

Study Questions: Processing with Prosody & Prediction Prosody

(Based on lecture and readings from Dec. 13, 2005)

Basic questions

1. What are the acoustical correlates of prosodic prominence?
2. Name three areas of language in which prosody plays a role.
3. What evidence do we have that prosody aids in processing? Name one example.
4. What would be the most appropriate question for the answers given? Words in capital letters should be interpreted as having prosodic prominence.
 - a. ESTHER has bought a motorcycle for herself.
 - b. Esther HAS bought a motorcycle for herself.
 - c. Esther has BOUGHT a motorcycle for herself.
 - d. Esther has bought a MOTORCYCLE for herself.
 - e. Esther has bought a motorcycle for HERSELF.
5. Given an example of a clitic.
6. What does it mean to be *given* or *new*?
7. How are the concepts of *given* and *new* used in synthetic speech.
8. How long does something stay given? Give two methods by which *loss of givenness* or a *resetting* of givenness can occur. In other words, if a word X is given at time t in a conversation, what might happen so that at time t+1 X is no longer given, but has to be treated as new. There are at least two explanations in the lecture slides that try to account for this change from given to new.
9. What are open class words? Give examples.
10. What are closed class words? Give examples
11. What is *pitch accent*?
12. What was *Newspeak*?
13. What is a complex nominal? Why do they pose problems for speech synthesis?

Analysis & Discussion Questions

14. When is something given? Given an example where, given a context, it is clear that reference to a concept must be given, and another example where it is not clear whether or not a concept is given.
15. Consider the following text. Which words would you tag as new or given? Why those words, and why are the new/given. Explain your reasoning.

Wat moet ik kopen voor mijn liefje? 40 procent van de Nederlandse mannen loopt rond met deze vraag vlak voor de kerstdagen. Dat blijkt uit een onderzoek naar het bestedingsgedrag van consumenten rond kerst.

Vrouwen hebben minder problemen met het kiezen van presentjes, maar komen volgens het onderzoek met weinig originele cadeaus thuis. De helft van de vrouwen koopt een boek, een cd of een concert- of theaterkaartje voor hun vriend.

Van de werkende Nederlanders zegt twee derde kerstcadeaus te kopen. Ze geven daar gemiddeld 179 euro aan uit. Vorig jaar was dat 78 euro minder. De meest gekochte kerstcadeaus zijn alcoholische dranken, kleding en eten.

16. Your friend has a company that has inherited a diphone synthetic speech system from another company. The basic synthesis is good, but the prosody is terrible (they are giving prominence to the last word in each sentence! Awful!) Your friend's company has promised an important client that the speech synthesis will sound great for reading aloud emails, and now the client wants to see a prototyp of the product next week. In desperation they beg **you** to help them, knowing that having followed the course in taal- en spraaktechnologie you have unique knowledge about how to improve the prosody. What will you do?
 - a. What will you do to improve the prosody in general. Your friend has a team of programmers standing by, who are just waiting for your instructions.
 - b. What will you do to improve the prosody to make it work well for reading aloud **emails**?
17. What advantages are there for a speaker to reduce given information? Does the hearer get anything out of this?