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Authors

Kuleshova, Svetlana

Hartmann, Stefan

Pleyer, Michael

et al.

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What do we understand from experiments in language evolution: inferences from multiple-choice vs. open-ended semantic space paradigms

Svetlana Kuleshova

Nicolaus Copernicus University in Torun, Torun, Poland

Stefan Hartmann

HHU Düsseldorf, Düsseldorf, Germany

Michael Pleyer

Nicolaus Copernicus University in Toruń, Toruń, Poland

Marta Sibierska

Nicolaus Copernicus University, Torun, Poland

Johan Blomberg

Stockholm university, Stockholm, Sweden

Przemysław Zywczyński

Nicolaus Copernicus University, Torun, Poland

Sławomir Waciewicz

Nicolaus Copernicus University, Torun, Poland

Abstract

In our poster, we challenge the multiple-choice paradigm used in many communication experiments and the validity of conclusions that can be drawn from it. We concentrate on two well-constructed experiments that have made claims that humans can understand improvised or interspecies forms of communication (e.g., Ćwiek et al., 2021; Graham & Hobaiter, 2023). We hypothesized that participants would perform worse when asked to provide free-text answers, compared to the original design of multiple choice. Our results indicate that participants performed worse compared to the original studies. The post hoc analysis showed that, in many cases, relevant semantic domains were correctly identified by the participants, but hardly any responses were fully congruent with the target concept. We conclude by discussing which types of questions are better addressed with the multiple-choice vs. open-text paradigm, and how the results of each of them can be mapped onto a larger picture of language evolution.

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