シンポジウム

Translation: Final Frontier for Artificial Intelligence?

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This symposium was inspired by the impression that recent advances in artificial intelligence made it an appropriate time to revisit the topic of machine translation, first discussed at a JASEC forum at Waseda University about a decade ago. After all, if a computer program can be devised that can defeat even a high-ranking professional Go player (something that was expected to take at least another 10 years but became a reality in March of this year), there is reason to think that the even more formidable challenge of fluent computer translation from one language to another might soon be overcome. Certainly Google Translate and other online services appear to have set their sights on achieving such a goal, even if technical experts in the field of machine translation modestly demur when asked point blank about the likelihood of that happening. Just how far has machine translation come? What advantages are retained by human translators? What conditions must be satisfied in order to judge machine translation a success?

By way of approaching these questions in a spirit of friendly competition, two panelists—one a technical researcher in the field of machine translation and the other a journalist for an English-language online newspaper published in Japan—were invited to provide English translations for a set of Japanese examples and comment on the results, which were provided to the audience in the form of a handout. The examples were selected by the moderator based on extensive use in a university class on Japanese-English translation, and were classified into six categories: signs and simple instructions; longer instructions and advice; short biographical and geographical passages; descriptive passages from travel guides; expository passages from elementary-school textbooks; and newspaper opinion columns.

The translation itself was performed by Google Translate (treated as the AI representative) and native-English-speaking staff writers for the English Mainichi website (with which the second panelist is affiliated). In addition to discussing the examples, the panelists were encouraged to expand on the topic in any fashion they saw fit, with results as described in the summaries below. From the moderator's point of view, it must be said that the Google Translate versions, although often capable and occasionally quite impressive, did have trouble managing idiomatic usage, especially in longer, more expository passages. This outcome was perhaps only to be expected given the conditions imposed and (as the technical researcher quite justifiably noted) the rather small and arbitrary nature of the corpus. It should also be recognized that machine translation is in fact being used effectively in real-life situations, not only in the fields of business and IT but also by the public at large.

In any case, audience participation in the subsequent Q&A session demonstrated a high level of interest in the topic, and on the basis of the presentations and the remarks of the panelists during the Q&A, it seems safe to conclude that collaboration rather than competition between computers and humans will remain the most productive form of commercial and technical translation, at least for the immediate future. At the same time, mention was made of a new approach that is currently under development and promises to greatly enhance the quality of machine translation, so perhaps human translators would do well not to become too complacent.