

Force dynamics in the semantic evolution of lexical categories

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The Force Dynamics Theory, which was developed by Talmy (1988, 2000), has had a great impact on Cognitive Science and Cognitive Linguistics in the last decades. It is largely consonant with the model of image schemas (Johnson, 1987; Lakoff, 1987), since the last includes particular dynamic schematic structures, such as FORCES and BARRIERS, but the Force Dynamics Theory conveys a fine-grained explanatory potential, which has proved useful for the description of a variety of linguistic constructions, such as causatives (Shibatani, 2002) and the middle voice system in Spanish (Maldonado, 1993, 2006), among others.

In my communication, I explore the role of force dynamics in the semantic evolution of verbs, arguing that the force-dynamic patterns tend to persist in semantic change. Although it has been showed that image schemas play a crucial role in the category coherence of several linguistic units (Sweetser, 1990; Soares da Silva, 2003), the potential of Talmian force dynamics has not yet been deeply explored in diachronic lexical semantics.

In order to shed some light on this issue, I will focus on the semantic evolution of the Spanish verb *arrancar*, which functions prototypically as a caused-motion verb ‘strip off’, having developed a significant variety of meanings in the history of Spanish, such as its use as an intransitive motion verb ‘rush off’, its inchoative value ‘start up’ or its auxiliary function in verbal periphrases <*arracar a* + infinitive> and <*arrancarse a* + infinitive>. I carried out a quantitative and qualitative analysis of 830 occurrences of the verb *arrancar* from the 13th to the 20th century, extracted from the *Corpus del Nuevo Diccionario Histórico del Español* (CNDHE). First, I classified and quantified the different structures with *arrancar*, and then I described the process of semantic extension experienced by the verb.

I will show that the force dynamics present in the prototypical meaning of *arrancar* (‘rush off’) tend to persist in the different semantic extensions of the verb, playing a major role in the coherence of the lexical category. More concretely, I will argue that the transitive meanings of *arrancar*, such as ‘eject’ and ‘rip’, keep the same force-dynamic pattern than the prototype, which applies in different domains (physical, social, psychological). The intransitive values of *arrancar* (such as ‘rush off’ and ‘start up’) and its auxiliary values also have a force-dynamic character or, at least, they can be characterized as *energetic constructions* in terms of Langacker (1991) and Maldonado (1993, 2006), in the sense that they profile and emphasize the energy involved in such processes.

These results show, on one hand, the utility of the Force Dynamics Theory in diachronic lexical semantics, since it facilitates the fine-grained study of the cognitive

structures and mechanisms enabling category coherence and category variation. On the other hand, our findings suggest that force dynamics show a high level of abstraction, so that they should be considered among the most schematic conceptual structures, on an equal footing with image schemas.

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