Statistical Machine Translation Decoder Based on Phrase

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This paper describes a decoding algorithm for statistical machine translation based on phrases. In the past, the solution to the decoding problem were inspired from that of speech recognizers, translating each input word into one or more output words generating in left-to-right direction. The algorithm presented here iteratively constructs phrases or chunks of concepts until all the input words are consumed. This behavior resulted in computational complexity higher than those with left-to-right constraints, though the translation accuracy is better from the Japanese-to-English translation experiments.

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