Homework #3
Due: 2 October 2015, 13h

Preliminaries.   In this assignment you will again be working with the Switchboard Corpus. The goal of the exercise is to gain some hands-on experience with corpus-based experiments (as opposed to lab experiments) related to alignment and coordination in dialogue.

Resources.   To help you get started, we provide you with a Python script (by Julian Schlöder) that includes a basic implementation of the coordination measure proposed by Danescu-Niculescu-Mizil et al. (2012), together with some Switchboard-specific auxiliary functions. You do not need to use this code at all if you don't want to. If you do use it, however, you are required to take it as your starting point only and to modify it or extend it in some non-trivial way that shows you understand the code and can make your own contribution to it. Note that this script relays on Chris Potts' modules for processing the Switchboard corpus (http://compprag.christopherpotts.net/swda.html). If you do not want to use our script nor Chris Potts' code, you can download the corpus from http://www.stanford.edu/~jurafsky/swb1_dialogact_annot.tar.gz.

Exercise.   You are asked to compare the level of alignment between different demographic groups of speakers and to report and discuss your findings. You can define groups of interest using the metadata in each of the Switchboard transcripts regarding gender, age, dialect area, education, conversation topic, etc. Your report (max. 3 pages) must include the following:

- Explain your choice of demographic groups and formulate and motivate a working hypothesis regarding linguistic alignment. (Toy example: alignment may be influenced by emotional aspects; if so, dyads discussing topic A will align more than dyads discussing topic B, since A is more emotionally charged than B).

- Define precisely your chosen alignment measure.

- Report your findings and discuss them against your working hypothesis.

Send your report and your documented code by email to Julian (julian.schloeder@gmail.com).

References
C. Danescu-Niculescu-Mizil, L. Lee, B. Pang and J. Kleinberg (2012). Echoes of power: Language effects and power differences in social interaction, in *Proceedings of WWW*.