

Keynote: Don't shun the pun: On the requirements and constraints for preserving ambiguity in the (machine) translation of humour

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How do we know when a translation is good? This seemingly simple question has long dogged human practitioners of translation, and has arguably taken on even greater importance in today's world of fully automatic, end-to-end machine translation systems. Much of the difficulty in assessing translation quality is that different translations of the same text may be made for different purposes, each of which entails a unique set of requirements and constraints. This difficulty is compounded by ambiguities in the source text, which must be identified and then preserved or eliminated according to the needs of the translation and the (apparent) intent of the source text.

In this talk, I survey the state of the art in linguistics, computational linguistics, translation, and machine translation as it relates to the notion of linguistic ambiguity in general, and intentional humorous ambiguity in particular. I describe the various constraints and requirements of different types of translations and provide examples of how various automatic and interactive techniques from natural language processing can be used to detect and then resolve or preserve linguistic ambiguities according to these constraints and requirements. In the vein of the "Translator's Amanuensis" proposed by Martin Kay, I outline some specific proposals concerning how the hitherto disparate work in the aforementioned fields can be connected with a view to producing "machine-in-the-loop" computer-assisted translation (CAT) tools to assist human translators in selecting and implementing pun translation strategies in furtherance of the translation requirements. Throughout the talk, I will attempt to draw links with how this research relates to the requirements engineering community.

Biography of Tristan Miller. Tristan Miller is a Lise Meitner Fellow at the Austrian Research Institute for Artificial Intelligence (OFAI) and an Associate Faculty Member at the Ontological Semantic Technology Laboratory of Texas A&M University–Commerce. Prior to joining OFAI, he held research appointments at Technische Universitt Darmstadt and the German Research Center for Artificial Intelligence (DFKI), and worked as a business analyst and language engineer for InQuira Europe (later acquired by Oracle).

Miller received his doctorate in Computer Science from Technische Universitt Darmstadt in 2016. His research interests lie mainly in computational semantics, including word sense disambiguation, computational argumentation, and the construction and manipulation of lexical-semantic resources. Computational humour has been a particular research focus of his since 2014, and he now leads an Austrian Science Fund project on the computer-assisted translation of wordplay. Some of his work has been covered by the mainstream press, including *The Washington Post*, *The New York Times*, *c't*, and Austrian public radio.

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