Hey!

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Abstract

Zinacantec Family Homesign (Z) is a new sign language emerging spontaneously over the past three decades in a single family in a remote Mayan Indian village. Three deaf siblings, their Tzotzil-speaking age-mates, and now their children, who have had contact with no other deaf people, represent the first generation of Z signers. I postulate an augmented grammaticalization path, beginning with the adoption of a Tzotzil cospeech holophrastic gesture—meaning "come!"—into Z, and then its apparent stylization as an attention-getting sign, followed by grammatical regimentation and pragmatic generalization as an utterance initial change of speaker or turn marker.

Keywords: Sign language; Home sign; Gesture; Grammaticalization; Pragmatics; Turn-taking; Adjacency pair; Emerging grammar

1. Introduction

When one approaches a house compound, in the township of Zinacantán in highland Chiapas, Mexico, where I have been carrying out anthropological research for more than four decades, one stops outside the gate to call out in Tzotzil—the local Mayan language —*mi li'ote?*, literally, "Are you here?"[1] If anyone chooses to answer at all, usually the dominant female resident will reply simply *li'one* "I am here," thus formally opening a channel of communication whose negotiation may continue at great length ("Is Juan here?" "He is." "May I speak to him?" "Speak." "Juan, are you here?" "I am." "May I speak to you?" "What do you want to say?"... and so on) until, with luck and persistence, one may ultimately be admitted to the house for whatever the original errand was (Haviland & Haviland, 1983). The steps of a conversational opening, unpacked long ago by Schegloff (1968), are distributed over a series of verbal turns. The initial question "Are you here?" is heard idiomatically simply as a polite Tzotzil greeting, but it also

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indicates, via the literal question, that someone is requesting confirmation of another's presence and attention. The standard greeting, then, is an analog of a ringing telephone (or at least the ring of a landline handset, without "caller ID" or some distinctive caller-linked ringtone): a possibly anonymous and not directly addressed summons. That is, it may or may not be possible for someone inside the house to identify the person calling out (and, indeed, adults often dispatch child spies to peer through a crack in the door or around the side of the house to try to identify the visitor, if the voice cannot be recognized). A decision must then be made whether to ignore the greeting or to answer it; and, if the latter, *who* is to answer, that is, which voice will respond. However, the initial greeting conditions the relevance of a reply—from someone in the house—with the appropriate formulaic response. This response—"I am here"—in turn is just about as non-committal as picking up the telephone receiver, thus indicating receptivity to move on to the next conversational move. So at least part of what the initial turn, "Are you here?," is designed for—even though it may be anonymously performed and ambiguously addressed—is to alert a *potential* addressee to the visitor's intention to start an interaction. This paper aims to consider a visual device for accomplishing something similar, namely initiating a turn-at-talk, in a nascent sign language developing in tiny group of signers in this same Indian township in southeastern Mexico.

2. Z

Zinacantec family homesign, or "Z" for short, is a first-generation, spontaneously emerging kinesic communication system developing in a single extended family in Zinacantán—a community of predominantly Tzotzil (Mayan)-speaking peasants and rural merchants in Chiapas. Since 2008, I have been studying this nascent language, the collaborative invention of three deaf siblings, their hearing sister, niece, and nephew. None have met any other deaf people or been exposed to an existing sign language. This small group has created a sign system that meets all their quotidian needs, in interaction with other hearing members of the extended household.[2] They constitute a tiny island of signers in the midst of a sea of Tzotzil speakers, themselves engulfed by the vast ocean of speakers of Spanish (as well as speakers of other indigenous languages) in Chiapas and Mexico more widely.

Fig. 1 is a partial genealogy of the Z signing community. Jane, the oldest signer, was the sole deaf person in her village until she was 6 years old. She grew up with no accessible language model in exclusive interaction with hearing parents and older siblings, who did not realize for several years that Jane was deaf. The Tzotzil word that denotes her deafness, *uma'*, literally means that she never learned to speak; it shares the same pejorative polysemy as its English gloss, "dumb." Frank, born 6 years later, likewise did not talk; nor at first did his sister Terry, 4 years younger, although around age 3 she suddenly started to spout grammatical Tzotzil. Although Terry hears normally, growing up with signing siblings she initially did not apparently feel the urge to speak. Contrast the experience of Will, the youngest sibling born deaf into a household with three older
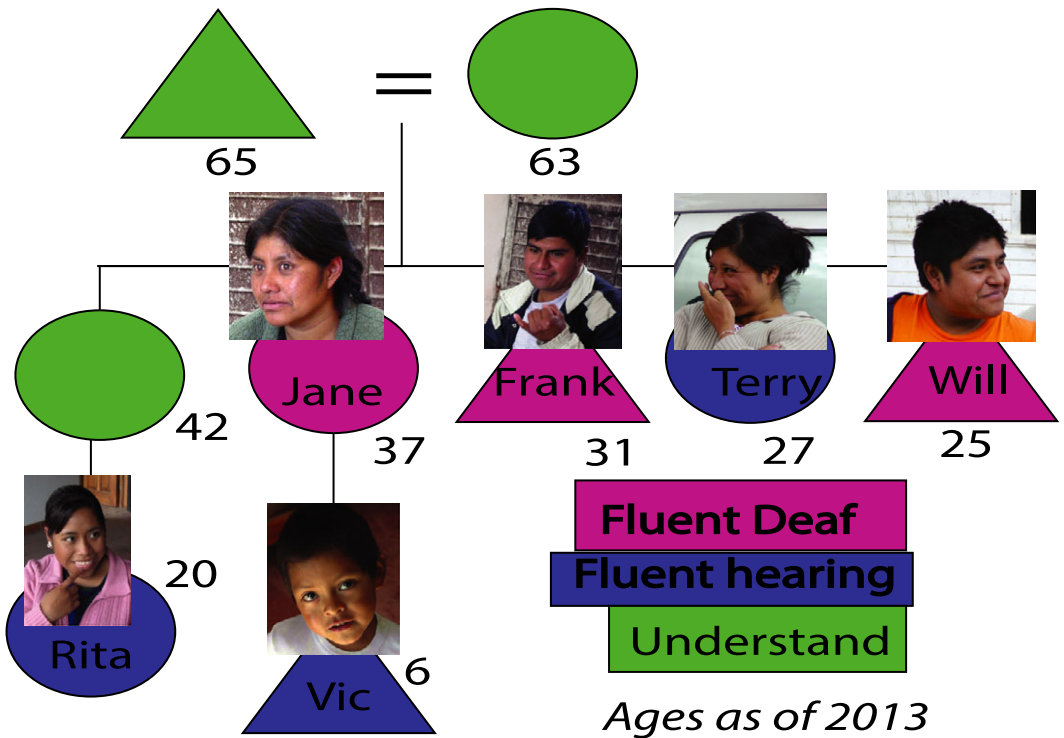
Fig. 1. Simplified genealogy of Z signers.

siblings who were already using the system of signs Jane had begun to develop nearly thirteen years earlier; or the situation of Vic, Jane's now 6-year-old son, hearing and in many ways a typical Tzotzil-speaking child, who started life both exposed to spoken Tzotzil and with signed Z as the "mother-tongue" with which he first began to express himself systematically. Rounding out the group of fluent Z signers is Rita, the daughter of an older sibling who was brought up from infancy in her grandparents' household and thereby joined a cohort of people whose principal means of communication was and remains the evolving homesign.

