

Multimodal Documentation of Highland Mayan Sign Language & Gesture

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Arizona Institute
for Resilience



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Languages of Guatemala

Mayan Languages

Thirty-two spoken Mayan languages are in use today by over 6 million people in Mexico, Guatemala, Belize, Honduras, and in diaspora communities

- In modern times, spoken Mayan languages have had increasing amounts of governmental recognition in Guatemala since the late 1980s or early 1990s (Maxwell 2020).
 - Official alphabet set in 1987 (Acuerdo 1046-87)
 - Establishment of the Academia de Lenguas Mayas de Guatemala in 1990 (Decreto 65-90)
 - Passage of the Ley de Idiomas Nacionales (Decreto No.19-2003)
 - The 2013 government-sponsored establishment of TV Maya

Sign Languages

We follow Fox Tree and Rodriguez in distinguishing Indigenous and Non-Indigenous Central American Sign Languages (ICASL vs NICASL)

- Highland Mayan Sign Language (HMSL) is an ICASL:
 - HMSL is used by both deaf and hearing individuals in Maya communities
 - Home sign languages are also used, sometimes intermixed with HMSL or NICASL like LENSEGUA
 - HMSL is nearly undocumented
 - There is work on sign in Ixil communities (e.g., Horton 2020), and one scholarly article on sign in a K'iche' community (Fox Tree 2009).
 - Sign in Kaqchikel communities is completely undocumented
- HMSL as signed in Kaqchikel communities is our primary focus today.

Sign Languages

In addition to HMLS, we also have LENSEGUA

- LENSEGUA (Lengua de Señas de Guatemala) is a NICASL centered on Guatemala City and Quetzaltenango (Rodriguez 2019).
 - Recognized as an official language since 2020 (Decreto 3-2020)
 - Taught in schools for the Deaf and in Deaf clubs like ASORGUA (Asociación de Sordos de Guatemala) beginning in 1945 (Rodriguez 2019)
 - There is documented variation in LENSEGUA (e.g., Parks & Parks 2008), but broadly it looks to involve elements of ASL, HMLS, as well as other NICASLs, like Mexican Sign Language.
- Despite its official status, LENSEGUA is also very poorly documented.
 - There is a small dictionary (De León 2000), language learning resources on YouTube, and one PhD thesis focusing on its sociolinguistic situation (Rodriguez 2019)

Indigenous Language policy in Guatemala

We have already mentioned that Mayan languages in Guatemala have official status (e.g., through the passage of Decreto No.19-2003, the Ley de Idiomas Nacionales).

- Critically, the recognition of spoken Mayan languages flows out of an Indigenous rights framework.
 - In 1995 the *Acuerdo sobre Identidad y Derechos de los Pueblos Indígenas de Guatemala* was signed as part of the peace accords that ended nearly 4 decades of genocidal war.
 - The Accords affirmed, among other things, the rights of Indigenous people to their languages and cultures, and access to education and government services in those languages.



**CONGRESO DE LA
REPÚBLICA DE GUATEMALA**

DECRETO NÚMERO 3-2020

EL CONGRESO DE LA REPÚBLICA DE GUATEMALA

CONSIDERANDO:

Que la Constitución Política de la República, establece que el Estado de Guatemala se organiza para proteger a la familia y a la persona humana, su fin supremo es la realización del bien común; por lo que es deber del Estado garantizarle a los habitantes de la República la vida, la libertad, la justicia, la seguridad, la paz y el desarrollo integral de la persona; asimismo, garantiza la protección de las personas con discapacidad física, psíquica o sensorial; y declara de interés nacional su atención, así como la promoción de políticas y servicios que permitan su rehabilitación y su reincorporación integral a la sociedad.

CONSIDERANDO:

Que el Estado de Guatemala ratificó la Convención sobre los Derechos de las Personas con Discapacidad, promoviendo, protegiendo y asegurando el goce pleno y en condiciones de igualdad de todos los derechos humanos y libertades fundamentales para todas las personas con discapacidad.

CONSIDERANDO:

Que el Estado de Guatemala aprueba y promulga la Política Nacional en Discapacidad, puesto que es el instrumento eficaz al servicio de las personas con discapacidad, para que puedan ejercer plenamente sus derechos humanos; y, brindar las condiciones para el mejor cumplimiento de sus obligaciones ciudadanas, eliminando todo tipo de discriminación.

