

MSU Language Acquisition Lab

Spring 2014

NEWS

How Spanish-speaking kids use verbs to understand meaning

English verbs and Spanish verbs: What's the difference?

How do kids growing up speaking **Spanish** compare to kids that grow up speaking **English**? One way that English and Spanish differ is in how their verbs work. *I swim, he swims, you swim, we swim, they swim*— In English, the pattern of how verbs like swim agrees with different subjects is quite simple; you only have to add **-s** when the subject is *he* or *she*.

In Spanish, this is more complex. *Yo nado, tu nadas, el nada, nosotros nadamos, ellos nadan*— Wow! Each subject has its own unique verb conjugation. On top of that, **subject pronouns in Spanish are almost always dropped**, a property that is also very different from English.



One duck, multiple ducks?? Information from verbs

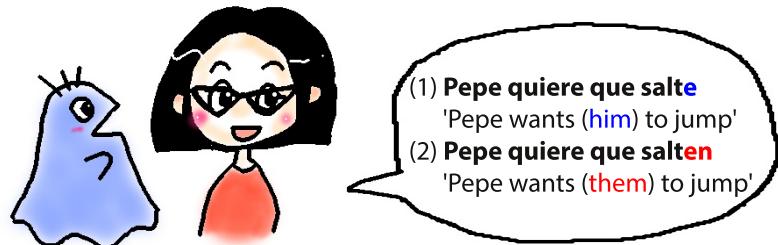
We know from previous research that English-speaking kids are bad at using the **-s** on *swims* to figure out that the subject is supposed to be *he/she/it*. Researchers found this out because when they told pre-schoolers, "**Show me the picture where the duck swims in the pond!**" they pretty much randomly guessed if this meant one duck, or multiple ducks. This was tricky for kids, because *duck swims* can sound exactly like *ducks swims*— The only way that they would be able to tell that "*duck swims*" is talking about one duck is if they can figure out that the **-s** on the verb was signaling *he/she/it* (=duck), not *they* (=ducks), as its subject. Adults can do this, but young children can't!



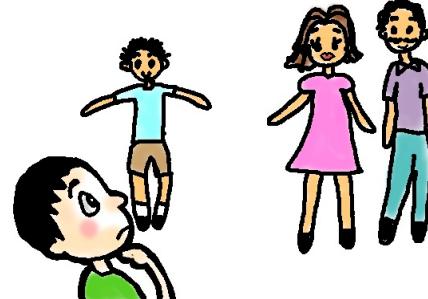
In our lab, we tried to find out what **Spanish-speaking kids** do in a similar situation. Why might we think that they would perform differently in a task like this? Well, as we have seen already, Spanish verbs are **very complicated**— you need to know how a verb is conjugated for each and every pronoun. This is especially important in Spanish because if the subject pronoun is omitted all the time, the form of the verb is what you must rely on to figure out what the invisible subject is. This leads us to think that **Spanish-speaking kids might be better** at using information from the verb form to figure out what a sentence means.

Our experiment

Here is how we tested our hypothesis. Our materials included one puppet named Pepe, one child doll, and two parent dolls. We pretended that Pepe was asking us to tell Spanish-speaking kids to do certain things.



We told kids sentences like (1) and (2). After hearing one of these sentences, they were supposed to make either the child doll or the parent dolls jump. Remember: The subject pronoun is dropped, so they have to rely on the form of the verb to figure out if one doll (child) or more than one doll (parents) is supposed to jump. If they understood the verb ending, they should make the child doll jump for (1), and the parents dolls jump for (2).

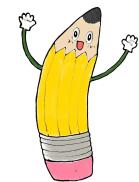


Results: What we found out

It turns out that **Spanish-speaking pre-schoolers were bad at picking the correct doll(s) to make jump!** Upon hearing sentences like (1) and (2), they had to guess who Pepe was talking about.