My initial research on Z (Haviland, 2011, 2013a,b,c, 2014) has concentrated on emerging linguistic structure in the homesign and, in particular, on what I have been calling "portability." In such a tiny speech community, where people know almost everything about one other, how and why will they develop conventional linguistic tools that allow them to transcend the massive shared knowledge behind any particular speech event and create forms that can be moved from one situation to another? Since a possible source for visual raw material in Z is cospeech gesture among Tzotzil speakers—a topic which I have studied independently for many years—I have looked to gesture for both conventionalized emblems, and also for systematic indexical and iconic resources which may contribute to the emerging structure of Z.

Both Zinacantec Tzotzil speakers' gestures and the emerging Z homesign system give evidence of a semiotic resource Jürgen Streeck (2009) dubs "gesturecraft": patterns of manual action apparently borrowed but also emancipated from everyday manipulations of the material world, which have acquired additional communicative meaning when incorporated into gesture and sign. Such action patterns or "enactments," as Adam Kendon calls them, form the bases for many speakers' gestures (Kendon, 2004), and they also play a role in indigenous sign languages (Kendon, 1980, 1988). It has been persuasively argued that gestures used by speakers of spoken languages are plausible sources for at least some lexemes in the sign languages used by members of the same or interrelated communities, and, more contentiously that "the remarkable family resemblance between signs and gestures, and the tight integration of speech and gesture, point to a common ancestor" (Wilcox, 2004:69) for both spoken and signed languages. In Z, gesturecraft appears to motivate both signed equivalents of spoken Tzotzil words and also signed grammatical formatives.

3. "Come!" in Zinacantec gesture

Consider a gestural command familiar to most Latin Americans and Europeans (although perhaps not to many North Americans), also part of the emblematic repertoire of Tzotzil-speaking Zinacantecs. It involves a sequence of motions: raising the hand palm downward, usually with the fingers loosely extended and the thumb to the side, then quickly raising the fingers and flipping the hand downward, sometimes repeating the motion several times before retracting the hand (and the arm if it has been extended) to a rest position. Part of the gestural performance is usually simultaneously gazing at the intended addressee, who may be rather a long way off.

Fig. 2 (see the slow-motion Video S1) illustrates such a gesture from a ritual gathering. The man illustrated is summoning another person from across the plaza, using a gesture immediately understood as "come here!" A Tzotzil speakers' gesture virtually identical in form also means "bring!" In Fig. 3 (see Video S2), a man recounts a scene in which a customer at a rural *cantina* asks to be served liquor. He performs (or "quotes") the gesture while saying, in Tzotzil, "Give me a quarter liter, we have to leave right away."

This "come" or "bring" gesture illustrates several noteworthy features of many speakers' gestures, which amount to pragmatic holophrases—in this case, a command. First, although there is a clear indexical motivation involved (the implied HERE of "come" or "bring" is indicated by the downward "pointing" of the extended fingers, and the direction of the extended fingers is toward the addressee), the meaning of the gesture is in an obvious way conventional and arbitrary: Outsiders unfamiliar with it may be baffled by what it means, or, indeed, like many North Americans, interpret it as meaning not "come" but "go away." Second, the entire gesture is designed for coordinated interaction; it is aimed at an interlocutor, meant to engage the latter's attention, and to solicit a specific reaction. Third, it is designed to be perceived visually—both the motion of the hand (which can be more or less conspicuous) and the direction of the gaze rely on mutual visual attention, which must thus be previously (or perhaps concurrently) achieved.

I begin with this common Zinacantec gesture to suggest a possible starting point for one kind of pathway to emerging grammar in Z, whose putative end point is perhaps the most frequent and ubiquitous of Z signs. Will, the youngest of the deaf siblings, performs a particularly ostentatious version of this Z sign in Fig. 4 (see Video S3) to request an interlocutor's attention. He raises his hand, palm downward, extends it in the direction of an intended interlocutor (at whom he also gazes), and drops the arm swiftly. Notably, before Will performed the sign, both he and his candidate interlocutor (who cannot be seen in the camera frame) had not been engaged in interaction but had instead been resting in silence, rather far from one another, on a grassy hillside.

Since Will is accustomed to interacting simultaneously with hearing as well as deaf people, he combines his hand and arm motion—aimed at Terry, his hearing sibling who is also a native Z signer—with an attention-getting vocalization. The hearing Z signers gloss this sign into Tzotzil as *kaltik ava'i*—"listen!" (literally, "let us speak so that you may hear"[3]). I normally subtitle it in English simply as "HEY," although this is not a very perspicacious gloss, as we shall see.

A somewhat less demonstrative version of the same sign can be seen, in a more ordinary conversational context, where Jane is sitting with her two brothers, finishing a meal. She wants to tell them about something that happened that morning when both were away from the house compound at work. In Fig. 5, Jane begins with a little excited shake of both fists, after which she lifts her left hand to face height, palm outward, and rapidly flips it down while extending her left arm.

She repeats the sign a second time, almost identically (see Fig. 6—the formal difference is that here she begins with her arm almost fully extended, with her palm already

Fig. 2. A Zinacantec man does a double downward hand flip to gesture "come here!."

Fig 3. Zinacantec man narrating a quoted gesture meaning "bring it here."

Fig. 4. "Hey!": Memo requests attention.

Fig. 5. Jane excitedly signs HEY.

Fig. 6. Jane repeats HEY. . .

Fig. 7. . . . and begins her story with a pointing sign.

directly facing her intended addressee), before launching into her story by pointing at the location where the events she wants to recount took place (Fig. 7, see Video 6).

