**INTRODUCTION**

American Sign Language (ASL) and English differ in the linguistic resources available to express visual-spatial information. We used a referential communication task (based on Clark & Wilkes-Gibbs, 1986) to examine how signers vs. speakers create referring expressions for novel complex objects that differ in shape.

**METHODS**

- **Participants**
  - 10 pairs deaf native ASL signers
  - 10 pairs native English speakers

- **Task**
  - The Director must describe each shape in turn to the Matcher from 1-12.
  - The Matcher’s goal is to arrange the shapes to match target order.
  - Task is repeated 6 times, and each round had a new target order.

**RESULTS**

- **Description times** dramatically reduced over time as participants mutually accepted referring expressions.
- **Description times** were longer for ASL than for English, in contrast to previous results with spatial location descriptions (Emmorey, 1996; Lane, 1992). Gaze shifting between the shape stimuli and the Director may have contributed to longer rounds for signers.

**English Example**

- **Round 1**: Okay um... the next one there’s a white shape cut out of the middle um... almost like a white triangle in the center, the rest seems more black like um... but this one um... if I looked at the top, if I looked at it like this [gestures] it’s a little bit like a Christmas tree and then there’s a white triangular shape cut out of kind of the middle of the shape.
- **Round 2**: Um... the next one um... if you cover up the bottom half it looks a little bit like a Christmas tree, so it goes like this [gestures] on the top like a z, but lighthening bolt shape on the top.
- **Round 6**: Lightning bolt - Christmas tree.

**CONCLUSIONS**

- This communication task provides a novel way to investigate the creation, stabilization, and evolution of referring expressions over a short time span.
- Lexical labels improved communication efficiency over shape-based descriptions for both ASL and English.
- For ASL, classifier constructions may be less efficient for creating labels for complex objects than for expressing spatial locations.

**References**


We would like to thank our study participants. We would also like to thank Nicole Denny, Christiana-David and Elisabeth Lotman for assistance with this project. This research is supported by The National Institutes of Health DC100997 to Karen Emmorey and San Diego State University Research Foundation. For more information: kemoreyny@mail.sdsu.edu. Website: www.emmorey@sdsu.edu