Cognitive Linguistics Symposium

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Mappings in Conceptual Systems, Grammar, and Meaning Construction

Reflecting basic features of neural organization and mental processing, a central and repeated finding of cognitive linguistics has been the need to posit "mappings" or "correspondences" between different structures or different domains of experience. Included are mappings between the elements of different "mental spaces", as well as correspondences between the "source domain" and the "target domain" of a metaphor. Correspondence is also cited in "cognitive grammar" as being pivotal to grammatical constructions.

In the present symposium, we examine key notions of cognitive linguistics as they relate to cognitive science more generally, focusing in particular on the role of mappings and correspondences in conceptual systems, grammar, and the on-line construction of meaning.

Why should there be such a thing as grammar? It would not exist were lexical units available to symbolize every conception one would want to express. However, lexical units form a limited set, whereas the conceptions we wish to encode linguistically are open-ended and indefinitely varied. We overcome this by resorting to complex expressions comprising multiple lexical elements. Each component element evokes some facet of the overall conception, a facet singled out precisely because it is susceptible to individual lexical encoding. Collectively, these individually symbolized conceptual "chunks" provide enough clues about the intended composite conception intended by the speaker that the addressee (especially in context) is able to reconstruct some approximation to it. But this reconstruction cannot proceed effectively unless information is systematically provided concerning how the conceptual chunks are supposed to fit together. This information is supplied by the manner in which the component lexical elements are combined: a particular means of phonological integration (e.g. linear adjacency) serves to indicate--to symbolize--a particular means of conceptual integration.

Conventional patterns of this sort constitute a grammatical system. Cognitive grammar effects a significant theoretical unification by claiming that grammar consists of patterns of symbolization (thus it forms a gradation with lexicon). Grammar reduces to assemblies of "symbolic structures", each residing in the symbolic association between a conceptual and a phonological structure. In such an assembly--or"construction"--component symbolic elements are linked by correspondences to one another and also to the composite symbolic structure resulting from their integration. Semantically, these correspondences indicate which substructures of the component conceptions (or "chunks") are to be equated and thus superimposed in forming the composite conception. From another perspective, correspondences represent the distortion engendered by dissociating the integrated composite conception into overlapping chunks for purposes of symbolic encoding. On this account correspondences are inherent and indispensable to grammar--a direct and ineluctable consequence of the very existence of complex expressions and grammatical patterns. Correspondences figure in the characterization of every construction and are the basis for all grammatical dependencies. Adding or adjusting a correspondence can drastically affect an expression's meaning, form, and grammatical behavior. The key to an explicit and revealing grammatical analysis thus lies in elucidating the correspondences linking component and composite structures at multiple levels of organization.

Mapping operations are essential for functional assemblies, and they figure prominently in the constitution of conceptual systems. Metaphorical mappings link domains in multiple and systematic ways that are grounded in human experience and culture. Through projection, they allow some domains to structure the conceptualization of others. Complex metaphorical systems are learned early and they underlie much of semantics, language organization, and category formation. Recent developments in metaphor theory will be discussed.

Finally, correspondences are at the heart of on-line construction of meaning. Multiple mental spaces are set up and dynamically linked as we think and talk. Actual discourse consists in building vast networks of such spaces, shifting viewpoint, focus, and anchoring, as we 'move' through configurations of such spaces.

Very general cognitive operations, like conceptual blending, enter into this process. We will report on recent results concerning blended spaces and conceptual integration, focusing in particular on the 'optimality' principles that constrain integration in context. The research suggests explicit mechanisms of creativity inscribed in everyday thought and language.