1. Introduction: Diminutives across languages, theoretical frameworks and linguistic domains

Stela Manova[1], Laura Grestenberger[2], Katharina Korecky-Kröll[1]
University of Vienna[1], Austrian Academy of Sciences[2]

1. Situating diminutive morphology theoretically

Although cross-linguistically the *prototypical* meaning of diminutives seems clear and easy to define, namely the expression of smallness, and diminutive formations, as a rule, exhibit overt markers, diminutive morphology itself presents a number of challenges to both linguistic descriptions and theoretical analyses. Diminutive(-related) meanings and forms have consequently received much attention in the literature (see the overview in Grandi & Körtvelyessy 2015). Some authors have even claimed that it is impossible to account for the peculiarities of diminutives with the regular mechanisms of grammar and that an additional component is needed: In generative morphology, Scalise (1986) labels this component *evaluative morphology*; in Natural Morphology, Dressler & Merlini Barbaresi (1994) term it *morphopragmatics*; in syntax(-based theories of morphology), the preferred label seems to be *expressive morphology* (Steriopolo 2009) or just *expressives* (for size and attitude) in the Principles and Parameters framework, see Steriopolo (2016); in the Cartographic Syntax diminutives are placed in the so-called *extended nominal projection* (with augmentative, pejorative, diminutive, and endearing heads), Cinque (2015); still others identify a *complex functional affix* (serving as both a head and a modifier), Gouskova and Bobaljik (2022) in a Distributed Morphology framework. We return to all these issues below. A more detailed list of linguistic terms used in relation to "evaluative derivation" and the authors that coined them, without reference to linguistic theories, can be found in Körtvélyessy (2014: 296f).

Does linguistic theory need special mechanisms and tools to account for diminutives cross-linguistically? Or is everything a matter of method (Jurafsky 1996)? Do diminutive affixes have a domain of their own in the word form and should they be treated separately from all other affixes? The goal of the current volume is to answer these and related questions based on empirical evidence from a wide variety of languages. The volume contains a selection of papers presented at the first two workshops of the series *Dissecting Morphological Theory: Diminutization (DMTD)*, https://sites.google.com/view/morphologytheories-diminutives/.

DMTD1 and DMTD2 were organized in 2021, within the annual meeting of the Societas Linguistica Europaea (SLE) and the Austrian Linguistics Conference, respectively. Due to the COVID-19 pandemic, both workshops were held online.

To properly understand diminutives and their status in grammar, one first needs to address some long standing problems in linguistic theory to see how diminutive(-like) formations relate to them: the derivation-inflection divide (1.1.), the question of bases of derivations (1.2.), and the relation between meaning and form (1.3.). In what follows, we briefly introduce the basic assumptions of four major theories of morphology (with references to other frameworks). We discuss Natural Morphology (NM), Construction Morphology (CxM), Paradigm Function Morphology (PFM), and Distributed Morphology (DM). The selection of the theories is not arbitrary: Some of the contributions in the volume explicitly identify with one of these theories, while others refer to some of the tools and assumptions of one or more of these four theories.

Therefore, after the introduction of each theory, we list the relevant chapters in the volume where one can find an analysis within (or related) to the respective theory.

The remainder of this introductory chapter is structured as follows. In section 2 we introduce different types of diminutive formations, those known from the literature and those discussed in the present volume. Thus, we also make clear the contribution of the volume with respect to the definition of types of diminutives, which then leads us to section 3 where all contributions of the volume to the current linguistic debates are presented. Section 4 explains the structure of the volume providing advice on how to read it in order to get the most of it. In section 5 conclusions are drawn. The chapter ends with an acknowledgement section.

1.1. Diminutive morphology and the derivation-inflection divide

1.1.1. Theories that differentiate between derivation and inflection

Such theories usually assume that there is no clear-cut boundary between derivation and inflection and speak of prototypical versus non-prototypical derivation and inflection. As a rule, they suggest sets of criteria for how to assign a grammatical category to either derivation or inflection (Dressler 1989 with a reference to NM; Plank 1994 without a reference to a specific theory; Štekauer 2015, with a reference to Onomasiological Theory; to mention just a few scholars). Following such an approach, diminutivization falls under non-prototypical (word-class-preserving) derivation. Natural Morphology (NM), Construction Morphology (CxM), and Paradigm Function Morphology (PFM) are theories of this type.

Natural Morphology (e.g., Dressler et al. 1987, Dressler 1989, Luschützky 2015, Dressler & Kilani-Schoch 2017, Gaeta 2019 and Dressler & Merlini Barbaresi 1994 with a focus on diminutives) is a morpheme-based theory of morphology that operates with classical morphemes: NM morphemes are lexical items that relate meaning and form (see section 1.3). NM defines diminutives as non-prototypical derivation because, in contrast to prototypical derivation such as, e.g., agent noun formation, diminutives preserve the word class of the base. Another characteristic that speaks for non-prototypical derivation is the fact that diminutive suffixes may follow inflectional morphemes, as shown in example (1) from German, in which the diminutive suffix follows the inflectional plural suffix.

(1) German plural diminutives

Base	Plural	Diminutive	Diminutive Plural
Kind	*Kind-<u>er</u>*	*Kind-**chen***	*Kind-<u>er</u>-**chen***
child	child-PL	child-DIM	child-PL-DIM

However, the order of the morphemes in (1) is language specific, in that there are languages (e.g., the Slavic ones) in which DIM is before PL even in plural diminutives such as *Kind-<u>er</u>-**chen*** ‘child-PL-DIM’. Derzhanski (2005) introduces a very helpful terminology for the interaction of diminutives and number: diminutive plurals (when a noun is first diminutivized and then the DIM form is pluralized, i.e., the order of the semantic operations is DIM-PL) and plural diminutives (when a noun is first pluralized and the PL form is then diminutivized, i.e., the order of the semantic operations is PL-DIM, which is the case in (1)). Manova and Sitchinava, this volume, tackle this issue by comparing Slavic and Germanic data; Korecky-Kröll discusses it for German, but finds only marginal evidence for it in recent corpus data.

Naturalness is a gradient concept and different diminutive forms may differ in constructional iconicity, salience, uniformity, indexicality, morphosemantic and morphotactic

transparency and other preference parameters of universal markedness as well as in their (language-specific) productivity, i.e., they may exhibit different degrees of "naturalness". Thus, German *Büsch-el* 'tuft, bunch', from *Busch* 'bush', is morphosemantically opaque (unproductive and highly lexicalized) and morphotactically opaque (due to the stem vowel change), while the child-specific diminutive *Hund-i* 'dogg-ie' follows a productive pattern, is morphotactically and morphosemantically transparent and thus more "natural" than *Büsch-el.* Contributions discussing diminutives from the perspective of NM are Dressler and Ransmayr; Dressler, Mattiello, and Ritt-Benmimoun as well as Korecky-Kröll.

Construction Morphology (e.g., Booij 2010), as the label suggests, recognizes not the morpheme but the construction as a basic unit of analysis. Constructions are pairings of form and meaning. On the form side, phonological, morphological and syntactic pieces of information are paired with conceptual (semantic, pragmatic and discourse) information on the meaning side. A morphological construction may have holistic properties, i.e., properties that do not derive from its constituents. The levels of representation of conceptual structure can be split into sublevels, e.g., the pragmatic level may be assumed to include the dimension of style and register, as in diminutives, which may function for expression of endearment and/or of negative evaluation. For coining new words, abstract schemas of generalizations about sets of existing complex words are assumed not only when patterns are productive, but also when they are unproductive, as this is the case, e.g., for many Dutch diminutive verbs ending in *-elen* and *-eren* such as *babb-elen* 'chatter' or *bibb-eren* 'shiver'. They express a diminutive and/or repetitive meaning but many of them lack a clear base verb (Booij 2019: 386).

So-called phrasal lexemes (lexemes having phrases as their bases) are maybe the clearest case of CxM: roughly, a construction of words turns into a single word. Voeikova (this volume) discusses such formations in Russian under the term univerbation. Other usage-based approaches compatible with CxM (e.g., Bybee 1985, 2010; Köpcke 2002) are discussed in Korecky-Kröll.

