

TRACKING THE UPS AND DOWNS OF HISTORICAL LIVES

A Case Study on German Moravian Memoirs

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Data

reused **89** German Moravian memoirs from ...

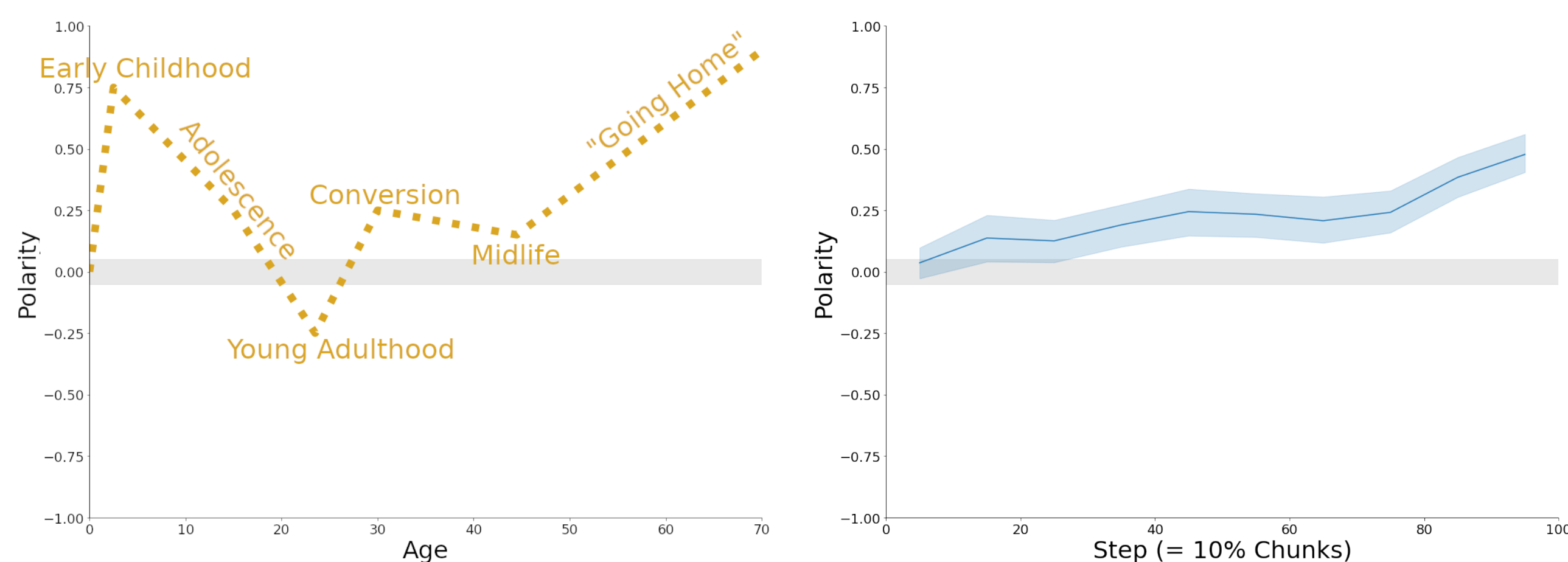
- *Moravian Lives*
- *Bethlehemer Schwestern*
- *Moravian Men's Memoirs*
- *Bethlehem Digital History Project*

Preprocessing

- 1) split texts into sentences with 🗄️ Stanza
- 2) manually annotated **36** memoirs (= **2210** sentences)
- 3) split into 1728 train & 442 test sentences to ...
 - **fine-tune** transformer models with 🤗 Hugging Face
 - **evaluate** off-the-shelf (OTS) approaches

