## Homework 1 L98: Introduction to Computational Semantics

## Simone Teufel and Weiwei Sun

Use WordNet search 3.1 (and nothing else) to manually assign the correct sense to all open-class words in the three sentences on the next page. This is an instance of the all-word WSD task. The purpose of this exercise is for you to get to know WordNet's representation of senses. For this reason, do NOT consult other lexica or any other information resource while performing the word sense disambiguation. You should indicate the sense using numbers (counting systes from the top for the appropriate PoS from the top).

When in doubt, you should use all local information in WordNet to disambiguate as well as you can. You might want to follow hyponymy and other links if this helps you make a decision.

Open-class words appear in bold-face; you can assume that all non-bold faced words have only one "reasonable" sense.

If a search returns no results, you are still expected to find reasonable variants if they exist in WordNet. Try to input your word form in a slightly different form, as WordNet might represent it differently.

Deliverables:

- Your list of disambiguated senses for each boldfaced word.
- Write 200–300 words about your methodology how did you decide in difficult cases? Which methods did you use to get a good understanding of what a WordNet sense was supposed to mean?
- Then write about 500 words about your observations in this exercise. You should concentrate on at least 2 difficult cases. Did you find any

phenomena that are hard to express in WordNet? Why? Did you find any systematic inconsistencies?

• Bonus points: Try to find nouns in WordNet that have only one sense. How would you characterise such words? Do they share properties in any sense?

Deadline: Friday 27/1, 4pm

The sentences (all from BBC News webpage, collected on 17/1/2011):

- The explosive eruption of Hunga-Tonga Hunga-Ha'apai sent a shock-wave around the world.
- The event literally touched every corner of the globe as a pressure wave spread out in all directions to complete a full circumnavigation.
- A gorgeous whip down the line gets Korda to bf game point, but there's a gasp from the crowd as he trips into a double fault.