Problems, solutions and new avenues of research in contemporary morphology

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1 ISMo

This special issue is a follow-up to the fourth edition of the International Symposium on Morphology (ISMo), held in Nancy (France) from September 13 to 15, 2023. Since 2017, ISMo has been organized every other year in turn in Lille, Paris, Toulouse and Nancy by researchers in morphology from French linguistics laboratories. Continuing the tradition started in 1997 with the three editions of the *Forum de Morphologie* (in Lille and Toulouse), then nine *Décembrettes* (in Toulouse and Bordeaux), ISMo welcomes contributions in inflection and word formation in similar proportions, which is relatively original in the landscape of international morphology conferences, which tend to attract more work in inflectional morphology.

As in previous editions, the research presented at ISMo 2023 focuses on a wide variety of languages (modern or ancient, well-documented or poorly endowed), on their description and on the analysis of their morphological phenomena. This research, strongly rooted in data, is based on principles from a variety of theoretical schools.

These works reflect the different theoretical sensibilities that run through the discipline and the changes in the way morphology is thought and practiced. Word-based theories (Blevins 2016) or lexeme-based theories (Aronoff 1994; Fradin 2003; Plag 2003; Spencer 2013), which have largely taken precedence over morpheme-based ones (Lieber 1992; Scalise 1986), are now increasingly giving way to paradigmatic models (Carstairs-McCarthy 1994; Štekauer 2014; Boyé & Schalchli 2016; Bonami & Strnadová 2019; Hathout & Namer 2022).

The contributions of the morphologists presented at ISMo logically adopt the formalisms that belong to these frameworks and the principles that support them: multidimensional structures of *Construction Morphology* (Booij 2010), and *Relational Morphology* (Jackendoff & Audring 2020), multiple inheritance of typed feature structures (Bonami & Crysmann 2016) as in *Information-based Morphology* (IbM) (Crysmann & Bonami 2016), analogy-based reasoning (Skousen 1992; 2002), onomasiological approach (Dokulil 1962; Štekauer 2005), dissociated architectures as in *Distributed Morphology* (Halle & Marantz 1993). Likewise, the devices developed and used to test the robustness and reliability of these models are highly diverse: corpus exploration, statistical tools, neural networks, experimental methods, and so on.

2 Theme of the special issue

In this special issue, we present a selection of papers from the 2023 edition of ISMo¹. We chose to focus on questions related to theory and models. The works presented in this volume concern inflection for one and word formation for the others; some focus on a variety of languages, others highlight original or peripheral constructions, while others deal with little-studied data, or explore new questions. Crucially, they offer an original reading of phenomena that may have been the subject of previous research: this new perspective brings new solutions and explores new avenues of analysis.

The works in this issue contribute to the vitality of the tools, principles and theoretical models in contemporary morphology in three ways, and reflect the discipline's epistemological path: (i) testing theories and making them evolve; (ii) questioning theories; (iii) proposing new theories.

1. Confirm the expressive power of existing theoretical currents and their ability to analyze complex phenomena. The contributions by Livio Gaeta, by Adèle Mortier, and by Baptiste Unger Moreau & Berthold Crysmann each adopt a different approach: *Construction Morphology* (Booij 2010) for the first, *Distributed Morphology* (Halle & Marantz 1993) for the second and *Information-based Morphology* (Crysmann & Bonami 2016) for the third. In all three articles, the authors show how the models they refer to are able to account for new questions and describe new data.

2. Challenging what already exists. In contrast, the approach adopted by Bernard Fradin and László Palágyi is to use data to highlight shortcomings of specific rationales and principles, like the polysemy of morphological processes (Rainer 2014; Salvadori & Huyghe 2022) in the case of Bernard Fradin, or the orientation of derivation rules in the case of László Palágyi. As a result, the relevance of derivational processes such as back-formation (Becker 1994; Rainer 2004; Štekauer 2015) is in turn called into question.

3. Propose innovative solutions to unexplored questions. The third stage in this path of thought is the adoption of new tools (theoretical, formal or computational) to shape new theoretical approaches, or at least to make them evolve in depth. This is the approach proposed by Daniele Sanacore, Nabil Hathout and Fiammetta Namer who use generative AI to produce prototypical "stories" to cluster the relations in a word family (Roché 2023) in order to group them relative to the derivational paradigms they are contained in (Štekauer 2014; Bonami & Strnadová 2019; Namer & Hathout 2020; Hathout & Namer 2022) based on their interpredictability (Bonami & Guzmán Naranjo 2023).

