Very brief introduction to psycholinguistics

Chris Potts, Ling 390a: Controlling the Discourse, Fall 2007

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1 Goals

Psycholinguists seek theories of how humans acquire knowledge of language and how they use that knowledge to produce and understand utterances.

Psycholinguistics is important to all areas of grammar, from phonetics and phonology (the study of linguistic sounds and how we produce them), to morphology and syntax (the way we structure words and sentences), to semantics and pragmatics (the ways in which we interpret language).

We will study psycholinguistic methods in-depth starting in October. The present handout is just a brief introduction to the ideas, methodologies, and goals of the field.

2 Typical general questions

(1) What analyses (interpretations) of a sentence do people prefer? Why? Are these preferences the same cross-linguistically?

(2) Do people activate more than one meaning for the word *bank* when they read or hear the sentence *Josh went to the bank*?

(3) Is there a pause between sentences when we speak? Is there a pause between words when we speak?

(4) What can *aphasia* (language disorder due to brain damage) tell us about the brain and the way it processes language? How can we use this knowledge to help aphasics regain their linguistic abilities?

These are just a few examples. There is essentially no end to the questions you can ask, and you can ask them for lots of reasons — an interest in language, or cognition, or sociology, or politics, or economics, or . . .

3 Methods

Psycholinguists employ the full range of experimental techniques and methodologies of modern psychology. Many of these methods are *behavioral*: subjects are presented with some linguistic examples and asked to make judgments about them or perform tasks based on them. The experimenter might be interested in how fast subjects react to the data, whether they understand the data in a particular way, whether they can understand the data at all, whether they care more about one part of the data than another, and so forth.

4 Hypotheses

Every experiment, no matter how small, should be in service of some *hypothesis*. The hardest part about setting up an experiment is finding the right data ('stimuli') for your hypothesis, or the right hypothesis for your data. You should always be ready to revise your hypothesis. You might have to do that many times over the course of your research.

5 Examples

These are just for us to talk about. We'll quickly see that presentation is crucial to success, so one needs to be much more thoughtful about which subjects see what when. After we think about the examples, we should formulate hypotheses and consider ways in which we might test them more extensively. We should also be ready to give up these examples in favor of better ones.

(5) John told the girl that Bill liked the story.

Who was John talking to?

What did he say?

(6) While Bill hunted the deer paced in the zoo.

Rating (1 = unacceptable; 5 = perfectly acceptable)

1 2 3 4 5

(7) The rich man the boats.

Rating (1 = unacceptable; 5 = perfectly acceptable)

1 2 3 4 5

(8) Kyle and Ellen would like to see a movie. Kyle has $20 in his pocket. Tickets cost $8 each. He says, "I have $8."

Is Kyle's utterance truthful? Pick one: Yes No.

(9) Kyle and Ellen would like to see a movie. Kyle has $20 in his pocket. Tickets cost $8 each. He says, "I have $6."

Is Kyle's utterance truthful? Pick one: Yes No.

(10) Mark these sentences as G (grammatical) or U (ungrammatical).[1]

a. None of the astronomers saw the comet, but John did.

b. Seeing the comet was nearly impossible, but John did.

c. The comet was nearly impossible to see, but John did.

d. The comet was nearly unseeable, but John did.

(11) What questions might we ask about the phrase *green space*?

[1] How might this be different if we asked subjects to rate them 1–5?