Welcome to our annual update of research at Cardiff University on social and cognitive development.

It’s all Greek to Me!

Elena Sakkalou has completed a series of studies on imitation and prosody. Prosody is the rhythm, tempo, and melody of the voice. Elena showed 14- to 18-month-olds how to make a toy work, and commented on her success or failure – but instead of speaking English, she spoke Greek. Because she spoke Greek, we were able to ask whether babies can decide which action to imitate on the basis of prosody alone. Babies as young as 14 months were able to do so. The results of Elena’s studies give new meaning to the phrase ‘It’s all Greek to me!’

Making Faces

Sarah May is studying imitation in very young babies, and is now in the second year of her PhD. Participants of Sarah’s study are just 4 weeks old, so we like to think of them as Cardiff University’s youngest students. Sarah’s PhD follows up on a study run by Dr. Mary Fagan. The results of that first study suggested that infants’ imitation abilities are related to their attention abilities. Babies’ attentional abilities change dramatically across the first few months of life, and we are interested in how those changes impact the ability to learn from others. Sarah shows babies a short film of someone’s face, and looks to see whether or not they copy those faces. Sarah recently tested her 100th baby, a remarkable milestone!

Language Learning is More Than Parroting

Harriet Over recently completed a series of studies on language learning and imitation. These studies asked when young children copy grammatical mistakes, and when they correct them. Harriet taught 3-year-olds a game in which the object was to copy whatever she said. Interestingly, when Harriet spoke grammatically, children copied her, but when she spoke ungrammatically, they corrected her. In a follow-up study, the sentences were ‘spoken’ by either a toy frog or a cardboard box. Children corrected the frog but not the box. These studies tell us that children copy the intentions behind speech, rather than the words they hear – but only if the speaker has a mind.

First Steps

In January 2008 we will begin a major new study, funded by The Leverhulme Trust. We will follow the development of 32 babies from the day they are born until they turn 18 months. Parents will be our partners in research, keeping electronic diary records of their babies’ activities, and bringing their babies to a group breakfast at Café Junior once a month. This is a groundbreaking study that will yield the first major catalogue of early milestones in physical, cognitive, and social development. We have convinced Elena Sakkalou to stay with us as Postdoctoral Researcher on the project. You can read more about the PhD students on the project in “Comings and Goings.”
The Word is Out!

Our research is featured in the November issue of The APA Monitor on Psychology, a publication of the American Psychological Association (also available online at http://www.apa.org/monitor/). In an article called “The Joke’s in You,” science writer Michael Price highlights our work on the building blocks of humour. Elena Hoicka and Merideth Gattis have a new paper, “Do the wrong thing: How toddlers tell a joke from a mistake” in the journal Cognitive Development. Oliver Perra and Merideth Gattis have a new paper, “Reducing the mapping between perception and action facilitates imitation,” in the British Journal of Developmental Psychology. Elena Sakkalou and Merideth Gattis have a new paper, “Fourteen- to 18-month-old infants infer others’ intentions from intonation,” in the journal Infancy.

Comings and Goings

We have two new PhD students joining the First Steps project. Nia Fowler has been working in our group since spring 2007 and finished her degree in Psychology at Cardiff in July 2007. Elma Hilbrink is joining us from Nijmegen University in the Netherlands, where she has just completed a Master’s degree in Research Methods in Psychology. Harriet Over is spending the current academic year at the Max Planck Institute for Evolutionary Anthropology in Leipzig, funded by a prestigious Leverhulme Trust Fellowship. In between visits to the orangutans at the amazing Wolfgang Köhler Primate Research Center, Harriet is conducting studies with toddlers on imitation and joint attention. Oliver Perra has finished his ESRC Postdoctoral Fellowship, and is now working with Dale Hay on a Cardiff-based project on social development.

An Even Bigger Thank You!

Last year we said a big thank you to those of you who participated in our studies, and this year there are even more of you, so it is an even bigger thank you! We are especially thrilled at how many of you have grown with us, by returning for new studies as your children get older. We also want to say a big thank you to our student interns over the past year: Nia Fowler, James Harris, Claire Jones, and Alice Winstanley. Our interns speak with families in the maternity wards at University Hospital Wales and help us with appointments. Last but not least, a big thank you to the many people who helped with our recruitment process, including staff at Cafe Junior, Chapter, local churches and libraries, The National Childbirth Trust, Techniquest, and UHW.

Wanted: Babies Who Like to Play

We are always looking for parents and children who are willing to participate in our studies. We are currently testing children from newborn to three years. If you have children in this age range, or know friends or family who do, and would be interested in hearing more about ongoing studies, please return the freepost postcard or alternatively email us (development@cardiff.ac.uk).

Who We Are

Dr. Merideth Gattis, Research Director
Ms. Nia Fowler, PhD Student
Ms. Sarah May, PhD Student
Ms. Elena Sakkalou, Researcher
Ms. Kate Ellis, Research Assistant
Ms. Elma Hilbrink, PhD Student
Ms. Harriet Over, PhD Student
Ms. Claire Jones, Research Assistant