It is worth noting, as an aside, that non-signing Tzotzil speakers do *not* use anything resembling the "come/bring" gesture as a way simply to engage another in conversation, although, as mentioned, part of the successful use of the beckoning gesture depends on actually soliciting the intended addressee's attention as part of issuing the command to come. In fact, there is no conventional gestural means, as far as I am aware, by which Tzotzil speakers solicit the attention of another, although there are many spoken phrases (including the phrase *kaltik ava'*i) as well as verbalized vocatives—mostly delicately calibrated in terms of the mutual age, gender, and status of the interlocutors—which fulfill such a role.

Before moving on to HEY as a Z sign, however, it is important to note that the Z signers use and understand something very like the Tzotzil speakers' "come" gesture itself. For

example, Terry uses exactly that gesture with young Vic when she beckons for him (and also commands him verbally) to come sit on her lap (Fig. 8, which shows one of two seemingly identical downward strokes—see Video S4). Here, of course, both interlocutors are hearing Tzotzil speakers (Vic was about 5 years old at the time), so it is no surprise that they should employ a standard gestural emblem from their speech community.

However, all the members of the household, including the deaf signers, use the visual "come here" command with one another. Jane, the oldest deaf sibling, uses it to call her (hearing) son Vic, with whom she only communicates in Z, as illustrated in Fig. 9 (see the slow motion Video S5).

Frank, another deaf signer, also uses it with his deaf siblings—in Fig. 10 signing to his sister to come out from behind the camera and sit down at the table. His downward hand flip (which, like the sign in Fig. 9, is glossed by hearing Z signers as meaning "come here!") immediately moves into another sign meaning GO THERE as he points to her chair (see Video S7).

It thus seems clear that the Z signers have also incorporated something closely resembling the Tzotzil cospeech "come" gesture into their communicative repertoires, presumably adopting it from the gestural practices of the surrounding speaking environment. (Of course, in the case of the hearing Z signers, it is already presumably part of their spoken *gestural* repertoire as speakers of Zinacantec Tzotzil.) That is, a gesture from the spoken

Fig. 8. Terry beckons to Vic with two downward strokes.

Fig. 9. Jane uses the "come" gesture with Vic (2 downward strokes).

Fig. 10. Frank commands his sister to come and sit down.

Fig. 11. HEY: Jane waves for attention with fast, multiple strokes.

language has, in some sense, jumped over the semiotic fence that divides a Tzotzil speakers' gesture (here a highly conventionalized emblem which is substitutable for speech—perhaps even designed for circumstances where speech is difficult, because of distance or interference, or otherwise to be avoided) from a full-fledged signed command in Z. This transition from speakers' gesture to sign may be expected to engender other sorts of changes, both formal and functional, which are beyond the scope of the present paper. Nonetheless, there seems a compelling logic to assuming that the COME sign of Z in some sense derives from the "come" gesture of Tzotzil speakers.

It is thus particularly striking that the Z signers have additionally developed the formally similar but functionally quite distinct HEY sign introduced above in Fig. 4. Indeed, a particularly clear example of both the juxtaposition and the difference between the two Z signs may be seen in Figs. 11 and 12. Jane is summoning one of her siblings, who is on the far side of a wide courtyard inside a narrow doorway, to see a large tourist bus that has pulled up outside the gate. She demonstrates a clean transition from attention-getting waving (a protracted performance of the HEY sign, accompanied by vocalizations) to three distinct repetitions of a "come here" beckoning gesture. In a single continuous signed utterance, that is, Jane signs "Hey, come here!" Although the hand positions are essentially identical in the two parts, as the still frames show, she first signals HEY with quick multiple up and down strokes (Fig. 11) until she has her interlocutor's attention.

Then she signs the command COME! with three sharp downward strokes, held briefly in the downward position (Fig. 12) between each repetition. What I have glossed—and what the signers themselves gloss[4]—as HEY and COME, that is, share handshapes and hand positions, but differ in the speed, number, and motoric "sharpness" of the hand motion, where it is the COME! sign, rather than HEY, that uses the fuller, more well-defined, and slightly longer lasting hand shape.[5] A more subtle difference can also be seen by comparing Jane's arm positions in Figs. 11 and 12. The downward flip of the hand in HEY is accompanied by a higher arm position—usually coinciding with an extension of the arm during the hand flip, which effectively brings the hand closer to the

Fig. 12. COME: Jane asks her interlocutor to approach, with single, sharp strokes, held.

Fig. 13. Kata Kolok "come" sign (de Vos, 2012, drawing from p. 185).

intended addressee. By contrast, no such raising of the arm is seen in the COME command, and, in fact, during the downward flip both hand and arm may slightly retract in the direction of the signer. (The entire sequence is on Video S8.)

4. Gestures, signs, and grammaticalization

De Vos (2012) describes a sign in Katak Kolok, an established village sign language from Bali, which strongly resembles—both in form and function—the signs just described for Z. She writes:

A form of COME that is produced with repeated movement and directed at a person, functions to summon an addressee. This function is linked to Balinese cospeech gesture, in which an identical gesture has been observed. (deVos, 2012, p. 186)

The sign is illustrated in Fig. 13. Although de Vos neither clarifies what it means for a Kata Kolok sign to be "identical" to a cospeech gesture, nor elaborates the "link" between the two, she provides an example in which the sign meaning COME, repeated, can be used as a device for requesting an interlocutor's attention. It is:

a sentence from a story[6] about a deaf ghost [. . .]. When the signer and the ghost meet, the signer asks the ghost to come and sign with him, but the ghost disappears. The repeated form of COME is glossed as HEY. (ibid.)

The sentence, illustrated in Fig. 14, includes the sequence "YOU HEY TALK" where what is glossed as HEY is a double downward hand flip, a single repetition of which, according to de Vos, would mean COME.

