# KNOWLEDGE THEME:

What do children know at different points in development and how do they come to know it?



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## INTRODUCTION

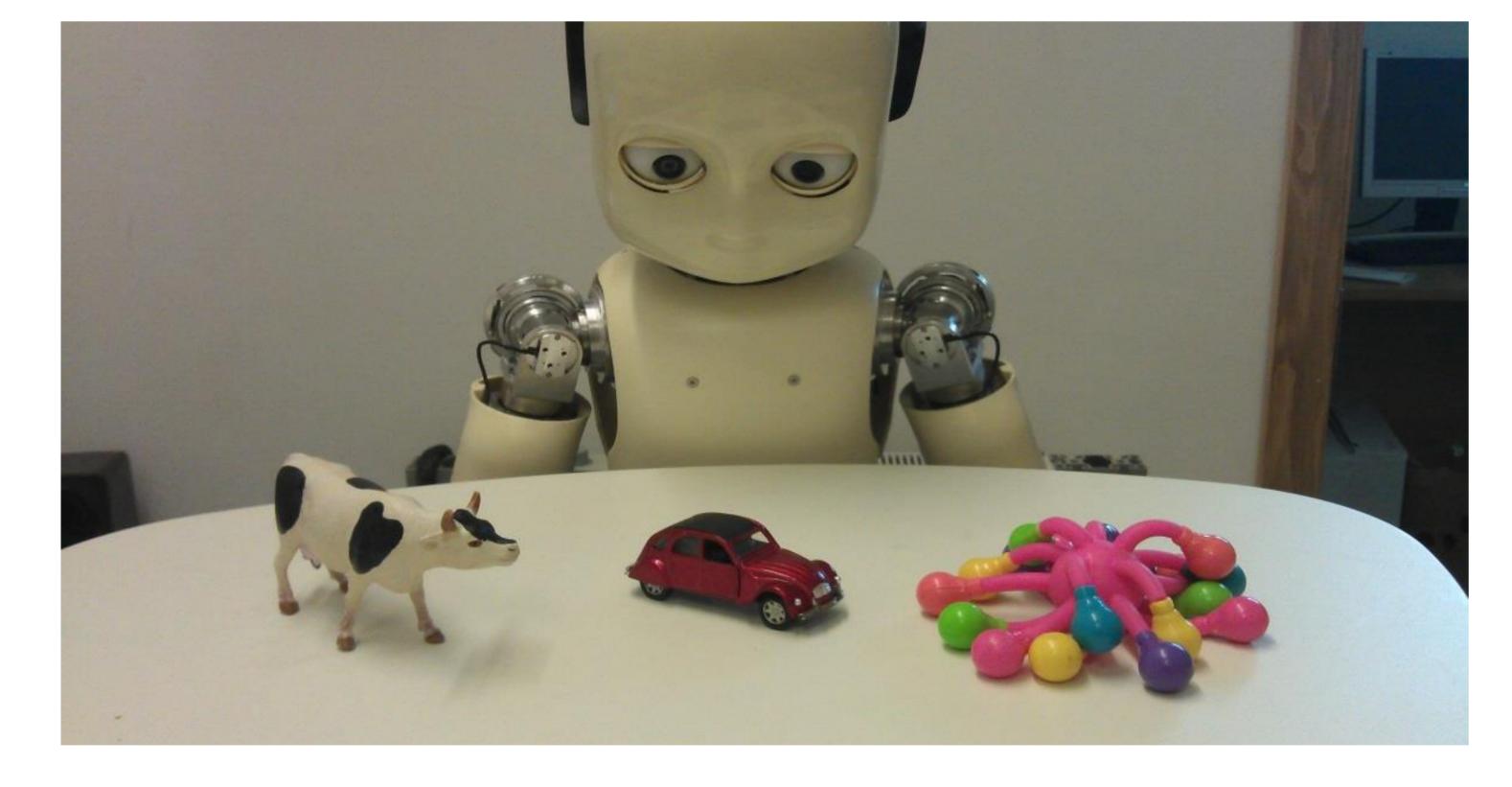
Children use language in clever ways from very early in development, but what do they know that allows them to do this? And how do they learn to use language like adults?

This theme explores how closely children's knowledge of language is tied to the language that they hear and how they go beyond their input to build categories and rules.



### WORDS AND CATEGORIES

It is tempting to think that learning the meaning of words just means learning what words refer to in the world, but words like 'cow', 'car' and 'toma' do not refer to things but to categories of things.



We are running experiments with 12 and 30 month olds and simulations with connectionist models, to understand how humans (and other life forms) build categories, and what factors influence the speed and robustness of their category learning.

### LEARNING VERB ENDINGS

Many languages (e.g. Polish and Finnish) have complicated sets of verb endings, but even very young children seem to use these endings correctly. We are running elicitation experiments with 3 and 4 year olds to find out whether their early use of verb endings is as productive as it seems, and if not how it becomes productive like adults'.

# LEARNING TO ASK QUESTIONS



As soon as children start to talk, they begin to ask questions, but how do they learn to do this correctly? And why do children with

language delay find it especially difficult? We are comparing question-asking in typically developing and language-delayed children and building computer models that can explain the difference between them.

#### IMPACT

We will be able to

- (a) Determine what children need to know in order to learn language
- (b) Inform parents about what to expect from children at different ages
- (c) Advise speech and language practitioners about how to encourage children to move beyond their input.









