Three Directions for the Design of Human-Centered Machine Translation

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User strategies for evaluating translations

Survey findings

1. Help users craft good inputs
   - How can we automatically identify when a text is a poor candidate for translation and suggest improvements?
   - How can we teach users about the strengths and limitations of MT systems?

2. Help users understand translations
   - How can quality information be better aligned with users’ needs?
   - How can we design systems that help people make use of imperfect translation?

3. Expand interactivity and adaptivity
   - How can machine translation models provide greater control to users over different aspects of a translation, such as tone? What aspects of a translation would users want control over?
   - What roles or personas would users want a translation agent to play, e.g. interpreter, educator, confidence checker?

→ Key takeaway: Users need more support to effectively use machine translation.

TranslatorBot

A proof of concept prototype

TranslatorBot plays the role of interpreter and suggests simplifications

TranslatorBot detects typos and suggests auto-corrections