

## Part 1

1.1 [distinct, JJ, speakers, NNS, of, IN, other, JJ, sources, NNS, to, TO, be, VB, associated, VBN]

1.2 Not enough. I can not find the word overlap between the collocation vector in 1.1 and the eight distinct WordNet senses.

## Part 2

The dog[*agent, subject*] chased Jim[*theme, object*].

Jim[*theme, subject*] was chased by the dog[*agent, object*].

In this first sentence, The dog chased Jim, the dog is the agent and it's in subject position, and Jim is the theme in direct object position.

In the second sentence, Jim was chased by the dog, the semantic relationship of the dog and Jim to the chasing event is the same: the dog is still the agent and Jim is still the theme. But their grammatical roles are different. We can use this passive structure to reverse the usual pattern and focus our attention more on the theme than on the agent.