We presumably need a term other than "grammaticalization" to capture the phenomenon of "jumping" from the gestural repertoire of a speech community (which one expects to be variegated and multifunctional, typologically diverse, and only partially regimented) into the semiotic raw material of a nascent sign language emerging in its midst (where regimentation is, presumably, a central feature of its new life). Some scholars[7] suggest that such a process is appropriately labeled "lexicalization." More important, we need to understand how to demonstrate that such a "species-jump" has actually occurred (in the presumed absence, in most cases at least, of sufficiently detailed longitudinal or historical linguistic data). Note, for example, that I do not claim that the Z HEY sign derives directly either from the Tzotzil "come here" gestural command or from the Z COME sign, something difficult to prove without further diachronic evidence (here, about how Jane began to use the HEY sign in the first place, about which evidence sadly does not exist). De Vos's example gives some added plausibility to such a possibility, but it remains speculative.[8]

However, de Vos's example illustrates a different phenomenon, familiar in spoken language, in which lexical signs evolve into more grammatical elements, via processes of stylization and specialization which, in spoken language, are often called grammaticalization.[9] In Kata Kolok, the striking formal similarity between what are apparently already autonomous signs in the same communicative system—one meaning "COME!" and the other glossed as "HEY!" (i.e., "Come talk with me")—gives plausibility to a grammaticalization account. In this section, I examine in detail how the Z HEY sign is used, to demonstrate that, whether or not the signers' HEY sign is actually derived from the speakers' "come here" emblem, it *is* possible, as I will try to show, to discern a grammaticalization path from the full attention-getting HEY! sign in Z to a functionally specialized and formally reduced—that is, "grammaticized"—turn-taking particle.

Fig. 14. Kata Kolok sequence (author's drawing from a video clip courtesy of Connie de Vos).

The most obvious function of the HEY sign in Z, suggested by its English gloss "of convenience" (Kendon, 1980), is to solicit visual attention from an interlocutor when a signer is about to begin a turn. That there needs to be such a sign as part of a kinesic communication system like Z is, of course, a notable consequence of the "visible modality"— or, at least, its presumed *non*-reliance on audible signals as a means of achieving mutual attention among deaf interlocutors.[10] Since Z has emerged in a signing community that includes hearing people, audible requests for attention frequently accompany the HEY gesture (as in Will's utterance in Fig. 4 above); and tactile methods are also frequent, as we shall see. There is, however, an obvious conundrum: To be seen at all, the HEY sign itself already requires at least peripheral visual attention. (It also needs itself to be visible enough to attract more direct visual attention when interlocutors are not so attentive.)

Here is a characteristic instance of the HEY sign from the middle of an interaction in which Jane (shown on the right of the split screen images) is describing a photograph to Terry and Will (on the left). Terry and Will's attention has been momentarily distracted, and they have turned to look at the commotion behind them (Fig. 15).

Having examined the photo she is supposed to describe, Jane raises her right hand, apparently in order to request attention with the HEY sign (Fig. 16, top), but she hesitates before performing the sign, holding her hand up (and in fact, filling the pause by biting her right thumbnail) until she has regained her interlocutors' gaze (Fig. 16, bottom).

Only at this point does she actually raise her fingers and flip them down in the HEY sign (Fig. 17, left split frame), immediately thereafter starting to describe the stimulus (Fig. 17 right frame). Jane uses a beckoning movement like that of Will's in Fig. 4,
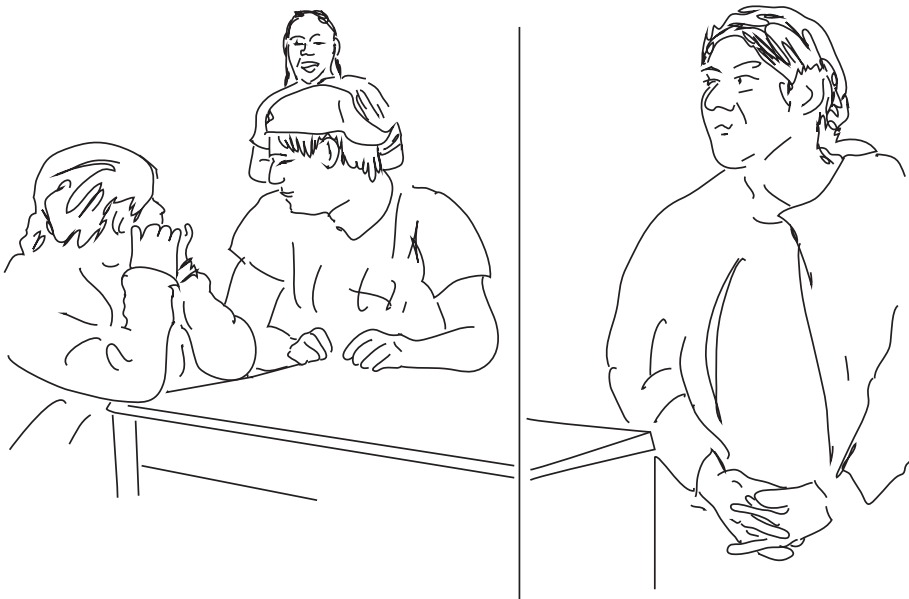

Fig. 15. Jane has lost Terry and Will's attention.

although it is kinesically a highly reduced version of it; similarly, contrasting with the sequence of multiple downward strokes in the full Tzotzil speakers' COME gesture, here Jane produces a single, minimal downward flip of the hand (the whole sequence may be viewed in Video S9).

More generally, the very purpose of "attention getting" moves implies that they must be "recipient designed" in the minimal sense that their exact modality is dependent on their interlocutor's receptivity. An audible summons is clearly ineffective with deaf interlocutors. As the first pair-part of a classic conversational "adjacency pair" (Sacks, 1992; Sacks, Schegloff, & Jefferson, 1974)—a Scheglofﬁan "summons"—an interactive move like HEY depends for its success on uptake. Frank, for example, appears simply to abort an upcoming HEY sign, raising his right hand but then retracting it to rest without performing the downward flip (Fig. 18) when he sees that no one is looking at him (see Video S10).

Nearby conversational partners may also resort to a simple poke, as Terry does interrupting Will in Fig. 19 in order to launch a turn.[11] In other circumstances, multiple modalities may be invoked, as in Fig. 20, where Jane, addressing a hearing signer, performs the visible HEY sign while vocalizing, and then pounds on the table (see Video

Fig. 16. Jane raises her hand and hesitates, waiting for her interlocutors' gaze.

Fig. 17. With her interlocutor's attention, Jane signs HEY and to starts to describe a photo using a size-shape specifier.