POR TANTO:

En ejercicio de las atribuciones que le confiere la literal a) del artículo 171 de la Constitución Política de la República de Guatemala,

DECRETA:

La siguiente:

**LEY QUE RECONOCE Y APRUEBA LA LENGUA DE SEÑAS DE GUATEMALA,
LENSEGUA**

Artículo 1. Objeto de la Ley. La presente Ley tiene por objeto regular lo relativo a las definiciones, los principios, reconocimiento, aprobación, desarrollo, utilización, uso, fomento, manejo y la autoridad administrativa de la Lengua de Señas de Guatemala, "LENSEGUA".

Sign Language policy in Guatemala

On 02-18-2020, the Republic of Guatemala ratified the 2008 UNCRPD

- Recognizes and approves LENSEGUA
- Establishes September 23 as the day of LENSEGUA
- Chooses the National Deaf association to create teaching materials
- Guarantees that Deaf people receive education in LENSEGUA as their first language
- Supports training for interpreters

Crucially, no mention of potential signing communities in Mayan regions, who may use a sign language different from LENSEGUA

Indigenous Sign Language Policy

We thus have a split.

- Mayan languages are recognized under an Indigenous right legal framework.
- Non-Indigenous sign languages like LENSEGUA are recognized under a disability rights legal framework.

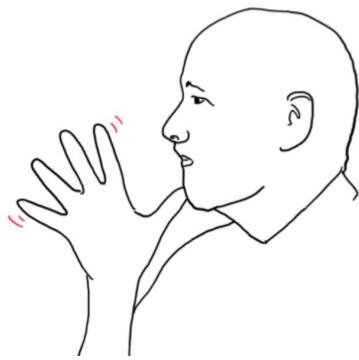
But Indigenous sign languages like HSL appear to fall through the cracks, not appearing in either set of laws.

- One of the goals of our work is to document HSL and work towards its recognition, especially as an Indigenous language.

Sign Languages & Gesture Systems

Sign Language Basics

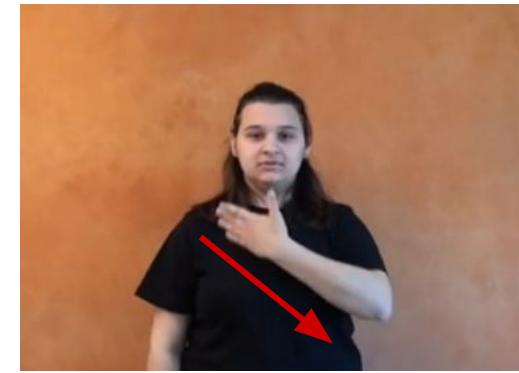
- Sign languages are fully-fledged languages and are not universal



'I can't' in French SL
'mom' in American SL



'love' in Portuguese SL and Turkish SL



- Sign languages vary in terms of vocabulary, phonology, syntax and semantics

Sign vs. Gesture



Gesture

→

Emblems

→

Sign

Less conventional

More holistic

Linguistic properties absent

Co-occurs with speech

More conventional

More compositional

Linguistic properties present

Occurs without speech

Kendon's continuum (McNeill 1992)

Mayan gesture

- Mayan gesture systems are very old, and widespread. Depictions of these gestures can be found in Classic Maya (200-900 CE) epigraphy
- Pan-Mayan handshape classifiers:

