Who We Are

We are the Language Acquisition and Sound Recognition Lab, or LASR. Our home base is UC San Diego, where Professor Sarah Creel, Principal Investigator to this research, is a faculty member of the Cognitive Science Department. Along with our lab manager, Liz Groves, graduate students Conor Frye, Carson Miller, and Reina Mizrahi, and an excellent crew of undergraduates from UCSD, we are investigating several aspects of children’s development of language and recognition of various sounds. We recruit preschool-aged children from the local San Diego community to participate in our computer tasks. We appreciate the great help from our preschool directors and are always grateful for the teachers’ hospitality. All of the tasks, or games, that we play with children are fun and short (about 15 minutes), and award a little prize as a thank you for participating. We’d like to give a warm thank you to all the directors, teachers, parents, and children for helping us with our research, and hope to keep making great discoveries in this field!

Preschoolers Say the Darndest Things

- “My lips are expensive”
- Experimenter: “You’re going to meet some children and you get to decide who you want to be friends with” Child: “Kitties!”
- Experimenter: “I like your ponytails” Child: “Yes, they’re very cute.”
- [About a music study] “I’m really good at this game because I eat a lot”
Do children encode information about talkers while simultaneously learning new words?

As children learn language, they gradually develop the ability to process multiple pieces of information about what is being said such as grammar and syntax. When hearing a spoken word, talker information, such as age, gender, and identity is communicated in addition to the word itself. Do children use talker identity to help them learn words? In this study, we wanted to know if children use this information when learning new words that sound very similar (geeb, geege) and if they are able to correct their assumptions when more information becomes available to them. We used eye-tracking equipment to see when children learned these new words and what information they were connecting to each of the new words.

In each experiment, preschoolers played a computer game involving two characters, Anna and Conor. Each character had a favorite object, and both words sounded similar (geeb, geege). They were then asked by the talkers for their favorite object (“I want to see the geege”) or for the object of the other talker (“Conor wants to see the geege”). Children recognized words more quickly if the two similar sounding words were spoken by talkers with different identities (male and female). We also found that children will look to the talker’s favorite object when hearing the talker’s voice and before knowing what they should be looking for. So if Anna said, “Find the geege for Conor” children would first look to Anna’s favorite object (the geeb). But once they heard Conor’s name, they would look toward the geege. These experiments show that children learn not only word meanings, but also voice and talker identity when learning new words.