

Prosodic phenomena in Wichita preverb phonology

Wichita is a polysynthetic language of the Caddoan family, spoken in and around Anadarko, Oklahoma in the U.S. There is one living speaker, aged 85, and two or three semi-speakers. I have gathered data from many speakers for the past 50 years, however, and have a fairly clear picture of the structure of the language.

Caddoan polysynthesis is similar to Iroquoian: in Wichita, there are over 30 position classes in the verb, potentially containing temporal, locative, instrumental, modal, and argument (noun class, case role, number) information. A minimal verb contains four morphemes: tense/mode, pronominal argument, verb root, and aspect, but most verbs used in ordinary discourse have several more morphemes, including incorporated nouns. The phonology at morpheme boundaries is complex, but for the most part it is independent of morphological structure. Wichita speakers form new words with the same kind of creativity that speakers of less synthetic languages use to create new sentences.

The beginning of the verb has slots for tense/mode, two pronominal arguments, and a class of morphemes called “preverbs” which may code the case roles of some arguments, but which are often simply conjugation class markers. There are about 1,500 possible morpheme combinations for these four slots, and the phonology here is different from that of the rest of the verb. In particular, many of the morpheme combinations include a pitch phoneme, either in this complex or later in the verb. This pitch can be analyzed as behaving like a segmental phoneme.

In this paper I want to report on the phonology of some of these forms, concentrating particularly on the pitch phenomenon. A sample of the issues can be seen when trying to specify regularities for third person arguments. One third person morpheme marks intransitive subjects or third-on-third transitive verbs and is signaled by special allomorphs of the tense/mode prefixes. The other morpheme occurs primarily with plural subjects in third-on-third constructions or intransitives, but can also mark stative or obviative subjects and is often translated as a passive. I call the morpheme which represents the second pattern “indefinite”. Its shape is /iy/.

Some data representative of the problems are these:

Third person	indefinite
(1) tá:cháreʔes ‘she planted for herself’	tiyá:cháreʔes ‘they planted for themselves’
(2) tikaʔacs ‘he is eating it’	tíkaʔacs ‘they are eating it’
(3) ni:chí::ʔih ‘the strong one’	ni::chí::ʔih ‘the strong ones’
(4) tí:cʔirhawi ‘he went to bed with her’	ti:cʔirhawi ‘the other one went to bed with HER’
(5) ti:chíhriʔi ‘she/he is in charge’	ti:chiriʔih ‘they are in charge’
(6) iskiri:cáʔakhiré:sis ‘he is catching up with with them’	iskiri::cá:khiré:sis ‘they are catching up with them’

Example (1) is straightforward: the only difference between the two forms is the insertion of the /iy/ morpheme. Example (2) is also simple, showing that /y/ becomes high pitch before /k/. Example (3) likewise seems phonetically simple, since the addition of /iy/ after the initial /t/ merely adds a mora to the long /i:/ already present. Examples (4) and (5), however, require considerably more attention. In both, high pitch on the simpler form is erased in the more complex one, but in (4) this happens at the locus where the morpheme is added, while in (5) the change is further into the verb. In (6), the pronoun acts as it does in (3), but the insertion of the /iy/ morpheme entails other changes further into the verb.

There are seven other pronominal prefixes which each have their own way of interacting with the preverbs and the morphemes which follow them. The phonological processes defy optimality theoretical constraint descriptions, but work nicely as ordered rewrite rules.

Perhaps most interesting in the context of the focus on prosody at this conference is the use of pitch as if it were a segment, rather than being autosegmental or part of an intonation pattern. It replaces segmental phonemes in the process of cluster simplification, as in example (2) above, and its occurrence in words is no more predictable than the occurrence of segments like /r/ or /w/. It does not correlate with syllable count or syllable structure, nor are there any accent phenomena that can be related to it except that impressionistically, high-pitched syllables have a stronger stress than non-high-pitched ones. In this, however, stress follows pitch rather than vice versa. I think I have demonstrated that not all linguistic pitch is either lexical or prosodic; it can also be segmental.