Plants



Land animals



Humans

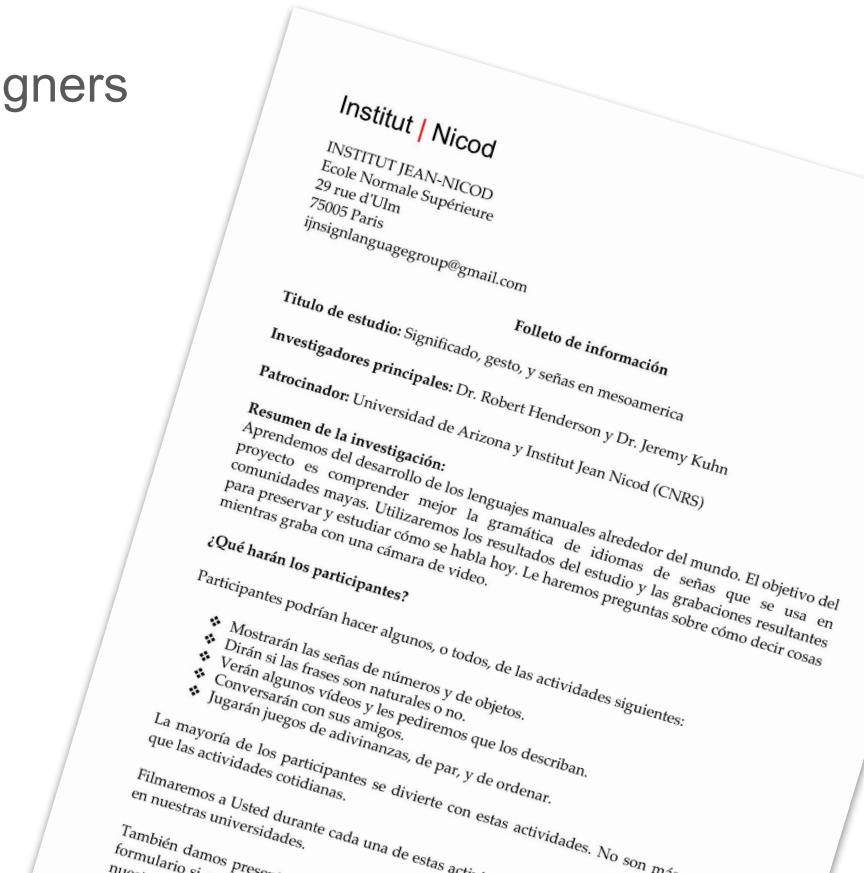


Young Maize God producing plant classifier Kerr vase 3933

Documentation & Methods

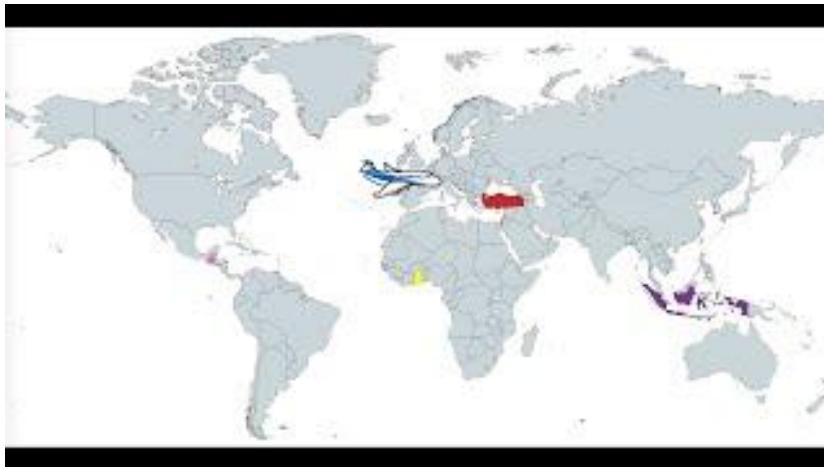
Receiving **consent**

- No common language with the signers
- Cultural dimension of consent
 - Technical jargon
 - Culturally foreign concepts
 - Individual vs. group consent
 - Signers' curiosity: what is it for?



Receiving **consent**: Strategies and principles

- Multi-channel consent
- Signing vs. discussing a consent form
- Show, don't tell

