1 Metaphor in RSA

Can we get a basic RSA speaker $P_s$ to speak metaphorically? In the following reference game, we imagine three parties, which we have named in a way that reveals their characteristics: $p_{v \& e}$ (both violent and energetic), $p_{v \& \neg e}$ (violent but not energetic), and $p_{e \& \neg v}$ (energetic but not violent). We also suppose that there are three messages, ‘riot’, ‘violent’, and ‘energetic’, where ‘riot’ is semantically ‘violent and energetic’. We think it’s possible for a speaker of English to characterize $p_{e \& \neg v}$ metaphorically as “a riot”. Can RSA simulate this behavior?

\[
\begin{array}{ccc|c}
  & p_{v \& e} & p_{v \& \neg e} & p_{e \& \neg v} \\
\hline
\text{‘riot’} & 1 & 0 & 0 \\
\text{‘violent’} & 1 & 1 & 0 \\
\text{‘energetic’} & 1 & 0 & 1 \\
\end{array}
\]

\[
\begin{array}{c|c}
  p_{v \& e} & 0.05 \\
p_{v \& \neg e} & 0.10 \\
p_{e \& \neg v} & 0.85 \\
\end{array}
\]

\[
\begin{array}{c|c|c}
  & \text{‘riot’} & 0 \\
\text{‘violent’} & 0 & \text{‘energetic’} & -5 \\
\end{array}
\]

(a) \[\text{Lit}(p_{e \& \neg v} | \text{‘energetic’})\]

(b) $P$

(c) $C$

First, calculate the following values for this reference game for $\alpha = 1$:

i. $P_{\text{Lit}}(p_{e \& \neg v} | \text{‘energetic’})$

ii. $P_{\text{Lit}}(p_{e \& \neg v} | \text{‘riot’})$

iii. $P_s(\text{‘energetic’} | p_{e \& \neg v})$

iv. $P_s(\text{‘riot’} | p_{e \& \neg v})$

Second, what do these values indicate about the ability of $P_s$ to speak metaphorically? Is there a setting of the costs, the prior over parties, and $\alpha$ that would produce metaphorically interpretations given this underlying lexicon? Why or why not? You needn’t offer a rigorous proof (though you are welcome to do that!). A clear explanation suffices. (2–4 sentences.)

2 Acknowledgements

Use the negation test, the interrogative test, and the conditional-antecedent test to help determine whether (A) presupposes that Carol won the marathon.

(A) Joan acknowledges that Carol won the marathon.

For each test, provide:

- The example that results from applying the test to (A).
A judgment as to whether the example supports or challenges the claim that (A) presupposes that Carol won the marathon, along with your reason for reaching this judgment.

Don't worry if the tests give conflicting results; you can treat them each as independent of the others. However, insights about why the tests behave they way they do are always welcome.

3 Deriving hypothesis N

This is not required for people doing a final project. Final projectors should answer question 4 instead.

This question asks you to assess how two views of presupposition account for hypothesis N. Specific subtasks:

i. The ‘Presupposition’ handout develops a semantic view of the presupposition of the definite article the and shows how hypothesis N follows as a consequence of that treatment. Summarize how that account works, being sure to explain the role of the key concepts concerning partial functions and compositionality. (2–5 sentences)

ii. What is the ‘Stalnakarian’ view of presuppositions as Simons describes it in ‘Foundational issues in presupposition’? Summarize the view. (2–5 sentences)

iii. We expect a successful theory to explain hypothesis N in terms of more basic concepts, rather than having to stipulate it. This seems especially desirable because hypotheses N, Q, and C are unified by the fact that they all involve operators that reduce speaker commitment to the at-issue content while leaving the presuppositions unmodified. How would the Stalnakarian view derive hypothesis N? This is more speculative, asking you to think in new ways about the Stalnakarian view and the nature of hypothesis N. (4–6 sentences)

iv. Which view has the better account of hypothesis N? State your view and summarize the evidence that led you to it, with the goal of convincing others that your view is correct. (4–6 sentences)

4 Final project task

This problem is required only for people doing a final project. Everyone else should answer question 3 instead.

Chris will send you, within 24 hours of your submitting assignment 5, a custom-made question to answer here (due along with the rest of the assignment, on Mar 6).