Interlingua Based Statistical Machine Translation

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In goal oriented spoken language translation, an interlingua based approach has proven quite useful as it (1) reduces overall effort when multiple language pairs are required, (2) can provide a paraphrase of semantic equivalence in the input language, (3) abstracts away from the disfluencies of spoken language to express the speaker’s intention. On the other hand, interlingua based systems are cumbersome to develop as semantic grammars have to be laboriously prepared for each input language. In this paper, we demonstrate that mappings from input text to interlingua can be learned automatically and that new input languages can be added by language projection. We show that the resulting system also delivers competitive performance.

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