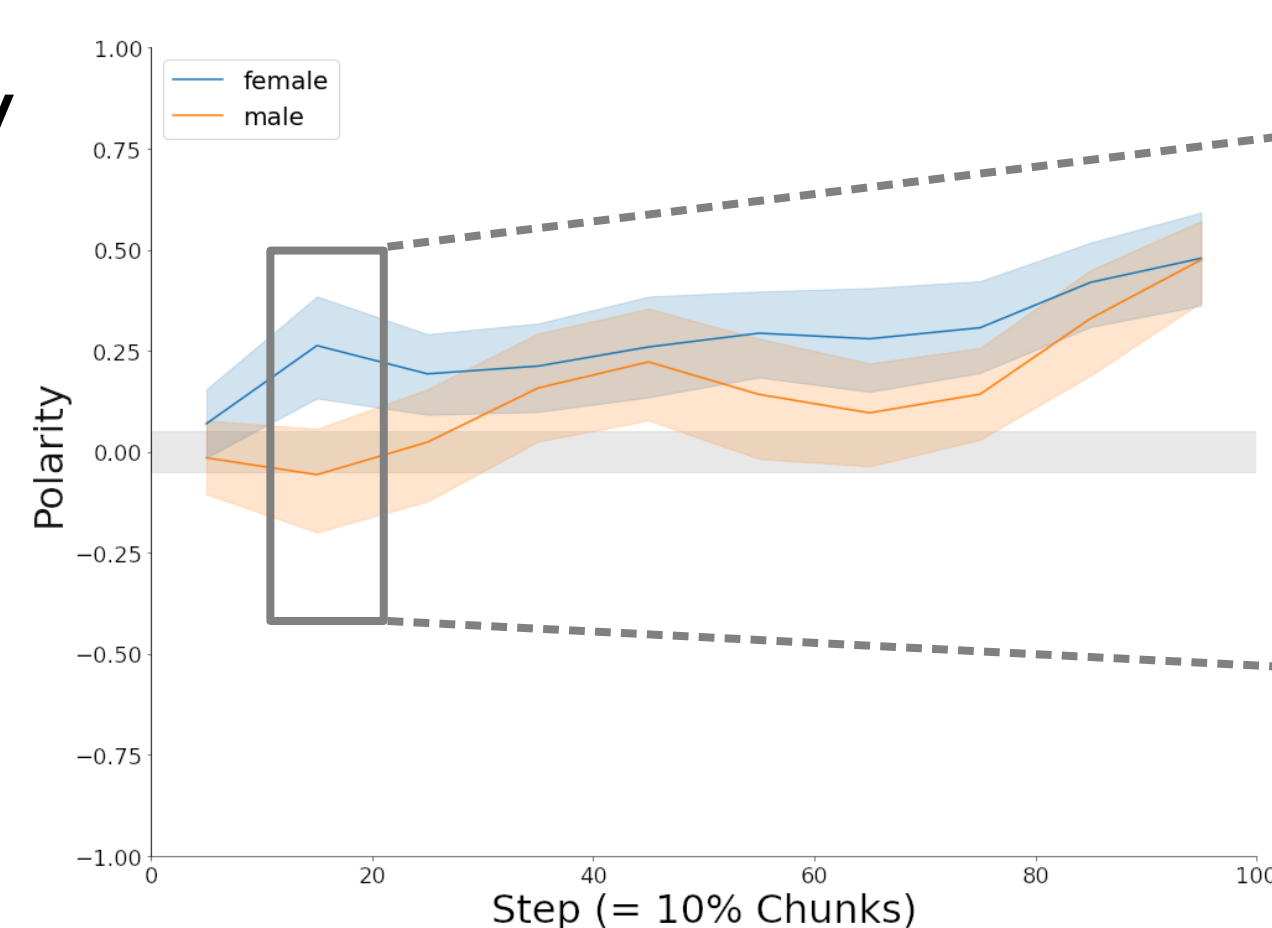
Sentiment Analysis

- classified sentences as **positive**, **neutral** or **negative**
- fine-tuned `gbert` outperformed OTS approaches
 - F1 score: .81 (vs. `GerVADER`, Tymann et al. 2019: .58)
- applied `gbert` to all texts & aggregated by „step“
 - quite similar to **expected trendline** (McGuire 2021)



