

# **INDICATIONS AND GRAMMAR: EYES AND OUTSTRETCHED FINGERS IN A FIRST GENERATION EMERGING SIGN LANGUAGE**

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The natural emergence of language can be observed most prominently in the spontaneous and interactive creation of family and village sign systems. These arise in contexts where a sufficient number of deaf children and their caregivers are able to socialize one another into innovative communicative practices, sometimes giving rise to entirely new languages. On the basis of such an emerging sign language from a rural Mexican community, this paper argues that pre- (or non-) linguistic interactive resources involving gaze, pointing, and attention management, form the bases for both turn-taking as a pragmatic achievement and proto-grammatical evidential and affective categories in the new sign language.

## **1. Attention management in “Z”**

### **1.1. *Emerging sign languages and Z, a first generation family homesign***

Among the few contexts where science can observe spontaneous and naturally emerging *new* human languages are communities whose deaf members are sufficiently numerous and multi-generational to allow communication systems based on a visible modality to arise, develop, persist, and sometimes spread. (See, to mention only a few examples, deVos 2012; Feldman et al. 1978; Fusellier-Souza 2006; Goldin-Meadow 1993; Haviland 2013, 2013c; Kendon 1980b; Le Guen 2012; Sandler et al. 2005).

An emerging sign language, dubbed Z, in an extended family of Tzotzil speaking people from Chiapas, Mexico, has developed among three deaf siblings, their hearing sister and niece, and now at least two hearing children in a nascent 2nd generation. The language draws on no other sign language, and makes selective use of visible aspects of communication among hearing household members. A first generation sign language, like Z, is particularly compelling, especially since it has arisen in such a very short time. Jane, now in her late

thirties, spent the first six years of her life as the only deaf person in her community. Her brother Frank, also born deaf, was followed later by a hearing sister Terry and then by Will, also deaf, born when Jane had reached the age of thirteen and was thus one of his primary caregivers (Haviland 2014).

### **1.2. *Mutual attention and the grammar of turns in Z***

Z, whose entire speech (sign) community numbers just a handful of fluent signers, builds primarily on a lexicon of invented conventional visible signs, supplemented by an inferentially driven and extensive system of deictic indications—both referential and otherwise—to produce highly structured, interactive, and collaborative conversation. Patterns of grammaticalized utterance structure have also emerged, with corresponding nascent grammatical categories. At the same time, variation in lexicon and apparent morphosyntax can be observed in even this tiny speech/sign community, along with clear metalinguistic discourses and ideologies (Haviland 2013b, 2016).

This paper will analyze mechanisms for managing mutual attention in Z conversation, to argue that contrary to standard assumptions the primary motivation for emerging linguistic structure (in this language, if not elsewhere) is less a drive to achieve reference and predication, and more a desire to coordinate action interactively—a slight twist on DuBois' aphorism (1985:363) that "grammars code best what speakers do most."

### **1.3. *The plurifunctionality of gaze***

The fact that when we gaze we both see and are seen to be seeing—in part a result of the physiology of the human eye whose "white sclera ... has almost certainly evolved to enhance gaze detection" (Levinson & Holler 2014)—makes the eye a powerful multifunctional interactional tool. Levinson and Holler continue: "[M]odern human communication exhibits a specialized ethology not found in other animals: its face-to-face character, which affords the full deployment of multiple articulators, the frequent deployment of mutual gaze and the sustained exchange of short but complex communicative turns are characteristics." Such a system "allows us to communicate without spoken words, as when I indicate with a gesture that you have signs of your breakfast on your chin" (2014, p. 4). All sign languages, of course, "allow us to communicate without spoken words" and this fact gives them special interest for understanding human language more generally.

Scrutiny of the structure of gaze and attention in Z reveals that much of the turn-taking machinery required for signed interaction is in place in non-linguistic interaction independent of signing itself. For example, collaborative labor among multiple participants who need not (and sometimes cannot—because of distance or visual or aural obstruction—speak or sign to one another) is often organized in ways strongly reminiscent of turn-taking, involving exquisitely synchronized shifts in attention and coordinated action. As another example, pre-linguistic children exhibit turn-like coordinated alternations of activity (Bruner 1975), and this is true for children both hearing and deaf. Moreover, referential devices may be directly parasitic on such shifting structures of attention which, in turn, they manipulate: under appropriate circumstances, one can refer directly by directing one's gaze; and that gaze direction itself may (and frequently does) alter the gaze of others. There have been recent advances in the study of gaze in spoken conversation, and its interactive expressivity, complexity, and delicacy (e.g., Kendon 1967, Goodwin 1981, Rossano 2013). Sign languages nonetheless may be profoundly different from spoken languages in this arena: for a visual medium like sign—evolved for deaf interactants who have little or no access to acoustic signals—directed gaze takes on heightened importance: to access another's signing; as a referring device; and also for explicit addressivity—both recipient selection and interactive exclusion, i.e., displays of non-recipientcy. That a signer normally needs to be looked at in some way to be understood also provides her with an inventory of simultaneous visible palettes for communicating: the hands and limbs, the body and its postures, and importantly the face. This talk will conclude with aspects of facial expression in Z that appear to communicate both affective and evidential categories, including, for example a general “interrogative” inflection (Rossano et al. 2009) of central importance in Z conversational “repair” (Dingemans et al 2015).

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