The Raymond and Beverly Sackler Faculty of Exact Sciences
Tel Aviv University

Question Decomposition *with* Dependency Graphs

Matan Hasson and Jonathan Berant, 2021

What is a QDMR?

- Question Decomposition Meaning Representation

Which of the Indiana Jones movies was released on June 12, 1981?

1. Indiana Jones
2. movies of #1
3. when was #2 released
4. #2 where #3 is equal to June 12 , 1981

Question
Reference
Function

Wolfson et al., 2020

Generation → Dep. Parsing

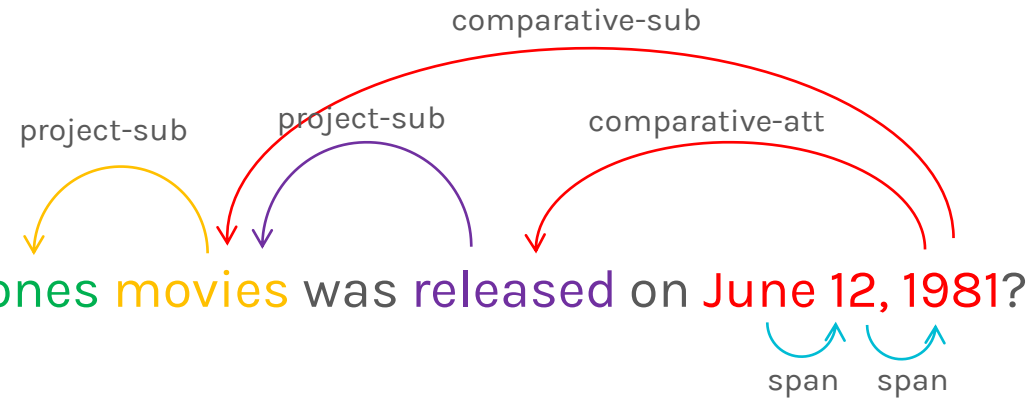
Which of the Indiana Jones movies was released on June 12, 1981?

1. Indiana Jones
2. movies of #1
3. when was #2 released
4. #2 where #3 is equal to June 12 , 1981

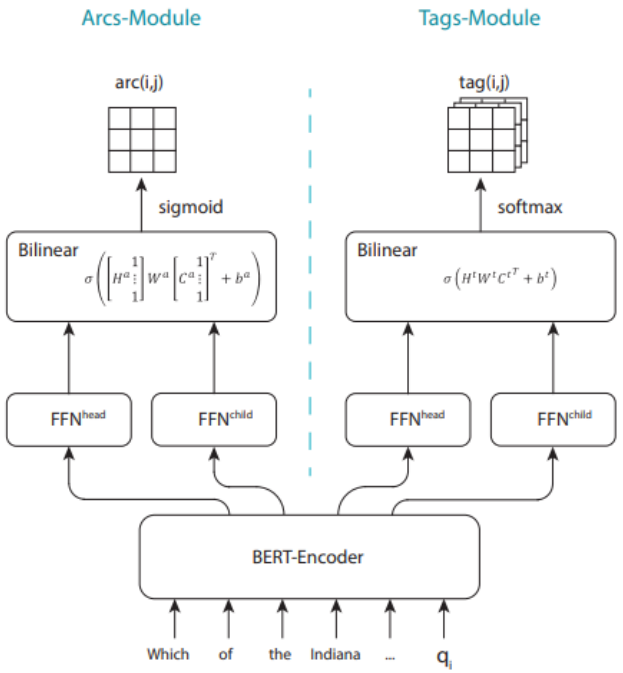
Seq2Seq

Which of ...? [SEP] Indiana Jones [SEP] movies of ...

