Towards a better understanding of analogy: challenges, methods, and perspectives

Lorenzo Moretti (University of Zurich) lorenzo.moretti@es.uzh.ch

Marianne Hundt (University of Zurich) m.hundt@es.uzh.ch

It has been argued that the (unconscious) ability to create analogies across two or more complex events on the basis of the similarities of some elements that are part of such events is one of the domain-general cognitive skills that characterize linguistic communication. Recent studies have shown that analogy is a pervasive mechanism that enables language acquisition and learning (Tomasello 2003), is involved in language change (De Smet and Fischer 2017), and influences the way we process and store language (Hoffmann 2022).

Usage-based approaches assume that the domain-general cognitive ability of identifying similar patterns was crucial in the emergence of language in humans (Hoffmann 2022). De Smet and Fischer (2017: 240) describe analogy as a cognitive principle "at the heart of grammatical organization", as the ability that humans have "to interpret something symbolically depends upon already having the competence to interpret many other subordinate relationships" (Deacon 1997: 74). In language acquisition, it has been shown that thinking analogically allows children to detect similarities from a very young age and, guided by these commonalities, to produce further generalizations and build up grammatical categories (Gentner and Smith 2013; Rakison and Lawson 2013). In language change, analogy plays an important role and has been a staple of diachronic linguistics. It has been discussed in the context of grammaticalization processes (Hopper and Traugott 2003) as well as constructional change (Traugott 2020). Analogy is also at work in several cases of morphological change, particularly those whereby new paradigms come into being through resemblance with already existing patterns. Very well-known processes of morphological change are analogical levelling, which consists in the complete or partial elimination of morphophonemic alternations within paradigms, and analogical extension, which can be observed when speakers extend one form to another one which originally followed a different pattern.

However, despite the centrality it occupies in several linguistic theories, analogy still presents scholars with several challenges. For once, the way in which analogy as a process actually works is still relatively poorly understood. Since analogy was recognized as a prominent mechanism of change by the Neogrammarians in the nineteenth century, scholars have attempted to formulate rules that would capture analogical tendencies (e.g., Kuryłowicz 1947 and Mańczak 1958). These

generalizations, however, have not been universally accepted, with the result that "the elusiveness of analogy still remains" (De Smet and Fischer 2017: 240). Secondly, it is not always clear what the term 'analogy' refers to. Analogy in fact has been used to describe both the process of analogical thinking and the mechanism of language change. It is for this reason that Traugott and Trousdale (2013) have introduced the distinction between analogical thinking (the motivation) and analogization (the mechanism). Furthermore, while psycholinguistic research has developed methods to assess the impact of analogy in language processing (e.g., eye-tracking, see Thibaut et al. 2022), the operationalization of analogy in corpus-based, historical research still provides methodological challenges to the field. Statistical models, such as the Analogical Modeling of Language (AML, Skousen 1989) and the Tilburg Memory Based Learner (TiMBL, Daeleman and van den Bosch 2005), which employ memory-based learning algorithms have begun to be fruitfully used in particular in morphological studies (Krott et al. 1999; Ernestus and Baayen 2004; Plag et al. 2007).

The aim of this workshop is to bring together scholars from different disciplines (psycholinguistics, computational linguistics, contact linguistics, historical linguistics) to explore the role that analogy plays in language processing and change. We welcome both more theoretically and methodologically-focused contributions. The latter are an important goal of the workshop, as one of our points of emphasis is on the empirical modelling of analogical processes, including the possible methodological challenges that may arise in data extraction, analysis and quantification of analogy in corpus-based studies. Research questions that participants should consider in their proposals should thus include one or all of the following:

- How can the influence of analogy in processes of language change, processing, acquisition, and contact be operationalized and quantified?
- How can different methodological approaches (experimentation, corpus data, simulation, machine learning) help us get a better understanding of how analogy proceeds?
- What are the prerequisites for and constraints on analogical processes?
- How can findings from different fields (e.g., historical linguistics, language acquisition, psycholinguistics) be brought together in the analysis of analogical processes?
- What types of analogy can be theoretically identified? What type of impact do they have in language change, processing, acquisition, and contact?

Call for papers: We invite authors to submit provisional abstracts for 20-minutes presentations, no longer than 300 words (references excluded), to be included in the workshop proposal. Abstracts

should be sent to the convenors (lorenzo.moretti@es.uzh.ch and m.hundt@es.uzh.ch) before **November 14, 2024**. If the workshop proposal is accepted, presenters will be asked to submit a 500-word abstract by **January 15, 2025**.

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