SHORT-TERM SCIENTIFIC MISSION BRIEF

STSM start and end date: 04.03.2023- 17.03.2023.
Grantee name: Rozenblum Yael.
Home Institution: Technion- Israel Institute of Technology.
Host Institution: Institute of Linguistics and Language Technology, at the University of Malta.

Research interest:

Yael Rozenblum is a Ph.D. candidate in the Applied Science Communication research group, specializing in expressions of scientific literacy in the public sphere when diverse publics are engaging with social scientific issues. Her research focuses on how the public and media integrate scientific knowledge and new vocabulary in their arguments regarding COVID-19 and what arguments they use, as well as the association between the argument used by the public and the media.

STSM Summary

The main purpose of the visit was to examine how the public and media use scientific information in their arguments when engaging with COVID-19. Specifically, we focused on how and to what aims scientific information is used in arguments and what communicative and linguistic strategies is it embedded.

The visit included two main parts. In the first stage, a codebook was developed for the analysis of science-related arguments. In order to develop the codebook, the host and the grantee had daily meetings dealing with identifying different structures and characteristics in the arguments presents in the public comments and online news articles. The codebook is a cross-disciplinary work, that uses concepts from argumentation theory, covert hate speech as well as science education, and communication, includes (a) references to linguistic measures used in hate speech (e.g., aggression, sarcasm); (b) scientific aspects (e.g., the correctness of the scientific argument) (c) the context of the argument (e.g., politics, vaccines); (d) social actors (e.g., decision-makers, the public); (e) reference to the

public trust toward the social distancing guidelines, decision-makers and scientific procedures (e.g., the efficacy of vaccines).
In the second stage, we use the codebook that was developed during the first phase to analyze the arguments in the readers' comments and online news dealing with COVID-19. This also includes exploring the connection between the arguments presented in the online news articles and the reader's comments, to understand the relations between them. This phase included regular meetings in order to establish an adequate agreement.
The results of this analysis can promote a better understanding of the arguments regarding a social scientific issue generated by two main actors, the public and the media which is the main source of scientific information for the public. This echoes the aims of WG1, whose intent is the analysis of 'argumentation, documents and procedures, communication, and the discourse of citizens' (MOU, 2018, p.10).

In addition, during the visit, the grantee presented the rationale and preliminary findings in the Linguistic faculty seminar of the host institution, which included discussion and questions regarding the work, and provided unique insights into the grantee's research.

The main results of the visit are the following. Firstly, the development of an analysis tool for the assessment of argumentations in readers' comments and online news articles. This tool is not exclusive to this study. We hope to present the analysis tool to other researchers, such as the Applied Science Communication Research Group from the Technion, for use in other studies. At the same time, we hope that other scholars can benefit from it and use the analytical tool that was developed. This can contribute to APPLY Action by improving the evaluation and analysis of argumentation.
Secondly, the host and grantee hope to write and publish an article together to share their work and focus on the aims that scientific arguments are used by the public in the relevant discourse and what communicative strategies is it embedded. By understanding the aims that these actors use scientific arguments and what communicative strategies they embedded, policymakers can improve the communication between

different stakeholders and the public and help plan interventions in future science-related events.
Also, the initial results of the collaboration will be presented as part of her presentation at the Public Communication of Science and Technology Conference (PCST) in April 2023.