

## SHORT TERM SCIENTIFIC MISSION

### BRIEF

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Grantee name: Martin Hinton

Home institution: University of Łódź

Host Institution: University of Amsterdam, Amsterdam, The Netherlands

### Research interest:

Martin Hinton works on argument evaluation, for which he has developed the CAPNA assessment system, with a particular emphasis on linguistic elements of argument, analysed by his Informal Argument Semantics. He also works and publishes on fallacy theory.

### STSM Summary:

The purpose of this study mission was to build on the work carried out during an earlier STSM to Amsterdam in October 2019, and to develop new lines of research on the evaluation of natural argumentation in the public sphere. This was achieved through consultation and discussion with the host, Dr Jean Wagemans, and collaboration with other members of his research group Language and Cognition in Argumentation (LANCAR), to whom the earlier results were presented. A meeting was also held with Dr Henrike Jansen at the University of Leiden concerning the possibility of future cooperation.

The outcome of this work will be documented in two separate articles. The first contains an analysis of a text generated by an AI programme which relates to the public discussion of the relationship between humans and technology. An important part of this study is an examination of the types of argument produced by AI machines and how they may impact on the wider debate. It has been discovered that while the software does produce arguments similar in type to those expected from a human arguer, it also produces a good deal of irrelevant, contradictory, and extremely weak reasoning. This suggests that artificially intelligent arguers are unlikely to be able to persuade large numbers

of people currently, but were they to be coupled with tools allowing them to evaluate their own arguments and filter out those of poor quality, they could make significant improvements in this direction. The degree to which that is a good thing is an open question. This article is close to completion and will soon be submitted for publication.

The second paper being prepared is of a more theoretical nature and concerns the way in which the development of a precise evaluation procedure for arguments leads to a new approach to the fundamental concept of fallacy. It is hoped that by tying claims of fallaciousness to clearly defined steps in an evaluative process, the possibility to discuss, criticise and reshape the arguments made in the public sphere will be greatly improved. This article is still in the early stages and will be part of further cooperation with Dr Wagemans and LANCAR. Findings are planned to be shared at the European Conference on Argumentation in Rome in 2022.