

ENVIRONMENT THEME: Which information sources in the child's environment contribute to language learning?

Theme Lead: Padraic Monaghan, Lancaster University

Contact: p.monaghan@lancaster.ac.uk

INTRODUCTION

Children do not learn language in a vacuum. They learn with many sources of information around them: such as visual, auditory, or social cues.



Some cues help language learning, others may impede the process. This theme explores how information is integrated from multiple sources.

LANGUAGE AND VISION

Language structure often reflects the way in which the world operates: We say “the girl throws the ball” because we observe a girl, then we see her throwing and the thing she throws is a ball.

We are investigating how children learn animacy and causation from visual scenes, related to language learning.



We are also using EEG with 9 month infants to determine if they become sensitive to cues such as animacy much earlier than previously observed.

LANGUAGE AND SOCIAL CUES

When a child looks at an object, how should you talk to the child about the object and at what time is it optimal to speak? Using joint attention requires children and adults to be sensitive to social cues. We are testing 9 month old infants using EEG to determine when these cues develop and how to promote them to facilitate word learning.



CUES ACROSS DEVELOPMENT

To acquire language, children need to *divide up noisy continuous speech* into individual words, link words to the environment, and work out how sentences map onto complex events (e.g. “the girl throws the ball”). We are testing the range of environmental factors affecting each type of learning task.

IMPACT

We will be able to

- Advise nurseries on how to best design children's environments to promote learning.
- Determine the point at which children are “ready to learn”.
- Understand the implications of insensitivity to visual, auditory, or social cues for language learning.