

Research topic to
be assigned



Master's Thesis: Meta-Analysis on Syntax in the Brain

TOPIC Despite decades of research, it remains unclear whether there is a clear neuroanatomical distinction between the processing of syntactic and semantic information of sentences in the human brain. A recent meta-analysis of functional imaging studies failed to identify activation patterns specific to the processing of syntax (Turker et al., 2023, *Psychological Bulletin*, <https://doi.org/10.1037/bul0000403>). However, this analysis did not take into account linguistic details of the stimuli used in the various studies. The aim of this master's project is to review the literature on functional neuroimaging studies of syntax against the background of a linguistic analysis of the stimuli used.

WHAT WE OFFER The project is a collaboration between the Chair of Cognitive and Biological Psychology at University of Leipzig and the Research Group Cognition and Plasticity (both Professor Gesa Hartwigsen), as well as the Department of Neuropsychology at the Max Planck Institute for Human Cognitive and Brain Sciences (Professor Angela D. Friederici). Your work will be co-supervised by Sabrina Turker, Philipp Kuhnke and Patrick Trettenbrein and can be carried out at a location of your

choice. You have the opportunity to build on existing preliminary work in this study and do not have to start from scratch.

WHAT WE ARE LOOKING FOR A student with a background in (theoretical) linguistics, psychology or a related cognitive science. Applications from students who so far have worked primarily theoretically on various aspects of syntax are particularly welcome. Prior knowledge of neuroimaging techniques is not required. We expect you to be well organised and preferably have relevant basic computer skills (spreadsheets, working with databases, etc.). A very good command of English is required, knowledge of German is not essential.

WHEN CAN I START? You can start immediately. However, we are flexible and happy to orientate ourselves to the specific requirements of your home institution for writing theses.

Are you interested or do you have any questions? Please send your application (including a short CV) or your questions directly to Sabrina (turker@cbs.mpg.de) or Patrick (trettenbrein@cbs.mpg.de)