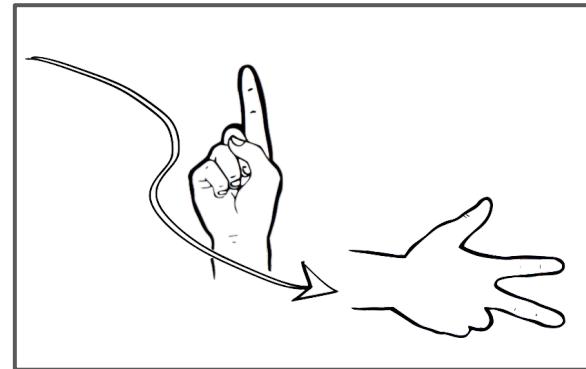
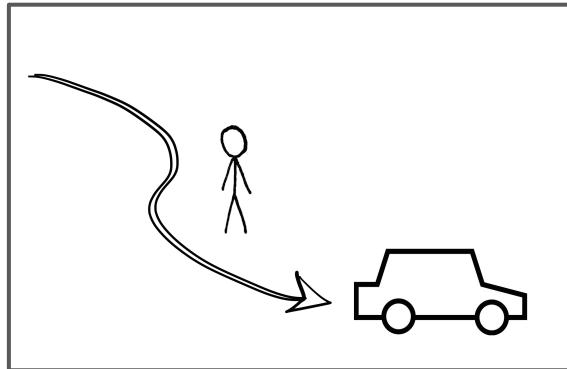


Research questions

- **Overall goal:** documentation; first grammatical description
- *Today:* results on **classifiers**

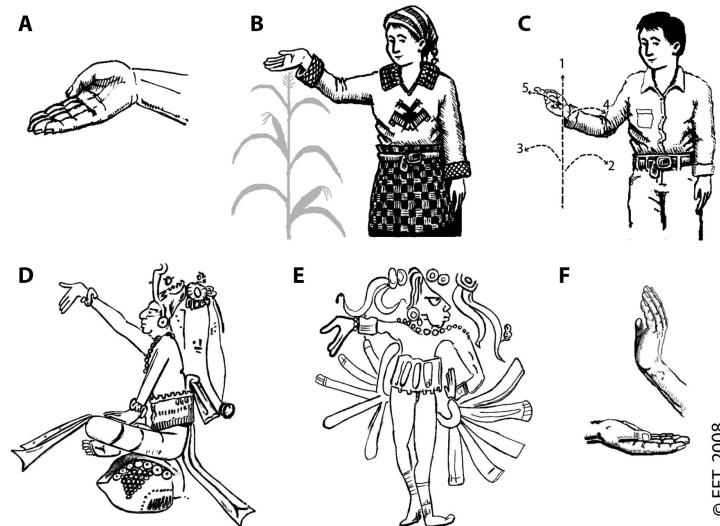
Classifiers in sign language:

- A conventionalized handshape identifies a class of objects (person/vehicle/...)
- A gestural component specifies the position or movement of the referent



Why study classifiers in HMSL?

- Adamarobe SL, a shared SL of Ghana, has no classifiers (Nyst 2007)
 - A similar sociolinguistic context to HMSL?
- Hearing Maya people use classifier gestures with ancient roots (Fox Tree 2009)
 - Are these present in HMSL?
 - If so, are they used in the same way?
- Is there a process of **grammaticalization**?
- How are **culturally important gestures** integrated into the language?



Designing tasks

- No common language with the researcher
- Linguistic tasks are unnatural
- Strategies:
 - Tasks (“games”) done by pairs of signers.
 - Culturally specific and appropriate.
 - Prompts are nevertheless controlled.
 - Prompts designed to elicit specific grammatical strategies.