Paradigm Function Morphology is a-morphous; the basic unit of analysis is the paradigm, or set of inflected word forms. Morphemes are just markings (pieces of form) without meaning. Content and form are separated in terms of content paradigms and form paradigms and the relation of these paradigms is governed by paradigm functions (Stump 2001). The theory has a number of versions,[1] but the gist remains the same. Regarding diminutives, in PFM diminutive morphology can be category-preserving, "transparent" (2), or category-changing, "non-transparent" (3), Stump (1993, 2001). Transparent diminutives are "headed by their derivational basis". There may be subclasses, e.g., category (noun) preserving diminutives which are transparent with respect to category, but gender-changing, i.e., non-transparent with respect to a feature.

(2) Transparent diminutives (Stump 2001): Breton *-ig*, category & nominal gender preserved

Base		Diminutive	
bag **f.**	'boat'	*bag-**ig*** **f.**	'little boat'
ti **m.**	'house'	*ti-**ig*** **m.**	'little house'
bihan (**adj**.)	'small'	*bihan-**ig*** (**adj**.)	'a little (too) small'

(3) Non-transparent diminutives (Stump 1993): Kikuyu (Bantu) nominal diminutives impose (prefixal) inflection class:

[1] Stump (2016: 105) assumes three paradigms: the content paradigm, the form paradigm, and the realized paradigm.

Base	Plural	Diminutive	Diminutive plural
i-rima 'hole'	*ma-rima*	***ka-****rima*	*tũ-rima*
5-hole	6-hole	**12**-hole	13-hole

In Bantu, the singular forms of a semantic group of lexical items forms a class: in (3), the base and the diminutive belong to separate classes, class 5 and class 12, respectively. Each singular class has an associated plural class: The plural of class 5 is class 6, and the plural of class 12 is class 13 in (3). Thus, the only inflectional alternation is between SG : PL, and it is exactly of the same type as BASE : DIM, in the sense that both PL and DIM are expressed through class change; cf. Hyman and Mbuui (submitted) on diminutivization in Tiania (Bantu). PFM recognizes cross-linguistic variation in whether diminutive morphology attaches before or after inflectional/derivational morphology. Since PFM is a-morphous, (1), (2) and (3) are formalized as (different types of) paradigm functions which map to root-to-root derivatives, word-to-root derivatives, word-to-word derivatives, and word-to-stem derivatives (Stump 1993, 2001), to cover the range of the attested variation in selectional/percolation properties of diminutive morphology. As already mentioned, the theory has a number of versions and currently all types of bases are called 'stems', see 1.2.

Although none of the contributions collected here is explicitly situated in PFM, a number of chapters rely on paradigms in their analyses (though no paradigm functions are defined), e.g., Alonso-Cortés & Vivancos, Argus & Kazakovskaya, Dressler et al., Korecky-Kröll, Manova & Sitchinava, and Voeikova.

1.1.2. Theories that do not differentiate between derivation and inflection

Such theories are syntax-based and assume that morphemes realize ("spell out") syntactic terminal nodes (functional heads), for example, Distributed Morphology (DM, e.g., Halle & Marantz 1993, Harley & Noyer 1999, Embick & Noyer 2007, Bobaljik 2017). "Words" and "paradigms", rather than being theoretical primitives, are epiphenoma arising from the interaction of syntactic structure building with linearization and phonological realization (Vocabulary Insertion, VI). With respect to the analysis of diminutive morphology, the distinction between category-changing and category-preserving morphemes has been modeled as due to two types of affixation in DM, namely affixation as head vs. affixation as modifier/specifier (in relation to diminutive morphology, see Wiltscho & Steriopolo 2007; Fábregas 2013; Steriopolo 2015, 2016; Gouskova & Bobaljik 2022). While heads project their own category and gender features, the modifiers do not and hence do not change the category or gender of the base. In theories like Nanosyntax (e.g., Caha 2020) that do not allow clustering of features in a syntactic node, all affixes are heads or continuous functional sequences, cf. also Cartographic Syntax (e.g., Cinque & Rizzi 2015). In Cartographic Syntax, the Exoskeletal Model (Borer 2003, 2005; De Belder 2011) and some versions of DM, affixes (including diminutive affixes) may moreover attach at different "heights" of syntactic structure, for example, either above or below a nominalizing projection, resulting in "high" (above *n*) vs. "low" (below *n*) nominal diminutives. "High" diminutives attach to an already categorized base (i.e., to verbalizers, *v*, nominalizers, *n*, or stativizers/adjectivizers, *a*), whereas "low" diminutives attach to the root or at any rate below the first categorizing affix (de Belder 2011, de Belder et al. 2014). These can differ morphologically and semantically, as in the Hebrew examples in (4) from De Belder et al. (2014). Low diminutives are formed directly from the root via reduplication of the final consonants of the (usually triconsonantal) root, while high diminutives are formed via

suffixation. While low diminutives can have idiosyncratic, lexicalized meanings ('kitten'), high diminutives are always semantically regular in the sense that they compositionally contain the meaning of the nominal base ('cat' → 'small cat'). Cross-linguistic variation in these approaches thus follows from differences in the nature or feature content of diminutive morphemes (head vs. modifier) and the amount of functional structure to which they attach (root vs. categorized 'stem').

(4) High and low diminutives in Hebrew

Base	Diminutive		
xatul 'cat'	*xa**taltul***	'kitten'	"low"
	*xatul-**on***	'small cat'	"high"

In the Cartographic approach of, e.g., Cinque (2015), these differences follow from variation in the realization of an universal functional sequence of evaluative projections in the extended nominal domain: *Augmentative* > *Pejorative* > *Diminutive* > *Endearing*. Cinque derives the ordering of projections from the relative ordering of different evaluative suffixes in Italian, cf. (5).

(5) Italian evaluatives (Cinque 2015)

Base		Evaluative	
casa f.	'house'	*cas-ett-in-a*	'small cosy house'
		house-END-DIM-f.	
cane m.	'dog'	*cagn-acci-one*	'big ugly dog'
		dog-PEJ-AUG	
		cagn-ett-acci-o	'nasty little dog'
		dog-END-PEJ-m.	

Thus, the fact that the pejorative suffix follows the endearing one, but precedes the augmentative one in the examples in (5) suggests the relative order AUG > PEJ > END, where the projections further to the left are higher in the extended left periphery than the ones to the right. Since the diminutive suffix occurs linearly to the right of the endearing suffix in (5), its position in the hierarchy must be between END and PEJ. This approach shares similarities both with the high vs. low diminutives of De Belder's Exoskeletal approach and with DM and allows for a certain flexibility in terms of the attachment sites of different suffixes cross-linguistically, but the extent to which this hierarchy is cross-linguistically generalizable awaits further study. In this volume, contributions situated in syntax-based approaches are those by Kagan & Nurmio, Steriopolo, and Fornasiero. Steriopolo's and Fornasiero's approaches are based in DM; Fornasiero moreover applies the high vs. low distinction in diminutives to data from Italian Sign Language. Kagan & Nurmio argue for a similar distinction in the Russian nominal domain, but in the Exoskeletal approach of Borer (2003, 2005).

1.2. Bases of diminutive derivations

The question of the derivational basis of diminutives (like the question whether diminutive morphology is derivation or inflection) is largely theory-dependent, which is due to the fact that different theories of morphology make different assumptions regarding the bases of morphological derivations in general. Some theories postulate a parallel existence of roots, stems

and words as bases, e.g., NM (Dressler & al. 1987) and thus derive diminutives from all three types of bases depending on whether the diminutive affix attaches to a well-formed word, (6), to a stem (= 'root + affix'), (7), or to a root, (8). In a NM analysis, one has to ensure that a stem or a root does not coincide with a word because if the base of the derivation exists as a well-formed word, the derivation is classified as word-based, which is motivated with the primary status of words in discourse. In (6) through (8), morphemes in brackets are inflection and obligatory for the well-formedness of the word.