Dep. Graph



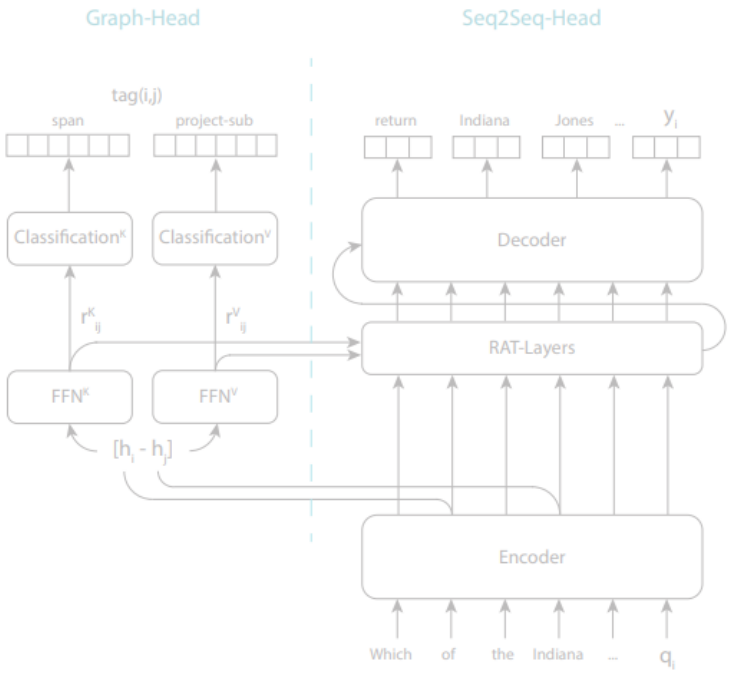
Models



Biaffine Graph Parser

(Dozat and Manning, 2018)

- ✔ 16X faster inference time
- ✔ Sample complexity

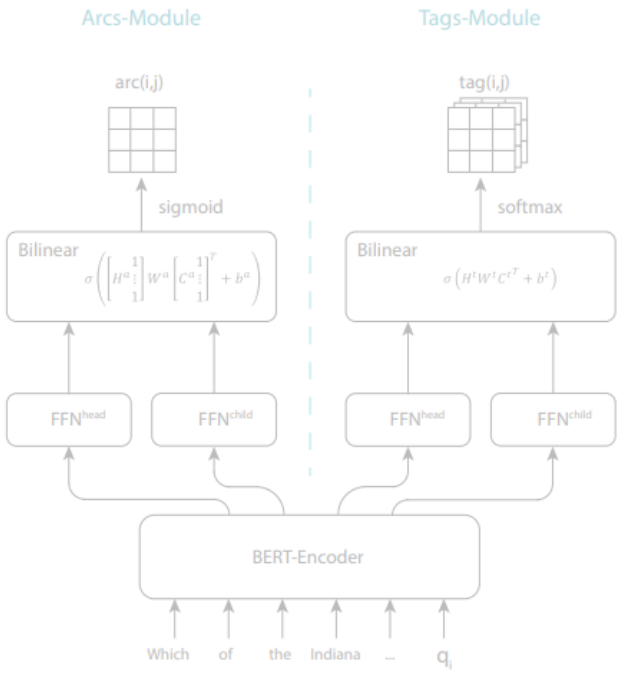


Latent-RAT

(ours)

- ✔ Domain generalization
- ✔ Long decompositions

Models



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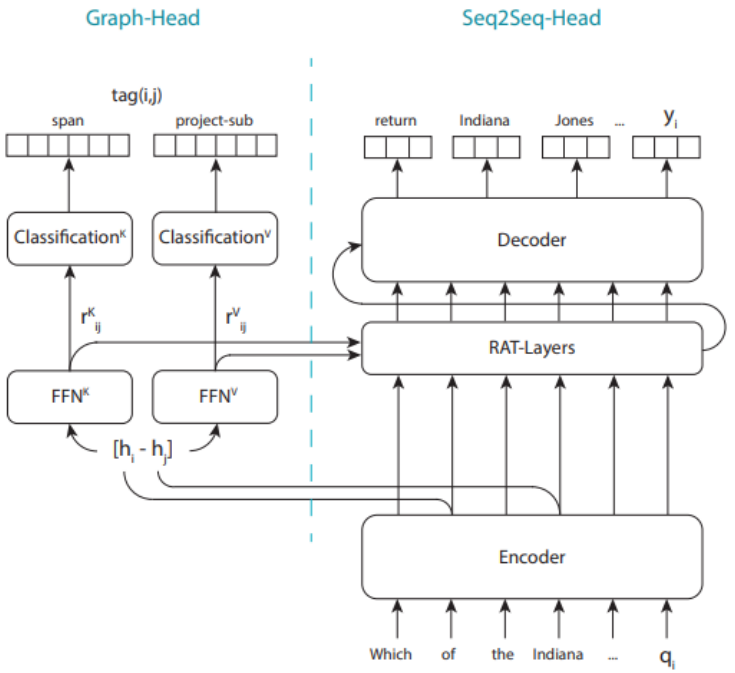

