



Psychic linguistics?

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Mission statement

...We believe that empirical data can help to further develop these theories, but applying well-known psycholinguistic techniques in this area is challenging for two reasons: first, **the gap between abstract theoretical constructs and testable predictions is large**; second, **the contextual nature of discourse and pragmatics is difficult to implement** with experimental paradigms that have been optimized for word- and sentence processing. Plausible communicative contexts are crucial for eliciting natural pragmatic behavior and generalizing our findings, but negatively influence the experimental control...

Apologia for experimental pragmatics

- Testing theory-critical predictions that relate to processing rather than ultimate interpretation (e.g. via RTs, eye-tracking, EEG...)
- Gathering off-line data, e.g. via TVJ, acceptability judgment...
 - Because we're not examining our native language, and therefore don't have expert intuitions
 - Because we're not the group of interest in terms of age or cognitive profile, therefore our intuitions are irrelevant
 - Or just (in)validating our own intuitions
 - Important if you don't trust my intuitions, or you think I'm confounded by believing in a theory that makes a particular prediction concerning a given stimulus – democratising the process of judgment

Limits of intuition?

- Thinking about work on ‘embedded implicature’
 - Question of whether weak scalar terms, specifically *some*, get enriched readings (+> “not all”) in embedded positions
 - Geurts and Pouscoulous (2009): inference judgment task
 - Chemla and Spector (2011): acceptability judgment task (sentence-picture matching)

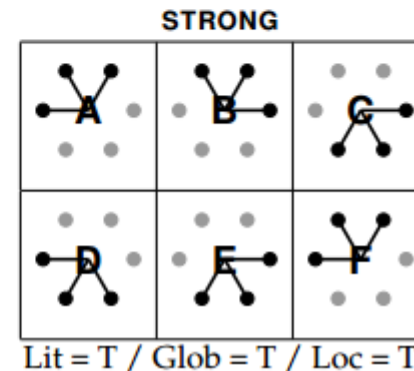
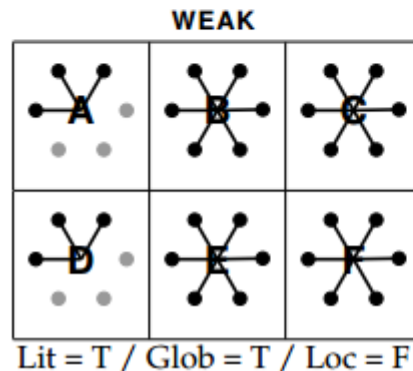
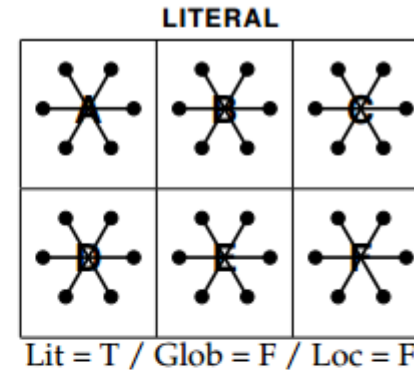
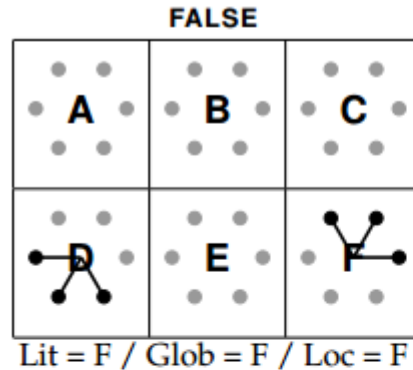
Geurts and Pouscoulous (2009) materials

	<i>target sentence</i>	<i>candidate inference</i>
\emptyset	Fred heard some of the Verdi operas.	He didn't hear all of them.
<i>all</i>	All students heard some of the Verdi operas.	None of the students heard them all.
<i>must</i>	Fred has to hear some of the Verdi operas.	He isn't allowed to hear all of them.
<i>think</i>	Betty thinks Fred heard some of the Verdi operas.	She thinks he didn't hear all of them.
<i>want</i>	Betty wants Fred to hear some of the Verdi operas.	She wants him not to hear all of them.

Table 1: Sample sentences used in Experiments 1a-b.

Chemla and Spector (2011) materials

Every letter is connected to some of its circles



Some remarks

- This was part of a (by the standards of this subfield) fairly heated exchange of papers
- Strong intuition that there is a cline of...well, *something*, in both stimulus sets
- Good reason to suspect that by asking the right question, we can elicit judgments that reflect that...
- ...and that a skilled researcher can package such a question as a plausible operationalisation of the factors of interest
- So what do we gain from actually running these studies?
 - Well, better bibliometrics, perhaps...

Building in accidental confounds?

- Is the ‘Verdi operas’ family of sentences a good testbed for embedded *some*?
 - If we have intuitions about the likely results, how do we know (other than trusting the researchers, as I do, in this case) that this isn’t a cherry-picked example that yields a good spectrum of judgments?
- What is permissible in this regard?
 - Running a pilot study to validate the method?
 - Running a pilot study but selecting items in it to go forward to the main study?
 - Introspecting about which items would work and selecting from those which (we think) would, for the main study?
 - Note: if we can predict the outcome in broad terms given the items, this is just as bad – the result is in any case that the item set is not representative of its supposed population

Fictional example: metaphors

- Studying established versus novel metaphors
 - Need to steer between two kinds of ‘out of scope’ items
 - *My lawyer is a shark*
 - cf. Marryat (1840), *Poor Jack*: “I’m what the sailors call a shark, that is, I’m a lawyer”
 - *Your Majesty is a stream of bat’s piss*



Fictional example: metaphors

- Studying established versus novel metaphors
 - Need to steer between two kinds of ‘out of scope’ items
 - Specifically, we want familiar metaphors that aren’t lexicalised, and novel metaphors that are comprehensible and ‘effective’
 - We typically end up with two lists, one containing some familiar metaphors and some lexicalised ones, and the other containing some comprehensible novel metaphors and some incomprehensible ones
 - We’re then a bit selective about which ones we mention in the main body of the paper

List A	List B
The body is a temple	The body is a shrine
My lawyer is a shark	My lawyer is a starfish
My commute is a marathon	My commute is a steeplechase
Bill is a loose cannon	Bill is a trebuchet

Wisdom of crowds?

- I've been talking about off-line measures
- Empirical question: could we guess the difference between these two lists in respect of reading time, or N400 amplitude?
 - If so, are trained linguists better at doing this, or could the general public do it (given explanation of the terms)?

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Why not run experiments?

- Certainly we should, for some things
- But are we overusing them? Or directing our resources inappropriately?
 - There are some ethical questions connected with this, although arguably they're not especially pressing given the kind of thing we do
- Or would it be scientifically unsafe to do less?



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