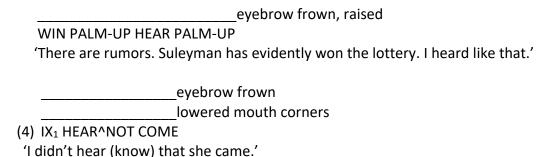# Is the mouth marking evidential in Turkish Sign Language (TİD)?

Sign languages have two main grammatical components: manual signs and nonmanual markers. In this study, we will focus on one of the nonmanual markers in Turkish Sign Language (hereafter, TİD), namely 'lowered mouth corners' as an evidential marker. To our knowledge, no study has reported markers for evidentials in TİD. Thus, we obtained new data by presenting signers different contexts where the source of the information was not firsthand, in particular, hearsay and evidence-based (Aikhenvald, 2004). For hearsay, the contexts contained reference to rumors; signers were asked to provide an appropriate version of a target sentence. For evidence-based, the contexts included evidence for an event. In all contexts, lowered mouth corners (hereafter, lmc) is the prominent nonmanual accompanying the verb as seen in Figure 1.

a. GIVE-BIRTH b. WIN c. WIN
Figure 1. Verbs with mouth corners down in evidential contexts

In Fig. 1a, lmc accompanies the verb GIVE-BIRTH as produced in (1) in the context that you know that your lab-mate is pregnant and there are still three or four weeks before she is due, yet you heard that she gave birth yesterday. In Figs. 1b and 1c, lmc appears with the verb WIN in (2) and (3). The context was hearsay and as seen in (3), the signers got the information from rumors about the situation. In (3), lmc does not accompany the background information but appears over the assertion, conveying to the interlocutor that the signer is not sure about the information source and is not fully committed. Lowered mouth corners was present in each of our collected targets, and we suggest that it marks evidentiality.

_____lowered mouth corners
_____eyebrow frown
(1) YESTERDAY GIVE-BIRTH SURPRISE GIVE-BIRTH
    'Yesterday, she apparently/evidently gave birth.'
_____lowered mouth corners
(2) #O HEAR SULEYMAN PIANO WIN PALM-UP
'I heard it (It is like hearing from rumors.) Suleyman has won a/the piano.'

_____eye squint
(3) RUMORS IX-pl$_{3a}$ KNOW IX$_{3b}$ SULEYMAN$_b$ MONEY LOTTERY,
_____lowered mouth corners

_____eyebrow frown, raised
WIN PALM-UP HEAR PALM-UP
'There are rumors. Suleyman has evidently won the lottery. I heard like that.'

_____eyebrow frown
_____lowered mouth corners
(4) IX$_1$ HEAR^NOT COME
'I didn't hear (know) that she came.'

As seen in sentences (1-4), other nonmanuals also appear in these contexts. Brow frown (bf) (also noted by Kelepir et al. 2018) is another prominent nonmanual marker in the data. However, it has a more restricted appearance than lmc and only appears when the signer is not expecting the event to have happened. For instance, the signer was not expecting her lab-mate to give birth so soon in (1). Brow position is also different in Fig. 1c, whereas lmc still appears with the verb. This situation also supports lmc being an evidential marker.

However, we have phrased our title as a question for several reasons. First, as seen in (1)-(4), the spreading domain of lmc varies. That is, it spreads over the VP in (2) and (3) while it spreads over the whole sentence in (4). Based on Cinque's (1999) hierarchy and the semantics of the evidential, we were expecting it to spread over the whole clause since it marks the signer's source of information for the proposition. Yet, this is not the case in all the data. Second, lmc has also been reported with non-specific or indefinite pronouns as in (5) (Kelepir et al., 2018). The nonmanual lmc appears only with the non-specific subject, leaving out the VP. This is unexpected from an evidential marker and makes us to wonder whether it also marks something else rather than or in addition to the evidential.

_____lmc
(5) ONE^PERSON^C_PERSON DOORBELL PRESS   (Kelepir et al., 2018, p.267)
'Someone is ringing the door.'

The target of Kelepir et al.'s (2018) study was impersonal structures and it is possible that these contexts may also serve to support evidentials. In their contexts, signers were given the end result, but not who actualized the event. Based on these contexts and datapoints like (5), they reported that lmc is a marker of nonspecificity. However, we have also seen that lmc can appear with definite arguments like lab-mate (1) or a proper name (2-3). Definite pronouns clearly show that lmc is not marking non-specificity, yet it remains a puzzle why it occurs over just the pronoun, not the whole clause, in (5).

Third, another puzzle here is that it is the mouth that is the marker of the evidential, despite the fact that evidential is a high syntactic node. In particular, Bross and Hole (2017) proposed an intriguing bodily mapping of Cinque's hierarchy (1999) in sign languages. One of their claims is that higher functional categories are mapped to higher body parts. For example, TİD marks epistemic with the nonmanuals eye squint (upper face) and head tilt (Karabuklu et al., in press). Given Bross and Hole's mapping hypothesis and the findings on epistemic, we were expecting evidentiality to be mapped to a higher body part. Finding lmc (lower face) as the evidential marker provides a challenge for Bross and Hole's proposal.

Indeed, we were looking primarily at the head as the articulator for the evidential. More clearly, the head is the articulator for epistemic and for the contexts where the signer is certain about the proposition. For instance, head *tilt* appears in epistemic contexts where the signer has either just one piece of evidence or is making an inference about the proposition (6). In contrast, head *nod* appears when the signer is sure about the subject's abilities and commits to the proposition (7). We observe these two complementary head positions based on the information source that the signer has. Based on these points and the close semantics of epistemic and evidentials, we expected to observe the head as the articulator also for evidentials. Yet, as seen in (1-5), the head is not the marker and it occurs mostly in the neutral position.

                         _____head tilt, eye squint

(6) LIGHT-ON, MOM HOME EXISTENTIAL POSSIBLE
    'The light is on. Mom may be at home.'

                  ___head nod

(7) IX-3 SWIM DO
    '(I know) that he can swim (for sure).'

As a summary then, we propose that lowered mouth corners (lmc) is the evidential marker in TİD based on its marking VP or the whole clause in hearsay or evidence-based contexts. Lmc is the prominent marker in all cases even when it appears with other nonmanuals such as brow frown. However, we also raise a question for Bross and Hole's (2017) bodily mapping hypothesis. Finally, based on the data, we also propose that TİD classifies visual sources as firsthand information sources as in (6) and hearsay (1-3) as non-firsthand information sources (Aikhenvald, 2004).

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