

Foreword: New territories in word-formation

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Word-formation is a domain of linguistics which has steadily evolved in the last decades under the influence of the wide availability of electronic corpora and of a renewed interest in contrastive approaches to morphological analysis. From the 1990s onwards, morphological studies have increasingly relied on corpus data. An initial point of interest was the domain of productivity measurement (see Baayen & Lieber 1991, Baayen & Renouf 1996), but resorting to corpora soon became a widespread practice, notably to document rare phenomena, which cannot be thoroughly discussed in the absence of a wealth of data (see Plénat *et al.* 2002). Implementing this quantitative turn took longer in morphology than it did in the domain of syntax, where one may for instance think of the early publication of seminal books like *Variation across Speech and Writing* (Biber 1988) or the *Longman Grammar of Spoken and Written English* (Biber *et al.* 1999). Today, however, handbooks centering on morphology, like *The Oxford Reference Guide to English Morphology* (Bauer *et al.* 2013), likewise rely on corpus evidence to proffer data-rich analyses of word-formation processes.

Present-day contrastive studies have their origins in pedagogically centered approaches to L2 acquisition in the post-WWII era (see Weinreich 1953, Lado 1957). After Contrastive Analysis fell into disrepute in the late 1960s (see Wardhaugh 1970, Aarts 1982), the domain of contrastive linguistics gradually reemerged by incorporating a theoretical dimension (see König 1971, Hawkins 1986, König & Gast 2009), which has recently led Johan van der Auwera (2012) to argue that contemporary contrastive linguistics can be viewed as pilot work for linguistic typology. Since the 1990s, contrastive linguistics has also embraced the corpus-linguistic turn, giving birth to the new subdiscipline of corpus-based contrastive linguistics (see Aijmer *et al.* 1996), which comprises a word-formational component (see Lefer 2009, Cartoni & Lefer 2011).

The eight articles in this special issue all originate from papers delivered at the international conference *New Territories in Word-Formation*, which was held at the University of Sofia in May 2013, and which gathered together European morphologists with an interest in contrastive and/or corpus-based approaches to word-formation

in the widest sense. Employing different methods of analysis, the first four papers are united first by the fact that they all focus on a contrastive approach to compounding and affixation, and second by the fact that they all deal with Modern Greek, whose patterns and products are contrasted with those in English and German.

A first uncharted territory in word-formation appears to be the encoding of socio-expressive meaning in compounds. Assuming that compounds have a strong pragmatic motivation, Chariton Charitonidis (Institut für Linguistik, University of Cologne) demonstrates, through the contrastive analysis of 64 Greek and 132 English stance-marking compounds, that there exist sets of language-specific patterns of mapping denotational (lexico-semantic) head and socio-expressive (stance-encoding) head. The proposed classification scheme, which is based on such linking patterns, is intended to supplement the classification models offered by Antonietta Bisetto and Sergio Scalise (2009) and Angela Ralli (2013), whose classes of compounds can be exhaustively mapped onto just three linking patterns between the semantic and the pragmatic head. The lexico-semantic analysis of the assignment of the socio-expressive head leads to the conclusion that there are explicit similarities between the linking patterns of Modern Greek and English socio-expressive compounds, with only one exception – an additional, fourth linking pattern is identified in Modern Greek and its existence is explained through language contact with French. Capitalizing on the results of this contrastive research, the author concludes that compounding is mainly a pragmatic process whereby syntactic operations play a secondary role. The paper paves the way towards a universal theory of compounding in which the linking of denotational and pragmatic (socio-expressive) heads yields the different compounding classes recognized cross-linguistically.

In the second article, Maria Koliopoulou (University of Innsbruck) explores the morphology-syntax interface by putting Greek and German compounding under the spotlight. Her focus is on the interfixation properties whereby some compounds are created by using a semantically empty element to link two lexemes. Koliopoulou tries to determine how close they are to syntax as a module of language. Assuming certain syntactic parallels between Greek and German compounds, a correlation is established between the presence of linking elements in the compounds of both languages and the closeness of compounds to syntax, the sensitivity of compound formations to syntactic rules. Koliopoulou relies on Joan Bybee's (1985) morphology-syntax continuum, as it provides a soft division between these

two components in which German compound types fit well. Based on the results of this analysis, the main conclusion of this work is that German compounds stand closer to syntax than Greek compounds. In particular, the compound type that exhibits the most syntactic features is the copulative type with an appositive meaning relationship.

The following two contributions focus on verbal affixation in Greek and English. The first one is authored by Christina Manouilidou (University of Patras) and Linnaea Stockall (Queen Mary University of London), and it investigates Greek vs. English deverbal pseudo-words by analyzing the ways in which different types of grammatical information are relevant in licensing deverbal word-formation. This article provides a full account of the verb-creating Greek affixes *-simos*, *-tis*, *-tos* and *-tikos* in terms of their essential features and as to constraints relating to lexical bases and themes. The authors then move on to the case of English with the affixes *un-*, *-ish* and other morphological processes which are contrasted with the previous Greek cases. While the selection of a syntactic category is rather strict in Greek affixes, English seems to license the use of verbs created by conversion as well as verbs derived from various syntactic categories. The main contribution of this investigation lies in three psycholinguistic experiments conducted in a controlled environment. The first one is an off-line task on Greek that pays attention to the rejection/acceptance of pseudo-words with respect to violations of thematic and categorial constraints. The main finding of this test is that the subjects are able to differentiate between pseudo-words that violate different kinds of constraints, and that thematic constraints might be more violable than categorial ones. The second experiment is an on-line task on Greek, and it comes to the conclusion that, concerning error analysis, disparities exist between thematic and categorial violations in Greek cases, thus proving that participants differentiate possible from impossible words as well as different degrees of violations among pseudo-words and non-words. The last experiment is an online task on English which deduces that, as happens for Greek, argument structure violations are much more likely to be accepted than lexical category violations. All in all, this article asserts that in both Greek and English, subjects are more likely to reject units that violate syntactic category restrictions than pseudo-words that violate argument structure information.