(6) Word-based diminutive derivation (Bulgarian)
kompjutăr 'computer' → *kompjutăr-ce* 'computer-DIM, i.e. small computer'

(7) Stem-based diminutive derivation (Bulgarian)
nož-ic(a) 'scissors' → *nož-ič-k(a)* 'scissors-DIM', *k : č* alternation, ***nožic* is not a word

(8) Root-based diminutive derivation (Bulgarian)
bluz(a) 'blouse' → *bluz-k(a)* 'blouse-DIM', ***bluz* is not a word

Two types of stems are recognized in the literature: *categorized* and *uncategorized* (*morphomes*, Aronoff 1994). Stems in the morpheme-based NM, (7), are always categorized. The same holds for stems in the morpheme-based DM, though DM, in contrast to NM, operates with abstract morphemes. We return to this point in 1.3. DM stems are also of the type '√root + affix'. By contrast, in a-morphous morphology (e.g., PFM), all subword units are just markings without meaning, which makes the categorization of stems impossible, thus all stems are uncategorized. Additionally, a-morphous morphology recognizes only stems as bases, i.e., all derivations are always stem-based. In the present volume, no contribution adopts an a-morphous approach, although chapters promoting word-based analysis are in principle compatible with this approach, see Alonso-Cortés & Vivancos, Manova and Sitchinava, as well as chapters putting forward a phonology-before-morphology analysis of diminutive formation, namely Hamans and the already-mentioned two chapters.

In DM, all morphological derivations start from the uncategorized √root. However, categorized stems also play a role in DM as the derivational basis to which other affixes (realizations of higher functional nodes) can attach. Such affixes can attach either as heads or as modifiers. Diminutive affixes have also been treated as being either heads or modifiers or both, that is, one and the same affix can have different functions in different derivations. We address this issue with examples in the next section. In the present volume, the chapters by Steriopolo and Fornasiero propose a DM analysis; Kagan & Nurmio also argue for different bases of diminutive/singulative suffixes in Russian in a slightly different framework.

Although it could seem that roots, stems and words cover all possible types of bases of diminutive derivation, the contributions to this volume demonstrate that the syllable (Hamans) and the lexical phrase (Voeikova, a few examples in Burkacka, too), e.g., phrasal lexemes (or univerbation), can also serve as bases of diminutives and related formations. It should be noted here that having lexical phrases (constructions) as bases is a major derivational device in CxM.

Finally, some of the chapters promote template morphology, thus for the sake of completeness it should be added that templates are hard to describe in terms of formal bases such as roots/stems/words because: (a) a template does not necessarily coincide with an existing word (templates often have empty slots, i.e., are longer than words in a language); and (b) in a

prototypical template, slots are filled simultaneously. Nevertheless, if a morphological system combines templates (a stipulated sequence of slots) and scope (the order of those slots is compatible with a step-by-step derivation), one can define bases, see the discussion of template and layered morphology in the chapter by Manova & Sitchinava.

Clearly, bases of diminutive derivations in morpheme-based theories can also be classified in terms of lexical categories (except for the uncategorized √root in DM), and so we find denominal, deverbal and deadjectival diminutives described in the literature. Of these, denominal diminutives are the most frequent ones cross-linguistically and they are also the diminutive type discussed in most of the chapters of this volume. In the nominal domain, diminutive affixes can change fundamental properties of nouns such as countability (the chapter by Kagan & Nurmio) and gender (Steriopolo's chapter). Additionally, the type of base to which a diminutive affix attaches in the nominal domain gives rise to different readings: diminutive affixes attached to proper nouns derive hypocoristics (Alonso-Cortés and Vivancos), whereas diminutive affixes that attach to nouns denoting persons do not derive diminutives, in the sense that the derivative does not mean 'small'. In some of the chapters, the authors refer to such formations as quasi hypocoristics (Burkacka, Dressler et al., Hamans).

Moreover, diminutive affixes in the nominal domain (and evaluative affixes more generally) can often be stacked (cf. Cinque's hierarchy of evaluative projections above), and although all diminutivizers express more or less the same semantics, they do not combine with each other freely (cf. the chapters by Burkacka, Dressler et al., Manova & Sitchinava).

Diminutive suffixes attached to adjectives may express approximation, see Burkacka's chapter where diminutives from adverbs are also addressed. In the verbal domain, diminutive affixes can change the conjugation class and/or valency of the base (Oltra-Massuet & Castroviejo 2014, Grestenberger & Kallulli 2019, Audring, Leufkens & van Lier 2022) and unlike diminutive nouns, not all diminutive verbs are derived from verbal bases, see Wahl's chapter on Austrian German diminutive verbs.

Overall, with respect to the role of the word class of the base in diminutive formation, the contributions to the volume confirm the peculiarities of diminutives known from previous literature. Moreover, Alonso-Cortés and Vivancos contribute novel facts about the role of homophonous noun bases, i.e. what happens when a proper name and a common noun coincide in form and both appear with a diminutive suffix.

1.3. The relation between meaning and form in diminutives

The treatment of the relation between meaning and form is again theory-specific and some facts were briefly mentioned in 1.1. and 1.2. Here we first take a general perspective on the meaning-form issue and then explain how the different theories approach it.

With respect to the relationship between meaning and form, theories of morphology are of two types (Manova et al. 2021): (i) those assuming that form and meaning emerge simultaneously, i.e., are inseparable; and (ii) those that separate meaning from form by taking a meaning-first approach. As already mentioned, NM is morpheme-based and operates with classical morphemes, in the sense that NM morphemes relate meaning and form simultaneously, i.e., in NM meaning and form are inseparable. By contrast, syntax-based theories of morphology (DM) as well as paradigm- and construction-based theories (PFM and CxM, respectively) always treat meaning and form separately, starting from meaning. Such theories are often referred to as meaning-first. We first produce what we want to say in terms of semantics: combination of

abstract morphemes (syntactic terminal nodes) in DM; ready-made sets of morphosyntactic properties associated with paradigm cells in PFM; or conceptual (semantic, pragmatic and discourse) information in CxM. Having produced the semantic derivation, we apply operations for its formal realization (*late insertion* in DM, *form paradigms* in PFM, the "form side of a construction" (phonological, morphological and syntactic information) in CxM). Clearly, all these considerations also apply to diminutive formation in these four theories.

In order to produce an open set of words with a limited set of formal elements (whether we call them morphemes or not), the morphological component has to reuse these elements, which can give rise to form-meaning mismatches. In the morphological literature, form-meaning mismatches have been seen as particularly typical of diminutive(-related) derivations (we return to this issue in the next section). Form-meaning mismatches in diminutive(-related) formations can have different sources. They may arise via *diachronic reanalysis*, also called *semantic bleaching*, by which diminutive affixes lose their diminutive meaning, e.g. the Bulgarian word *bar-če* 'café' was originally a diminutive from *bar* 'bar, discoteque'; *bar-če* has lost its diminutive meaning in some contexts and now means something larger than a *bar*, which makes sentences such as (9) well-formed:

(9)	*bar-če*	*săs*	*sobstven*	*bar*
	café [*lit.* bar-DIM]	with	its own	bar

It should be mentioned that all theories of morphology, irrespective of whether they separate meaning from form, have mechanisms to account for this kind of lexicalization.

Form-meaning mismatches can also arise via *semantic broadening*: a form receives additional expressive-evaluative meanings and in this way turns into a diminutive-related formation. All pragmatic studies in the present volume (see part III), are devoted to issues related to semantic broadening and its discourse-pragmatic implications. The same holds for the chapters discussing the meaning-form mismatch in (quasi-)hypocoristics, namely the fact that hypocoristic markers are often homophonous with diminutive markers but (quasi-)hypocoristics do not express smallness (see the chapters by Alonso-Cortés and Vivancos, Burkacka, Dressler et al., Hamans, Voeikova, and Korecky-Kröll).

A peculiarity of diminutive morphology related to its form side is the fact that diminutive suffixes can be stacked, i.e. repeated on adjacent cycles, which has made linguists speak of degrees (or grades) of diminutiveness: first-degree diminutives (DIM1), second-degree diminutives (DIM2), and even third-degree diminutives (DIM3), all illustrated in (10) and (11). From the languages discussed in the present volume, diminutive suffix stacking is well-documented in Slavic (Szymanek & Derkach 2005, Manova 2015a,b, in press, Manova & Winternitz 2011, Burkacka 2015) and in the Romance languages (Dressler & Merlini Barbaresi 1994, Merlini Barbaresi 2012, Cinque 2015, Grandi 2023). For some (still unclear) reason, this phenomenon is less frequent in Germanic languages. For a similar phenomenon in an African language, Tiania (Bantu), see Hyman and Mbuui (submitted). Here, it has to be mentioned that only DIM1 may lexicalize, see (10) and cf. (9).

