

ABSTRACT

GRAMMAR AND INFORMATION:

AN INVESTIGATION IN LINGUISTIC METATHEORY

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This work examines the foundations of linguistic theory, with particular reference to the status and justification of grammars and theories of language structure. A metatheoretical critique of generative grammar is followed by epistemological motivation for, and presentation of, an alternative conception of language structure due to Harris, together with an approach to its justification. It is proposed that grammars have an informational validity as structures comprised of maximally unredundant equivalence classes whose members all demonstrably 'say the same' over a specified domain. Chapter 1 introduces the issues involved and summarizes the argument. In Chapter 2, the metatheoretical situation in American structural linguistics prior to the advent of generative grammar is reviewed. Among the findings are that familiar attributions to the central figures of this period of a goal of providing "mechanical discovery procedures" for grammars or of attempting to specify linguistic form without regard to meaning are groundless. Chapter 3 situates the first major work of generative grammar in respect to Quine's contemporary proposals for linguistic theory and finds wanting <sup>the</sup> arguments advanced <sup>in that work</sup> that linguistic form can be identified independently of considerations of meaning. Chapter 4 charts the evolution of generative grammar from a "formal systems" view of grammars and languages to recent proposals concerning "core grammar"

and "markedness". It is argued that in pursuit of "explanatory adequacy" generative grammar has increasingly been distanced from the control of empirical evaluation, and that claims seeking a biological locus for abstract grammatical properties are unsubstantiated and problematic in themselves. Chapter 5 provides an epistemological critique of 'information' as employed by recent writers. Grammars -- as un~~re~~dundant characterizations of combinations of linguistic elements that can occur -- are characterizations of information. Chapter 6 refers to a prior study presenting a 'grammar' of a sublanguage of cellular immunology. It is shown both how and that a theory of language structure can be empirically validated by enabling the construction of formulas of information that compactly summarize and trace the findings and discussions in research reports of a science.