CCGs to Encode Syntax at Each Token

Syntax reflects long-distance dependencies.

- <u>What</u> city is the Taj Mahal in?
- <u>Where</u> is the Taj Mahal $\emptyset$?

The need to produce in depends on the *What*/*Where*.

- CCG tags for is differ $\Rightarrow$ dependency highlighted.
- Following CCG tags, the decoder can know if *in* is needed.
- CCG tags are denser than words $\Rightarrow$ better generalization.