S11) to draw her interlocutor's attention.[12] Notably, none of these turn-regulating devices is a sure fire means of obtaining even attention, let alone a next turn, as complex micro-political negotiations between interactants are always involved.[13]

The sign is also modulated physically between deaf interlocutors, who will frequently resort to pokes and touches to draw each other's attention.[14] Will, attempting to engage his brother Frank but standing several meters away to his right (Fig. 21), uses several
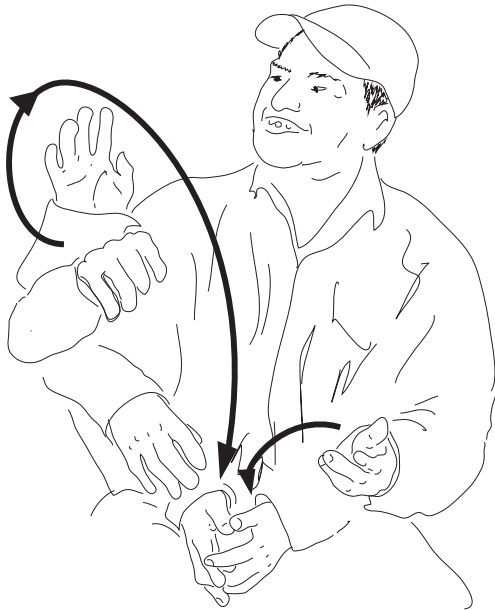

Fig. 18. Aborted hey.

Fig. 19. Tactile modalities.

highly demonstrative versions of the HEY sign (one illustrated in Fig. 22) to no avail. Both are eating corn on the cob (see Video S12).

On the other hand, what can be made more demonstrative can also be reduced or minimized, and here we have a clue to how this HEY sign evolves in Z. When Will finally gets Frank's attention, he nonetheless again performs a tiny version of the sign (still glossed as *kaltik ava'i* "listen" by my Tzotzil-speaking teachers) before he starts his turn, even though he is holding a piece of corn in his hand (Fig. 23).

After this initial minimal HEY, without changing hands he moves directly into the rest of his utterance (about an old man living up the hill from their house—note that his OLD_MAN sign, on the right in Fig. 24, is articulated on the face, with puckered lips and squinted eyes). (See a slow motion version of this whole sequence in Video S13.)

The link between mutual visual attention and the HEY sign can also be further complicated. Whereas in Fig. 17 Jane gazes steadily at her interlocutors from well before she signs HEY, the sign is not always linked to a locked gaze. Jane can also start the HEY sign while her gaze is elsewhere, for example, on a computer screen where she is watching a stimulus video (Fig. 25, left side, as she raises her left hand in preparation for the HEY stroke); she shifts her gaze up to her interlocutors, evidently to check their attention, only as she performs the downward flip of the fingers to signal that she is about to embark on a turn (see Video S14).

Evidence of the sign's further grammaticalization into a functionally much more general pragmatic particle comes from the many cases when a signer already has her interlocutors'
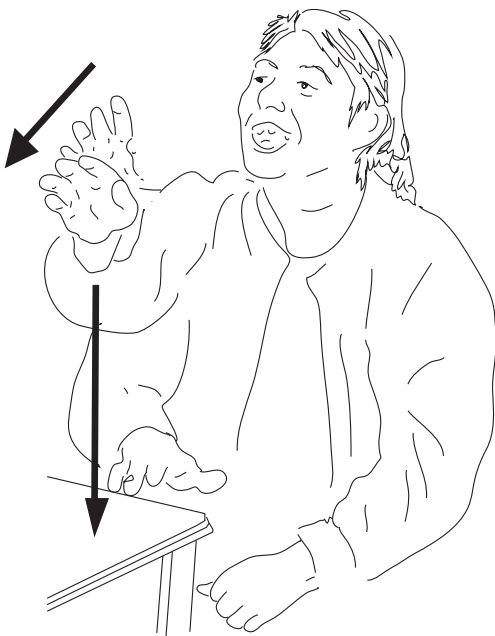

Fig. 20. Sound and sight: Jane pounds the table three times after HEY.

Fig. 21. Will standing several meters away from Frank.

Fig. 22. Will tries to start an interaction.

Fig. 23. Will makes a tiny HEY sign, while holding a
piece of corn in his hand.

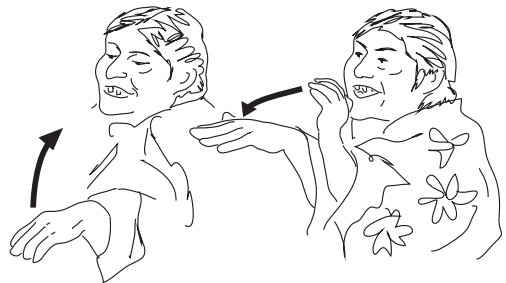Fig. 24. Will signs "that old man."

Fig. 25. Jane, timing of gaze and hand.

full attention—as Terry does in Fig. 26 (she is on the right in the split screen view and her interlocutors are on the left)—but still prefaces a new turn with the HEY sign.

Throughout this entire performance, Terry continues to gaze toward the computer screen at the photograph she is about to describe. She does not bother to look up to check that she has her interlocutors' attention, although Will does shoot her a quick eyebrow flash just as she finishes the HEY sign (Fig. 27), apparently signaling explicitly that he is ready and waiting for what she is about to sign. Even at that point, as she starts to describe the stimulus photograph, Terry still is gazing at it rather than at her interlocutors. (The sequence may be seen in slow motion on Video S15.)

The HEY sign here is reduced to an almost pure pragmatic convention, used to indicate little more than the simple intention to start signing. Sometimes it helps engineer a

Fig. 26. Terry signs HEY with her interlocutors' gaze already fixed on her.

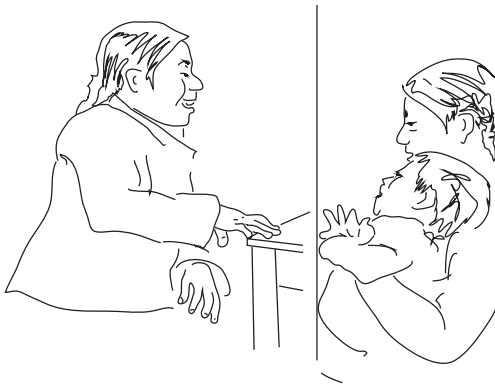Fig. 27. Will shows with an eyebrow flash that he is ready to listen.

Fig. 28. Split screen: Rita (on the left) looks down as Jane (on the right, gazing at a computer screen) finishes a description.

Fig. 29. Rita says HEY while Jane continues to gaze at the stimulus.

speaker change, regardless of whether the interlocutors' attention is already secured (or even verified). A typical context for HEY as a speaker transition marker is illustrated in the following sequence of turns. In Fig. 28, Jane (on the right side of the split screen image) has just described a stimulus picture, at which she is still looking, holding her wiggly infant son in her lap. Rita (on the left of the split screen image) starts to ask a clarifying question, as she in turn gazes down at the matrix of printed photos from which she is meant to select a matching stimulus picture.

