

Progress report of research visit

Gudrun Reijnierse & Aletta Meinsma

From September till November, Aletta Meinsma (PhD researcher Quantum & Society, Leiden University) visited Gudrun Reijnierse (Assistant Professor Language & Communication, VU). The goal of the visit was twofold:

1. Developing and submitting a pre-registration for an experimental study into the effects of metaphor in communication about quantum science and technology, which is ready to be executed after the visit;
2. Establishing an interdisciplinary research community of physicists, humanities scholars, social scientists, etc. working on quantum communication, and science communication more broadly.

To achieve these goals, the following contributions were made.

Research meeting at the start of the visit, September 8

The first contribution of the research visit was a research meeting at the beginning of the visit where Aletta's group from Leiden University and Gudrun's group from VU met. This was a first step towards setting up an interdisciplinary research community of quantum scientists, communication experts and linguists. The meeting led to a fruitful discussion about the research we wanted to set up during the visit and after the meeting we toasted the start of the visit at Grand Café Living. We also wrote a news article about the meeting which appeared on the Network Institute website:

<https://networkinstitute.org/2023/10/06/flying-start-to-network-institute-research-visit-integrating-quantum-with-language-communication/>



Research symposium, November 6

Establishing an interdisciplinary research community of quantum scientists, communication experts and linguists took further shape during the research symposium on November 6, 2023. The title of the symposium was *The Role of Language in Engaging Audiences in New (Quantum) Technology* and approximately 30 participants joined. The symposium took place at Restaurant De Bosbaan, and networking opportunities included walking in groups through 'het Amsterdamse Bos', playing quantum games in pairs, and having lunch, drinks and dinner together. We also wrote a short news article about the day that appeared on the Network Institute website:

<https://networkinstitute.org/2023/11/10/research-symposium-shines-light-on-the-role-of-language-in-engaging-audiences-in-new-quantum-technology/>



Ethics committee approval

During the visit, we thought out the research that we wanted to conduct into the effects of metaphor in communication about quantum science and technology. It resulted in an ethics committee document that was approved by the Ethical Review Committee of the Faculty of Science of Leiden University, the Netherlands (number 2023 – 021). The research consists of two parts: an experts insights part and an experimental part.

Part 1: Expert insights

During the research visit, we designed a survey in Qualtrics to gain expert insights into accurate metaphors for explaining quantum science to a broader audience. The survey was sent out in early January 2024.

Part 2: Experiment

Furthermore, we started preregistering the experimental part of our study. We are still working on the preregistration, but expect it to be published in February, 2024.

Poster at VIOT

Finally, in January, 2024, we will present our study at a 3-day national language conference called VIOT. The Network Institute logo is included at the bottom of the poster. Please find a screenshot of the poster on the next page.