The second paper dealing with verbal affixation in Greek and English is by Angeliki Efthymiou (Democritus University of Thrace). The author's aim is to prove that both languages exhibit a Meaning Hierarchy that governs the order, availability of meanings, and

shared and forbidden senses of verb-forming suffixes. This research is largely based on Rochelle Lieber's (2004, 2005) model of lexical semantics, with occasional reference to neighbouring frameworks (Pustejovsky 1995, Jackendoff 1990). Efthymiou offers a Meaning Hierarchy for verb-forming suffixes and distinguishes the following suffix meanings: causative/resultative, ornative, inchoative, locative, performative and simulative. An interesting proposal is made on the meaning properties of the English suffixes in question by concentrating on the modification of the primary skeletons and semantic structures of verbs, as postulated in previous work by Rochelle Lieber (*ibid.*) and Ingo Plag (1999). The reader will find a full account of the semantic properties of the suffixes in question followed by the Meaning Hierarchy of Modern Greek verb-forming suffixes and by a Meaning Hierarchy of verb-forming suffixes from a generalised perspective. Among other points, this paper concludes that Greek verb-forming suffixes are more versatile semantically speaking than their English counterparts, with a wider margin for variation in their structure.

The corpus-based approach is the centerpiece of the next two articles, which focus on German and French. First, Stefan Hartmann (University of Mainz) examines the productivity of German *ung*-nominalization as opposed to infinitival nominalization, for which he uses data from the 16th to the 19th centuries retrieved from two different corpora. The author adopts a cognitive-linguistic and constructionist perspective in order to account for the diachronic changes that the two types of German nominalizations under discussion may undergo. Making use of corpus data from both Early New High German and New High German, Hartmann examines changes in frequency and productivity, the constraints of *ung*-nominalizations, and lexicalization-related notions. The theoretical foundations are developed around Carmen Scherer (2006) and Martin Hilpert (2011, 2013), after which a number of construction schemas and the abstract meaning relationships of word-formation products are discussed. In the conclusion, the author assumes that word-formation and, in particular, word-formation change are best accounted for by constructions. The author argues for a usage-based rather than an intuition-based approach to the topic, since cultural and cognitive factors can help us fully understand why word-formation processes perform like they do.

The article looking into French similarly underlines the key importance of a corpus-based and data-rich contextual observation of complex lexemes. In *How is the meaning of complex lexemes constructed? A study of neoclassical compounds in -cratie / -crate and*

-logie / -logue, Marine Lasserre and Fabio Montermini (University of Toulouse / CNRS) carry out a detailed analysis of two connected pairs of combining forms used in the formation of present-day neoclassical compounds of French. Through a very close investigation of lexemes culled from the *Grand Robert* and *Trésor de la langue française* dictionaries and the Google Books Ngram dataset for French, they demonstrate that the semantics of these compounds cannot be restricted to the combination of the values of their morphological elements. The interpretation of neologisms also crucially involves their inclusion in a lexical network of items which have been constructed on the same pattern. Attracting poles are organized around individual leader words in the case of *-cratie / -crate* and in a complex network of connected meanings in the case of *-logie / -logue*.

In the next paper, Mira Kovatcheva (Sofia University) turns to a little-studied phenomenon in the periphery of the Bulgarian language – deverbal ideophones. The author describes the formation of these deverbal ideophones, as well as of onomatopoeic ideophones, in terms of concepts in modern morphological theory and establishes the phonotactic, grammatical and communicative constraints which regulate their word-formation. The function of ideophones is defined as the switching between a depictive and a descriptive mode of language use, predominantly in oral communication, more specifically vivid narratives and baby talk. It appears that the formation of deverbal ideophones can only be explained in view of a special type of analogy (distinct from analogical levelling, extension and creation) dubbed transitive analogy, which operates between morphological schemas and employs a mechanism of feedback and feed-forward cycle between them. In such context, the regularity of production of deverbal ideophones in oral communication finds its word-formation accounted for. The analysis of the understudied phenomenon of the use and creation of this rare class of words leads to conclusions favouring a word-based model of morphology and a two-way storage in the lexicon. The notion of paradigmatic word-formation is employed to eradicate the puzzling idiosyncrasy of deverbal ideophones as regular word-formation products.

In *Phonological and phonetic variability in complex words: An uncharted territory*, Ingo Plag (University of Düsseldorf) closes the issue by taking morphological research to another frontier, which poses a serious challenge for many current theories of the lexicon, for morphological theory and for theories of lexical processing. He draws upon the latest research in English morphology to outline a prospective research program at the morphology-phonology and

morphology-phonetics interfaces. Plag's central claim is that the amount, nature and significance of phonetic and phonological variation in morphologically complex words has been largely glossed over or unsatisfactorily treated in the specialized literature and he details various types of morpho-phonological alternations – stress preservation, stress shift, (de)gemination, resyllabification, compound stress assignment – as well as cases of variation in phonetic implementation – phonetic reduction and the phonetic implementation of homophonous affixes – that need to be addressed. His plea is for a collective endeavor of intensive empirical research to chart these new, untraveled territories.

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