Rita starts with HEY (Fig. 29), although Jane is still gazing at the stimulus picture.

Rita goes on to ask about the object in question, a candleholder (Fig. 30), and she signs CANDLE twice, finally managing to attract Jane's gaze on the second repetition (see the rightmost frame). This is the first speaker change. (See slow motion Video S16.)

Immediately after Rita's question is answered, Terry (sitting beside Rita) asks for further clarification and, although Jane is already watching her, Terry initiates her turn as

Fig. 30. Rita signs "candle" twice, only attracting Jane's gaze on the second repetition.

Fig. 31. A speaker change.

well with HEY (Fig. 31, see Video S17), thereby explicitly indicating her intention to take over the floor.

The use of a formally reduced HEY sign not directly to solicit attention but for speaker self-selection—that is, to mark the start of a speaker's utterance—is extremely frequent in the Z interactions I have filmed, more frequent by far than either the full-blown COME command or the use of HEY actually to secure an interlocutor's visual attention. The important grammaticalization path is thus from a form that requests attention to a reduced version, a pragmatic particle, as it were, which announces that attention is imminently relevant.[15]

I summarize the putative paths of borrowing, lexicalization, and grammaticalization, starting with Zinacantec Tzotzil gesture and ending with the emerging structure of Z sign, in tabular form (Fig. 32). An emblematic gestural holophrase present in Zinacantec Tzotzil speakers' gestures, and shared much more widely in Mexico and elsewhere in Latin America and Europe, is a beckoning gesture meaning "come!" and "bring!" It seems to have been borrowed fully fledged into the emerging family sign language as
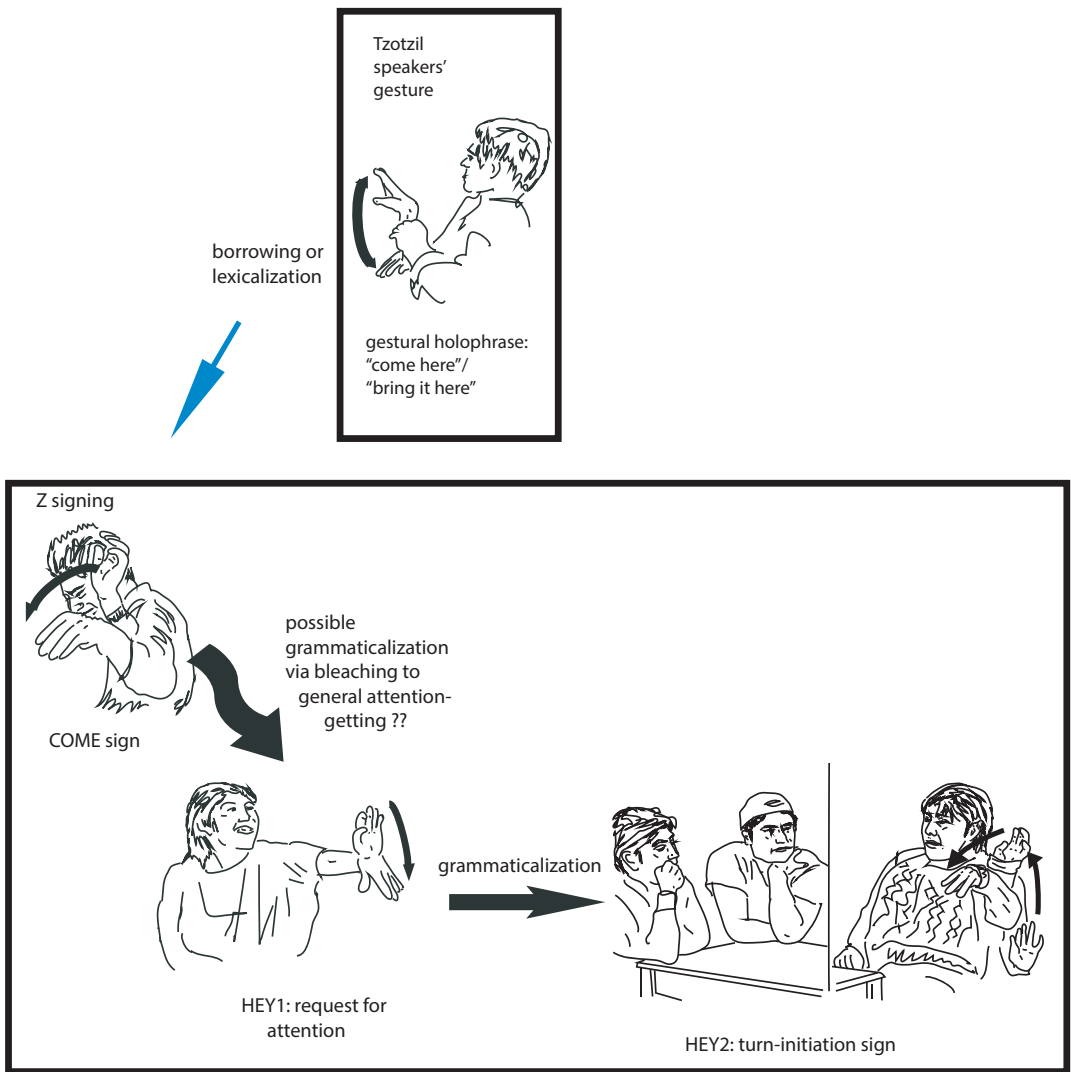
Fig. 32. Possible etymologies and grammaticalization paths.

a Z signed lexeme, where it also functions as a complex command (involving establishing mutual attention with the added request for action). Whether or not related or independently created—and note that formally it emphasizes the attention-getting aspect of the gestural holophrase over the beckoning part—another sign, glossed here as HEY1, is a similar but formally reduced "attention request," used to solicit an interlocutor's attention to an upcoming signed utterance. This, in turn, I argue has given rise to another sign, glossed HEY2, which is possibly (but perhaps not always) formally distinguished from HEY1 by the lack of mutual attention (i.e., mutual gaze) between

signer and interlocutor, and which indicates not a request for attention but merely the intention to initiate a conversational turn. It becomes, that is, a pragmatic marker of turn-beginning.

