The Emergence of Nonmanual Markers in a Young Sign Language

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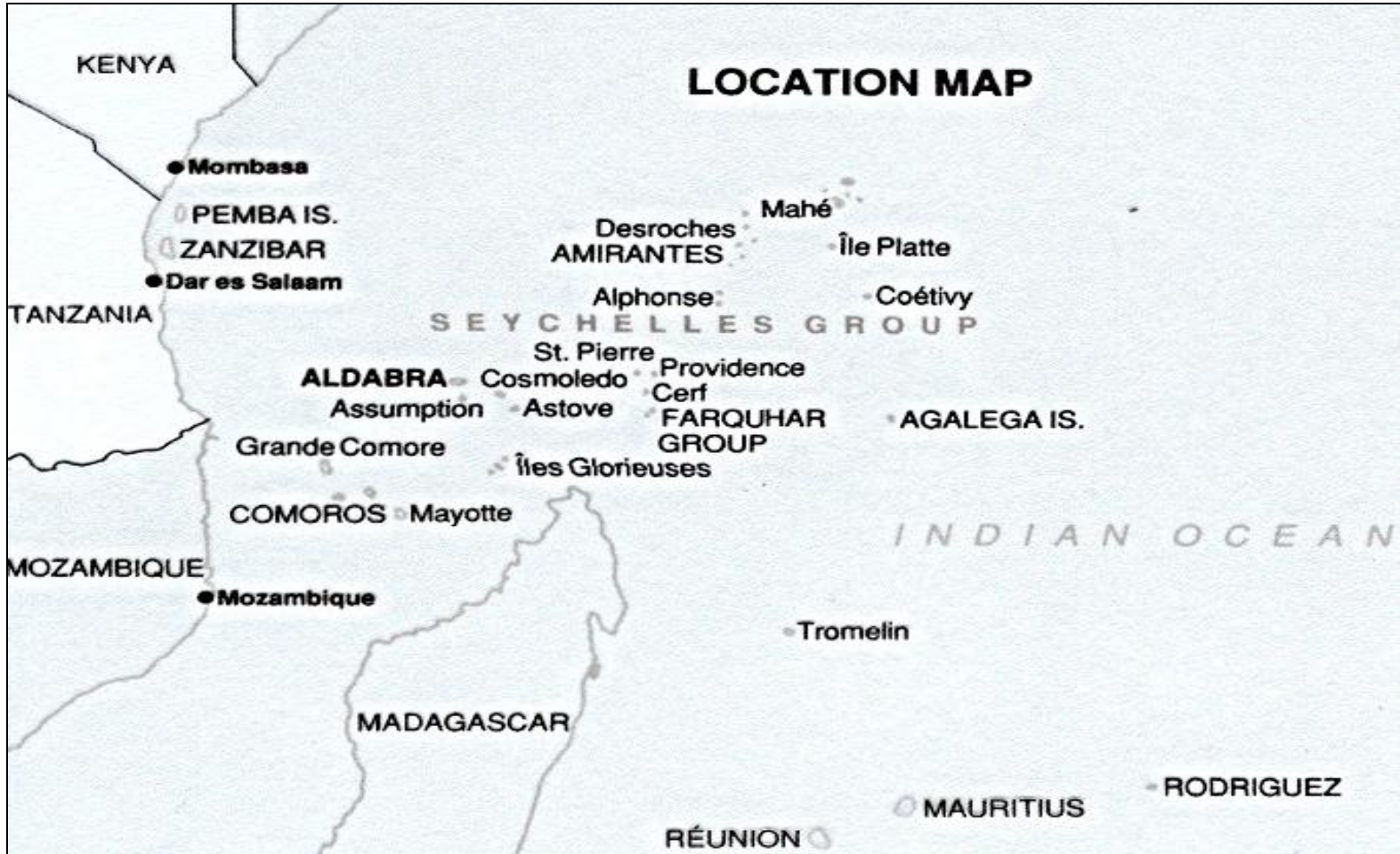**University of Cologne, Germany**

