1 Too few gumballs? [2 points]

In their experiment 1 (and experiment 2), Degen and Tanenhaus (2014) asked participants to rate how natural they found descriptions of the form “You got some gumballs” for different set sizes.

i. What did they find for set sizes in the subitizing range? (1–2 sentences)

ii. Why is this finding surprising under the assumption that the pragmatically enriched meaning of some is some but not all? (3–4 sentences)

iii. How do Degen and Tanenhaus explain this observation? (3–4 sentences)

2 RSA calculations [3 points]

Consider the following reference game:

<table>
<thead>
<tr>
<th></th>
<th>r₁</th>
<th>r₂</th>
<th>r₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>'hat'</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>'glasses'</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>'mustache'</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

(a) Scenario

(b) $\mathbf{R}$

(c) $\mathbf{P}$

(d) $\mathbf{C}$

With $\alpha = 5$, what are the following values?

i. $P_{\text{Lit}}(r₁ | 'glasses')$

ii. $P_{\text{Lit}}(r₃ | 'glasses')$

iii. $P_{S}( 'glasses' | r₁ )$

iv. $P_{S}( 'mustache' | r₁ )$

v. $P_{L}( r₁ | 'glasses')$

vi. $P_{L}( r₃ | 'mustache')$
3 Conversational implicature [2 points]

The goal of this question is to use and assess the reinforcement, suspension, and cancellation tests for conversational implicatures. For Sentence below, apply each test and provide:

- 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.

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

Sentence: Sam refuted the hypothesis that Jesse stole the cookies.
Target meaning: Jesse didn’t steal the cookies

4 High-stakes conversational implicature [3 points]

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

Suppose that the following dialogue takes place in the context of a Senate confirmation hearing. A is a powerful senator, and B is a candidate for the important position.

A: Have you ever ingested Pop Rocks Candy and Coca-Cola at the same time?
B: I have not ingested Pop Rocks Candy and Coca-Cola at the same time in over ten years.

B’s response generates a conversational implicature. Identify that implicature and explain how it arises from interactions among the maxims and the information we can glean from the context.

Final project task [3 points]

Note: this problem is required only for people doing a final project. Everyone else should answer question 4 instead.

Write a two-paragraph description of your project idea and provide a current work-plan that explains what work needs to be done, and by when. (These plans tend to fall apart once research begins, but there is still value in having them!) All of this can be informal and preliminary. The goal is to start a discussion with Chris.

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1When I was growing up, simultaneously ingesting Pop Rocks and Coca-Cola was reputed to be very dangerous: [http://en.wikipedia.org/wiki/Pop_Rocks](http://en.wikipedia.org/wiki/Pop_Rocks)