Nonetheless, as in the case of many spoken grammaticalized elements, the conceptual and categorical lines between forms and functions are far from clear, amounting instead to a cline where one usage blurs into another. I can illustrate this most clearly with a final complex sequence in which young Victor, describing a series of still photographs to the adult signers, moves seamlessly from what I have termed the self-selecting turn initiator HEY2 (in two slightly variant forms), to a clearly addressed HEY1, and finally to an especially demonstrative HEY1 (which strikingly resembles the COME! sign with which I began). Victor is in the middle of describing a long sequence of interrelated photographic stimuli (meant to approximate a kind of Swadesh word list elicitation task). While his eyes are still on the video screen where the photos are displayed, he performs one rapid, highly reduced HEY2 sign (Fig. 33).

He repeats the sign, as he begins to move his gaze from the computer screen to his mother Jane, his principal interlocutor (Fig. 34).

Finding that his mother is not actually attending to him, he repeats what we may now wish to gloss as a HEY1 sign, while gazing directly at her (Fig. 35).

As it turns out, V discovers that he still does not have his mother's attention, so before he has flipped his hand entirely downward, he launches into a much more expansive full scale HEY1 that more clearly resembles the COME sign (Fig. 36) both in its dynamic range and its insistent directivity.[16]

Interestingly, he concludes the sequence with what appears to be an artificially truncated final HEY1, as he evidently realizes part way through executing the sign that Terry, sitting next to him, has also started to engage his interlocutor's attention. He turns to gaze at Terry, while transforming his own downward hand flip into a slap on

Fig. 33. Victor signs HEY2 while gazing at the photo stimulus.

Fig. 34. Victor signs HEY2 again, starting to shift his gaze to his addressee.

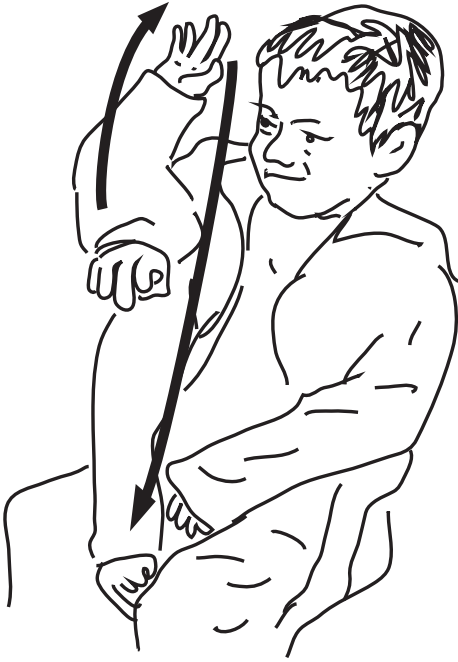Fig. 35. Victor signs HEY1 gazing at his addressee.

Fig. 37. Victor starts a final HEY sign, and transforms it into a knee slap.

Fig. 36. Victor signs HEY quite demonstratively.

his knee (Fig. 37), perhaps waiting to see whether Terry manages finally to attract Jane's attention. (The entire short sequence can be seen on video 18 in the Supplementary Materials.)

Here, the close functional and formal connections between what I have somewhat artificially glossed as separate signs, HEY1 and HEY2, are clearly demonstrated. They harken back to the original insight: that a command like the gestured "come here!" (or the spoken question *mi li'ote* "Are you here?") involves an assemblage of different elements, including directed addressivity, some presumption of mutual attention, and coercive (albeit miniature) interactive force to condition the relevance of a response. These elements may, in turn, be dissociated from one another, unpacked, selected, and only partially reconstituted as the forms that express them become grammaticalized.

5. Final remarks

The HEY sign thus has the expected properties of a classic grammaticalized linguistic element. It never fully sheds its likely etymology—the "come here" emblematic gesture used together with spoken Zinacantec Tzotzil, presumably lexicalized whole cloth as a "cognate" into Z itself, and involving both an explicit request for attention as well as a deictic summons from speaker to interlocutor. It represents, that is, the "first pair part" of

a familiar kind of adjacency pair, and the miniature social power that it exercises persists even in the sign's most grammaticalized usage: when it has a schematic form (a repeated but minimal downward hand wave), a highly specialized sequential or syntactic context (an utterance initial particle without apparent separation from what follows), and a generalized or "bleached" meaning (signaling the mere intention to start signing, having already secured or in the hope of securing attention). My goal here has been merely to demonstrate, through bare "proofs by existence," that a series of formally similar Z signs thus constitutes an apparent grammaticalization chain that might lead all the way from a cospeech gestural holophrase, to a conventionalized signed command, to a generalized functional attention request, to a pragmatic sign-particle central to the turn-taking system for a visual communication system.

To return briefly to the Tzotzil greeting sequence with which I began, note that the opening gambit "*mi li'ote?* Are you here?" exercises a similar kind of micro-power. Any response other than silence explicitly accepts the conditional relevance the greeting is meant to enforce (that is, acknowledging that the recipient is available for further interaction). Similarly, one can see a similar conceptual progression, reminiscent of this putative grammaticalization path, even in the etymologies of the spoken formulas that initiate Zinacantec interaction. The first move in the sequence literally asks an interlocutor to confirm his or her presence: *mi li'ote?* "Are you here?" Although it may be addressed by a known speaker to a known hearer, it seems by default to presume anonymity (and maybe even invisibility). Nonetheless, the formula stands as an unmarked greeting, inviting interlocutors to treat it as the prelude to a fuller interaction and thus erasing the potential oddity of its literal obviousness. (Why ask me if I am here if you are already talking to me?) Likewise, the putative progression from a gestured summons, to a signed request for attention, to a bare pre-announcement that one is about to initiate an utterance represents a similar schematization of a full-blown literal command to a ritualized pragmatic marker.

Space constraints compel me to leave to another occasion a fuller longitudinal account of the acquisition of the HEY sign by Victor, the first—and possibly the last—of the second generation of Z signers. Similarly missing is an adequate account, based on frequencies in a representative corpus of natural Z signing, of how different instances of this putative continuum of interrelated sign forms are distributed, across occasions of talk and across the tiny sociopolitical universe of Z signers. (Do some people use the sign or poke one another more often? Do they omit it when they already have an interlocutor's attention, or not? Are some more successful in achieving uptake than others? What exactly is the function of the sign when an interlocutor's attention is already achieved?) Such considerations are particularly important because interactive and micro-political constraints on possible "states of talk" (Goffman, 1978, p. 798) implicate social structural variables and power relationships whenever someone presumes to call on another's attention, and this is particularly true in a tiny signing community like that of Z, where there are limited possible interlocutors to begin with, all with quite particular biographies and personalities. The inevitable confluence of interactive, interpersonal, and communicative constraints makes the study of such miniature emerging visible grammar especially compelling.

