

How much is one word?*

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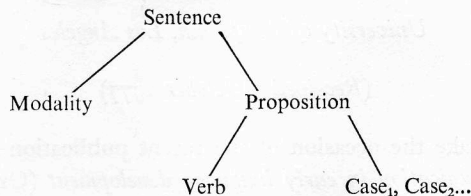
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I should like to take the occasion of the recent publication of our book, *The structure of communication in early language development* (Greenfield & Smith 1976) to respond to J. Dore's (1975) criticisms of this work, based on an earlier draft (Greenfield, Smith & Laufer 1972). (It should be made clear, however, that the points under discussion remain in the published volume.) I shall, at the same time, respond to some points raised by Howe (1976) in her recent review of our book in this journal. I hope to clarify our position, including its relation to speech act theory, and elucidate some general theoretical issues in early language development.

Dore's criticism occurs in relation to his presentation of what he calls the 'holophrase controversy': is or is not the early single-word utterance sentential? Dore places us in the camp of the holophrasists, those who would argue for the sentential value of single-word utterances. Yet we have been sharply critical of the basic holophrastic view that the child's single word somehow 'contains' a sentence. Our view is that at the single-word stage the child may construct complex messages, not because the word is a sentence, but because the child combines the single word with nonverbal elements such as gesture, action, object and intonation. These combinations can, in our view, occur because the single word is from the beginning inserted in a cognitive-perceptual-action framework. Dore correctly ascribes this latter notion to us, but goes on to say that we 'too rely to some extent on all the hypotheses proposed by the transformational syntactic theory of holophrases' (Dore 1975: 25). The major of these hypotheses would seem to be that sentences are innate, part of the organism's internal structure, even at the one-word stage, and that early word combinations are therefore nothing more than 'the expression of a previously (innately) known syntactic system in patterned speech' (*ibid.*: 23). TO SAY THAT A WORD IS RELATED TO AN UNDERLYING COGNITIVE-PERCEPTUAL-ACTION STRUCTURE IS VERY DIFFERENT FROM SAYING THAT IT IS RELATED TO AN UNDERLYING SENTENCE. Our claim is the former, not the latter. We agree with Dore's conclusion that overemphasis on the sentence has not been theoretically productive in understanding the one-word stage of language development. We do, however, object

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to being placed among those who employ the sentence concept at the one-word stage. Dore categorizes us in this way by presenting his own tree-structure representation of our conception of the deep structure of the single-word utterance:



It should be emphasized that this is a representation that never appears in our work. In fact, it deviates from our own representation in introducing linguistic concepts of sentence, verb, case and proposition. None of these has in fact appeared in any version of our work on single-word utterances. Instead we use terms that are appropriate to describe a cognitive-perceptual-action framework rather than a sentence (or logical structure), e.g. ACTION or STATE rather than VERB, EVENT rather than PROPOSITION, SEMANTIC FUNCTION OF AN ENTITY rather than CASE. Of these terms only SEMANTIC has linguistic status. But this term has as much to do with the speaker's perception of the world as it does with language. We have used SEMANTIC to express the meaning relation between a single word and a cognitive representation of real-world events (Greenfield & Smith 1976: 213). In addition we have retained Fillmore's term MODALITY for elements that modify the EVENT as a whole (most often the child's attitudinal relation to the EVENT), but are explicit in saying that it 'may be expressed nonverbally' (Greenfield & Smith 1976: 41).

Dore places us in the opposite camp from cognitive-developmental approaches which 'have in general not attributed knowledge of linguistic structure to the child at the earliest stages of language development' (1975: 26). But neither have we. We see the perceptual and action schemata which do exist as the basis for but not identical with later linguistic structure.

The following assumption, with which we strongly disagree, is implicit in Dore's work: there exist two separate structures in the child, a cognitive one and a linguistic one. A contrary assumption has been stated in our work, more explicitly in the published version: that there is a single cognitive organization underlying both linguistic and nonlinguistic modes of expression and understanding. This organization makes possible the beginnings of language where a single word is a functional part of the nonlinguistic or conceptual organization of a particular speech act and referential situation. As development proceeds, the linguistic aspects of structure become able to function in a more autonomous fashion. **THUS, IT IS A FALSE DICHOTOMY TO ASK WHETHER THE ONE-WORD STAGE REPRESENTS A LINGUISTIC OR CONCEPTUAL PHENOMENON: IT IS THE INTEGRATION**

OF THE FORMER WITH THE LATTER THAT CONSTITUTES THE POWER AND INTEREST OF THIS STAGE OF DEVELOPMENT. In this view, creation of separate structures between language and other forms of cognition occurs through a process of differentiation as development proceeds.

