish words, as well as the effect of orthographic priming on nonsuffixed words (eba-PRUEBA ‘test’). For suffixed and pseudosuffixed words, related primes significantly accelerated response latencies in comparison to unrelated primes (ista-JORNALERO; ura-CORDERO); for simple words, there was no facilitation effect of the orthographically related prime (eba-PRUEBA) in comparison to the unrelated prime (afo-PRUEBA). In other words, since *-če* is a word-final (frequent) derivational suffix in Bulgarian (C2), for morphological processing it is favorable if a derived Bulgarian word terminates in *-če*. Contra Parsability Hypothesis (Hay 2002)/Complexity-Based Ordering (Plag & Baayen 2009), morphological parser appears semantically blind (Beyersmann et al. 2016; but affix position matters, Crepaldi et al. 2016), and all word-final *-če* suffixes are the same suffix for it. All this indirectly supports reanalysis of morphological form and suffix homophony word-finally. Unsurprisingly, the semantically-blind positional logic of the morphological parser serves for affix discovery in Unsupervised Learning of Morphology (Hammarström & Borin 2011).

Is diminutive affix reanalysis wide-spread cross-linguistically? Is it always related to word-final/beginning position? Do (productive) diminutive affixes, in this process, always distance from the root?

References

- Alber, Birgit, and Sabine Arndt-Lappe (2012), Templatic and subtractive truncation, in J. Trommer (ed), (2012), *The morphology and phonology of exponence*, Oxford: Oxford University Press, 289–325.
- Aronoff, Mark (1994), *Morphology by itself*, Cambridge, Ma: MIT.
- Aronoff, Mark, and Nanna Fuhrhop (2002), Restricting suffix combinations in German and English: Closing suffixes and the monosuffix constraint, *Natural Language and Linguistic Theory* 20, 451–490.
- Beyersmann, Elisabeth, Johannes C. Ziegler, Anne Castles, Max Coltheart, Yvette Kezilas, and Jonathan Grainger (2016), Morpho-orthographic segmentation without semantics, *Psychonomic Bulletin & Review* 23(2), 533–539.
- Bobaljik, Jonathan (2017), Distributed Morphology, *Oxford Research Encyclopedia of Linguistics*, retrieved 17 Jun. 2020, from <https://oxfordre.com/linguistics/view/10.1093/acrefore/9780199384655.001.0001/acrefore-9780199384655-e-131>.
- Bonami, Olivier, and Jana Strnadová (2019), Paradigm structure and predictability in derivational morphology, *Morphology* 29(2), 167–197.
- Bybee, Joan L. (1985), *Morphology: A study of the relation between meaning and form*, Amsterdam: John Benjamins.
- Crepaldi, Davide, Lara Hemsworth, Colin J. Davis, and Kathleen Rastle (2016), Masked suffix priming and morpheme positional constraints, *Quarterly Journal of Experimental Psychology* 69(1), 113–128.

- De Belder, Marijke, Noam Faust, and Nicola Lampitelli (2014), On a low and a high diminutive: evidence from Italian and Hebrew, in A. Alexiadou, H. Borer, and F. Schäfer (eds.), (2014), *The syntax of roots and the roots of syntax*, Oxford: Oxford University Press, 149–163.
- Doleschal, Ursula, and Anna Thornton (2000), *Extragrammatical and marginal morphology*, München: Lincom.
- Dressler, Wolfgang U. (1989), Prototypical differences between inflection and derivation, *Zeitschrift für Phonetik, Sprachwissenschaft und Kommunikationsforschung* 42, 3–10.
- Dressler, Wolfgang U., Willi Mayerthaler, Oswald Panagl, and Wolfgang U. Wurzel (1987), *Leitmotifs in Natural Morphology*, Amsterdam: Benjamins.
- Dressler, Wolfgang U., and Lavinia Merlini Barbaresi (1994), *Morphopragmatics: diminutives and intensifiers in Italian, German, and other languages*, Berlin: de Gruyter.
- Grandi, Nicola, and Livia Körtevélyessy (eds.), (2015), *Edinburgh Handbook of Evaluative Morphology*, Edinburgh: Edinburgh University Press.
- Halle, Morris, and Alec Marantz (1993), Distributed morphology and the pieces of inflection, in K. Hale, and S. J. Keyser (eds.), (1993), *The view from building 20*, Cambridge, MA: MIT Press, 111–176.
- Hammarström, Harald, and Lars Borin (2011), Unsupervised learning of morphology, *Computational Linguistics* 37(2), 309–350.
- Hay, Jennifer (2002), From Speech Perception to Morphology: Affix-ordering Revisited, *Language* 78, 527–555.
- Jurafsky, Daniel (1996), Universal tendencies in the semantics of the diminutive, *Language* 72(3), 533–577.
- Lappe, Sabine (2007), *English prosodic morphology*, Dordrecht: Springer.
- Lázaro, Miguel, Víctor Illera, and Javier Sainz (2016), The suffix priming effect: Further evidence for an early morpho-orthographic segmentation process independent of its semantic content, *Quarterly Journal of Experimental Psychology* 69(1), 197–208.
- Manova, Stela (2011), *Understanding Morphological Rules: With Special Emphasis on Conversion and Subtraction in Bulgarian, Russian and Serbo-Croatian*, Dordrecht: Springer.
- Manova, Stela (2015), Affix order and the structure of the Slavic word, in S. Manova (ed.), (2015), *Affix ordering across languages and frameworks*, New York: Oxford University Press, 205–230.
- Manova, Stela, Harald Hammarström, Itamar Kastner, and Yining Nie (2020), What is in a morpheme? Theoretical, experimental and computational approaches to the relation of meaning and form in morphology, *Word Structure* 13(1), 1–21.
- Plag, Ingo, and Harald Baayen (2009), Suffix Ordering and Morphological Processing, *Language* 85, 109–152
- Rice, Keren (2000), *Morpheme order and semantic scope*, Cambridge: Cambridge University Press.
- Scalise, Sergio (1986), *Generative morphology*, 2nd edn, Dordrecht: Foris.
- Steriopolo, Olga (2009), Form and function of expressive morphology: A case study of Russian, *Russian Language Journal* 59, 149–194.
- Stump, Gregory T. (2001), *Inflectional morphology*, Cambridge: Cambridge University Press.