(10) Bulgarian lexicalized and compositional diminutives
bar 'bar, discotheque' → DIM1 *bar-če* 'small bar & café' →
→ DIM2 *bar-č-ence* 'very small bar & small café' →
→ DIM3 *bar-č-enc-ence* 'very very small bar & very small café'

With the reanalysis (lexicalization) of DIM1 *bar-če* as 'café', the diminutive suffix moves one position away from the root, nothing gets lost but a new non-diminutive suffix (closer to the root) is born. *Bar-če* still has diminutive-like 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'). Interestingly, the order of the diminutive suffixes in such sequences is fixed, e.g., *-č-ence, -č-enc-ence* but not **-ence-če, *-ence-č-ence* or **-enc-ence-če*, although all diminutive suffixes express the same meaning. Suffixes such as *-ence* cannot be followed by other diminutive suffixes and are termed closing in the literature, i.e. they close the diminutive domain for further suffixation, only inflection can follow (Manova 2015a, Aronoff & Fuhrhop 2002 on closing suffixes in German). To explain derivations such as those in (10) and the restrictions on the order of the diminutive suffixes, Manova & Sitchinava, this volume, place diminutive suffixes in the derivational domain of the Slavic word but set them apart from the non-diminutive derivational suffixes. They claim that the diminutive subdomain is templatically organized, while the derivation proper is scopal. A suffix (actually only the first suffix) from the diminutive subdomain (i.e. DIM1) may move to the neighboring non-diminutive subdomain (the reverse has not been observed). Additional evidence for postulation of non-diminutive and diminutive subdomain within the derivational domain is provided by the fact that the diminutive subdomain allows for repetition of suffixes on adjacent cycles, (11); whereas in the non-diminutive subdomain suffixes may be repeated only on non-adjacent cycles, (12); inflection suffixes cannot be repeated. In (11) and (12), the relevant suffixes are bolded.

(11) Bulgarian, AAA order, repetition on adjacent cycles

dete 'child' → DIM1 *det-ence* 'little child'
→ DIM2 *det-enc-ence* 'very little child'
→ DIM3 *det-**enc-enc-ence*** 'very very little child'

(12) Russian, ABAB order, i.e. repetition on non-adjacent cycles

lico 'face' → *lič-n-yj* 'personal' → *lič-n-ost'* 'person, personality'
→ *lič-n-ost-n-yj* 'related to personality'
→ *lič-**n-ost-n-ost'*** '(greater) personality'

(Manova 2010, 2015, in press)

With respect to the relationship between meaning and form, the contributions to this volume assume either simultaneous emergence of meaning and form or separate them, being both meaning-first and form-first. The meaning-first approach was addressed above. The form-first approach is the dominant approach in computational linguistics and natural language processing. Computers do not understand language, they have to be taught to emulate it, and this is achieved based on (sequences of) form. Approaches arguing for the importance of phonology in diminutive derivation (Alonso-Cortés and Vivancos, Hamans, Manova and Sitchinava) are form-first to some degree. It should be mentioned here that an exclusively form-first account of (diminutive) morphology is often impossible because morphology derives only subwords and words, while computers operate with sequences of form that are significantly longer than words,

see, e.g., the input of BERT (deep neural network currently employed in Google search, Devlin et al. 2019), or the input of GPT-4[2] (the latest language model for the ChatGPT AI chatbot, OpenAI 2023 paper). In other words, current NLP research provides evidence that form and meaning in language are in a perfect relationship but this may not be visible at a word or subword level, i.e. in morphology. On the role of phonology (form) in morphological structure building, see Manova & Knell (2021) who, with data from English, provide psycholinguistic evidence that suffix combinability is form-driven: native and advanced non-native speakers know suffix combinations by heart and do not need semantic cues to differentiate between existing and non-existing morphological structure such as two-suffix combinations, cf. stacking of diminutive suffixes, (10) and et passim.

2. Types of diminutives

2.1. Inflectional

This type of diminutive formation is suggested in Manova (2005) as a criterion for establishing the derivation-inflection status of a morphological category (cf. 1.1.), i.e., to show that the diminutive (word-class-preserving) marker can be placed in either the derivational or the inflectional slot of the Slavic word, which thus instantiates the non-prototypicality of diminutives with respect to the derivation-inflection distinction. In the literature on diminutives, inflectional diminutives have, however, remained somewhat neglected, although such examples provide interesting well-documented evidence for the origin of diminutives. Diachronically, young (baby) animals constituted an inflectional class of their own in Proto-Slavic and, synchronically, the remainders of those forms can still be used as diminutives in some languages, (13) and (14). There is no overt diminutive suffix but the inflection signals diminutivization (cf. also the Kikuyu/Bantu examples in (3) above). Abbreviations used in the following examples are D = derivational suffix, E = evaluative suffix, and I = inflectional suffix.

(13) Bulgarian
kot-k_D-$Ø_E$-a_I ‘cat’ → *kot*-$Ø_D$-$Ø_E$-$\boldsymbol{e_I}$ ‘small cat & baby cat’

(14) Macedonian
mač-k_D-$Ø_E$-a_I ‘cat’ → *mač*-$Ø_D$-$Ø_E$-$\boldsymbol{e_I}$ ‘small cat & baby cat’

Since in such formations, from a synchronic point of view, a suffix from the derivational slot of the word, -k_D- in (13) and (14), seems to be deleted, Manova (2011), in an NM study, discusses such derivations under the label stem-based subtraction (in diminutive formation); cf. section 1.2. on the bases of diminutive derivations.

2.2. Derivational

In contrast to those discussed in section 2.1., derivational diminutives have an overt diminutive affix in the evaluative ‘slot’ of the word, -$\boldsymbol{ic_E}$- in (15). That is, they attach to an already categorized stem with a derivational/categorizing affix,-$\boldsymbol{k_D}$- in (15).

[2] The length of input and output sequences in GPT-4 is nicely visualized at: https://openai.com/gpt-4.

(15) Serbian
mač-k_D-$Ø_E$-a_I 'cat' → *mač*-k_D-***ic***$_E$-a_I 'small cat'

Serbian distinguishes between 'small animal', *mač*-k_D-***ic***$_E$-a_I 'small cat', and 'baby animal', *mač*-$Ø_D$-$Ø_E$-$\boldsymbol{e_I}$ 'baby cat'; compare the Bulgarian and Macedonian examples in (13) and (14).[3]

2.3. Diminutive affixes which also operate as true derivational affixes

Finally, some diminutive morphemes are ambiguous between canonical diminutives and stem-forming nominalizers/derivational suffixes, cf. (16a) vs. (16b). "Lexicalized" diminutives with idiosyncratic/non-compositional semantics arise diachronically through the loss of diminutive meaning and the reanalysis of the diminutive affix as stem-forming morphology. In some cases, this can lead to the loss of the semantic distinction between the base and the erstwhile diminutive, as in the Bulgarian example in (16a).

(16) Bleached vs. compositional diminutives

	Bulgarian					Italian				
a. Bleached	*iv-a*	'selvage'	→	*iv-**ic**-a*	'selvage'	*cas-a*	'house'	→	*cas-**in**-o*	'brothel'
b. Diminutive	*ovc-a*	'sheep'	→	*ovč-**ic**-a*	'small sheep'	*nas-o*	'nose'	→	*nas-**in**-o*	'small nose'

De Belder et al. (2014) argue that the semantically bleached forms are "low" diminutives that attach below the nominalizer (or stem-forming suffix in general), and that their idiosyncratic meaning follows from the fact that they combine directly with the root, rather than with an already categorized stem.

2.4. Diminutive affixes as heads vs. modifiers

As already mentioned, in DM and related syntax-based approaches diminutive affixes are assumed to be able to attach as heads or as adjuncts/modifiers (Wiltschko & Steriopolo 2007, Fábregas 2013, Gouskova & Bobaljik 2022). Diminutive affixes that attach as heads determine or impose functional features such as gender and/or inflectional class and can locally condition suppletion, whereas modifiers do not. (17) and (18) are examples in which diminutive affixes act as heads.

