Recent studies in automatic readability assessment have shown that hybrid models — models that leverage both linguistically motivated features and neural models — can outperform neural models. However, most evaluations on hybrid models have been based on in-domain data in English. This paper provides further evidence on the contribution of linguistic features by reporting the first direct comparison between hybrid, neural and linguistic models on cross-domain data. In experiments on a Chinese dataset, the hybrid model outperforms the neural model on both in-domain and cross-domain data. Importantly, the hybrid model exhibits much smaller performance degradation in the cross-domain setting, suggesting that the linguistic features are more robust and can better capture salient indicators of text difficulty.

Abstract

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