

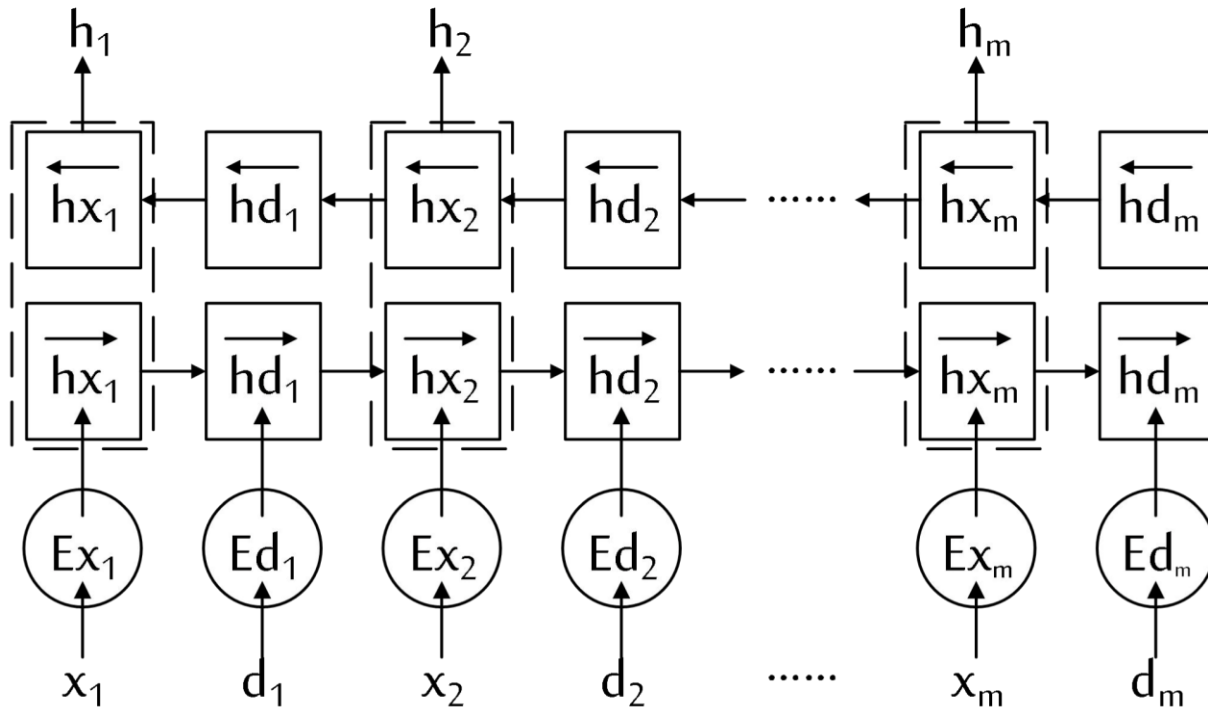
Improving neural sentence alignment with word translation

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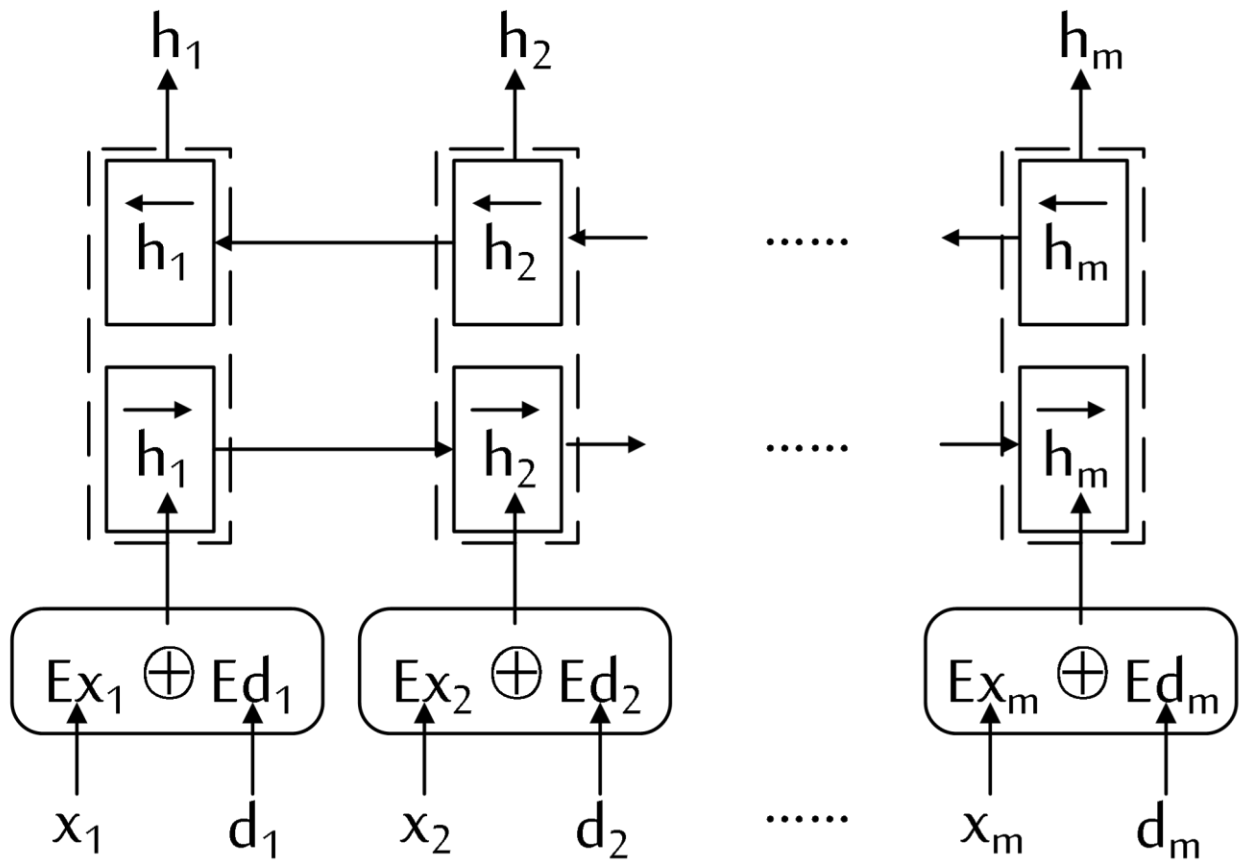
Motivations

