JUNE 2015

Dear Parents and Teachers,

We have had yet another productive and exciting year, and we owe many thanks to you and your wonderful children for making that happen! Without you and your generosity, our research would not be possible. Not only does it allow us to make an important contribution to the field of language acquisition and development, but it also gives Rutgers undergraduate students great experience with research. Thank you from all of us at the Rutgers Laboratory for Developmental Language Studies! We hope this newsletter gives you an idea of our research.

We are very excited to tell you about some of our favorite studies from this past year. The common themes of our research explore how children assign meaning (semantics), learn about linguistic structure (syntax), and learn how to use words and sentences in context (pragmatics). Some of our studies have focused on what younger children know about the meaning of their first words. Others have focused on how older children interpret complex sentences that pose a challenge even for adults! Still others look at how the process of acquiring two languages at once influences how young bilingual children and heritage speakers arrive at meaning.

One of the most rewarding aspects of our work is that we provide Rutgers students with the opportunity to be engaged in hands-on research from many different angles. Your children’s involvement has allowed our students a unique opportunity to witness language acquisition first hand, and analyze it scientifically. Throughout the year, we present our research at conferences, workshops, and universities, and publish it in peer-reviewed journals and edited volumes, which get circulated to many other researchers of language and acquisition. These presentations and papers give us an opportunity to share our findings, build bridges among researchers, and allow our undergraduate and graduate students a chance to showcase their contributions.

Again, thank you for being an important part of our research. We couldn’t have done it without you!

Many thanks,
Kristen Syrett, Ph.D.
Director, Rutgers Laboratory for Developmental Language Studies
ruccs.rutgers.edu/languagestudies/
Comparatives and Pronouns

We spend a lot of time making comparisons. We are always trying to figure out which one is bigger, who has more, and how much longer something will last. Interestingly, languages across the world express comparisons in different ways. This can make it challenging to be a young child, trying to figure out how comparatives work in the language s/he is learning. It is perhaps not so surprising, then, that children produce comparatives in unexpected ways well into six years of age. (For fun, just ask your child to compare two soccer players racing towards a goal, or how two recording artists sing a particular song!) One question we want to answer, is how do children’s abstract linguistic representations guide the comparisons they produce, and those that they understand but aren’t quite yet ready to produce themselves?

In a series of studies, we ask children (and adults, for comparison) to listen to a short story, and act out the final scene with toys. We cleverly designed these stories and the target sentence to probe how children interpret comparative constructions. But we include a twist: we include a pronoun (she), which could refer to different people in the story. We want to see if children’s linguistic representation rules out or allows in certain characters in the story. What we’ve found surprised us all. We ask children to interpret complicated sentences like, “She gave more cones to Winnie the Pooh than Sleeping Beauty’s Godmother.” After a little thought, most children know just what to do, although it’s not always what adults do! They appear to have more flexibility in how they interpret the pronoun, but the amounts they compare are almost always right. These findings are a window into how children represent quantities and make comparisons among them in the real world, and how they interpret pronouns as referring to different individuals.

**TRY THIS AT HOME:** You can see how your child interprets ambiguous pronouns firsthand. All you need is some Lego characters and some Legos. Give one Lego guy three Legos of one color, and the other Lego guy three Legos of another color. Now have each one lift each of his own Legos. Then say, “This Lego guy lifted his Legos, and this guy did, too.” See if your child thinks this is ok. Now this time have one Lego guy lift all of his Legos, and have the second guy lift the first guy’s Legos. Now say the same thing, “This Lego guy lifted his Legos, and this guy did, too.” Does your child still think this is an ok thing to say? HINT: The sentence could have both meanings!
Comparatives and Measurement

We have also investigated comparatives from another perspective, looking at differences in the interpretation of measurement expressions in English and Japanese. In English, we can say that someone is “two feet taller” and this can be understood as saying that the height of that person is two feet taller than some other height (maybe of that person’s child). But in Japanese, there is no “er” morpheme, so to make this comparison, one says that the person is “two feet tall,” and this is understood as being taller. But in English, this means that the person’s height is two feet. We wanted to know if English and Japanese children start off with similar interpretations for “two feet tall” or if they know that their languages assign two different meanings for this phrase. To find this out, we presented children with scenes where the height of two animals was being compared using a form of measurement that was totally new to the children. We then had a puppet deliver a sentence (“The lion is 2 chipanis taller.”) Both groups of children thought this meant that the lion was two chipanis tall! We then had the puppet say, “The lion is 2 chipanis taller than the tiger.” Even with this extra phrase, both groups of children still thought this meant that the puppet was referring to the absolute height of the lion!

Now, you as an adult might be thinking, where did the children go wrong? In fact, we have suggested that the children were led astray precisely because of aspects of their linguistic representation that are similar to those of adults. That is, because they know that the measure phrase “two chipanis” wants to measure out amounts, the grammar typically starts measuring from zero, but allows for the context to supply a different ‘zero’ (the top of the tiger). We think this is what children have to set in their grammar. These studies therefore provide a window into cross-linguistic similarities in language acquisition.

**TRY THIS AT HOME:** Invite two of your child’s stuffed friends to have a “picnic.” Give one of the friends one clementine, and the other one three clementines. Now, ask your child if the second character has two more clementines. Do they say “YES” or do they say “NO, he has three!” Then enjoy a nice snack of clementines!

Some lions, Algunos Tigres, and Unos Osos – Oh my!

We all know that acquiring a language can be hard. But what about acquiring two languages at once? What are the extra challenges a bilingual child faces? We were interested in one particular challenge: determining what the word ‘some’ means. This sounds easy, right? It turns out it’s not so easy for adults, and definitely not for children!
Think about how many different meanings ‘some’ can have: you request ‘some water’ at a restaurant but only expect enough to fill your glass; you ask for some time off from work, which could be days or weeks or even months; you only ate some of the M&Ms (you have no idea how the whole bag got eaten!). In short, ‘some’ always means ‘a vague amount’ but what that amount is varies with the context. What’s more, Spanish has multiple words for ‘some’: ‘algunos’ and ‘unos’. So the bilingual child is learning three different words, each of which may mean something slightly different.

We asked if monolingual and bilingual children – and adults – were sensitive to the different meanings of ‘some’ and whether the two groups of children patterned alike or differently. To do this, we ran a number of different tasks, to tap into different aspects of the context. In one task, we showed children two people interacting. One speaker delivered a statement with ‘some’ (or another key word), and the addressee tried to comply by doing something with the object that were shown. For example, the speaker might say, “You may take some books.” What would you do if the addressee took all of the books? Would you say this was all right, or not? How you respond depends on how you interpret ‘some’ (‘some but not all’ or ‘some and maybe even all’). Even though bilingual children don’t arrive at the same pattern of responses as monolingual children, they are still very sensitive to speaker-address dynamics. So it appears that were the two groups diverge is not in their overall pragmatic skills, but specifically in how they interpret this one lexical item, which varies across languages.

**TRY THIS AT HOME:** Put a small pile of blueberries in front of you and your child. Tell your child that you’re going to “take some of the blueberries” and tell your child to check whether you did what you said you were going to do. Now reach out and take ALL of the blueberries. Ask your child if you did what you said you were going to do (“take some of the blueberries”). What is your child’s reaction? How do you think they are interpreting ‘some’? Now try the same thing with “all” and only take a few of the blueberries, leaving some behind. Try saying you’ll take two, but take three instead. Does your child think this ok? (HINT: You actually have to take two on the way to taking three, but you won’t end up with the exact amount of two! Wow, that’s tricky!)