What does this tell us? Well, it turns out that even in a language like Spanish where the form of the verb is very complex and very important, young children don't know how to use the verb information to figure out what the subject of that verb is.

Overall, this suggests that it is difficult for children to use subject-verb agreement information for comprehension—**regardless of what language they speak!**



Does variable input affect language acquisition?

Pronounce the -s... Sometimes.

We know that what children hear is very important for learning a language, but what happens if what they hear is sometimes one thing, and other times, it's another? This is one of the central questions that our lab investigates.

In **Chilean Spanish**, depending on the speaker, **syllable-final s is sometimes not pronounced**. For example, gatos 'cat' can be pronounced [gatos] or just [gato], and comes 'eat' can be pronounced [comes] or [come].

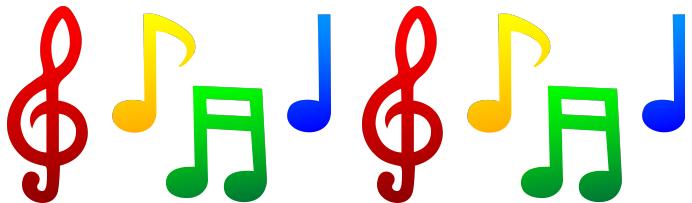
Here's the issue:

- (1) (ellos) canta '(she) sings'
Pronounced [kanta]
- (2) (tu) cantas '(you) sing'
Pronounced [kantas] OR [kanta]



Some people don't pronounce the last -s in (2)—but if they do that, it sounds exactly like (1)! The -s is the important information here, yet they only **sometimes** hear it as associated to 'you.' How do kids learn what form is used for 'HE/SHE sings,' and what form is used for 'YOU sing,' in a situation like this?

Importantly, this omission of -s **only happens in Chilean Spanish**. For example, the -s is always pronounced in another variety of Spanish spoken in Mexico City—Mexican Spanish. An interesting question then is this: **How do Chilean Spanish-speaking kids and Mexican Spanish-speaking kids compare in terms of learning verbs?**



Our Experiment

Here's how we investigated this. Do you remember the previous experiment with Pepe the puppet? We did the same experiment again, but this time, we added one more sentence.

We had Pepe the puppet, a child doll, and two parent dolls again. Pepe would "whisper" in our ears certain things, and we told the kids what Pepe said. The kids were supposed to do what Pepe requested. We had both Chilean Spanish-speaking kids and Mexican Spanish-speaking kids participate.

Remember that the subject pronoun is dropped in Spanish! The kids have to rely on just the verb to figure out what Pepe said means.



Here's what we might expect to happen. When Chilean Spanish kids hear (1), they could interpret it one of two ways—a. Pepe wants the child doll to jump, or b. Pepe wants the kid himself to jump. The second reading is possible because (1) can sound like the s-less version of (3). So maybe when Chilean Spanish kids hear (1), they will do the jumping themselves. Since Mexican Spanish doesn't have this optionality with -s, we thought that Mexican Spanish kids would not jump themselves when they heard (1).

Results: What we found out

Chilean Spanish children had the tendency to carry out the action themselves when they heard (1), but not Mexican Spanish kids. This is what we predicted!

What does this mean? Variable input DOES affect language acquisition—the variation in the pronunciation of -s or no -s affects Chilean-Spanish-speaking children's comprehension of verbs! This does NOT mean, though, that Chilean children don't know how verbs work. They know that verbs have properties like "2nd person (YOU)" and "singular/plural"; they just rely less on pieces like -s to determine them, because it's sometimes there, and sometimes not!

Thank you!

Thanks to all participants of these studies, including the kids and their parents! A big thank you also goes out to the preschools for their help!!

About the Lab



The MSU Language Acquisition Lab does research in child first language acquisition, with a particular focus on the acquisition of sentence structure and meaning, and the comparison of acquisition patterns in many languages including Spanish, Portuguese, English, Chinese, and Japanese.

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