

The Semantics of English Prepositions: Spatial Scenes, Embodied Meaning and Cognition

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PREFACE

Linguists, psychologists, and philosophers have long observed the importance of space and spatial experience for both language and thought. In this book, we examine the nature of human spatio-physical experience and how human conceptualization of spatial relations is reflected in the English language. In particular, we are interested in how spatial concepts are systematically extended to provide a wide array of non-spatial meanings. We do so through a study of English spatial particles, an important subset of which are prepositions.

The central notion we explore is that of a *spatial scene*, a conceptualized relation grounded in spatial interaction and experience, involving entities that are related in a particular spatio-configurational way. For instance, in a spatial scene described by: *The cup is on the table*, the cup is in contact with the upper side of the table. A distinct spatio-configuration is described by the following: *The coffee is in the cup*. This scene involves the coffee being located inside (as opposed to outside) the cup. However, spatial scenes do not only involve spatio-physical relations or configurations. It turns out that particular spatial relations have non-trivial consequences that are meaningful to humans. The spatial scene involving *on* also involves a support function between the table and the cup: unless enough of the cup's base is situated on the table, the cup will fall and smash on the floor. Equally, the spatial scene relating to *in* involves a containment function, which encompasses several consequences such as locating and limiting the activities of the contained entity. Being contained in the cup prevents the coffee from spreading out over the table; if we move the cup, the coffee moves with it. These consequences, as well as the spatial-physical configuration between entities, give rise to a range of non-spatial meanings associated with the spatial particles *on* and *in*. For instance, sentences such as: *You can count on my vote* and *She is in graduate school*, do not strictly involve spatial relations between physical entities, but rather non-physical concepts associated with the notions of support and containment respectively. Spatial particles offer rich and fascinating evidence of the complex interaction between spatio-physical experience, the human conceptual system, and language use. Consequently, they represent an excellent "laboratory" for investigating the way in which spatial experience grounds many other kinds of non-spatial, non-physical concepts.

Our approach is both cognitive and experientialist. It is cognitive in that we assume that meanings do not match up with a mind-independent objective reality. Rather, "reality" is determined by the nature of our bodies and our neuro-anatomical architecture, as well as the physical world we inhabit. Hence, the meanings encoded in language relate to and reflect our conceptual system, which constitutes our "representation" of reality. Our approach is experientialist as we acknowledge that our representation of reality is contingent upon a world out there, which in turn is meaningful, precisely because it, and our interactions with it, have non-trivial consequences for our survival.

Spatial experience provides a substantial portion of the conceptual bedrock for the human conceptual system, i.e., for the nature of meaning. Hence, this book, through a detailed analysis of the range of meanings associated with English spatial particles, argues for the foundational role of experience in the development of meaning in general, and word-meaning in particular.