- Recent studies have shown sentence-level representation **fails to capture word alignment details** which are promising evidences for sentence alignment
- Recent studies have also shown that neural models still **fail to capture a large portion of word translation details**, even though it is capable of learning certain word translations from parallel corpus.
- In this paper, we address **how to explicitly incorporate word translation to enhance word distributed representation to improve sentence alignment performance.**

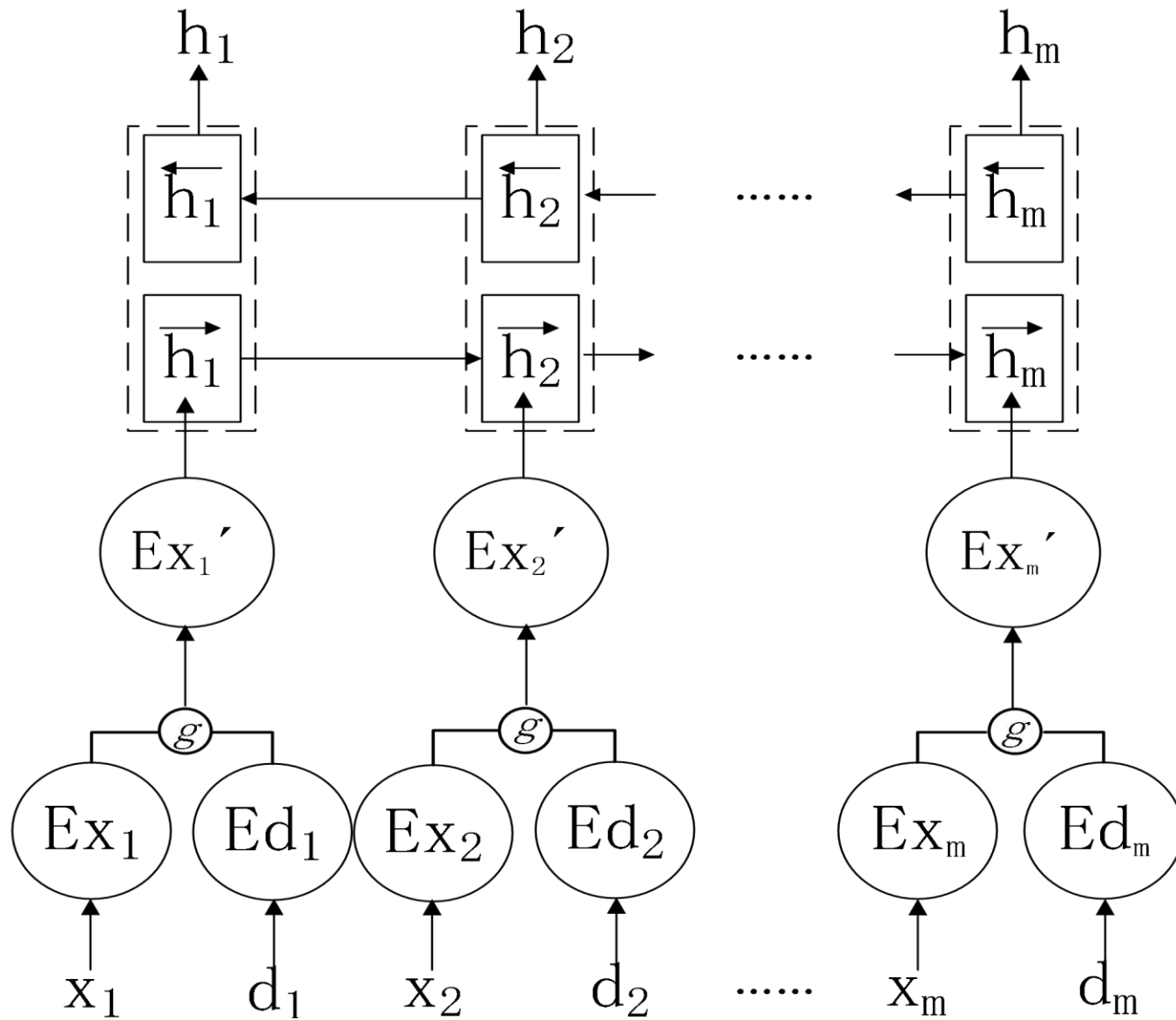


Mixed Encoder.

Here $(x_1 \dots x_m)$ is the input sentence while $(d_1 \dots d_m)$ is its word translation sequence.



Factored Encoder.



Gated Encoder.