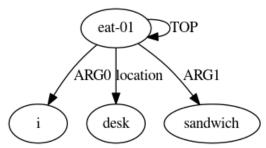
## CS6740/IS 6300, Lecture 26: Abstract Meaning Representation ("TM"), or AMR

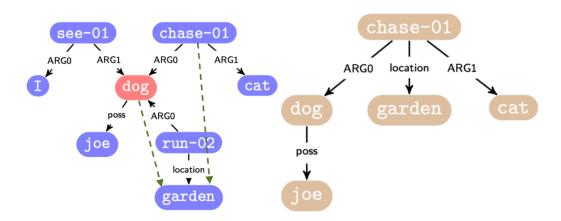
**1a.** Recall: an AMR graph for a Jurafsky and Martin example sentence "I ate a sandwich at my desk". (We talked about having "speaker" instead of "i".)



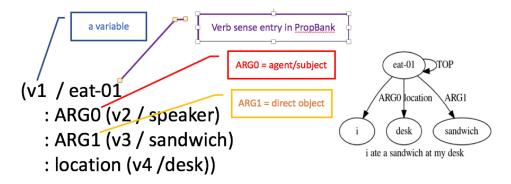
- i ate a sandwich at my desk
- **b.** May also be considered to cover syntactic variants: "At my desk, I ate a sandwich", "What I ate at my desk was a sandwich", "where I ate my sandwich was at my desk".
- **2**. Example from Groschwitz et al. (2018) slides for sentence "The witch tried to cast a spell". Note re-entrance.



**3.** Motivation: summarization (textual inference). Example from Liu, Flanigan, Sadeh, and Smith (2015) (mostly) as depicted by Koller, Oepen, and Sun (2019) tutorial; dotted lines inferred in LFSS. I saw Joe's dog, which was running in the garden. The dog was chasing a cat.  $\rightarrow$  Joe's dog was chasing a cat in the garden.



- 4. AMR format (Banarescu et al., 2013):
  - a) Variables for events, entities, etc.(x1 /book) means x1 is a variable representing an instance of the concept "book"
  - b) Relations indicated with colons and indentation
- **5.** Example (ignore "my desk" issues). PropBank gives argument information.



- **6.** Big example from the Groschwitz et al. (2018) slides see other sheet
- 7. Parsing to AMR Apply-merge algebra, Groschwitz et al. (2018)