Dore claims that conceptualizing the single-word utterance as a primitive speech act solves the problem of the holophrase controversy. His primitive speech act consists of two components, a PRIMITIVE FORCE (from Searle's (1969) illocutionary force) and a RUDIMENTARY REFERRING EXPRESSION (from Searle's (1969) proposition). The primitive force corresponds to phenomena we have classified as MODALITY elements (modality being a term from Fillmore's case grammar); modality includes the child's relation to an utterance, the pragmatic function of the utterance. Indicative and volitional were the two most important modes to appear in our data. What Dore calls the rudimentary referring expression corresponds to what we call EVENT. But there is an important difference: Dore's referring expression may not contain a predicating expression,¹ whereas our event may. While Dore allows nonverbal behaviour such as attention and gesture to be used to infer the presence of a communicative intent like requesting, Dore will not use these cues to infer the presence of predication. For example, if a child reaches towards a cookie and says *cookie*, this would be a request in Dore's scheme (its primitive force), even though the force was not expressed verbally (e.g. *want*). If however the child said *down*, throwing an object on the floor, Dore would not consider 'down' to be predicated of the object, even though the object is specified by the child's own action. This restriction appears theoretically inconsistent and, in fact, Dore is not able to sustain his claim that he avoids the concept of predication in the one-word stage. Consider the following observation (Dore 1975: 31): '*mama* with a rising terminal contour was used to ask if an object belonged to his mother or if a doll was the "mama"'. Here Dore is in effect saying that a speech act having the same primitive force (requesting an answer, as shown by a common intonation contour) and the same rudimentary referring expression (*mama*) has two different predicates: object belonging to mother vs. doll as mother. Yet such a distinction is not admitted into his formal system. It is precisely such a distinction which our description of the referential EVENT is designed to capture. Thus Dore inconsistently attributes to the one-word child a distinction which he says does not exist at that stage of language development. One of our findings is that implied predication develops relatively late in the one-word stage, so that, in comparison with an adult speech act, the balance between illocutionary force and propositional content will be more on the side of illocutionary force at the earlier stages. Thus our earliest stage is what

[1] For purposes of this discussion, a predicate is defined as a state or change of an entity, or a relation between two entities.

we call the pure performative, extending Austin's (1962) term, in which sound is used totally to do something, and not at all to refer to something (e.g. saying *pat-a-cake* in rhythm to hand clapping). A later stage in the one-word period adds Dore's primitive referring expression, indicating the identity or existence of an entity. Only at a still later stage does predication arise, as when, for example, a change of state is verbally predicated of a gesturally indicated entity. But an analytic scheme should capture the importance of this later development in one-word speech and the variety of predication types which appear during this period.

The issue of whether predication exists in single-word utterances is also raised by Howe's review of our book. She states that contextual information, no matter how elaborate, cannot prove the existence of propositions, by which she appears to mean predicative relations. We agree with Howe, and have said in our book, that experimental evidence is needed. It is, nevertheless, an empirical finding of our study that children use language in contexts involving their own relation to an entity before they do so in contexts involving a change of state of an entity or a relation among entities. The latter types of events are the real-world referents of predicative relations and, therefore, of full-blown propositions. The earlier part of this discussion has made it clear that we are not talking about the LINGUISTIC structure of propositions at the one-word stage. But our data do show the aforementioned transition from contexts of simple reference (or existence predicates) to contexts of more complex predicative relations; this transition must be accounted for by any theory of language development in the one-word stage.

Howe presents an interesting example to counter our use of context in this way: a 22-month-old child who says *It's a man* (indicative or referring expression) in the context of putting a model fireman down (ACTION). Her point is that this two-word utterance encodes simple reference rather than action. She uses this example to illustrate how contextual structure is not always in accord with verbal structure, just beyond one-word utterances where there is more linguistic structure. We also observed examples of this sort of phenomenon, where the utterance does not mirror the nonverbal context. Such examples are, however, in the minority. Much more predominant were the cases where two- or three-word sentences linguistically encoded just those situational relations in terms of which earlier single-word utterances had been described. With reference to Howe's particular example, there remains a developmental point that needs accounting for: our data show that children are able to refer to entities in indicative contexts (with deictic gestures like pointing) before they can do so in combination with other types of action. Once the child CAN use names in an action context, the possibility of constructing an action relation is present. Before this point it is not. Our approach identifies this new developmental possibility. Examples like Howe's, as well as experimental evidence, are

needed to find out exactly how and when this possibility results in the predication of action.

A related point raised by Howe is whether the one-word child recognizes the difference between types of propositional functions, such as the distinction between AGENT and OBJECT. On this point, we observed in our study that objects of action are verbally expressed much more frequently than agents. This observation demonstrates a behavioural differentiation of AGENT and OBJECT. While the precise cognitive significance of this differential frequency can be defined and refined only through experimental tests, any theoretical interpretation must account for our empirical observation.

Recent work (Miller 1975) indicates, moreover, that children in transition from one- to two-word utterances express relations by means of a single word when all situational elements are redundant but one, although in a situation of similar structure having less redundancy a two-word utterance may be used. Here the one-word utterance does not mark the absence of predication but the presence of redundancy. This is the operation of what we have called the principle of informativeness, a principle which Howe does not dispute in her review of our book. (For experimental demonstration of the role of informativeness in one-word speech, see Greenfield & Zukow, in the press.) The operation of informativeness in producing single-word utterances is indirect evidence that such utterances are not merely the result of the absence of predicative understanding.

In conclusion, let me try to clarify the relation of our approach to some general currents. Although Dore contrasts our approach with a cognitive-developmental one, the development of cognitive structure is, in fact, an important part of our analysis: cognitive structure is the framework of the child's single-word utterance. Although Dore contrasts our approach with one based on speech acts, our analysis actually includes the same elements as a speech-act framework. Thus Searle's major components of the speech act, illocutionary force and propositional content, are both represented in our scheme; and Austin's performative analysis is used to describe what corresponds to illocutionary force. My feeling is that Dore has exaggerated differences. My hope is that by elucidating continuities between our approach and his, this discussion will help others in interpreting the rapidly growing body of work on how children communicate before they combine words.

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