Task 1: Guess the picture

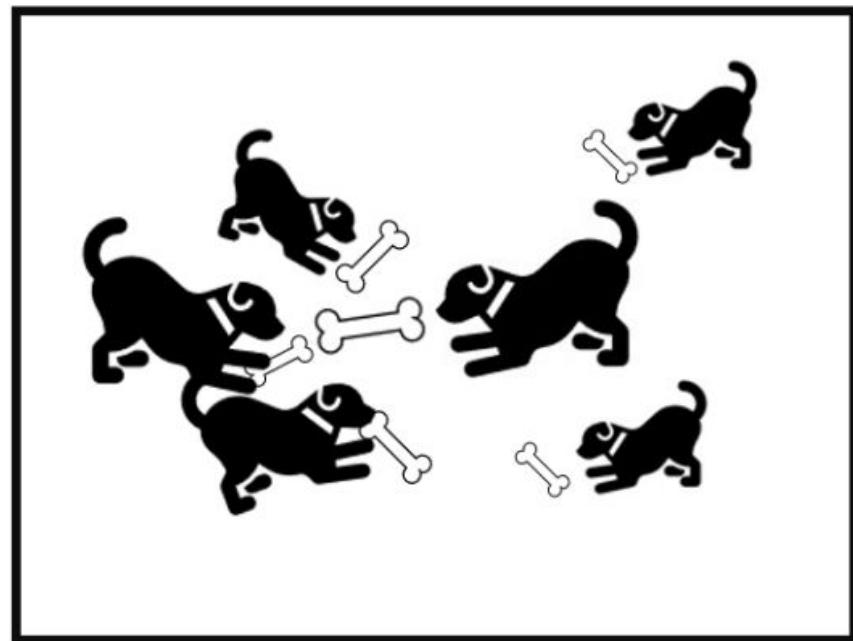
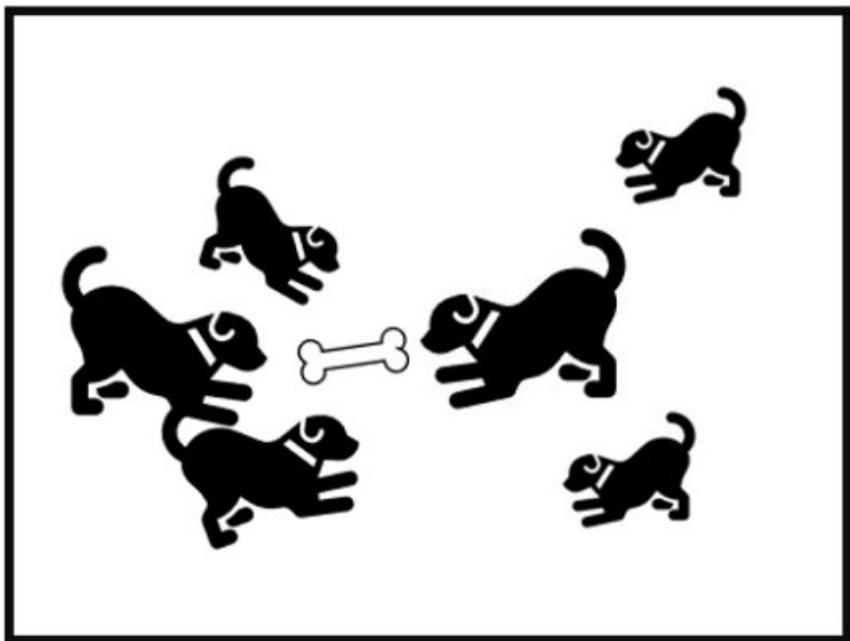
Signer 1 describes:



Signer 2 chooses:

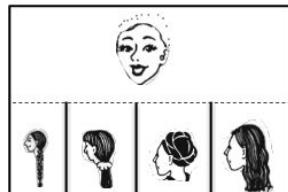
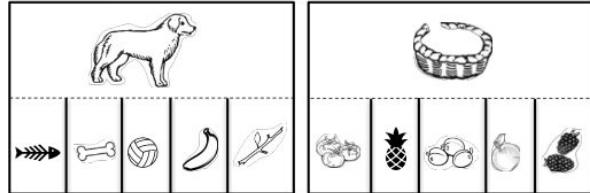
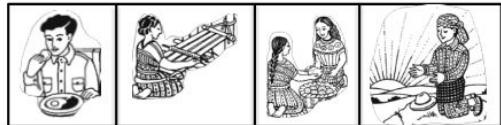
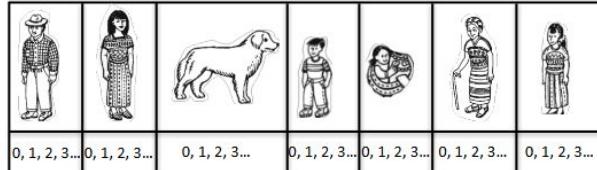


Task 2: Describe the picture



Task 3: Question/answer sheets

Signer 1 asks questions:

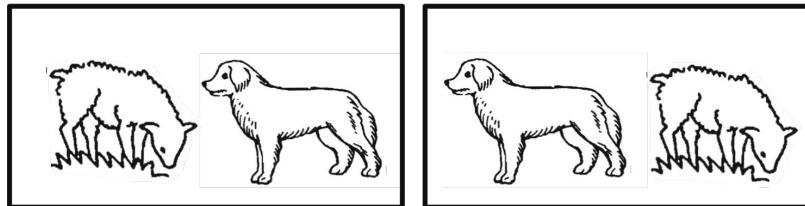


Signer 2 answers based on a picture:



Tasks: aspects to keep in mind

- There is no “correct way” to answer these tasks
- Sequential images:
 - Does this represent 1 dog, 1 sheep?
or 2 dogs, 2 sheep?
 - Do the images represent passage of time?
 - Many graphical conventions are not universal!
- Single images:
 - Name the object?
or explain it / tell a story about it?