(17) Bulgarian *-če* (gender change)

Base			Diminutive	
stol **m.**	'chair'	→	*stol-**če*** **n.**	'small chair'

[3] With respect to the relation between baby animals and diminutives, languages, at least the Slavic ones, are of the following two types: (i) such that use the nouns for baby animals as diminutives, in the sense that no diminutive form is available (Bulgarian and Macedonian); and (ii) such that systematically differentiate between baby animals and diminutives (Serbian, Russian, Polish, Czech, Slovak, Ukrainian, etc.). In the latter group of languages, diminutives are the default forms and can be used for baby animals but not vice versa (Manova & Gregova 2019), cf. Gouskova & Bobaljik (2022) analysis of baby animals in Russian.

nagreva-tel **m.** ‘heater’ → *nagreva-tel-**če*** **n.** ‘small heater’

(18) Russian “baby diminutives” in *-onok* with gender change (Gouskova & Bobaljik 2022)

Base			Diminutive	
kót **m.**	‘cat’	→	*kotʲ-**ónok*** **m.**	‘kitten’
mɨ̨ʂ **f.**	‘mouse’	→	*mɨ̨ʂ-**onok*** **m.**	‘baby mouse’
loʂadʲ **f.**	‘horse’	→	*ʐerebʲ-**onok*** **m.**	‘foal’ (+ root suppletion)

German diminutive suffixes are also famously gender-changing and impose neuter gender irrespective of the gender of the base. The inflection class (instantiated by the difference in plural morphology) is also determined by the diminutive suffix (zero plural), as in (19).

(19) German diminutives in *-chen*

	Base			Diminutive		
Sg.	*der*	*Ball*	‘ball’	*das*	*Bäll-**chen***	‘little ball’
	the.**M**.SG	ball		the.**N**.SG	ball-DIM	
Pl.	*die*	*Bäll-e*	‘balls’	die	*Bäll-**chen***	‘little balls’
	the.**M**.PL	ball-PL		the.**N**.PL	ball-DIM.PL	
Sg.	*der*	*Beutel*	‘pouch’	*das*	*Beutel-**chen***	‘little pouch’
	the.**M**.PL	pouch		*the*.**N**.SG	pouch-DIM	
Pl.	*die*	*Beutel*	‘pouches’	*die*	*Beutel-**chen***	‘little pouches
	the.**M**.PL	pouch.PL		*the*.**N**.PL	*pouch*-DIM.PL	
Sg.	*das*	*Schiff*	‘ship’	*das*	*Schiff-**chen***	‘little ship’
	the.N.SG	ship		the.**N**.SG	ship-DIM	
Pl.	*die*	*Schiff-e*	‘ships’	*die*	*Schiff-**chen***	‘little ships’
	the.**N**.PL	ship-PL		the.**N**.PL	ship-DIM.PL	

On the other hand, diminutive affixes that attach as modifiers do not impose functional features or determine lexical category, do not trigger suppletion (at least in Russian, Gouskova & Bobaljik 2022), and are compositional. They also differ in terms of their phonological properties (Fábregas 2013).

An example of a diminutive formation that has been analyzed as a modifier comes from Halkomelem Salish, where diminutive morphology (expressed as reduplication of the initial syllable of the base) can attach to nouns, verbs, and adjectives alike, without changing the category of the base, (20).

(20) Halkomelem Salish (Wiltschko 2006, Wiltschko & Steriopolo 2007)

	Base		Diminutive	
noun	*q’a:mi*	‘girl’	***q’á**-q’emi*	‘small girl’
	girl		DIM-girl	
verb	*lhí:m*	‘picking’	***lhi-**lhi:m*	‘picking a little bit’
	picking		DIM-picking	
adj.	*p’eq’*	‘white’	***p’í-**p’eq’*	‘a little white, whitish’

white DIM-white

In Russian, the nominal evaluative suffix *-onok* (cf. *-onk(a)* in the Russian Academy Grammar) does not affect the gender of the base and does not trigger root suppletion (although it does determine the declension class), compare (21) with (18).

(21) Russian evaluative *-onok* (Gouskova & Bobaljik 2022)

Base		Diminutive	
star-ik-Ø **m.**	'old man'	*staʳʲ-itɕ-**ónk-a*** **m.**	
koróv-a **f.**	'cow'	*korovʲ-**ónk-a*** **f.**	
lóʂadʲ-Ø **f.**	'horse'	*lóʂadʲ-**ónk-a*** **f.**	(no root suppletion)

While Gouskova and Bobaljik treat these different formations as evidence for the difference between heads and modifiers, an alternative view argues that they provide evidence for a difference in height of attachment of the diminutive suffix. Thus, gender- and category-changing diminutive morphemes such as the ones in (17)-(19) would be analyzed as selecting a categorized stem, whereas examples such as (20) would be evidence for attachment below the categorizing affix, which is therefore free to project its category and gender features irrespective of whether there is a diminutive suffix or not (though Russian evaluative *-onok* in (21) cannot be analyzed in this way, as Gouskova and Bobaljik show). Contributions that model such differences in terms of high vs. low attachment are the ones by Fornasiero, Kagan & Nurmio, and Steriopolo. The issue of gender change through diminutive morphology is also addressed in Steriopolo's chapter, with a focus on its sociolinguistic context in addition to the theoretical implications. The properties of German nominal diminutives are discussed in detail in the chapters by Korecky-Kröll and Dressler & Ransmayr. Slavic diminutive formation in general is discussed in the chapters by Burkacka, Voeikova, Manova & Sitchinava and, from a comparative perspective, in the chapters by Fejes and Argus & Kazakovskaya.

3. The contribution of the volume to current linguistic debates

The attested variation in the phonology, morphology, syntax and semantics of diminutives poses a challenge to morphological theory. The contributions collected in this volume tackle various aspects of this challenge from a cross-linguistic and cross-theoretical perspective and address a number of issues highly pertinent to current debates as well as long-standing problems in the analysis of diminutive formation. First of all, the contributions collected here demonstrate the universal character of diminutive morphology in particular (and evaluative morphology more generally) by providing evidence from a wide variety of geographically and typologically diverse languages, including evidence for the development of diminutive morphology in languages that initially lack such morphology (Swedish and Komi), see the chapters by Rosenberg and Fejes.

The morphophonological and morphosemantic properties of diminutive morphology suggests that they occupy a special domain of their own in the word form, as for example suggested in Cinque (2015). The present volume adduces further evidence for this observation, providing morphophonological (Alonso-Cortés & Vivancos, Hamans), morphosemantic and morphotactic (Fornasiero, Kagan & Nurmio, Manova & Sitchinava) evidence that there exists a place in the word form where diminutive suffixes are concentrated. Additional evidence for the postulation of a diminutive domain in the word form is provided by the fact that the diminutive

suffixes may be repeated on adjacent cycles, whereas non-diminutive derivational suffixes may be repeated only on non-adjacent cycles (inflection cannot be repeated), and a non-diminutive derivational suffix cannot follow a diminutive one (cf. closing suffix in Manova 2005a), see the contribution by Manova & Sitchinava on these and related issues. Several contributions in this volume model this type of stacking as evidence in favor of a high (compositional) vs. a low (lexical) position of diminutive affixes (Kagan & Nurmio, Fornasiero, Steriopolo), and the fact that it is found both in spoken and sign languages demonstrates that the generalization with respect to these encoding strategies holds across modalities.

There are several implications for the diachrony of diminutives: As Manova & Sitchinava show, the first suffix in the diminutive domain may move to the neighboring non-diminutive domain (the reverse has not been observed) when the erstwhile diminutive is no longer felt to be semantically diminutive by native speakers (see also Burkacka's chapter). This change in the lexicon of a language is illustrated with data from Bulgarian (south Slavic), Polish (west Slavic) and Russian (east Slavic) in the contributions by Manova & Sitchinava and Burkacka, and is also addressed in the contribution by Fornasiero using data from Italian Sign Language. This suggests that lexicalized or low diminutives (in the sense of De Belder et al. 2014) are the result of semantic bleaching and can in time develop into semantically neutral nominal categorizers (nominal stem-deriving affixes; for an analogue in the verbal domain cf. Grestenberger, to appear).

Conversely, a diminutive form may also receive *additional* expressive-evaluative meanings. The rise of diminutive-related formations seems due to the fact that the diminutive domain, since placed between derivation and inflection, is the least semantically restricted, in the sense that derivation is the closest to the root and influences its semantics the most (cf. Bybee 1985), thus (the product of) derivation has to be semantically fixed (cf. lexicalization) in order to give the lexical meaning, inflection since important for the further syntactic computation (i.e. sentence building) also has to be semantically restricted (i.e. clear), which makes the in-between domain of diminutives the only place in the word form appropriate for emergence of expressive-evaluative meanings. This thus explains why expressive-evaluative meanings are often associated with diminutive markers, which in turn makes diminutives somewhat vague semantically and challenging to account for in terms of meaning, cf. Dressler & Merlini Barbaresi (1994), Jurafsky (1996), Weidhaas & Schmid (2015), etc. Several articles in this volume address this challenge and contribute to our understanding of the interface of diminutive semantics with their sociolinguistic and pragmatic use (Korecky-Kröll, Dressler & Ransmayr, Steriopolo).

