Poverty of stimulus : some unfinished business

The core problem of the theory of language is to discover the mechanisms that enter into what Wilhelm von Humboldt called "the infinite use of finite means." New understanding in the theory of computability made it possible to undertake that task systematically in the 1950s. It quickly became evident how little was understood. Problems of "poverty of stimulus" were ubiquitous: cases of a substantial gap between the data available and what is known by the speaker, even a young child. A major thrust of linguistic theory since has been to discover principles to overcome the gap. Within the biolinguistic framework that began to take shape at the same time, one central goal is to reduce assumptions about genetic endowment ("universal grammar," in technical terms) to the operation of principles of greater generality, in the best case laws of nature. Considerable progress has been made, but even for some of the simplest and most elementary cases discussed 50 years ago, explanations that have been commonly accepted rely on dubious assumptions. Some of this "unfinished business" is what I intend to discuss, suggesting possible solutions -- which, as is so often the case, open new challenges.