

A fully funded 4-year PhD position

Important: this is just a preview. An official job ad will appear on [this page](#) by the end of March.

Where? [Center for Language and Cognition Groningen \(CLCG\)](#), University of Groningen, the Netherlands

When? Application deadline sometime in April (TBD), starting date in autumn 2025

Project: Modeling modals: A computational study of modal verb acquisition

Supervisors: [Annemarie van Dooren](#), [Yevgen Matusevych](#), [Arianna Bisazza](#)

Ideal profile:

- (1) demonstrable knowledge of (or interest in) linguistics, language acquisition, cognitive science, or related fields
- (2) demonstrable skills in at least some of the following: computational linguistics, natural language processing, computational cognitive modelling, neural language models, etc.

Project summary

Modals like *can* or *must* have various meanings: In a sentence like “You must close the door”, *must* expresses an obligation, while in “I must have left my notebook upstairs”, *must* expresses a kind of guess or conclusion. This ambiguity occurs in half of the world’s languages. How confusing is this ambiguity, and how do children resolve it? While previous studies approached these questions by annotating large amounts of language produced by adults or children, we approach the question by employing computational models that learn by finding patterns in language data. Can they learn the different modal meanings simply by paying attention to what they “hear”? Or do they need to come prepared with certain expectations? By using computational models, we will be able to answer these types of questions. Our interdisciplinary project brings together the fields of language acquisition and computational linguistics.