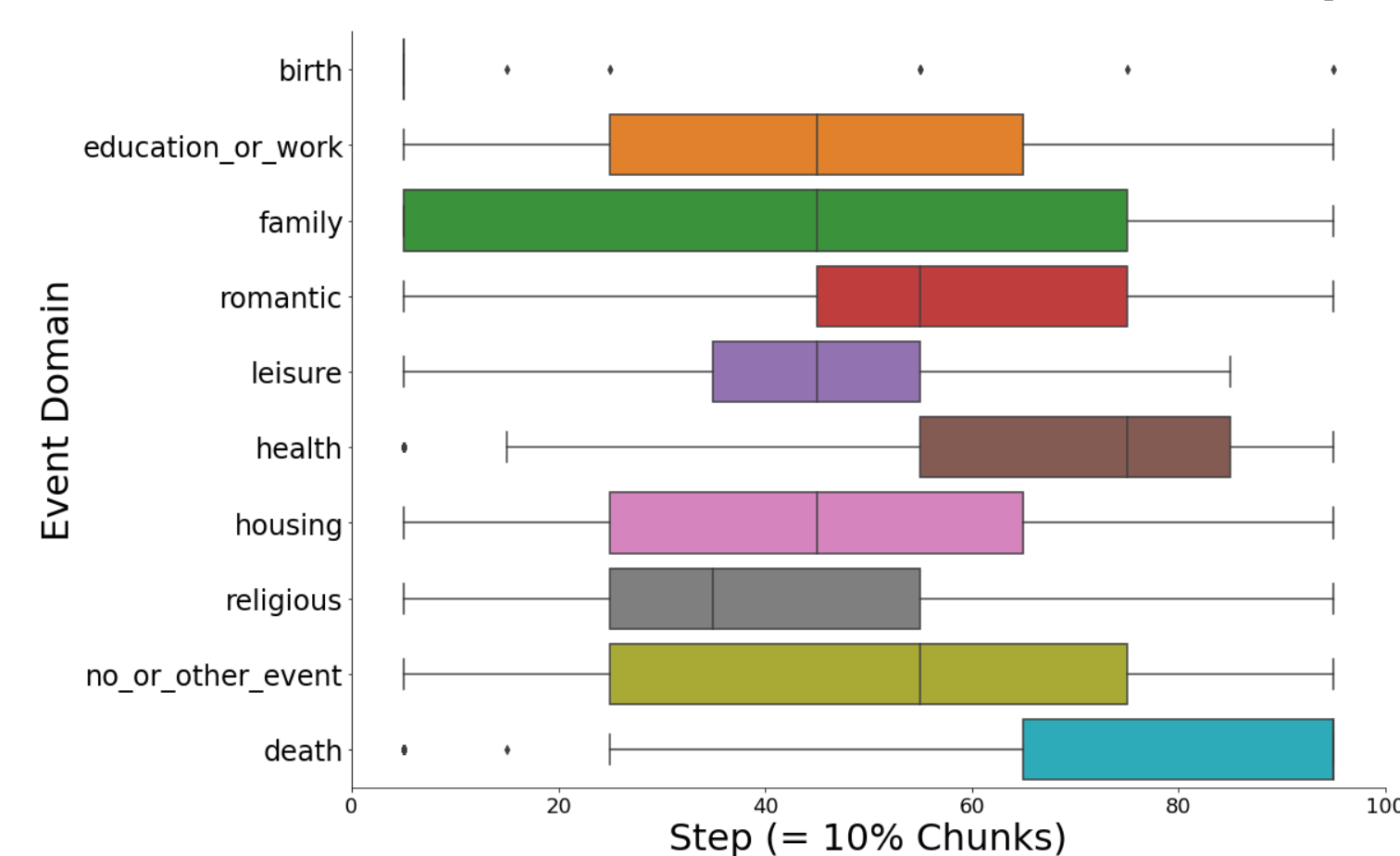
- investigated gender differences (54:35)

