## Semantic shifts and the dynamics of lexification patterns

Alexandre François (LATTICE, Cnrs, Ens-Psl, Usn, Paris), Anna Zalizniak (Institute of Linguistics, Russian Academy of Sciences, Moscow) Anna Smirnitskaya (Hebrew University of Jerusalem)

## **Description of the Workshop**

The aim of the present workshop is to explore semantic shifts and the dynamics of lexification patterns. Essential principles and processes of lexical change have been explored in numerous works in the last centuries (e.g. Coseriu 1964, Sweetser 1990, Wilkins 1996, Traugott & Dasher 2001, Blank & Koch 2013, Urban 2015, Koch 2016), including edited volumes on typological trends in semantic change (e.g. Vanhove 2008; Juvonen & Koptjevskaja-Tamm 2016; Rakhilina et al. 2022; Schapper & Koptjevskaja-Tamm 2022) but there is still potential for discoveries.

The main concepts anchoring our workshop provide a complementary perspective on semantic change. A **semantic shift** – in the sense established within the methodology of Zalizniak et al. (2012) – is a connection between two meanings A and B within one "word in a broad sense": that connection may manifest itself through diachronic evolution, polysemy, cognates, morphological derivations or borrowings. This approach explores semantic space by detecting which lexical meanings are closer to each other. *DatSemShift*, the Catalogue of semantic shifts developed by Anna Zalizniak and her team (Zalizniak et al. 2025), includes manually verified cases of semantic shifts, with an automated module using NLP technologies added more recently (Gruntov & Rykov 2023).

The notion of *colexification* (François 2008) – when two senses A and B are expressed by the same form – inspired numerous publications including NLP-based (e.g. Urban 2012, Östling 2016, Schapper et al. 2016, Di Natale et al. 2021, Karjus et al. 2021), and the creation of the online database Clics (Rzymski et al. 2020). François (2022) proposed **patterns of lexification** as a cover term for the distribution between senses and forms. While these patterns can be described synchronically, they also evolve over time: e.g. semantic change can result in a new colexification pattern, or in the loss of one. In parallel, François & Kalyan (2023) defined *dialexification* as a tool to capture polysemy at the level of entire cognate sets. This concept led to the creation of *EvoSem* (Dehouck et al. 2023, François et al. 2025), a database cataloguing the results of semantic change for about 25,000 etyma around the world. Both *DatSemShift* and *EvoSem* collect thousands of examples of etymology and semantic shifts from a vast array of language families.

In addition to these empirical resources, another venue for exploring semantic change is to propose new ways to model it, using mathematical tools and visual representations or *word* 

*embeddings*. Map-based approaches, already in progress (e.g. Georgakopoulos & Polis 2021, 2022; Di Natale & Garcia 2023), raise new questions of theory and method.

The data collected in these works provides new ground for conclusions about semantic shifts and their causes, as well as about lexification patterns as observable in certain semantic domains, certain language families or areas. Hopefully, our proposed workshop will contribute to explore these questions.

## Research questions

Our workshop will attempt to provide answers to the following questions:

- How do lexification patterns emerge in languages? How do they spread to their neighbours by contact (semantic calque)?
- Are certain patterns of lexical change specific to certain linguistic areas, or certain language families? Are there other patterns that are, on the contrary, equally distributed across all continents, and potentially universal? How can they be captured?
- Are certain types of semantic shift specific to certain semantic fields or domains?
- Can we identify different types of semantic shifts according to their cognitive mechanism (e.g. metaphor, metonymy, conventionalization of implicature, widening, narrowing...)?
- How can we reconstruct semantic paths in the history of languages? When two senses A and B are dialexified (i.e. found in the same cognate set), what reasoning can we propose to reconstruct the most likely direction of change?
- What are the motivations for semantic shifts? What factors (morphological, cognitive, pragmatic, social ...) can accelerate lexical change or slow it down?
- What are the best ways to visually represent semantic change? Can we derive them from the semantic maps/graphs used to represent synchronic patterns of lexification?
- What empirical resources exist in the domain of semantic shifts? What challenges do they pose? What answers can they provide?

These questions will be addressed in the course of our workshop.

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