Spatial language and cognition: exploring visuo-spatial thinking and speaking in English, French and Greek

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Abstract

Although human cognition is traditionally thought to be universal and language-independent, recent typological and crosslinguistic research reveals the need to place linguistic diversity at centre stage in order to better understand the nature of cognitive processes. In the domain of space, variability is realized with spatial semantic elements mapped across languages in very different ways onto lexical/syntactic structures. For example, **satellite-framed languages** (e.g., English) express manner in the verb and path in satellites; while **verb-framed languages** (e.g., French) lexicalize Path in the verb, leaving Manner implicit or peripheral. Some languages are harder to classify into these categories, rather presenting **equipollently-framed systems**, such as Chinese (**serial-verb constructions**) or Greek (parallel **verb-** and **satellite-framed structures** in equally frequent contexts). Such properties seem to have implications not only on the formulation/articulation levels, but also on the conceptualization level, thereby reviving questions concerning the language-thought interface. The present study investigates the relative impact of language-independent and language-specific factors on spatial representations across three typologically different languages (English-French-Greek) combining a variety of complementary tasks (production, non-verbal and verbal categorization) all coupled with eye-tracking. The findings show that typological properties of languages can have an impact on both linguistic and non-linguistic organization of spatial information (i.e., categorical choices, attention allocation patterns), open new perspectives for conceptualization and contribute more generally to the debate concerning the universal and language-specific dimensions of cognition.

Keywords

Spatial cognition, language typology, motion events, spatial categorization, conceptualization processes, eye movements