- slightly differing polarity
- mainly in the beginning
- 2 downs in male texts

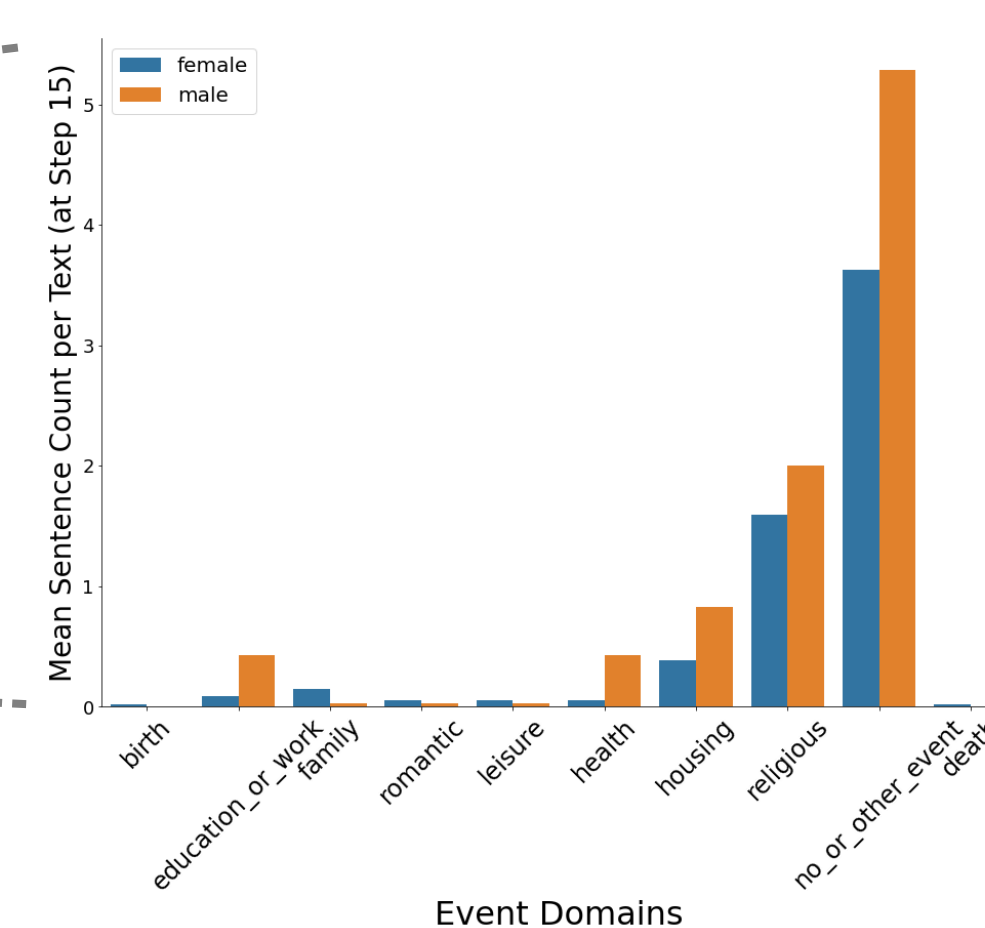


Life Event Domains

- based on categories from psychology (Haehner et al. 2024)
- fine-tuned `gbert` outperformed Inference baseline
 - F1 score: .71 (vs. `MdeBERTa-XNLI`, Laurer et al. 2019: .14)
- applied `gbert` to all texts & aggregated by „step“
 - domains not distributed equally over narrative time



- investigated gender differences at step 15



- male: more sentences
- female vs. male
 - family
 - romantic
 - leisure
 - education/work
 - health
 - housing
 - religious

Conclusions

- **Computational Linguistics**: state-of-the-art performances reachable with <2k fine-tuning instances & `gbert`
- **Religious Studies**: certain genre-specific ups and downs of Moravian memoirs attestable
- **(Historical) Social Sciences**: certain gender differences inferrable

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