

# Assignment 5

Chris Potts, Ling 130a/230a: Introduction to semantics and pragmatics, Winter 2019

Distributed Feb 19; due Feb 26

## 1 Conversational implicature? [3 points]

The goal of this question is to assess the **reinforceability** and **cancellability** tests for conversational implicatures. I'm hoping that working through these questions gives you a better sense for how the tests work, and I am planning to aggregate the responses to see how stable the judgments are across everyone in the class.

For each question, there is a sentence and a target meaning. For each test (reinforceability, cancellability), you should provide the following:

- The example that results from applying the test to the sentence to assess the status of the target meaning.
- A judgment as to whether the example supports or challenges the claim that the target meaning, where conveyed, is a conversational implicature. (You get full credit if you provide a judgment; we do not presuppose that any particular judgment is correct.)

Don't worry if the tests give conflicting results; you can treat each as independent of the other.

i. *Sentence*: Carol happens to own the book.

*Target meaning*: Carol owns the book

ii. *Sentence*: The task is difficult.

*Target meaning*: the task is not impossible

iii. *Sentence*: Almost every student did the homework.

*Target meaning*: some students did not do the homework

## 2 RSA and the division of pragmatic labor [3 points]

The 'Introduction to pragmatics' handout from Feb 5 briefly discusses the 'division of pragmatic labor' generalization, which says "Normal events are reported with normal language; unusual events are reported with unusual language". A simple motivating pair of examples is *Kim stopped the car* and *Kim caused the car to stop*. The first uses the normal/unmarked/simple verb *stop*, and conjures an image of a normal braking event. The second uses the unusual/marked/complex causative construction, and conjures images of unusual stopping events (say, jumping in front of the car).

Can the RSA model, as we defined it on the Feb 19 handout, simulate this generalization? The core assumptions we need to adhere to: we have two *synonymous* messages, one of which is more

marked (costly) than the other, and two referents, one of which is more probable than the other. For your answer:

- i. Present a reference game that implements the core assumptions of this scenario.
- ii. Provide the RSA literal listener, pragmatic speaker, and pragmatic listener values for your game.
- iii. Either explain how RSA models the division of pragmatic labor, or argue that it doesn't, and develop an argument for why RSA isn't able to capture this generalization in general.

### 3 Too few gumballs?

[4 points]

**Note: this is not required for people doing a final project. Final projectors should answer the next question instead.**

Degen and Tanenhaus (2015)<sup>1</sup> is an important experimental investigation of scalar implicatures. This question asks you to read up to page 684 of the paper and discuss the findings from experiment 1. More specifically:

- i. Read the abstract through once carefully, but don't get hung up on the details.
- ii. In the introduction, section 1.2 should be familiar from your reading of Grice. Section 1.3 presupposes a lot of background in language processing, so you might just skim it for now. In section 1.4, the "second cue" is the one that matters most for this question. Finally, section 1.5 is vital to read closely, since it describes the experimental paradigm.
- iii. Read section 2 ("Experiment 1") very carefully. The central manipulation is that Degen and Tanenhaus asked participants to rate how natural they found descriptions of the form "You got some gumballs" for different set sizes. The statistical reasoning on page 682 might be new to you, but you can, for now, read it as just supporting the conclusions that they state directly in prose.

The above is just the background reading. Now to the writing you need to do:

- iv What did they find for set sizes in the subitizing range? (1–2 sentences; "subitizing range" is not defined fully in the paper, but its meaning can be inferred from a careful reading, and the Wikipedia article 'Subitizing' is good.)
- v Why is this finding surprising under the assumption that *some* is a quantificational determiner with the meaning we always give it and a pragmatically enriched meaning "some but not all"? (3–4 sentences)
- vi How do Degen and Tanenhaus explain this finding? (3–4 sentences)

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<sup>1</sup>Degen, Judith and Michael K. Tanenhaus. 2015. Processing scalar implicature: A constraint-based approach. *Cognitive Science* 39(4):667–710.

## Final project task

[4 points]

**Note: this problem is required only for people doing a final project. Everyone else should answer question 3 instead.**

The goal of this question is to begin laying the foundation for your final project. We're looking for two long paragraphs (say, a half a page each).

The contents of the first paragraph will depend somewhat on the kind of project that you're doing:

- i. **If you're writing a standard essay:** Write a paragraph that describes the essay's empirical focus as you currently understand it, paying special attention to places where the topic connects with material from the course (the more specific the better).
- ii. **If you're creating a pilot experimental design, original corpus, or computational implementation:** Write a paragraph that describes how your project relates to material from our course (the more specific the better) and then provide the motivation for your project. For example, if you're going to implement an extension of RSA, then you can discuss how this extension relates to Grice and to the basic version of RSA that we're covering, and this should move you naturally to the empirical motivation for the extension. Or, if you're creating a corpus of examples of a specific kind, then you should explain which phenomena from class the examples relate to and then articulate what research questions your corpus will enable us to answer.

If your project idea doesn't fit into the above categories, please write to the staff address with a description of what you want to do, so that we can give you feedback on its viability and help you figure out what to do for this assignment.

**For the second paragraph,** give full citation information (at least full author name(s), year, title; a lonely hyperlink does not suffice) for the paper that is most central to your project, and write a brief summary of it, making sure that you explain how it relates to the content of your paragraph 1. We don't expect you to have mastered the paper at this stage, but you should be able to summarize it at a high-level and explain how it is relevant to your topic. (You're free to cite as many papers as you like in this paragraph, but please focus on one of them for now.)