Outline of the paper

- **Sociolinguistic background of MSL**
- **Research questions**
- **Previous Studies**
- **Methodology & Data**
- **Findings & Discussion**
- **Conclusion**

Mauritian Sign Language (MSL)

- In 1969 - a school for the Deaf was established in Beau Bassin

- Society of the Welfare of the Deaf (SWD) -> approximately 3,000 deaf people of varying degrees of deafness & hearing impairment

Mauritius

Nonmanual markers

- Nonmanual markers (facial expression, eye gaze, body, head and mouth movements) convey emotional, lexical & grammatical meaning

- Modality-specific phenomenon

- General consensus: Two types of mouth patterns in SL

  1. oral components, *mouth gestures*
  2. spoken components, *mouthings*

- mouthings = derive from spoken languages
- mouth gestures = sign language inherent

Research Questions

o Are mouthings and mouth gestures found in an emerging sign language?

o If yes, what are the functions of mouthing and mouth gestures? How are these distributed in comparison to other ‚established' sign languages?

Assumptions

- **Mouthings are unlikely to appear**

- **Mouth Gestures should be attested**

- **There is a relationship between mouth actions and word class**

- **The functions of mouth actions in MSL are similar to those found in other sign languages**

Previous Studies

- ASL: Nadolske & Rosenstock (2007)

- BSL, NGT, SSL: Crasborn et al (2008)

- DGS: Hohenberger & Happ (2001)

- IPSL: Zeshan (2001)

- MSL: Adone & Gebert (2006)

Data & Methodology

- MSL corpus -> + 50 native signers

- Data collection in 2004/05 in Beau Bassin

- Elicited data from a picture description task (material from Inge Zwitserlood)

- 6 signers (2 men, 4 women) aged 18-45
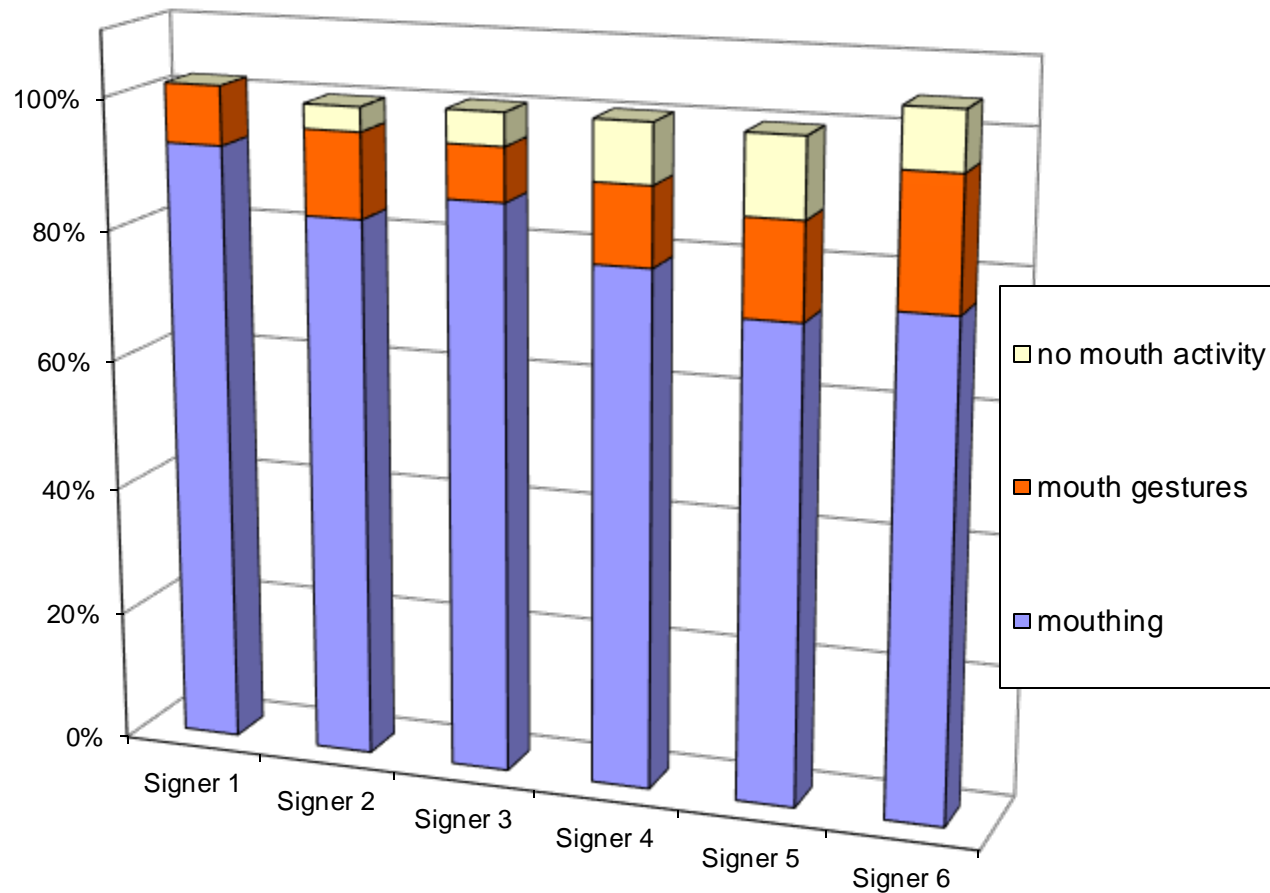
Data: The Distribution of Mouth Actions in MSL