The volume also contributes to our understanding of morphological borrowing with examples of borrowing of non-diminutive morphology (from Russian) for the expression of diminutive meanings in a language without diminutives (Komi), a rare case of semantic mismatch (incoherence) between the donor and the recipient language is documented in the contribution by Fejes that is neither matter (MAT) nor pattern (PAT) borrowing (Sakel 2007); and there is also no clear evidence that the process followed the usual borrowability path for affixes, that is, borrowing as parts of whole words (Paul 1886). Moreover, Russian noun-forming denominal suffixes serve as adjective-forming deadjectival suffixes in Komi, which is thus neither direct nor indirect borrowing (Seifart 2015), either.

Bringing together authors working on diminutive morphology within different theoretical frameworks, the present volume does not give trivial answers to pertinent theoretical issues based on the claims of a single theory but provides a platform for the comparison of solutions of

different major frameworks of morphological theory. The contributions to the volume also provide clear evidence that a mixture of strategies from different theories is often a more elegant solution than just following a single theory, and that evidence from morphotactics, morphophonology, semantics and pragmatics can be equally useful in determining the grammatical properties and distribution of a given diminutive affix. In fact, most of the contributions in this volume rely on a mix of methods (theoretical, corpus-linguistic, experimental) as the basis of their analyses, and it is precisely this multi-methodological approach that we think will provide the most fruitful avenues for future research into diminutives.

4. The organization of the volume

When organizing contributions to a volume, editors have a plethora of options: starting from the trivial one, an alphabetical order of the contributors' family names, to an order that is language-family-oriented, to diachronic-synchronic, to theoretical-empirical, to problem-oriented, etc. We decided in favor of the theoretical-empirical approach. The volume is divided into three parts: I. Theoretical approaches to diminutive formation, II. Corpus-based and other empirical studies and III. Sociolinguistic, pragmatic and acquisitional studies. Each part consists of five chapters. The assignment of a paper to a part of the volume implies that it provides an analysis that is mainly of a particular type, i.e., papers in part I of course present empirical evidence for their theoretical claims and papers in part II make theoretical assumptions, as do the papers in part III.

4.1. The chapters of the present volume

The articles in Part I focus on the theoretical analysis of diminutive morphology and its implications for morphological theory. The first two chapters propose syntax-based analyses of sign and spoken language, respectively. Chapter 2, " On a low and a high position for diminutive non-manual markers in Italian Sign Language" by **Elena Fornasiero** focuses on nominal diminutives in Italian Sign Language (*Lingua dei Segni Italiana*, LIS) and provides evidence for two different structural positions for compositional ("high") vs. non-compositional or "lexicalized" ("low") diminutive heads in LIS. This analysis corroborates the claim by De Belder, Faust & Lampitelli (2014) that these two positions (called SizeP and LexP, respectively; see also Kagan & Nurmio and Steriopolo, this volume) are cross-linguistically, and in fact cross-modally, available and adds new insights into the use of Non-Manual Markers (NMMs) in sign languages in general and in their use to express evaluative meaning in particular. NMMs are a set of head and body movements and facial expressions that interact with manual signs, either by modifying them or as part of their lexical representation. Fornasiero argues that the NMMs "squinted eyes" and "tongue protrusion" are used to realize both the (evaluative) Size head and the Lex head depending on the grammatical context. She also proposes a grammaticalization path by which compositional evaluative NMMs can become "lexicalized", i.e., part of the phonological representation of the sign, parallel to the semantic and phonological bleaching associated with the "low" diminutive position Lex^0 in spoken languages. This contribution thus adds important comparative data to the understanding of these two structural positions both from a synchronic and a diachronic perspective.

Chapter 3, "Diminutive or Singulative? The Suffixes *-in* and *-k* in Russian", by **Olga Kagan** and **Silva Nurmio** is a formal investigation of the semantics and distribution of the Russian suffixes *-in* and *-k*. In the literature, these suffixes are often treated as being both singulative and diminutive. Although on the surface it could seem that *-in* and *-k* have the same function, a careful analysis reveals that they differ in semantics and distribution and the authors argue that *-in* is singulative, while *-k* is diminutive: *-in* systematically applies to mass nouns and creates count nouns, therefore they claim that *-in* is a standardized partition operator; *-k* is a diminutive suffix expressing smallness in size and affection, it maps the argument to a relatively low degree on a size scale and is the head of SizeP. The authors also address the suffix *-ink*, dividing it into compositional *-in-k* and non-compositional *-ink*. Compositional *-in-k* consists of two suffixes *-in* and *-k*, with the singulative and the diminutive functions, respectively. Non-compositional *-ink* is a single suffix, similar to *-in*.

In contrast to the previous two chapters, chapter 4 claims that syntax-based accounts (scopal morphology) alone cannot account for some of the properties of diminutives in Slavic languages. Thus, chapter 4, on the one hand, continues the Slavic theme of chapter 3 but, on the other hand, emphasizes word-based morphology and phonology, which links it to chapter 5. Chapter 4, "Slavic diminutive morphology: An interplay of scope, templates and paradigms" (by **Stela Manova** and **Dmitri Sitchinava**) investigates diminutive nouns in Bulgarian, Russian, Polish, Czech, Serbian and Macedonian. The focus is on: 1) suffix homophony (diminutive suffixes are often homophonous with non-diminutive derivational suffixes), 2) lexicalization (diminutives may develop non-diminutive meanings and undergo semantic bleaching and reanalysis), and 3) diminutive suffix combinability (sequences of multiple diminutive suffixes that attach to the same base). The authors mix strategies from layered (scopal) morphology and template (a-scopal) morphology to tackle these problems: layered morphology adds suffixes step-by-step and a semantically broader diminutive suffix scopes over a more specific non-diminutive derivational suffix; template morphology combines suffixes in one step, which allows for the expression of different semantic relations between them (including semantic bleaching and reanalysis), as well as for repetition of diminutive suffixes on adjacent cycles. The authors argue that Slavic diminutives are best captured by a templatic approach that strictly separates diminutive from non-diminutive derivational suffixes; and that both derivational and inflectional paradigms are relevant to diminutive formation.

Chapter 5, "Diminutive formation in Spanish: evidence for Word Morphology", by **Ángel Alonso-Cortés** and **Matilde Vivancos** investigates the formation of Spanish diminutive nouns in a model of word morphology that focuses on morphotactic properties of the word as well as on declension classes. The authors claim that diminutives of common nouns, which are classified as words, must be distinguished from hypocoristics of personal names, which are classified as base NPs, although the respective suffixes may appear similar on the surface. But the internal word structures involved are different, as the authors show using examples of monosyllabic common nouns and personal names, which have often homophonous base forms, e.g., the common noun *flor* 'flower' vs. *Flor* used as a female first name: While the diminutivized form of the common noun is *flor-ecita* 'flower-DIM', the hypocoristic form of the personal name is *Flor-ita* 'Flor-HYP'. Alonso-Cortés and Vivancos identify the phonological *Avoid Monosyllabicity Constraint* as crucial for their analysis, a constraint which is consistent with the frequently mentioned preference for disyllabic words with trochaic rhythm in Spanish. In contrast to common nouns, which strictly follow this constraint, personal names escape it due to their

different categorial status as NPs. The authors conclude that the word is the central structural unit in Spanish diminutive formation.

