

Table 9-1. Examples from the CoNLL 2015 Shallow Discourse Processing task

Example	Discourse relation
GM officials want to get their strategy to reduce capacity and the workforce in place <u>before</u> those talks begin.	Temporal.Asynchronous.Precedence
But that ghost wouldn't settle for words, he wanted money and people—lots. <u>So</u> Mr. Carter formed three new Army divisions and gave them to a new bureaucracy in Tampa called the Rapid Deployment Force.	Contingency.Cause.Result
The Arabs had merely oil. <u>Implicit=while</u> These farmers may have a grip on the world's very heart	Comparison.Contrast

Understanding discourse also involves solving other problems like *anaphora resolution* and *metonymy detection*. In anaphora resolution, we want to resolve occurrences of pronouns to the entities to which they refer. This can become a complicated problem, as [figure 9-2](#) illustrates.²

- (a) The dog chewed the bone. It was delicious.
- (b) The dog chewed the bone. It was a hot day.
- (c) Nia drank a tall glass of beer. It was chipped.
- (d) Nia drank a tall glass of beer. It was bubbly.

Figure 9-2. Some issues with anaphora resolution. In example (a), does “It” refer to the dog or the bone? In example (b), “It” refers to neither of them. In examples (c) and (d), “It” refers to the glass and the beer, respectively. Knowing beer is more likely to be bubbly is critical in resolving such referents (selectional preferences).

Referents can also be metonyms, as illustrated in this example:

Beijing imposed trade tariffs in response to tariffs on Chinese goods.

Here, Beijing refers to not a location but to the Chinese government. Sometimes, successfully resolving referents might require working with a knowledge base.