Natural Language Processing

Assignment J1

The purposes of this assignment are to see how spoken language differs from written language; and to appreciate the role of NLP in speech understanding.

| 1. | Select a short utterance, and cover it with small, 100ms regions. Play each one of the regions individually, starting from the last one. What sounds do you hear? | | | | | | | | | | | |
|----|---|--------------------------|-------------------------------|------------|----------|------------|------|--------|---------|-------|------|-----------|
| | last region next-to-last region | | | | | | | | | | fi | rst regio |
| | Now merge the regions into 200ms regions and repeat the procedure: | | | | | | | | | | | |
| | last region Now listen to the | | ext-to-last | _ | | | | firs | st regi | on | | - |
| | Now listen to the entire utterance: what was it? | | | | | | | | | | | |
| | What fraction of your guesses were correct? | | | | | | | | | | | |
| | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | . , 8, | respect were | | | <u>-</u> ' | | | | | | |
| 2. | Listen to the er be said next? | | | | | | What | t do y | ou pr | edict | will | |
| 2. | Listen to the er | ntire conv | ersation up | to the 1 | 10 secon | d point. | | v | ou pr | edict | will | |
| 2. | Listen to the er be said next? | ntire conv | ersation up | to the 1 | 10 secon | d point. | | v | ou pr | edict | will | |
| 2. | Listen to the er be said next? What actually | was said to the 1 | ersation up next? 5 second p | o to the 1 | 10 secon | d point. | | v | ou pr | edict | will | |
| 2. | Listen to the erbe said next? What actually to the same up | was said not be to the 1 | ersation up next? 5 second pe | o to the 1 | 10 secon | d point. | | v | ou pr | edict | will | |
| 2. | Listen to the er be said next? What actually Do the same up Prediction: | was said p to the 1 | ersation up next? 5 second po | o to the 1 | 10 secon | d point. | | v | ou pr | edict | will | |
| 2. | Listen to the er be said next? What actually Do the same up Prediction: Actual: | was said p to the 1 | next? | o to the 1 | 10 secon | d point. | | v | ou pr | edict | will | |

3. Now go back and label in detail every utterance in the first 20 seconds of the conversation.

| 4. | What is the longest utterance you found? | | | | | | | | |
|----|---|--|--|--|--|--|--|--|--|
| | What is its syntactic structure? | | | | | | | | |
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| | | | | | | | | | |
| | Is it ungrammatical or otherwise hard to analyze? in what way? | | | | | | | | |
| 5. | In what places are there speech errors or other interesting or problematic phenomena? | | | | | | | | |
| | location:, description: | | | | | | | | |
| | location:, description: | | | | | | | | |
| | location:, description: | | | | | | | | |
| | location:, description: | | | | | | | | |
| | Why do you think these occurred? | | | | | | | | |
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Show the TA your labeling of the 20 seconds of data, and hand in this worksheet.