The phonological thread, specifically the syllable-counting analysis, is taken up in chapter 6 ("The syllable as the basis for word formation: Evidence from Diminutives, hypocoristics and clippings in English, Dutch, Afrikaans, Swedish and French formation"), too, which argues in favor of the syllable as the basis of analysis of diminutives and related formations. In this chapter, **Camiel Hamans** compares diminutives, hypocoristics of proper names, and different types of clippings in English, Dutch, Afrikaans, Swedish and French from the perspective of Prosodic Morphology. Among clippings, he differentiates between traditional monosyllabic clippings (e.g., *sister* > *sis*), embellished disyllabic clippings with final *-y/-ie* or *-o* that may or may not be present in the source word (e.g., *hanky* from *handkerchief* or *psycho* from *psychopath*) and pseudo-embellished clippings formed from existing monosyllabic non-clipped forms followed by *-y/-ie* or *-o* (e.g., *hip* > *hippie* or *weird* > *weirdo*). As monosyllabic forms are central in this process of (pseudo-)embellished clipping, even if not all of them are used as independent words, the author argues that the syllable is one of the most important building blocks of morphology in the domain of clipping. However, he also emphasizes the importance of the foot, as some clipped monosyllabic forms (e.g., **lesb*) are not even potential words due to violations of syllable structure conditions of the respective languages – in these cases, suffixation is mandatory and leads to a preferred disyllabic foot. And although the four Germanic languages show a preference for trochees, while French prefers iambic feet, all five languages behave similarly with respect to clipping. Hamans concludes from his analysis that a strict distinction between phonology and morphology is questionable.

Part II encompasses five chapters that focus on the empirical evidence for the synchronic rules of diminutive formation. The first three contributions discuss Germanic data, from a diminutive-poor language, Swedish (Chapter 7) and a relatively diminutive-rich language, German (chapters 8 and 9).

In chapter 7, "The Swedish suffix *-is* and its place in the theory of diminutivization: a corpus-based study", **Maria Rosenberg** investigates the Swedish suffix *-is* from the perspective of evaluative morphology. Although some scholars have claimed that Swedish lacks productive diminutive suffixation, others have identified *-is* as a diminutive suffix with evaluative meaning. Rosenberg's analysis is based on contemporary colloquial data from a social media corpus, which she compares to data from two older studies from the 20th and very early 21st century. Her results show that all subpatterns of *-is* forms found in the older studies are still available, but that new subpatterns have emerged in the contemporary data, which points to an increasing productivity of *-is*. In addition, variation between uter and neuter gender is still found in *-is* forms, but there is a tendency of regularization towards being used predominantly with uter gender and animate referents. Gender may also help to disambiguate homonymous and polysemous *-is* words, which can only be interpreted within the context of the communication situation. Rosenberg concludes that *-is* suffixation is a productive evaluative word-formation pattern with many diminutive-like properties that follows various subpatterns with different regularities.

Chapter 8, "Diminutives and number: Theoretical predictions and empirical evidence from German in Austria" by **Katharina Korecky-Kröll** focuses on nominal diminutives in Austrian German varieties, but also addresses the question of the interaction between diminutive and number morphology. Based on a previous study (Korecky-Kröll 2022) that suggested that speakers are more likely to use diminutives in the singular than in the plural ("singular

dominance"), she presents the results of a corpus analysis of five different corpora of oral and written German in Austria for three different sets of forms: 1) diminutives excluding hypocoristics & "*-i* derivatives" (e.g., *Dag-i* 'Dagmar', personal name), 2) diminutives including hypocoristics but excluding *-i* derivatives, and 3) diminutives including both hypocoristics and *-i* derivatives. The results show that the preponderance of singular diminutives is corroborated by the corpus data, but is less strong (and in some corpora even reversed) once hypocoristics, which tend to refer to individuals and are hence more likely to be used in the singular, are excluded. This study therefore has important implications for understanding the interaction between individuating, diminutive, and number morphology, especially in theoretical frameworks in which diminutive and number morphology are predicted to be unable to co-occur under certain circumstances (e.g. De Belder 2011).

In chapter 9, "Diminutive verbs in the Austrian language area: Morphological and semantic challenges", **Sabine Wahl** discusses verbal diminutives in Austrian German formed with the suffix *-e(r)l-* from (mostly) nominal and verbal stems. Verbal diminutives and their meanings are cross-linguistically understudied. Wahl presents a corpus study based on the Dictionary of Bavarian Dialects in Austria (*Wörterbuch der bairischen Mundarten in Österreich*, WBÖ) and two other sources and argues that the three core semantic features proposed by a previous study for Standard German verbal diminutives (Weidhaas & Schmid 2015), LOW INTENSITY, ITERATIVE, and CONTEMPT, are not systematically represented in the verbal diminutives in her sample. She uses a case study to illustrate that the use of diminutive verbs in Austro-Bavarian German is not only more widespread than in Standard German, but that the difference between diminutive verbs and their apparent (verbal) base is not always clearly recognizable, which may have implications for understanding the diachrony of these types of verbalizers. As for the morphosyntactic side of her study, Wahl's results confirm that *-e(r)l*-verbs are mostly derived from nominal bases and only about a third are based synchronically on verbs, and among the nominal bases those that already contain a segment *-e(r)l-* make up the largest group, as previous studies have argued (Weidhaas & Schmid 2015, Grestenberger & Kallulli 2019).

The descriptive perspective from chapter 9 continues in chapter 10, too. **Iwona Burkacka**'s contribution "Challenges in analyzing Polish diminutives" focuses on a language that is even more diminutive-rich than German, namely the West Slavic Polish. The richness of the system, along with the numerous (morpho)phonological and morphotactic alternations typical of Polish makes the description and analysis of diminutives a challenging task. The author not only provides a detailed account of the existing diminutive patterns and their formal and semantic properties and peculiarities but also gives a useful overview of the literature, especially of diminutive studies by Polish authors. Sociolinguistic issues relevant to the use of diminutives in Polish are also addressed.

Chapter 11 ("Diminutives among other *-k(a)* words in colloquial Russian: frequency and suffix variation") also focuses on a Slavic language: **Maria Voeikova** discusses derivations with the suffix *-k(a)* in Russian based on data from the Russian National Corpus. The suffix *-k(a)* is a very productive diminutive suffix in Russian but can also derive various non-diminutive meanings. Thus diminutives with *-k(a)* are analyzed together with other *k(a)*-derivatives, specifically with spoken variants of nouns used for semantic, pragmatic, and/or structural reasons. The author claims that such derivatives belong to the most productive declension classes, show no stress retraction, and have more salient and homogeneous inflectional endings in comparison to the base nouns from which they are formed. Four main types and several

subtypes of *k(a)*-nouns are discussed with a focus on frequency, productivity, suffix rivalry and blocking. The author maintains that suffix rivalry is typical of feminitives and hypocoristics (in the sense that various suffixes can combine with the same base noun), while diminutives, univerbations and informal truncations exhibit lexical and/or pattern blocking (i.e. they block alternative derivations).

Part III focuses on sociolinguistic and pragmatic aspects of diminutive formation and use and takes up many of the threads that also run through the first two parts. The first two papers discuss diminutive formation, borrowing and acquisition in intensive language contact situations with the involvement of the Russian language. In Chapter 12, "Borrowed or inspired? Komi diminutive under Russian influence", **László Fejes** based mainly on dictionary materials, explores the origin of the Komi adjectival diminutive-hypocoristic suffixes /-ik/, /-ɲik/ and /-iɲik/, which resemble the Russian noun suffixes /-ik/ and /-nʲik/. Intriguingly, while /-ik/ may serve as a diminutive suffix in Russian, /-nʲik/ cannot. Given that Russian has influenced Komi for centuries, one expects Russian suffixes to have been borrowed into Komi, and that /-nʲik/ gained a diminutive function due to its resemblance to /-ik/. Yet, as shown in the chapter, the suffix transfer did not happen so straightforwardly and falls under neither of the well-known types of borrowing described in the literature, namely Komi diminutive suffixes are neither instances of matter borrowing nor of pattern borrowing (in the sense of Sakel 2007) and there is no clear evidence that they followed the usual borrowability path for affixes, that is, borrowing as parts of whole words (Paul 1886). As Russian noun-forming denominal suffixes serve as adjective-forming deadjectival suffixes in Komi, the process cannot be classified as direct or indirect borrowing (in the sense of Seifart 2015), either. The author therefore claims that Komi diminutives were inspired by rather than borrowed from Russian.

