



Department of Translation
and Interpreting Studies
Faculty of Humanities
Bar-Ilan University

An International Symposium on Lay Use and Perceptions of Machine Translation

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Machine translation (MT) has had an increasing effect on multilingual communication and understanding in a globalized world. Despite its immense impact, the lay use and perceptions of MT remain largely understudied, and need to be better understood.



Lay uses of machine translation in the UK: A representative survey *Lucas Nunes Vieira, University of Bristol*

This talk will examine lay uses and perceptions of machine translation (MT) in the United Kingdom based on an online survey. The survey had 1200 responses and was nationally representative in terms of age, sex and ethnicity. It included questions on expectations and perceptions of translation quality and on MT use contexts. The results revealed important factors in users' understanding of translation, in their approach to risk, and in what they see as the ideal future developments for MT technology.

Lucas Nunes Vieira is a Senior Lecturer in Translation Studies at the University of Bristol (United Kingdom). He researches cognitive and sociological aspects of using machine translation in human translation processes and in communication. He has a PhD on post-editing of machine translation from Newcastle University (United Kingdom) and is Principal Investigator of Improving Products and Processes in Translation Technology Use, a project funded by the UK's Economic and Social Research Council.



Experienced machine translation gisters' perceptions of MT and themselves as MT users and teachers *Mary Nurminen, Tampere University*

Perhaps the group of people most experienced at machine translation (MT) gisting are patent professionals, who use raw MT to help them sift through large numbers of patent documents in order to locate the ones that are most relevant to patenting cases they are working on. This has been a common practice in the Intellectual Property Rights (IPR) field for approximately a decade. My talk draws from a 2019 qualitative study of nine Scandinavian patent professionals that focused on MT gisting in the IPR ecosystem. In the talk, I first explore the study informants' perceptions of MT itself, including their views on quality, their own expectations, and how they see the future. I then discuss the informants' perceptions of themselves as MT users and as teachers and coaches of MT literacy.

Mary Nurminen is a University Instructor and PhD candidate at Tampere University in Finland. She teaches translation (Finnish-English), interpreting, and writing. Her dissertation focuses on the contexts in which MT gisting takes place and the factors in those contexts that influence people's use and reception of raw MT.

The problem of machine translation in intercultural collaboration and how to overcome it

Pituxcoosvarn Mondheera, Ritsumeikan University

Diversity provides a great deal of benefits for society and organizations, as it has a considerable impact on innovativeness. Diversity of cultural background, i.e., cultural difference, could lead to a wider variety of ideas. While cultural diversity has significant advantages, it may involve difficulties in communication. The most significant challenge in intercultural collaboration is the language difference. It is almost impossible to communicate without an interpreter when people do not have a shared language. Fortunately, machine translation (MT) has been available and it has been used in intercultural collaboration. This talk will cover interesting problems caused by MT in intercultural collaboration found in field studies and experiments, for example, unequal opportunity for MT users and misunderstanding in MT-mediated communication. It will also cover current and future ideas of how to improve those problems using artificial intelligence and other techniques.

Mondheera Pituxcoosvarn is an assistant professor at the College of Information Science and Engineering at Ritsumeikan University in Shiga, Japan. She received her Master's and Doctoral degree from the Graduate School of Informatics, Kyoto University. She is interested in the areas of human-computer interaction, computer-supported collaborative work, collaborative learning, design thinking and design method. Her current project focuses on creating an intelligent agent to facilitate intercultural and multilingual workshops.

Beyond translation students: Machine translation literacy instruction for students in other disciplines

Lynne Bowker, University of Ottawa

In the 2020/2021 academic year, we launched in two pilot projects to embed machine translation literacy instruction in undergraduate courses for students who are NOT studying translation or applied languages. One was a course on "New Literacies for the Digital Age" which aimed to teach various types of information literacy and digital literacy to first-year students across the entire Faculty of Arts. The second was a course called "Introduction to Translation", but this course was NOT aimed at students who want to become translators; instead, it is an elective course for those who are curious about translation, and students came from across the whole university (e.g. Engineering, Health Sciences, Business, Social Sciences). In each of these courses, we embedded a 3-hour module on machine translation literacy and we then surveyed students to obtain feedback. Overall, these modules were appreciated by the students, which suggests that there is a need for and benefit to offering machine translation literacy instruction more widely to include students who are not necessarily majoring in languages or translation. We'll share our experience and the results of the surveys as part of this roundtable on lay use and perceptions of machine translation.

Lynne Bowker is Full Professor at the School of Translation and Interpretation at the University of Ottawa, where she teaches and conducts research in translation and translation technologies. She is the author of *Computer-Aided Translation Technology* (2002, University of Ottawa Press), and co-author of both *Working with Specialized Language: A Practical Guide to Using Corpora* (2002, Routledge) and *Machine Translation and Global Research* (2019, Emerald).

Human evaluations of machine translation in an ethically charged situation

Omri Asscher and Ella Glikson, Bar-Ilan University



Despite the immense influence of machine translation (MT) on cross-cultural communication worldwide, little is known about end users' predispositions toward MT. This talk presents a study that compares people's perceptions of MT and human translation in an ethically charged situation, in which the translation serves an immigrant worker in an interaction defined by power imbalance. Our findings show that an otherwise identical translation is evaluated differently when it is attributed to machine or human translation. People exhibit a negative bias toward the MT product when asked to assess its accuracy and reliability, its ability to convey cultural and emotional otherness, and its potential effectiveness in helping the disadvantaged immigrant in need of the translation. Interestingly, translators and non-translators exhibited the same biases and inclinations in their evaluations of the translation, and in their wish to intervene in it. Our results suggest that predispositions toward MT must be taken into account in any consideration of MT-mediated communication, as these predispositions may shape the communicative act itself.

Omri Asscher is a Senior Lecturer at the Department of Translation and Interpreting Studies in Bar-Ilan University. His work explores cultural and ideological aspects of literary and theological translation, particularly in the framework of homeland-diaspora relationships. He is the author of *Reading Israel, Reading America: The Politics of Translation between Jews* (Stanford University Press, 2019). His recent projects deal with the changing landscape of translation in our digital era, and examine people's perceptions of machine translation as a prism through which to understand the human-machine relationship.

Ella Glikson is a Lecturer at the Graduate School of Business Administration at Bar-Ilan University. Her research focuses on computer-mediated communication in virtual teams and multicultural contexts and examines different aspects of human-technology and human-AI interaction. Her work was published in such journals as *Journal of World Business*, *Journal of Service Research* and *Social Psychology and Personality Science*. Her recent review (co-authored with Anita W. Woolley, 2020) on human trust in artificial intelligence was published in the leading journal of *Academy of Management Annals*.

Believability and misleading machine translation

Marianna J. Martindale, University of Maryland



Neural Machine Translation (NMT) provides unprecedented output quality, but in less-than-ideal conditions NMT is known to "hallucinate" content that is unrelated to the source text. When these translations are believable, non-translator users may be misled into thinking that the output is correct. In this talk, I will discuss the results of an effort to annotate MT output for believability and what we can learn about misleading MT output from these annotations and from prior work in identifying misleading MT output and in the field of computer credibility.

Marianna J. Martindale is a PhD candidate in Information Studies at the University of Maryland. She received her BS in Computer science from Brigham Young University in 2003 and MS in Linguistics (Computational) from Georgetown University in 2007. Since 2003, she has worked on a team that supports, builds, and deploys machine translation systems primarily to non-translator users in the "real world". Her research focuses on machine translation reliability and user experience.