The specifics of constructional change: a quantitative account of the semantic expansion of the French complex preposition *en plein N*

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Complex prepositions offer a particularly interesting viewpoint on constructional change, since they arise regularly throughout the history of a language, as a result of constructionalization processes (Hoffmann 2005, Prévost & Fagard 2007) and obey a simple structure with a conventionalized fixed part and an open schema that can accommodate a restricted set of fillers (Lauwers 2014). Moreover, these fillers drive the meaning of the construction (Stefanowitsch & Gries 2008), giving a privileged access to its semantic structure (Hilpert & Perek 2015). In this contribution, I want to exploit the diachronic dynamics of these fillers to give an empirical account of the complex semantic changes a construction goes through.

To this end, I focus on the French complex preposition *en plein + N*, literally *in full + N*, which has no exact counterpart in English, but can be translated in some contexts by constructions such as *in the midst/middle/heart/center of* (see Van Rompaey & Davidse 2014 for a corpus-based long-term diachronic study of the grammaticalization and resulting layering of *in the middle/midst of* and *be in the process of V-ing*; Désagulier 2022 for a quantitative-based diachronic study of these prepositions). The source meaning of this construction highlights the wholeness of the filler noun; e.g. *en pleine assemblée* ('in full assembly') indicates full attendance, while *en pleine santé* ('in full health') describes a perfectly healthy condition. Corpus data is retrieved from the Frantext database (ATILF 1998-2023). Relying on the S-curve pattern of frequency increase (Feltgen et al. 2017), I identify two major steps in the historical development of this construction: first, a constructionalization in the sixteenth century, and a further expansion (or post-constructionalization; Colleman 2015) in the nineteenth century. The first frequency increase is best explained by a diffusion among the language users as the construction gets entrenched (Blythe & Croft 2012), while the second increase is an instance of a "lexical" diffusion as the construction comes to host a widening diversity of fillers (Ogura 2007, Rutten & van der Wal 2014), mirrored by a productivity increase (measured as the average number of types over multiple random samples of a fixed size; Valdeson 2022: 108).

To understand this post-constructionalization step, I extract the frequency trajectories of the 30 most frequent fillers, and automatically extract clusters of similar trajectories. Three groups of fillers are thus identified, the first one in relation to the source meaning, which is being lost at this time. The second one, already dominant in terms of frequency by the end of the first constructionalization step, reflects the core meaning of the construction as a "centrality marker" (Franckel & Lebaud 1991), both in spatial and temporal terms (cf. the fillers classification in Do-Hurinville 2008). However, this dominion is being challenged by a third group (*en plein(e) lumière/ciel/soleil/nuit/rue*), whose semantic orientation is unclear, but may be related to an intensifying reading of the construction (the 'paroxystic' reading in Do-Hurinville 2008).

Moreover, by a manual inspection of the less frequent fillers, I show that many new fillers refer to ongoing processes ('action nouns' in Haas 2011, 'processive nouns' in Do-Hurinville 2008), which corresponds to the use of the construction as an aspectual marker of unboundedness (Haas 2011). Although this use of the construction becomes well entrenched by the end of this expansion step, it plays a marginal role in the overall frequency dynamics. My hypothesis is that, for the construction to accommodate a new semantic domain, a strengthening of its core meaning is necessary; only then can it coerce new types into a semantic reading consistent with this core (Lauwers & Willems 2011).

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