Chapter 13, "Acquisition of diminutives in Russian and Estonian from a typological perspective" by **Reili Argus** and **Victoria V. Kazakovskaya** investigates first language acquisition of diminutive nouns in Russian and Estonian from a crosslinguistic perspective by focusing on the impact of language typology on developmental pathways. Whereas Russian is an inflectional-fusional language with a rich diminutive system consisting of about thirty different diminutive allomorphs, Estonian is on its way to develop from an agglutinating to an inflectional-fusional language while having only three different diminutive suffixes. The authors analyze diminutives and their corresponding simplex nouns in more than 110 hours of transcribed longitudinal spontaneous speech data of three young monolingual children per language aged 1;3 to 3;0 and find some similarities but also important differences between the two languages: Although diminutives show formal similarities and a similar productivity in both languages and emerge early regardless of the richness of the system, their proportion among noun derivatives increases with age in the Russian children, whereas it decreases in the Estonian children, who use diminutivization as their only means of derivation at the beginning of the observation period before acquiring other derivatives. A substantial facilitating effect of diminutives for the acquisition of inflection is only found for Estonian, where inflectional shifts of less regular simplex nouns to more regular and transparent diminutives are very frequent, while such cases are rare in Russian (but cf. Voeikova, this volume). However, if they occur in Russian, they are usually triggered by difficult-to-acquire declension or gender as well as by the lack of the corresponding simplex in child speech. The authors conclude that diminutives serve different purposes in the acquisition process in the two languages: In Estonian they are used as a temporary means facilitating the acquisition of inflection and word-formation, while in Russian they develop like a productive and rich part of vocabulary and word-formation.

In Chapter 14, "Morphological richness and priority of pragmatics over semantics in Italian, Arabic, German, and English diminutives", **Wolfgang U. Dressler, Elisa Mattiello** and **Veronika Ritt-Benmimoun** examine diminutive formation and use with a focus on diminutives in asymmetric communication with pet animals, in comparison to diminutives in child-directed speech. The data analyzed come from Viennese German, South, Central and Northwest Tunisian (Bedouin) Arabic, the Tuscan variety of Italian, and British English. The authors argue for the priority of pragmatics over semantics of diminutives in these languages, as the semantic meaning of diminutives relates to the smallness of the diminutive noun, while their pragmatic meaning has the whole speech act as its scope. It is also hypothesized that the morphological richness of a language correlates with high type and token frequency of diminutives, number of productive diminutive patterns, number of different patterns applying to the same base, combinability of diminutive suffixes with each other, and attributing to DIM both the head and the non-head function depending on whether or not the gender and category of the base is changed by the diminutive affix (e.g., from adjective to noun).

Chapter 15 ("Diminutive variation in Austrian Standard German: a corpuslinguistic study") by **Wolfgang U. Dressler** and **Jutta Ransmayr** is divided into two parts: The first part discusses the results of a morphological corpus study of the distribution of various nominal diminutive suffixes in (Standard) Austrian German, especially *-chen*, *-erl*, and (mainly child-centered) *-i* (see also Korecky-Kröll, this volume). Using recent digital resources such as the Austrian Media Corpus (AMC), Dressler & Ransmayr present a detailed study of the morphological properties and distribution of these diminutive suffixes and their combinability with various bases and interaction with non-automatic/supersegmental alternations such as umlaut. In the second part, they turn to speakers' use of these diminutive suffixes and discuss the results of a sociolinguistic questionnaire-based study on their usage and perception among students at the University of Vienna. Based on this pilot study they argue that the use of nominal diminutives, particularly the suffix *-e(r)l-*, is connected to the construction of Austrian (as opposed to German) national identity both in political and mainstream discourse and by speakers themselves.

Chapter 16, "Gender discrepancies and evaluative gender shift: A cross-linguistic study within Distributed Morphology" by **Olga Steriopolo** completes the sociolinguistic thread and the volume. It combines morphosyntactic theory with sociopragmatic analysis to show how morphological "gender mismatches" (e.g., applying feminine agreement to a man or vice versa) are used by speakers of typologically diverse languages to express evaluative meaning by using the "wrong" gender agreement morphology to indicate a perceived deviation from a culturally specific norm, both for inanimate and for animate referents (e.g., an object of unexpected shape or size, or a person whose behavior or appearance is perceived as unusual or culturally unexpected). Crucially, Steriopolo argues that even though the sociopragmatic standards of evaluation differ cross-culturally, the morphosyntactic means by which categorization and evaluation are expressed within the noun phrase ("low" categorizers vs. "high" evaluatives; see also Fornasiero, this volume) reveal cross-linguistically stable components of human grammars, where the higher, speaker perspective-oriented layer corresponds to viewpoint aspect in the verb phrase. Thus, this chapter also takes a strong theoretical perspective.

4.2. Other reading strategies

The volume also allows for a ***typological language-family-based reading***:

i) Slavic languages are discussed in chapters 3, 4, 10, 11, 12, 13.

ii) Germanic data are tackled in chapters 6, 7, 8, 9, 14, 15.

iii) Romance languages are analyzed in chapter 5 (on Spanish), 6 (with some French data) and chapter 14, which is cross-linguistic but one of the languages providing evidence for the analysis is Italian. Chapter 1 is on Italian sign language.

iv) The Finno-Ugric languages, Komi and Estonian, specifically the Russian influence on the emergence of the Komi diminutive (chapter 12) and a comparison of L1 Russian and Estonian (chapter 13).

v) Cross-linguistic analysis of typologically diverse languages can be found in chapters 14 and 16. Actually, the two chapters mentioned in (iv) also tackle typologically diverse data.

vi) Sign language data (Italian) is analyzed in chapter 1.

Alternatively, the chapters can be read ***problem-oriented*:**

- Emergence of diminutive(-related) forms: Chapter 6, 7, 11, 12, 13
- Diminutives from bases belonging to different lexical categories: Chapters 7, 9, 10, 14
- Proper and common nouns as bases, i.e. canonical diminutives versus hypocoristics: Chapters 5, 6, 8, 14
- Number-related issues (singulatives, plural diminutives and diminutive plurals): Chapters 3, 4, 8
- Stacking of diminutive suffixes: Chapters 4, 10, 14
- The role of phonology in diminutive formation: Chapters 4, 5, 6, 12
- Syllable counting and prosodic morphology: Chapters 5, 6
- Lexicalization of diminutives and suffix homophony: Chapters 4, 8, 10, 11, 12
- Sociolinguistic and pragmatic issues: Chapters 7, 8, 9, 12, 13, 14, 15, 16

5. Conclusion

Diminutives are situated between derivation and inflection and display a variety of morphosyntactic, semantic and phonological (including morphotactic) peculiarities. Their unique properties often pose a challenge to their theoretical analysis. Cross-linguistically, diminutives seem to form a word domain, in the sense that there is a space in the word form devoted to the expression of diminution, and this space often differs from that of stem-forming/derivational and inflectional material. Therefore, in languages that allow for multiple diminutives (second- and third-degree diminutives), diminutive affixes attach strictly on adjacent cycles. By contrast, derivation (proper) may be repeated only on non-adjacent cycles, which is thus further evidence for a separate diminutive domain in the word form. In syntax-based hierarchical approaches, this domain is bounded by lexical or "low" diminutives at the lower boundary, at which diminutive morphology overlaps with categorizing/stem-forming morphology, and by compositional or "high" diminutives at the upper boundary, where it interacts with other evaluative morphology as well as discourse-related aspects (formalizable as extended nominal left periphery in Cartographic approaches). Form-oriented approaches that analyze complex words in terms of

non-hierarchical linear sequences of elements define the boundaries of the diminutive domain as true derivational (i.e., non-diminutive) affixes and closing diminutive affixes, respectively. The former are always internal with respect to diminutive affixes (i.e., they are closer to the root than diminutive markers), the latter always occupy the last position in a sequence of diminutive (evaluative) affixes.

From a diachronic perspective, diminutive morphology undergoes both semantic bleaching (loss of diminutive meaning) and semantic broadening (acquisition of additional expressive meanings). The former process gives rise to lexicalizations, the latter to diminutive-related evaluative forms. Due to the in-between status of the diminutive domain, diminutive meaning is somewhat 'open' (in comparison to the semantics expressed by the derivational and inflectional domain) and expressive-evaluative meanings are often associated with diminutive markers as well. Diminutives also tend to acquire a variety of sociopragmatic uses and connotations that are often marked with respect to register, sociolect or dialect.

Overall, this volume confirms the peculiarities of diminutives both cross-linguistically and language-specifically, but it also undoubtedly shows that linguistic theory does not need additional mechanisms and tools to account for diminutive formation. Rather, a mixture of methodological and theoretical strategies is necessary to understand the complexities of diminutive morphology at the interfaces.

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