A bit more on scalar implicatures

Simon Charlow

1 Reviewing why scalar implicatures do or don't come about

- Near the end of Thursday's lecture, we discussed why, though the *or* in (1) defaults to an exclusive ("not both") interpretation, the *or* in (2) does not. (**Boldface** is intended as a visual aid and shouldn't be taken to indicate anything about pronunciation.)

  (1) I'm planning to invite (either) John **or** Bill to the party.

  (2) I'm not planning to invite (either) John **or** Bill to the party.

- In other words, we wanted an explanation for why (1) seems to mean the same thing as (3), but (2) doesn't seem to mean the same thing as (4). (It's not very easy to think about what (4) actually *does* mean. But if you work it out, one way for it to be true is if I'm planning on inviting *both* John and Bill! Whereas (2) means I'm planning to invite *neither*.)

  (3) I'm planning to invite John **or** Bill **but not both** to the party.

  (4) I'm not planning to invite John **or** Bill **but not both** to the party.

- The idea was to compare (1) and (2) with other things their speakers *might have said*, i.e. the sentences in (5) and (6).

  (5) I'm planning to invite John **and** Bill to the party.

  (6) I'm not planning to invite (both) John **and** Bill to the party.

- Assume *or*'s meaning is non-exclusive (like $\vee$).

- Then, before any implicatures get tacked on, (1) is true if *any* of the following holds:

  (a) I'm planning to invite just John

  (b) I'm planning to invite just Bill

  (c) I'm planning to invite both John *and* Bill.

- By contrast, (5) is true only in scenario (c). So (5) makes a *more specific* claim about the world than (1).

- This is what we mean when we say that (5) is **logically stronger** than (1). Since (5) is more specific than (1), it gives us more information about the way things are than (1)!

- In general, p is logically stronger than q if (and only if) the truth of p implies the truth of q—i.e. p **entails** q.

- Since (5) entails (1), the following is a valid argument (*at least one of* is equivalent to the non-exclusive interpretation of *or*):

  (7) I'm planning to invite both John and Bill to the party.
  $\therefore$ I'm planning to invite at least one of them to the party.

- Now, it's natural to assume that I know who I'm inviting to my own party. So if I *was* planning to invite both John and Bill, I would surely know that.

- By the maxim of Quantity, I should say the strongest thing I know to be true. So since I haven't said (5), and (5) is stronger than (1), you conclude that (5) is false. This generates the exclusive reading.

- So why does (2) lack the exclusive reading in (4)?
- The reason is that (6) *doesn't actually make a stronger claim than* (2).
- Equivalently (6) *doesn't* entail (2) (whereas (5) *does* entail (1)).
- One way to see this: the argument in (8) is **invalid**. It certainly doesn't follow from the fact that there's not room for both John and Bill at my party that there's room for neither!

(8) I'm not planning to invite (both) John **and** Bill to the party.
∴ I'm not planning to invite John **or** Bill to the party.

- Since (6) doesn't entail (2), (6) isn't stronger than (2). This means that the maxim of Quantity doesn't cause us to assume that (6) is false when we hear (2).

2 Reverse implicatures!

- In fact, it's not just that (6) isn't stronger than (2)—actually, (2) is stronger than (6)! So, for instance, the following argument is valid:

(9) I'm not planning to invite John **or** Bill to the party.
∴ I'm not planning to invite John **and** Bill to the party.

- i.e. if I'm not planning to invite either of them, I'm definitely not going to invite both!
- So this means that someone who uses (6) isn't saying the strongest thing they could be saying—i.e. (2). (Whereas before, the person saying (1) wasn't saying the strongest thing they could be saying—i.e. (5).)
- So saying (6) should implicate that (2) is false, yielding the following:

(10) It's not the case that I'm not planning to invite John or Bill to the party

- That's a mouthful. Let's simplify it by assuming that the two negations in this sentence cancel each other out (i.e. *I don't not eat meat* ≈ *I eat meat*). This gives (11) (where the *or* is the non-exclusive one):

(11) I'm planning to invite John or Bill to the party.

- So the prediction is that saying (6) should implicate that I'm actually planning on inviting at least one of them!
- Putting this together with the literal meaning of (6), we predict that what an utterance of (6) will in general **mean** is *I'm not planning to invite both John and Bill, but I'm planning on inviting at least one of them.*
- And this seems correct!