- Whatever answer is given, it is language!

Case study #1: LAND ANIMAL



Fox Tree (2009: 334)

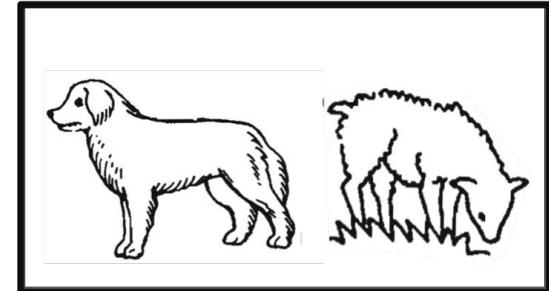
In hearing gesture:

- Indicates the height of land animals
 - Pinky “resting on back of animal”

In HMSL:

- Measuring height
 - Can additionally indicate *growing*.
- As a morpheme in lexical signs
 - DOG, PIG, ...
- To represent movement or orientation
 - Hand represents whole animal

Case study #1: LAND ANIMAL



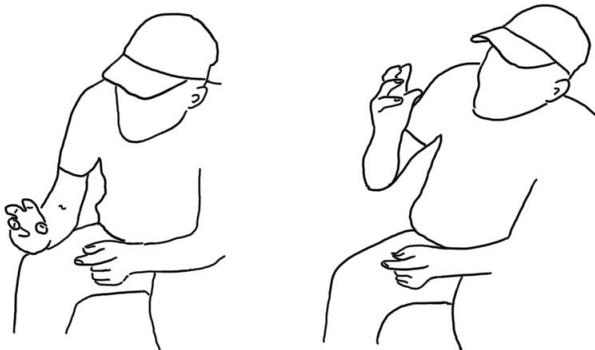
Case study #2: CHILD



In hearing culture and gesture:

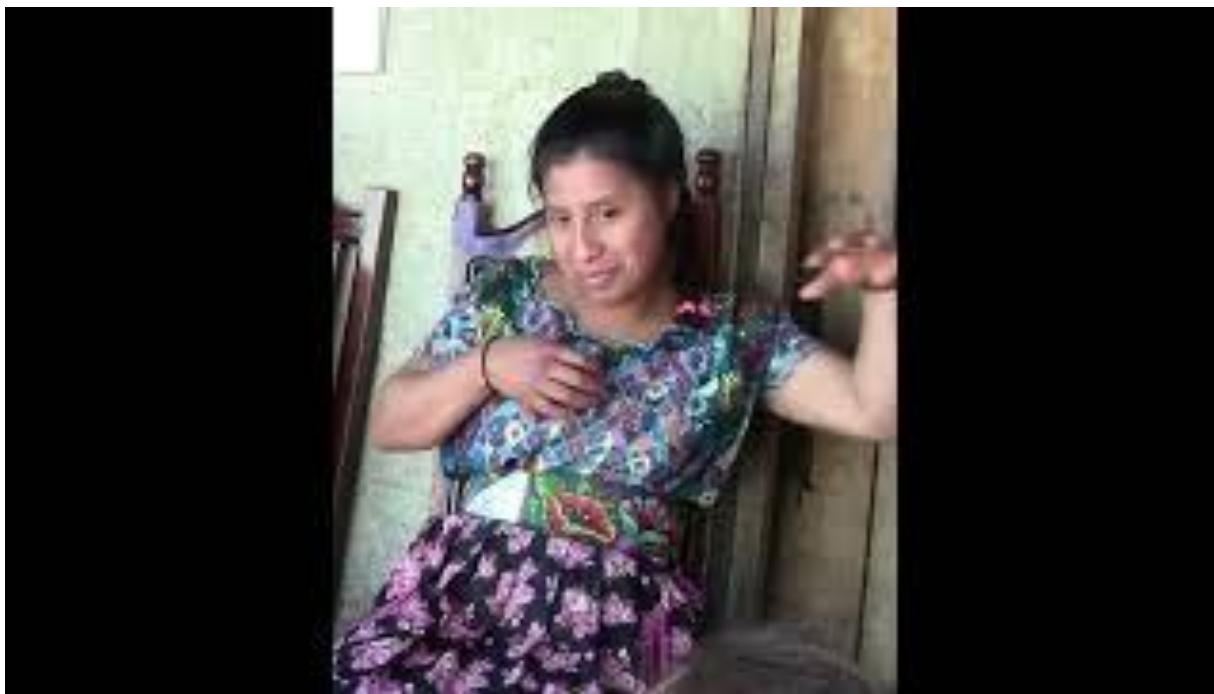
- A way for children to be greeted by elders
- Emblematic gesture meaning 'child', used for height of children

