

Polysynthetic Word Formation: Wichita Contributions to the Morphology/Syntax Debate

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Wichita is Caddoan language spoken in Oklahoma, USA. It is a polysynthetic language typologically very similar to Iroquoian languages: verbal "words" (defined as constructions consisting of bound morphemes only) consist of from four to more than a dozen morphemes in approximately 35 rigidly ordered position classes, with fairly complex morphophonemics to obscure some of the morpheme boundaries. Bound morphology expresses not only argument person and number, tense, and aspect, but various discourse, adverbial and modal categories as well. Moreover, the case-person-number morphemes are scattered through the word in several position classes or "slots", with different kinds of argument and verbal number (dual vs. plural, collective vs. individualizing, distributive vs. localized) expressed, and with reference to as many as four different arguments (subject, object, recipient, and possessor of object) possible in a single "word". Most transitive verbs allow or even encourage object incorporation, and many intransitive verbs also permit or encourage subject incorporation. There is even one (isolated but spontaneously produced) text example of the addressee of an imperative incorporated into the verb.

In a language with this kind of structure, the number of "words" is unbounded in the same way that the number of "sentences" is unbounded in more isolating languages, though obviously there is a limit to the length of any word (unlike the theoretically unlimited length of sentences). Speakers are just as creative about word formation in Wichita as they are about sentence formation in English, actively coining new constructions to fulfill the needs of the current discourse.

Is this process of word-creation similar to that of sentence-creation in other languages, or are the rules applied analogous to the lexical formation rules of other languages? Crudely put, are Wichita words assembled in the speakers' syntax or the lexicon? What kind of evidence would help to answer this question?

In a debate over this general issue a few years ago in the context of words formed through noun incorporation, Jerry Sadock (1986) and Marianne Mithun (1984, 1986) each defended one of the possible positions on this question. Sadock's opinion is that, in Greenlandic at least, some noun-incorporation processes are syntactic. Mithun's position, in contrast, is that what is created is a "new word", and the processing is therefore lexical. Baker (1996) analyzes those aspects of Wichita word composition which he discusses as purely syntactic, but his arguments are strictly from formal syntactic theory and do not address possible psychological issues.

In this paper I investigate in two ways the question of whether a Wichita verbal construction is treated by a speaker as a "word" or a "sentence". The first line of investigation is structural, and (at least according to the most popular definitions of syntax) leads inevitably to the conclusion that the components of Wichita words are assembled syntactically. Evidence includes the expression of subject-predicate relations, the composition of complex predicates, the fact that incorporated nominals can be referential and serve as the antecedents of anaphors, and the distribution of the components of both adpositional and noun phrases partly inside and partly outside the word. Contradictory evidence, however, is provided by the order of the morphological position classes, since groups of forms that we would like to consider parts of a "constituent" are non-contiguous, and by the fact that in real language use,

many polysynthetic constructions are only one word of a multi-word utterance which we probably want to call a sentence.

The second line of investigation is psychological, using anecdotal and experimental evidence. The anecdotal evidence comes from linguist-speaker exchanges when the linguist was trying to teach speakers to be language teachers, or to explain structure to semi-speakers. Pointing out paradigm-formation patterns (e.g. the change from "I" subject to "you" subject involves only the change from /t/ to /s/; the rest of the word remains the same) elicited comments such as "Gee, I never noticed that before." Such evidence suggests that the formations are psychologically unanalyzeable whole words.

The experimental evidence consists of the presentation to speakers of pairs of long, i.e. 7-10 syllable one-word utterances. The members of some pairs are identical, while others differ in varying degrees of subtlety. Listeners are asked to respond the instant that they notice that the second word differs from the first. If they react before the word is finished, we probably do not have evidence to answer our question, since reaction to "new word" could take place part way through the word; but if they consistently wait until the second word is finished before responding, we may have some evidence that these complex constructions are psychologically lexical units.

So is there an answer to the question of whether the verbal words in this language are lexical or syntactic formations? I think the bulk of the evidence points to the conclusion that bound morphology constructs psychological words, but some of the evidence is difficult to reconcile with that conclusion.

References:

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