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# Infants aged 12 months use the gender feature in determiners to anticipate upcoming words: an eye-tracking study

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(Received 05 May 2020; revised 29 December 2021; accepted 16 January 2022)

## Abstract

We investigated online early comprehension in Italian children aged 12 and 20 months, focusing on the role of morphosyntactic features (i.e., gender) carried by determiners in facilitating comprehension and anticipating upcoming words. A naturalistic eye-tracking procedure was employed, recording looking behaviours during a classical Looking-While-Listening task. Children were presented with sentences and pictures of two objects representing nouns characterised by either the same gender (determiner was uninformative) or a different gender (determiner was informative). As expected, 20-month-old children recognised the target picture when this was named, and they were faster in the different-gender condition. Interestingly, 12-month-old infants identified the target picture only when presented with an informative determiner (different-gender condition). These results suggest that, as early as 12 months of age and with an improvement seen at 20 months of age, toddlers can extract and use determiner gender features to enhance comprehension and make predictions about upcoming words.

**Keywords:** early lexical comprehension; grammatical gender; online language processing; language acquisition; looking while listening

## Introduction

One of the main challenges children face in language acquisition is recognising words from the speech stream and giving them meanings. It is a gradual process starting in the first months of life. According to behavioural research studies, infants use a variety of cues in the speech stream to process words and associate them with meanings (e.g., phonological features, statistical probabilities and regularities, lexical and morphosyntactic features; Gout, Christophe, & Morgan, 2004; Kedar, Casasola, & Lust, 2006; Saffran, Aslin, & Newport, 1996; Soderstrom, Seidl, Nelson, & Jusczyk, 2003). In this study, we investigated how Italian children aged 12 and 20 months use the morphosyntactic cues of grammatical gender to identify words during an online comprehension task.

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