Decomposing



Like, say, making dinner?

Break it Down

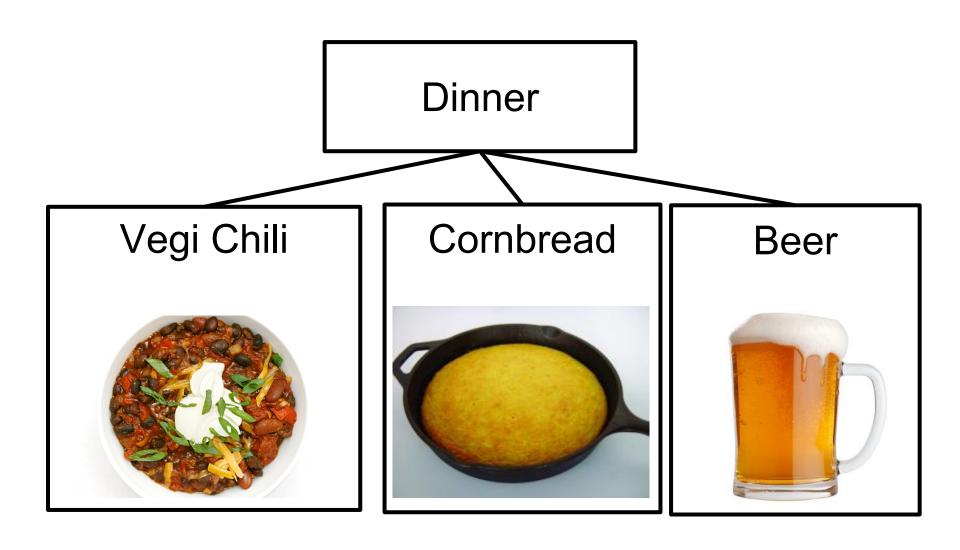
Like, say, making dinner?

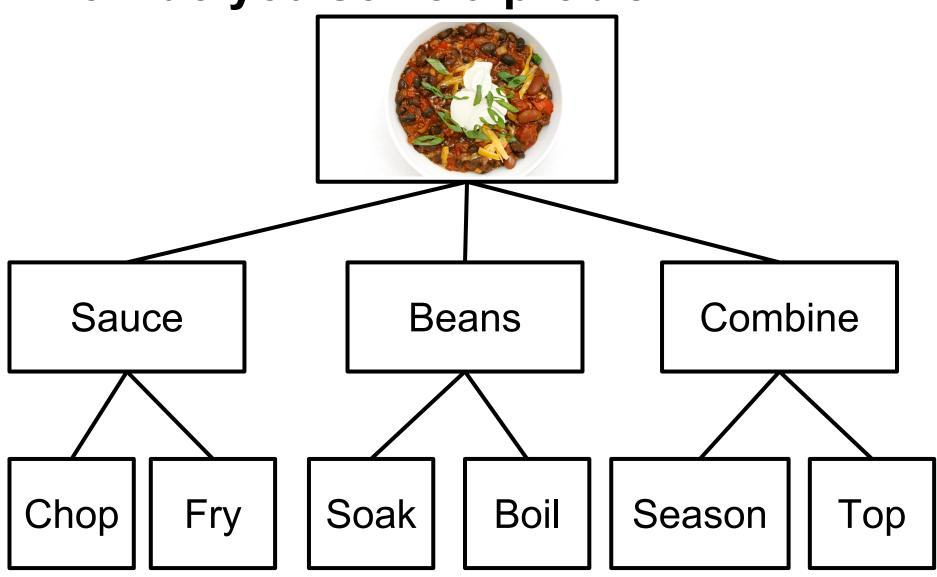
Well, dinner tonight is going to be vegetarian chili, cornbread, and beer.













For some life tasks you do this automatically.



Goal: create silly text from some source text

- A table of likely next words takes the form of a dictionary mapping strings to lists of possible next words
- Analyze source text to build a table of likely next words
- Generate a silly text from the table

Analyze source text to build a table of likely next words

- Break the source text into words
- Find every pair of words where one follows the other
- Adjust the frequency table using a pair like that

Generate a silly text from the table

- Find a plausible next word given a current word
- Find the first word
- Keep finding words
- Realize when we're done
- Somehow manage spacing regarding punctuation

Somehow manage spacing regarding punctuation

- Spaces come between words, but not between words and most punctuation
- Good enough: put spaces before words, not before punctuation
- Means we have to decide if something is a word

Means we have to decide if something is a word

- Words don't have punctuation in them
- Except contractions have apostrophes
- Except a single apostrophe isn't a word

Things to think about

- What information needs to be stored? How can you store it?
- What are the reasons that information might change over time?
- What decisions do you have to make?