Homework 6 Discussion

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Goals

• To make the specs as good as possible
• To understand the process of annotation
• Annotation necessarily includes a process of disagreement and fixing the specs to make them clearer.
• We have not figured out how to grade this yet. The grading should be very lenient, given the above goal.
Discrepancies with Adam's Annotation

- Argument Spans: mostly due to deficiencies in the specs
- Missing Arguments: not that many, usually genuine errors
- ARG1/ARG2 distinction: mixed
Span of Arguments

- Span of an argument: how many words?
- Most of the span disagreements were the result of insufficient specifications
- Case 1: Spurious ambiguity
  - new/PRED [time zone]/ARG
  - new/PRED time [zone]/ARG
  - These mean the same thing, but the specs do not say which to pick
- Case 2: Slight ambiguity, but difficult to distinguish cases
  - artificial/PRED light sources
    - Are the sources artificial or is the light produced?
- Case 3: There were only 3 cases where there were actual annotation errors due to spans
  - full night/ARG 's rest [The rest is not full]
  - Bright light/ARG exposure [The exposure is not bright]
  - Keep [a person]/ARG from feeling increasingly sleepy [a person, not person]
Omissions (not common)

- The 2 most common omissions (about ½)
  - `[of which] /ARG1 I /ARG2 was unaware /PRED`
  - `effective /PRED ways /ARG2 to reset the body clock /ARG1`

- Both of these are difficult cases
  - A complicated type of relative clause:
    - `research of which I was unaware`
  - A clausal argument that is shared with the noun
    - `The ways are effective to reset the body clock`
    - `The ways to reset the body clock are effective`
ARG1/ARG2 Confusion

• To get these consistent, it is necessary to analyze the cases of the most disagreement, as well as the specs.

• The most problematic parts of the specs:
  – (iv) If an adjective can never occur with two arguments, and its only argument does not meet the condition in (iii), then mark its only argument ARG1. Examples:
    • [The book]/ARG1 is red/PRED.
    • [This shirt]/ARG1 is ugly/PRED.
  – (iii) States that ARG2 should be marked for human experiencers

• Annotators were likely to mark only arguments as ARG2 regardless of the “human experiencer” or the requirement that it CAN take another argument.
Hole in the Specifications 1

• The most frequent cases in which ARG2 was marked instead of ARG1 were comparatives and superlatives.

• Proposed Specification change:
  – (iv) If an adjective can never occur with arguments ARG1 and ARG2, and its only argument does not meet the condition in (iii) then mark its only argument ARG1.

• Words effected: later, longest, earlier, brighter, smaller, lower, further
Cases Where Adam was Probably Wrong because he did not think of the other argument

- new, optimal, primary, recent
  - This time zone was new (to the United States)
  - This was of primary importance (for me)
  - This was optimal (for that environment)

- Solution: provide a lexicon, e.g., COMLEX, that classifies the number of arguments that adjectives can take (and possibly more info)
The Most Frequent Confusing Cases

• slow-release caffeine
• dark glasses
• bright light – occurs twice
  – Some mark once as ARG1 and once as ARG2
• it is complicated
• Alerting signal
• circadian timing
• circadian system
• added bonus
• homeostatic system
• homeostatic processes