3 Content of the issue

The first part consists of three articles highlighting the strengths of the theoretical approaches they adopt and their ability to grasp new data.

1. Livio Gaeta's article focuses on the way the hierarchy of relations operates in *Construction Morphology* (CxM), and on the inheritance of their properties (from the most generic to the most specific). It adopts a network-based approach within the framework of CxM, based on the principle that "nature abhors a vacuum": Livio Gaeta's analysis is that syntagmatic relations re-verticalize when necessary, to fill in a missing level in the

¹ https://ismo2023.ovh/

structure. In this way, the author explains the creative mechanisms of reanalysis as in the case of *grigio lino* 'linen grey' into *grigi-ol-ino* 'light grey', which serves as a model for the construction of other color adjectives, of back-formation as in *decontribuire* 'decontribute' (i.e., not pay social security contributions) and of secretive affixation (spandrels) such as *-gate* in *watergate*, *-burger* in *hamburger* or *-teria* in *cafeteria*.

2. Adèle Mortier's article examines the attribution of gender to evaluative derivatives suffixed with *-et* and *-ette* in French. She is interested in why the gender of the derivative is not always identical to that of the base, even though diminutives do not name new referents, but only modify the base reference. Through a corpus study, Adèle Mortier proposes a formal and semantic analysis within the theoretical framework of *Distributed Morphology*.

3. The article by **Baptiste Loreau Unger & Berthold Crysmann** deals with inflection. It looks at cases of syncretism in the marking of participles in Limbu verb forms. The analysis of this phenomenon is carried out within the framework of IbM, a formalism based on multiple inheritance of typed features, inspired by HPSG. The authors show how the model's plasticity enables them to accurately describe the circumstances in which inflectional marks are inherited and to propose several patterns that account for cases of underspecification, mark competition and feature neutralization.

The two articles in the second part present data supporting a discussion of the merits and limitations of notions that are both central and consensual: affix polysemy and morphological process orientation.

4. Bernard Fradin's article questions the polysemy of morphological processes, and the fact that the multiplicity of meanings associated with them does not reflect classic lexical polysemy such as metonymy and metaphor (Salvadori & Huyghe 2022). More specifically, he looks at the paradox of polysemy in processes that do not contribute to the meaning of the derived nouns. He offers an analysis of -*ier* suffixation in French, arguing that (*i*) this process is not polysemous, but rather a meaningless affix, and (*ii*) the meaning of -*ier* derivatives is provided to the derived nouns by the cell of the derivational paradigm in which they are inserted. This analysis accounts for the fact that this suffix can be used to form lexemes belonging to numerous and varied semantic-referential categories.

5. László Palágyi's article focuses on Hungarian verbal composition. In this work, he questions the assumption that morphological process are oriented and the legitimacy of back-formation as a constructional process in a word-based approach. László Palágyi offers an analogy-based analysis of forward- (i.e., regular), back- and cross-formations in Hungarian, English and Dutch. He also proposes that verbal compounds are different from other verbs, such as onomatopoeic verbs, in that the former are conditioned by source-oriented generalizations, while the latter are conditioned by product-oriented generalizations.

The third part contains a single article, the aim of which is to propose an operational solution to a novel problem: the division of word families into paradigmatic families. This solution is based on a new theoretical assumption, namely that paradigms are organized around a limited number of predefined semantic relations, and that paradigms exist prior to families.

6. The article by **Daniele Sanacore**, **Nabil Hathout & Fiammetta Namer** proposes a method for identifying paradigmatic families within word families. The theoretical hypotheses they defend are (*i*) that the lexicon is structured by conceptual relations, (*ii*)

that these relations constitute a finite inventory, and (*iii*) that all the "stories" that can be created from these relations draw from this inventory. These stories describe scenarios in the sense of Fillmore's *Frame Semantics* (1976), involving a set of relationships that function as a coherent whole. The authors' hypotheses put to the test in this study are based on the assumption that derivation and inflection are much more similar to each other than is still generally assumed in the literature on morphological paradigms (Bauer 1997).

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