

P1

"Head Nods" as Markers of Temporal Expressions in ASL

Margaret Ruth CRABTREE and Ronnie B. WILBUR
(Purdue University, USA)

ABSTRACT

Among the nonmanual (face/head/body) markers used for grammatical functions in American Sign Language (ASL), head nods, although very frequent in the discourse, have received little attention. They have so far been associated with functions such as marking the positions of elided verbs (Liddell 1980:30) and assertion (Liddell 1980:31). Here we report yet another function—as general markers of temporal expressions. Further, we argue that this non-manual marker (NMM) when performing this specific syntactic function is highly allomorphic, as an effect of layered rather than reset scope domains.

We observed four distinct “depths” of nod, they are defined as follows from shallowest to deepest, as n1-n4. For the “shallowest” nod, ‘n1’, the head is pulled slightly back. For ‘n2’ the chin is pulled in significantly tighter, causing "double chins". For ‘n3’, a more canonical nod is produced, the head finally tips forward. Lastly, for ‘n4’, the head tilts significantly toward the shoulder.

This NMM covers the signs/phrases referring to the times at which the events denoted by the main verb occur. These can be single lexical items like WINTER or phrases like THREE.TIME EVERY.WEEK (1). Other signs may occur under these nods alongside the temporal expressions, but temporal expressions are always covered by these nods.

As for the environments that cause allomorphy, all nods observed deeper than an n1 were preceded by and/or co-articulated with some other NMM. Deeper nods, n2-n4, were all preceded in the utterance by n1, and a few instances of embedded n2 occurred that did not have preceding n1s. This supports that n2-n3 are conditioned by NMM stacking. It is as if multiple syntactic nodes are generating single nods which build up in intensity rather than over-write one another. This is similar to the concept of "syntactic accumulation" of NMMs as described in Churng (2009). Allomorphs n2-n3 are the phonetic result of co-occurring nods.



Figure 1: n2



Figure 2: n4

There were nods in the data that covered some, but not all verbs, and these were also able to condition deeper nods over temporal expressions. The most noticeable nods occurred one after another in complex temporal expressions like "[[[three times] a week] for a year]". The glossing in (1) shows the increasingly deeper nods as the utterance progresses.

This analysis encourages accepting wider phonetic variation in NMMs. With predictable allomorphy, temporal expression covering head nods are a promising contribution to the analysis of ASL and illuminate new avenues for ASL NMMs.

(1) "He went to church three times a week for a year." (English stimulus)

	n1	n2	n4	

n4	IX-3 PAST.GO ONE.YEAR GO+++ CHURCH THREE.TIME EVERY.WEEK			
	IX-3 [PAST.GO [ONE.YEAR[GO+++ CHURCH[THREE.TIME EVERY.WEEK]]]]			
	3.SG went	one.year	go.ITER	church three.times every.week
	'In the past, he went for one year to church three times a week, every week.'			

REFERENCES

Churug, S. 2009. Syntax and Prosody in American Sign Language: The Nonmanual Prosodic Consequences of Multiple wh-questions (M.A. thesis, University of Washington).

Liddell, S. 1980. *American Sign Language Syntax*. The Hague: Mouton.