Latent-RAT

(ours)

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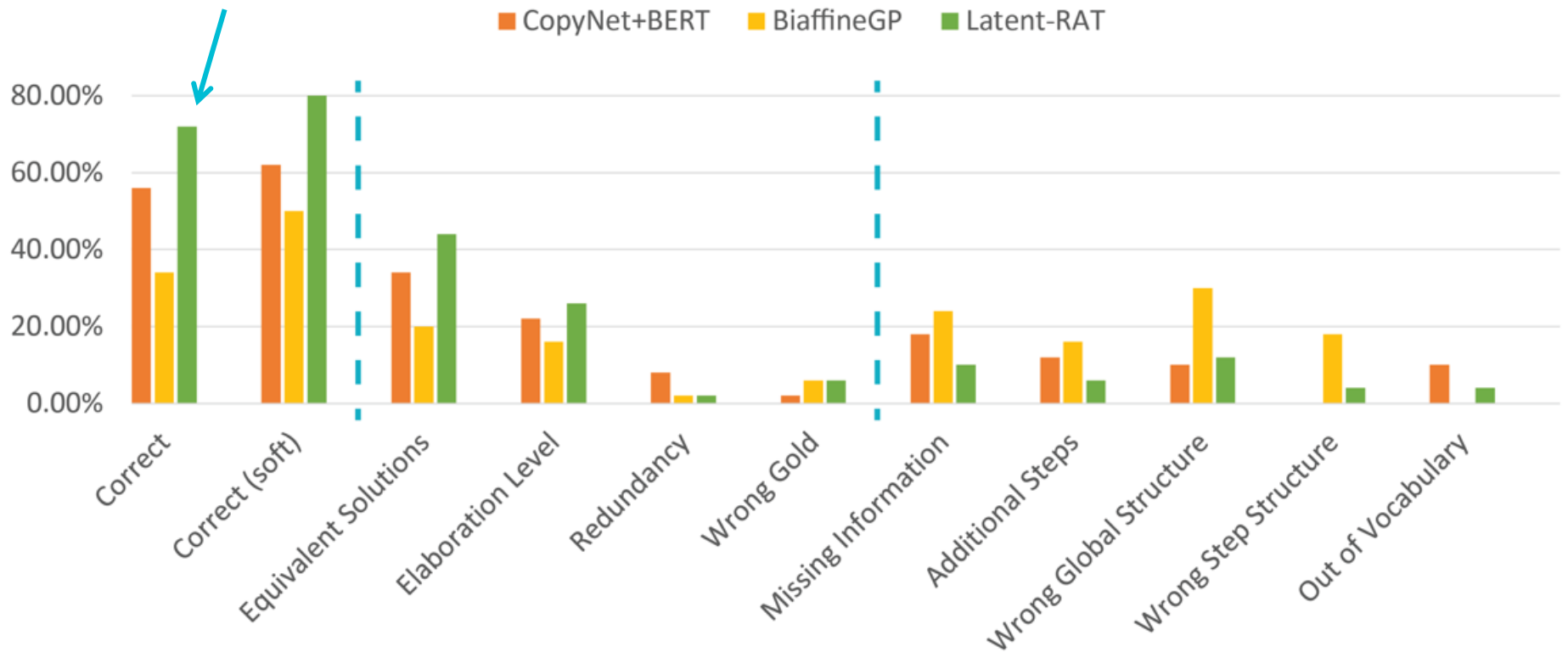
Error Analysis



Thank You!