

Europarl Datasets with Demographic Speaker Information

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1 Problem Statement

Research on speaker-adapted neural machine translation (NMT) is scarce. One of the main challenges for more personalized MT systems is finding large enough annotated parallel datasets with speaker information. Rabinovich et al. (2017) published an annotated parallel dataset for EN-FR and EN-DE, however, for many other language pairs no sufficiently large annotated datasets are available.

2 Datasets

To address the aforementioned problem, we publish a collection of parallel corpora licensed under the Creative Commons Attribution 4.0 International License for 20 language pairs available online: <https://github.com/evavnmssnhv/Europarl-Speaker-Information>. We tagged parallel sentences from Europarl (Koehn, 2005) with speaker information (name, gender, age, date of birth, euroID and date of the session) based on monolingual Europarl source files which contain speaker names on the paragraph level. We used meta-information of the members of the European Parliament (MEPs) released by Rabinovich et al. (2017) to retrieve the demographic annotations. An overview of the language pairs as well as the amount of annotated parallel sentences per language pair is given in Table 1.

3 Analysis

Additionally, we analyzed the EN-FR dataset with respect to the percentage of male versus female speakers in various age groups (see Figure 1).

Languages	# sents	Languages	# sents
EN-BG	306,380	EN-IT	1,297,635
EN-CS	491,848	EN-LT	481,570
EN-DA	1,421,197	EN-LV	487,287
EN-DE	1,296,843	EN-NL	1,419,359
EN-EL	921,540	EN-PL	478,008
EN-ES	1,419,507	EN-PT	1,426,043
EN-ET	494,645	EN-RO	303,396
EN-FI	1,393,572	EN-SK	488,351
EN-FR	1,440,620	EN-SL	479,313
EN-HU	251,833	EN-SV	1,349,472

Table 1: Overview of annotated parallel sentences per language pair

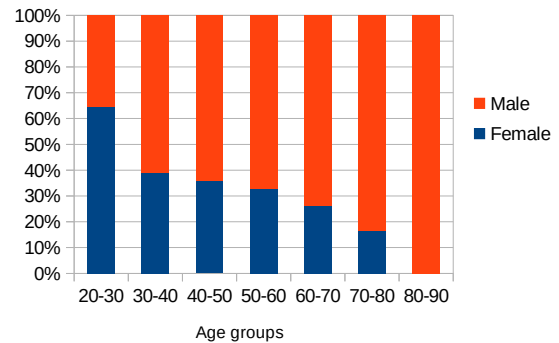


Figure 1: Percentage of female and male speakers per age group

References

- Ella Rabinovich, Shachar Mirkin, Raj Nath Patel, Lucia Specia and Shuly Wintner, 2017. Personalized Machine Translation: Preserving Original Author Traits. *Proceedings of the 15th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2017)*, Valencia, Spain, 1074–1084.
- Philipp Koehn, 2005. Europarl: A parallel corpus for statistical machine translation. *Proceedings of the In MT Summit*, Phuket, Thailand, 79–86.