Acknowledgments

Notes

1. A breakdown of the greeting is *mi* Interrogative_proclitic *li'-ot-e* HERE-2ndPerson_Absolutive-Enclitic, thus "Are you (singular) here?" The reply is literally "I am here," *li'-on-e* HERE-1stPerson_Absolutive-Enclitic.
2. Aside from classic studies of individual homesigners—deaf children born to hearing parents who receive little or no early exposure to sign languages—by Susan Goldin-Meadow and her colleagues (Goldin-Meadow, 2003, 2012; Goldin-Meadow, Butcher, Mylander, & Dodge, 1994), especially relevant comparative material on adult Brazilian homesigners and their communicative partners—whom she calls "privileged interlocutors"—may be found in the work of Ivani Fusellier-Souza (2004, 2006). See as well the tantalizing reference to a family homesign in Frishberg (1975:713 fn. 13).
3. The morphological breakdown is *k-al-tik* 1stPerson_Ergative-SAY-1stPerson_Plural_Inclusive, *av-a'i* 2ndPerson_Ergative-HEAR.
4. The Tzotzil gloss for HEY is, as mentioned, *kaltik ava'i* "let me tell you, listen"; the gloss for COME is *la'*, the irregular imperative of *tal* "come."
5. There are also other ways to sign COME! in Z, using different trajectories of the arm and hand, and using various kinds of lateral as opposed to vertical strokes.
6. Note that in this sense de Vos's example, drawn from a narrative, resembles the "gestural quotation" in Fig. 3 above, which illustrates the Tzotzil "bring it here" gesture in storytelling.
7. Both Roland Pfau and Mieke van Herreweghe have independently suggested such a name to me for this phenomenon.
8. But see Janzen, Shaffer, & Wilcox (2011 [1999]); Wilcox (2004), for arguments about analogous processes in established sign languages.

9. For grammaticalization in general, see Heine (1997); Hopper & Traugott (1993). Overviews of grammaticalization processes in sign languages are to be found in Pfau and Steinbach (2006, 2011); and Janzen (2012). For proposed grammaticalization paths in emerging sign languages linking speakers' gestures to signed lexemes, see, for example, Perniss and Zeshan (2008), de Vos (2012), and, for a village sign language in another Mayan context, Le Guen (2012).

10. I have neither space nor competence to elaborate more fully on the turn-taking mechanisms of Z here, although significant literature deals with such matters in established sign languages (see Baker, 1977; Coates & Sutton-Spence, 2001; Van Herreweghe, 2002). I am indebted to Mieke van Herreweghe for kindly bringing these crucial references to my attention. That speakers' gestures have an important regulatory function in requesting, maintaining, and relinquishing the conversational floor is well known, and such a function forms an important part of various gestural typologies (see Kendon, 2004).

11. Online ASL dictionaries distinguish with different glosses and as separate signs such things as HEY (a kind of attention-getting wave, which Carol Padden (p.c.) tells me can be inflected quite differently depending on whether one wants to request an interlocutor's attention in an unmarked ["Hey!"] or in a more demonstrative way ["Have you heard about *this*...?"]) and SHOULDER-TAP. Of the former, one reads: "The sign "hey" is a good way to get someone's attention when you want to sign to them. Do NOT do this sign close to somebody's face. That would be rude. Do it from at least several feet away. The closer you are, the smaller the movement. The further away you are, the larger you can do the movement" (http://lifeprint.com/asl101/pages-signs/h/hey.htm). Regarding the latter, "If you tap someone on the shoulder using a single finger or using too strong of a jabbing movement it will hurt. If you use too light of a movement it will be unnerving. You should generally use a bent hand and make contact twice using the tips of the fingers" (http://lifeprint.com/asl101/topics/attention_getting_techniques.htm).

12. Van Herreweghe (2002:82) cites "tapping the table" as a speaker's self-selection device in a bid for next turn in Flemish Sign Language multiparty conversation, in the context of a chaired meeting. "[L]ightly slapping the table at which someone is sitting" is also cited online as an ASL attention-getting device (http://lifeprint.com/bookstore/bookstore.htm). Whether to call these devices signs or some variety of "interpersonal gestures" (Sweetser & Sizemore, 2008) is a somewhat more vexed question.

13. See Haviland (2013a), where among other things I argue that a power hierarchy among the signers makes it much more likely that some individuals than others manage to gain the conversational floor.

14. Indeed, anecdotally, it seems to me that the deaf siblings touch each other much more freely than most Zinacantecs, who are often rather stiff about physical contact. The siblings in the family where Z has developed have striking physical and tactile ease with one another, exceptional in Zinacantán where even intimate conversation

and interaction between close family members or friends is ordinarily physically restrained. Olivier LeGuen (p.c.) remarks that among Yucatec deaf signers in the communities where he works a good deal of tactile contact is common—much more than is usual with hearing interactants. This is equally true for Z signers.

15. In this usage, the reduced HEY sign is a close signed equivalent to the reduced spoken form of *kaltik ava'i* which Tzotzil speakers similarly use as a kind of verbal "paragraph initial marker": *va'i un* (literally, "so listen..."). The latter form is a contraction of *av-a'i* 2ndPerson_Ergative-HEAR followed by a phrasal enclitic *'un*.

16. The gradual escalation of Victor's turns is reminiscent of the sort upgrading of formulations identified by Schegloff (1995) in sequential tries by interactants to secure interlocutor's understanding of, for example, person reference.

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Supporting Information

Video S1. Will asks for attention.
Video S2. Tzotzil "bring" gesture.
Video S3. Will asks for attention.
Video S4. Jane asks for attention.
Video S5. Jane asks for Victor to come (slow motion).
Video S6. Jane asks for attention and points.
Video S7. Will signs "come and sit down"
Video S8. Jane signs "Hey, come here!"
Video S9. Split screen interaction: Jane waits to ask for attention.
Video S10. Frank aborts the HEY sign
Video S11. Jane signs HEY and taps the table.
Video S12. Will fails to gain Frank's attention.
Video S13. Will signs "HEY, remember that old man over there?"...
Video S14. Jane asks for attention while looking down.
Video S15. Terry signs "HEY, It's a fish" while looking down.
Video S16. Rita requests a turn.
Video S17. Terry requests a change of speaker
Video S18. Victor demands attention in several different ways.
Because of privacy concerns, the author requests that readers wishing to consult the videos that accompany this article contact him directly.