In addition to counting the co-occurrences of lemmas and aspect categories, the co-occurrences between grammatical dependencies and aspect categories are also counted.

Dependency has three components:

1. Governor word.
2. Dependent Word
3. Relation Type

From these dependency relations we might learn that only when the word food is used as a nominal subject, it implies the category food.

1. (Governor word, Dependency Type)
2. (Depending word, Dependency Type)

Hence, we extract, for each dependency, the following three forms:

1) {dependency relation, governor, dependent} (*D*1);

2) {dependency relation, dependent} (*D*2); and

3) {dependency relation, governor} (*D*3).

Algorithm:

1. Determine Lemmas or Dependencies
2. Find the part of the speech of the training and the testing data.
3. Find out the lemmas.
4. Create a dependency parser using the Standford CoreNLP
5. Set of Lemmas SL, three dependency Sd1, Sd2, Sd3 and category of the sentence denoted by Sc
6. Determine Weight Matrix
7. Df
8. Fd
9. Sdfd
10. dfdf