Table 1 relates to the data from the picture elicitation task

Example from MSL

Mouthing: *madam*   *kuto*   *dipen*

Sign   CUT

Translation: 'A woman cuts bread with the knife'.

Disambiguation by Mouthings in MSL

'madame' woman	'ville' girl

Adone & Bauer

The Use of Mouth Patterns

Picture elicitation task

- Mouthing – ca. 80%
- Mouth gestures - ca. 15%

- Signer was confronted with a set of 22 pictures designed to elicit a single sentence only

Story telling task

- Mouthing – ca. 50 %
- Mouth gestures - ca. 40 %

- Signer retold the story from a picture book, e.g. Frog Story to another deaf person

The Use of Mouth Gestures

- **Storytelling register – increase of MG**

- **4 different MG identified:**

1. Adverbial
2. Echo Phonology/Semantic-empty
3. Enaction
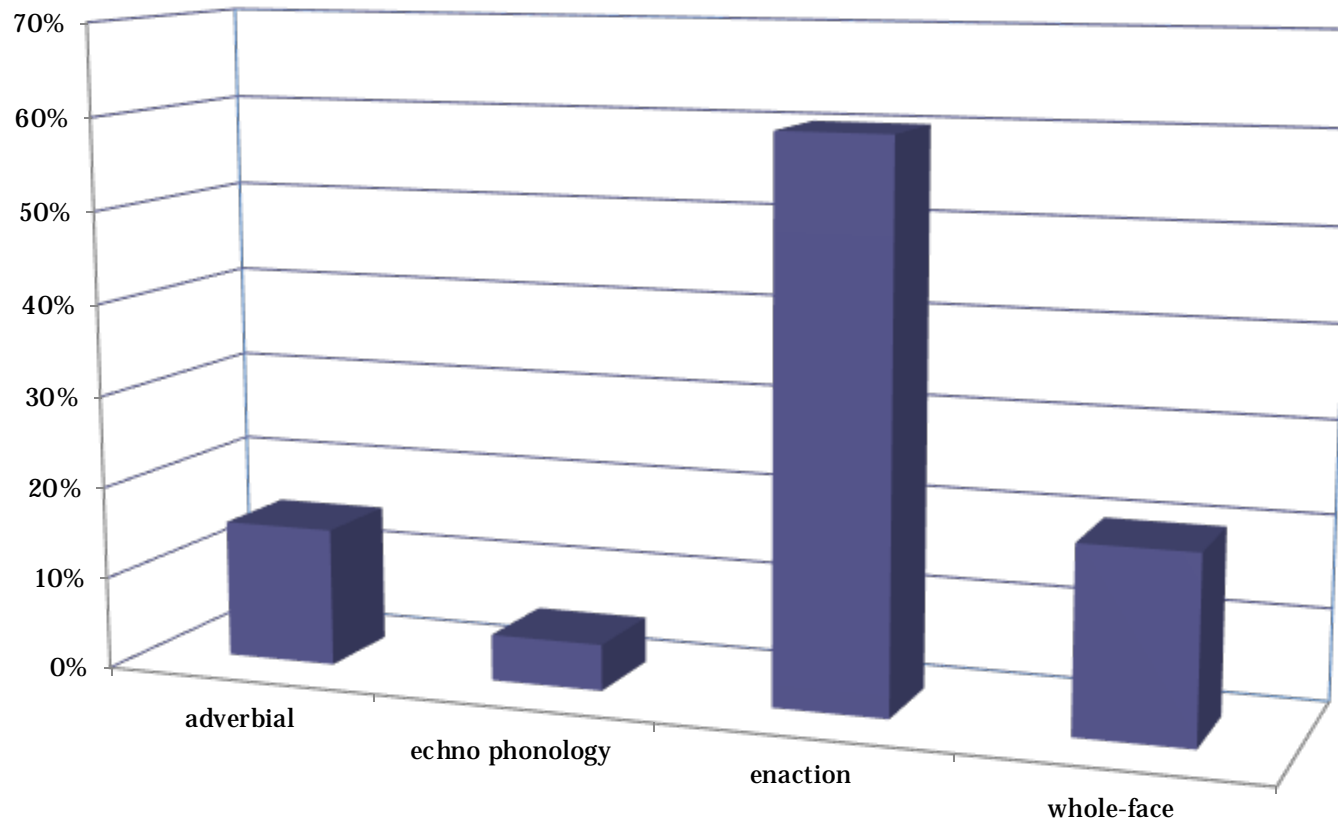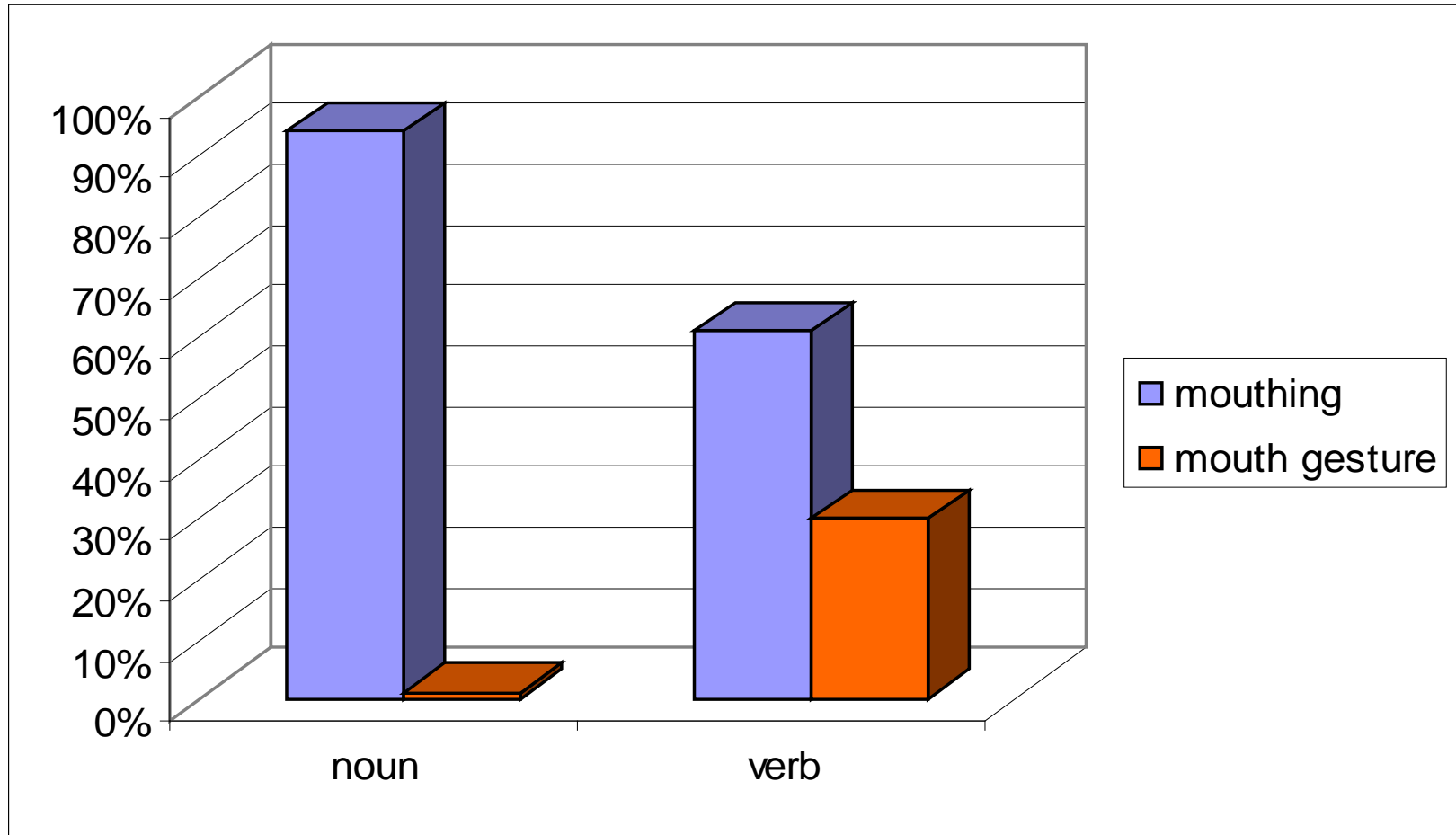4. Whole-face
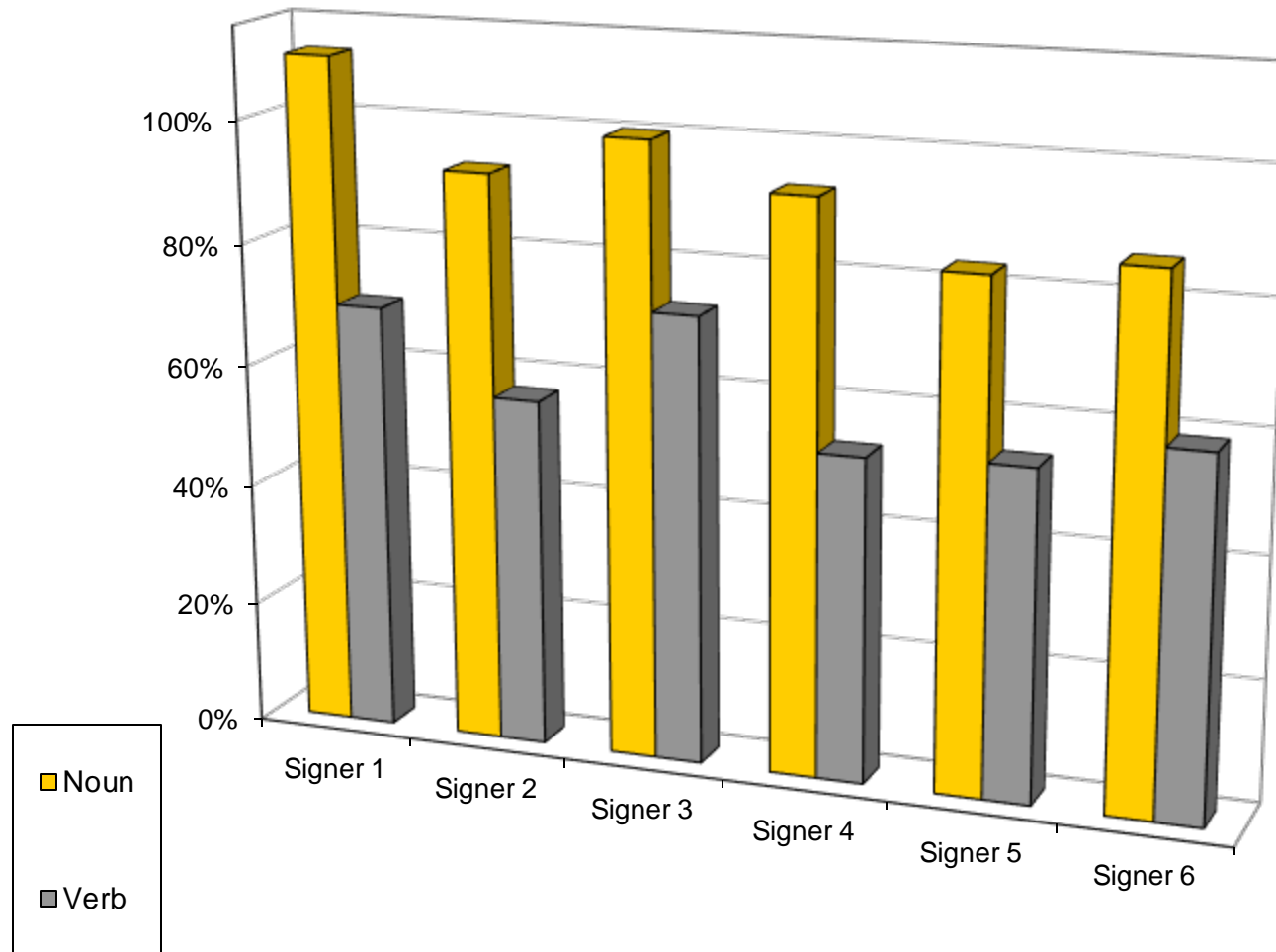
The Distribution of Mouth Gestures
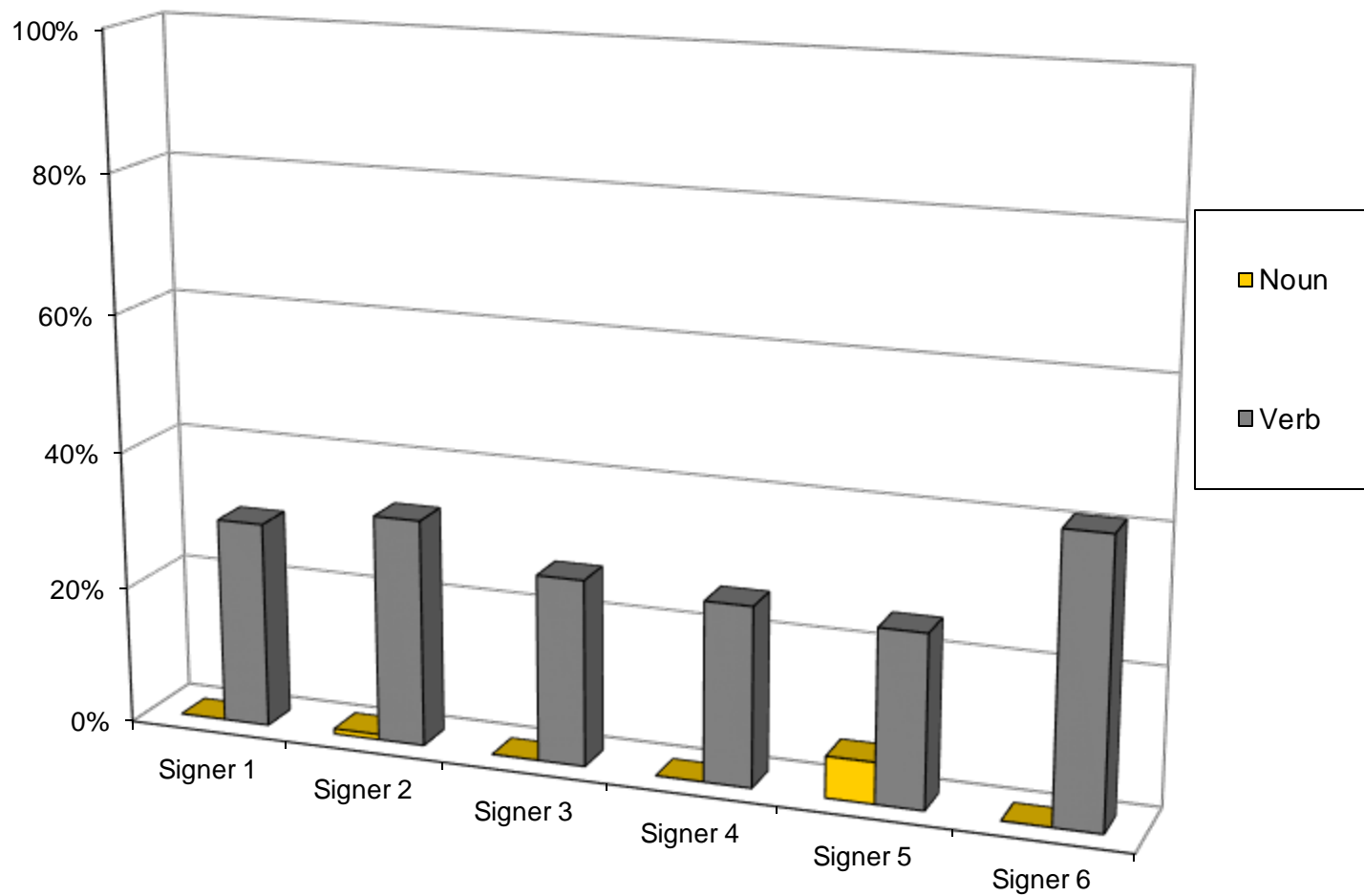

