
The Concept of ‘inheritance’ in Grammatical Theory – What Is It and Which Questions Does It Raise?

TOBIAS UNGERER

DSB 3.10 - 15:10

Over the last 40 years, a number of grammatical theories have emerged which do not subscribe to the mainstream paradigm of Chomskyan generative syntax, but advocate radically new ideas about speakers’ representation of linguistic knowledge. For instance, Lexicalfunctional Grammar (Bresnan & Kaplan, 1982), Head-Driven Phrase Structure Grammar (Pollard & Sag, 1987), Word Grammar (Hudson, 1984) and different strands of Construction Grammar (e.g. Goldberg, 1995) all view grammar as a declarative system of form and meaning (or function) elements which are subject to learnable constraints. Within these frameworks, new questions have taken centre stage.

One of these is the question which relations exist between the units of speakers’ linguistic knowledge, i.e. which mechanisms structure that knowledge base and render it an efficient tool for language use. Most constraint-based theories have identified one particular relation as being particularly fundamental to the organisation of linguistic knowledge: ‘inheritance’, the taxonomic relation between a more abstract superordinate category and a more specific sub-category which adopts the features of its super-class. For example, individual lexemes like *cat* and *dog* may inherit part of their meaning from their common super-type *animal*; on a more complex level, a clause like *Chris drove Pat mad* may inherit some of its features from the abstract syntactic schema of the resultative construction (Goldberg, 1995).

Conceptions of inheritance, however, differ widely across theories and researchers. Frequently, inheritance seems to be adopted as a useful technical tool without much reflection on its theoretical origins and psychological implications for models of language. This talk will attempt to address some of these limitations by i) sketching the interdisciplinary history of the concept of ‘inheritance’ from its origins in 1960s artificial intelligence literature

(Quillian, 1968) to its integration into linguistic theory; ii) outlining some differences in the way that different grammatical frameworks make use of the concept; and iii) highlighting unresolved questions about the role of inheritance in linguistic representation and processing.

The latter part includes a discussion of static vs. on-line views of inheritance, the notions of 'redundant' and 'shared' information in speakers' linguistic networks, and a critical reassessment of the psychological status of inheritance in comparison with other structuring mechanisms such as meronymic (part-whole) relations. The overall aim is to raise awareness among researchers for how distinct conceptions of inheritance can give rise to fundamentally different views of how language is stored and processed, thus highlighting the importance of further investigations into the psychological mechanisms underlying inheritance.