# WSC Error Analysis

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### Sentence 196

John+ tricked Bill- because he was mischievous.

- When you're mischievous against something or someone it is almost always implied that the object is being mistreated or hurt by the subject. The predicate "tricked" will in this case most certainly imply to a human reader that John is behaving badly towards Bill. The sentence should therefore be possible to resolve by using script knowledge.
- There are two candidates for the incorrect answer and none for correct one. However, the two incorrect candidates are duplicate.

They are described as being beautiful young maidens with long blonde or green hair and the tail of a fish. They are often seen playing in the waves or riding on sea horses along with the Tritons as the attendants of Neptune, the sea god, and his Nereid wife, Amphitrite. There are said to be somewhere between 50 and 100 of them in existence, and most of their names are in Spenser s The Faerie Queen. The most famous among them are Amphitrite, Doto, Galatea , Panope, and Thetis. In Modern Greek folklore they are said to be beautiful maiden nymphs who dwell in the countryside and in forests, where one may hear them playing in their bouzouki (a stringed instrument with a long neck and a pear-shaped body). They can be MISCHIEVOUS toward humans, by TRICKing them into dancing until they re exhausted, or by kidnapping them and leading them astray into muddy places. If offended they may retaliate by making one face swell or become otherwise distorted.

Oceanids This is the name of the sea nymphs also known as Okeanides and Okeaninai, in Greek and Roman mythology.

The daughters of Tethys and Oceanus, there were anywhere between 50 and 3,000 of them.

The most popular Oceanids are Amphitrite, Doris, mother of the nereids by Nereus, Styx, Asia the wife of Prometheus.

In the Roman mythology of Homer Electra is the daughter of Atlantis and one of the nymphs in the constellation Pleiades.

Listing 1: Context for  $R_1$  and  $R_2$  (duplicates).

• This is an article about Greek mythology which is probably unimportant for our sentence. The correct subject in this sentence is *They*, which points to something that is clarified in the context and not within the sentence (beautiful maiden nymphs). The correct object is *humans*.

They can be MISCHIEVOUS toward humans, by TRICKing them into dancing until they're exhausted, or by kidnapping them and leading them astray into muddy places.

Listing 2: Target sentence in  $R_1$  and  $R_2$ .

- The test sentence is of the form X trick, X mischievous. The corpus sentence is of the form X mischievous towards, X trick.
- A predicate in English can be of the form *adverb* towards or *adverb* against. Is this considered?

#### Sentence 201

Rick Davis- campaigned for John McCain+ since he was the best man for office.

- This sentence is only possible to resolve easily if we look among corpora related to politics.
- With a good corpus this would be very easy to resolve if the object candidate was of the form **man for office** instead of just **man**. The latter case will be way too general and has nothing to do with this special kind of political situation our sentence describes.
- The system should be able to make the comparison X man for office  $\sim$  campaign for X vs. X campaign for  $\sim$  X man for office instead of X man  $\sim$  campaign for X vs. X campaign for  $\sim$  X man.

#### Sentence 350

Claudia- lost all her money to Valarie+ because she is really smart.

- This sentence obviously has a lot of issues, since we have only 6 votes for the correct candidate, **X** smart ~ lose to **X**, but 142 votes for the incorrect one, **X** lose ~ **X** smart. However the logic behind the candidate comparison looks completely correct, and this should be easy to resolve.
- It would be very interesting to make comparisons between negating opposites, for example: X lose  $\sim X$  smart vs. X lose  $\sim X$  stupid. This is also not too difficult to implement.

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Subcontractors couldn
                            t collect for work
    completed.
Businesses, once successful, went belly up.
Neighborhoods became patch worked with empty houses
    and overgrown lawns.
The only people making good money were bar tenders and
Colonial lent money into almost every type of business
Even though they were SMART about it, they lost some
    serious money.
Their
         mortgage warehouse
                                       took a hit,
   along with commercial loans.
Meanwhile, business banking, retail mortgage, consumer
    lending, wealth management, and the investment
    brokerage were hedging against the tide.
Colonial
              s problems were economy related and
   not as severe as propaganda testified.
At the time of the initial reporting,
                  s 12.88% risk based capital rate
    Colonial
    was above regulating guidelines of 10% to be
    considered well capitalized.
Colonial had assets and strategic measures in place.
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Listing 3: Context from  $R_1$  and  $R_2$ .

Even though they were smart about it, they lost some serious money.

Listing 4: Target sentence for  $R_1$  and  $R_2$ .

- Looking at this example, one issue could be that the object it in the
  target sentence is an exophor and not an anaphor. It is not clear
  from either the sentence itself or the context of what we are smart
  about.
- Similar problem as with sentence 196, **X** smart is not true here, instead we have the case of smart about **X** or **X** smart about
- This sentence is a concessive clause determined by Even though. Even though they were smart about it, they lost some serious money is equivalent to They lost some serious money even though they were smart about it.

#### Sentence 443

The **cheetah-** outran the **antelope+** so it got eaten.

- The comparison eat ~ outrun X vs. X outrun ~ eat makes no sense. Not sure if this sentence is actually translatable to a logic form since eat is conjugated to its passive form (eg. the antelope was eaten, the antelope got eaten, the antilope is being eaten, etc.), which is not the same thing as its corresponding active form (the antilope is eating, the antilope ate). However the system makes some kind of generalization here and suggests that "eating" in istself is an implication of a cheetah that is outrunning or outrunning a cheetah.
- eat  $X \sim \text{outrun } X \text{ vs. } X \text{ outrun } \sim \text{eat } X$ ?

#### Sentence 70

**Jimbo** was running from **Bobbert**+ because he smelled awful.

- The problem here is that we are comparing **X** smell ~ run from **X** vs. **X** run ~ smell **X**. The verb *smell* can have several meanings depending on context. It can be sort-of reflexive and not at the same time, i.e. "He smells" can be equivalent to "He stinks" and "He is sensing a smell" at the same time; it depends on the context.
- X smell awful  $\sim$  run from X vs. X run  $\sim$  smell awful X would probably solve this problem.

# Sentence 407

Luigi+ rescued Mario- because he was the only one who can.

- This sentence is not gramatically correct. It should be Luigi+ rescued Mario- because he was the only one who could.
- Current comparison is X one  $\sim X$  rescue vs. X one  $\sim$  rescue X. This is too vague.
- Results would probably be better if the system compared X one who can  $\sim X$  rescue vs. X one who can  $\sim$  rescue X.

## Example

John+ tricked Bill- because he was mischievous.

• lol

Lorem ipsum ipsum lorem quai.

Listing 5: Example

• Possible solution: roflmao idk