Table relates to the data from storytelling task

Distribution of Mouth Patterns over Syntactic Categories

Mouthing and Word Class

Mouth Gestures and Word Class

Findings

1. Mouthings and Mouth Gestures are present in MSL.

2. Contrary to our predictions, we have identified a high percentage of mouthings in a young SL.

3. Enacting Mouth Gestures seem to be the largest category.

4. Similar to ASL, BSL, NGT, DGS, MSL nouns are accompanied by mouthings more frequently than verbs.

Discussion: Mouthings

- A high percentage of mouthings variable in MSL vs. varying degree of mouthings in DGS

- Mouthings predominantly occurred with nominal signs similar to 'established' sign languages vs. Mouthings in IPSL

Discussion: Mouthings

- **Mouthing** – contact phenomenon between the sign language and the spoken language of the region.

- **The amount of mouthings** in people's signing depends on the amount of contact they have had with the surrounding spoken language (and other reasons: personal background)

Discussion: Mouth Gestures

Functions of mouth patterns in BSL:

Lexical (disambiguation, sole carrier of meaning), semantic (adverbials) & ‚echo phonology' (well-formed signs), enaction

Function of mouth patterns in MSL:

Enaction (BITE, SHOUT, EAT, CHEW...), Adverbials (HEAVY CARRY)

NO lexical function (no disambiguation)

Discussion: Mouth Gestures

- MSL seems to have a large inventory of Mouth Gestures, however their functions are restricted

- From language genesis perspective, as MSL gains in linguistic complexity, the use of mouth gestures and its functions could increase

Conclusion

- This sign language of the island of Mauritius offers an ideal test case for research because of its recent emergence.

- Analyzing emerging language - we trace the developing structure of grammatical devices

- Mouthings is a contact phenomenon, varying due to different reasons

- Mouth gestures are inherent to sign language, they are present from the early development of the language and develop gradually their functions.

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