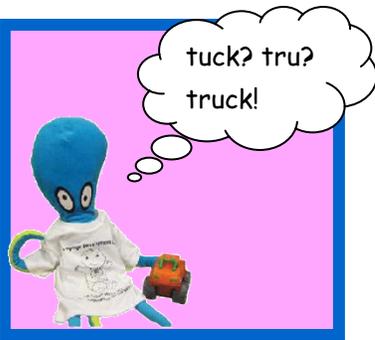


LANGUAGE DEVELOPMENT LAB

Newsletter - winter 2012



Director

Dr. Chris Fennell

Grad Students

Annie Drouin

Sophie Godbout-Beaulieu

Tamara Hudon

Honours Student

Will Deller

RAs/Volunteers

Becky Ginsburg

Zhen Xu

Thyra Driver

Erik Service

News

◇ Good luck to former honours student Brock Ferguson, who has left the lab after 2 years to pursue graduate studies at Northwestern University in Chicago.

◇ Welcome to the new honours student, Will Deller.

Language Development Lab



Le labo du développement
du langage

From the Director

Let me begin by sincerely thanking all the parents and babies who have participated in our studies. We are learning so much about early language development, both in monolingual and in bilingual infants, from your participation, and we are happy to share these findings with you via this newsletter. Whether you have participated in a study or not, I would also like to thank you for your interest in our research. As with all research enterprises, this work would be impossible without a dedicated research team. My graduate students and collaborators will share their findings as well. We are always happy to answer any questions you may have about our research or about language development during infancy. Feel free to contact us! Once again, thank you for your continuing support and ongoing interest.

Ongoing Studies

Do monolingual and bilingual infants cope with accented speech differently?

Over the last year we have been testing monolingual and bilingual 9 and 13 month olds to see whether or not they can recognize that a word stays the same despite a change in speaker and accent. More specifically, we have been investigating whether babies who receive exposure to two new words spoken by a native speaker of English can identify these words in short stories spoken in English by a native speaker of French. The data to date suggests that 9 month old bilingual infants cope with a change in accent, while monolingual infants do not. We think that this is due in large part to bilingual infants being exposed to more accented speech, and more variability in speech in general at home. Previous studies showed that monolinguals do not accommodate for accented speech until about 13 months and we will soon know if our participants do the same. These preliminary findings were presented at the International Child Phonology Conference in York, England in June.

What is the effect of lexical stress on word-learning?

In this study we are looking at the effect of lexical stress on learning phonetically-similar words (i.e. words that differ by only one phoneme, like *cat* and *rat* for example). Lexical stress refers to the emphasis of one syllable in contrast to the other, for example you reCORD a REcord. In English, lexical stress is usually on the first syllable of each word, while in French it is usually on the last syllable of a sentence. Previous studies suggest that lexical stress could help infants to identify words in running speech. The

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What's a phoneme?

Here at the lab, we spend a lot of time thinking about phonemes. Phonemes are units of sound that are meaningfully different from one another in a given language. For example, **l** and **r** are both phonemes in English because the words "rate" and "late" mean different things. This is not true for all languages: what is a distinctive sound contrast in one language is not necessarily so in another. This is why, for example, a Japanese speaker learning English will often say **r** instead of **l** and vice-versa; the difference between the two sounds is not a phonemic difference in Japanese and is therefore very hard for a Japanese speaker to hear.

current study aims to show whether lexical stress allows babies to hear the difference between similar-sounding words and whether that is dependent on the language(s) they are learning (e.g., an English baby may hear the difference on a stressed first syllable more than a French baby). We started testing 17 month olds last April and we are now starting to test 14 and 20 month olds.

Modeling Monolingual and Bilingual Language Environments

How well do infants track and remember the sounds that they hear around them? In order to find out, we will have infants listen to a series of different sounds which mimic an unfamiliar language environment. These different sounds - none of which exist in English or in French - are arranged in patterns where the most important sounds (for these unfamiliar languages) occur the most often. Then, we will test infants on their ability to distinguish these different sounds. We are predicting that infants' performance on a specific sound contrast will depend on how important (i.e., frequent) the sound was in the simulated language environment that they were just exposed to.

New (Really Exciting) Studies

Learning new words, but can we prove it?

We know that infants as young as 6 months old can understand some words in everyday situations, but this has been difficult to demonstrate in research settings. In this study we will present infants with words that they may know already; they will hear the word played while watching the corresponding image on a screen. We will then present new, nonsense words with corresponding novel images to see whether they can associate the word they are hearing with the image they are seeing. If infants recognize the novel word, then we expect them to look at the correct image on the screen when presented with more than one image at once. Testing began in November!

If you are interested in participating with your baby (4-24 months of age), you can contact us by phone (613-562-5800 x4447) or email (ldl@uottawa.ca). Alternately, you can fill out an online registration form at www.ldl.uottawa.ca.

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Recent Publications and Presentations

- Fennell, C. T. (2011). Object familiarity enhances infants' use of phonetic detail in novel words. *Infancy*, DOI: 10.1111/j.1532-7078.2011.00080.x
- Fennell, C. T. & Byers-Heinlein, K. (2011, November). Monolingual and bilingual infants' use of atypical phonetic information in word learning. 36th Annual Boston University Conference on Language Development, Boston, USA.
- Fennell, C. T. & Byers-Heinlein, K. (2011, June). Sentential context improves bilingual infants' use of phonetic detail in novel words. International Symposium on Bilingualism, Oslo, Norway.
- Fennell, C. T. (2011, June). Word learning at a junction: Infants' use of bottom-up and top-down cues in lexical acquisition. Invited talk to the Department of Experimental Psychology, University of Oxford, Oxford, U.K.
- Fennell, C. T. (2011, June). Bilingualism in the infancy period. Invited talk to the Centre for Research on Bilingualism in Theory and Practice, Bangor University, Bangor, U.K.