In HSL:



- Height used to indicate the birth order
 - Eldest child; middle child; youngest child
- Is used for nuclear family relations regardless of age
- In the absence of sign names, CHILD can be used to refer to specific individuals.

Case study #2: CHILD



Case study #3: Use of nouns as classifiers



SHEEP



FATHER / MAN

- Common nouns can be used as classifiers to indicate movement or position of a referent.
- Even body-anchored signs!
 - SHEEP is signed on the arm
 - FATHER is signed on the upper lip
- Classifier constructions thus appear, even without necessarily having a clear-cut morphological inventory.

Community Impacts & Goals

Community impacts

- Sign language education
 - Materials development
 - Comparison between HMSL and LENSEGUA directed at teachers to help them recognize and support the native language(s) of their students
 - HMSL Dictionary
 - Other pedagogical resources/tools
 - Consultation with teachers and signers is needed – what will be most useful?

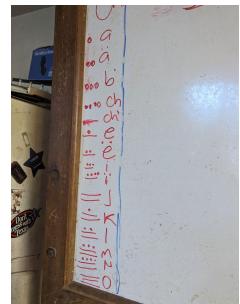
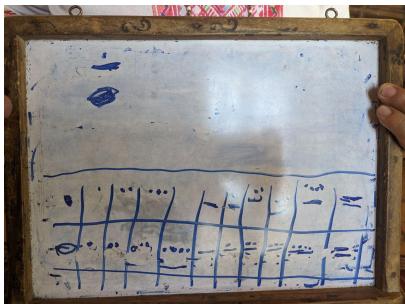
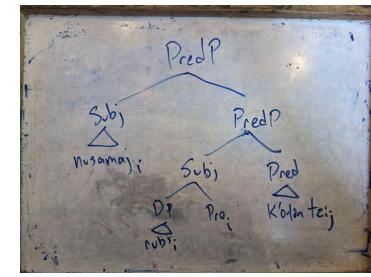


Community impacts

- Policy
 - Within the current policy framework of Guatemala, the status of Indigenous sign languages is unclear
 - At the same time, language shift is underway
 - E.g., first-hand reports from teachers about policies of transitional bilingual education
 - Goal: lobby for greater recognition of and support for Mayan sign languages
- Awareness
 - White paper for the Academy of Mayan Languages
 - Official recognition within broader language, education and disability policy
 - Inclusion of sign languages in discourse about Indigenous/heritage languages



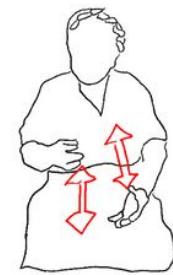
Matyö^öx!



DOG



ONE-EACH



rutelela'



Kaqchikel-speaking
region of Guatemala



Young Maize God producing
plant classifier Kerr vase 3933





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[Link](#) to RISE poster

Case study #3: Other classifiers

Overspecified



SHEEP



MAN

Underspecified



Animate entity



Animate entity

Urban vs. Shared SLs

Urban SLs

- Urban areas of developed countries
- Most users are deaf
- Late first-language acquisition
- Deaf culture
- Negative attitude from hearing community

Shared SLs

- Rural areas with high % of deafness
- Users are deaf and hearing
- High degree of integration and equality
- Positive attitude from hearing members

(Nyst 2007, de Vos & Pfau 2015)