How at-issue is the complement of content of clause-embedded predicates (Experiment 1A)

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1 Introduction

In experiment 1A, we apply the Q/A with positive answer diagnostic to diagnose the at-issueness of contents of the complements of clause-embedded predicates.

2 Research Question

How at-issue is the contents of the complements of clause-embedded predicates?

3 Goals

There are two goals of this task. The one is to compare this diagnostic for at-issueness to others, in order to better understand the diagnostics and the underlying concept. The other is to compare the at-issueness of different contents to on another, on the various diagnostics.

4 Experiment 1A

We use JavaScript to design experiment 1A.

4.1 Stimuli

As for the six target stimuli,the contents are the contents of the complements of six clause-embedding predicates, chosen from the 20 predicates investigated by Judith Degen and Judith Tonhauser (ms) to cover different levels of at-issueness based on the asking-whether diagnostic:

- know: factive, very high mean (.82)
- discover: factive, lower mean (.8)
- think: non-factive, lower mean (.7)
- confess: non-factive, lower mean (.65)
- say: non-factive, lower mean (.4)

- be right: non-factive, very low mean (.18)

The contents are six contents chosen from the 20 contents investigated by Judith Degen and Judith Tonhauser:

- Emma studied on Saturday morning.

- Sophia got a tattoo.

- Mia drank two cocktails last night.

- Danny ate the last cupcake.

- Tony had a drink last night.

- Jackson ran 10 miles.

We are going to randomly generate six target stimuli by using JavaScript, and we are going to follow the following steps:

1. Generating the variable of six predicates in 3rd person singular, present or past tense, namely "knows", "thinks", "discovered", "confessed", "said", and "is right".

2. Creating the array of contents. We generate the variable of contents, namely "sophia", "emma", "mia", "danny", "tony", and "jackson". And we generate the long contents (content long):

    - 'sophia': "got a tattoo",
    - 'emma': "studied on Saturday morning",
    - 'mia': "drank two cocktails last night",
    - 'danny': "ate the last cupcake",
    - 'tony': "had a drink last night",
    - 'jackson': "ran 10 miles"

3. Defining the array of the speakers' names (not end with "s" or "z", and different from the names of the contents, attitude holders, and those names appear in the control stimuli)
   "Alice", "Bob", "Steven", "Daniel", "Ken", "Charlie", "Vincent", "Noah", "Frank", "Grace", "Oliver", "Isabel", "Jack", "William", "Charlotte", "Chole", "Dawn", "Clare", "Nina", "Nora", "Leo"

4. Defining the content name as proper name or pronoun (name of contents):

    - 'sophia': name: 'Sophia', pronoun: 'she',

- 'emma': name: 'Emma', pronoun: 'she',
- 'mia': name: 'Mia', pronoun: 'she',
- 'danny': name: 'Danny', pronoun: 'he',
- 'tony': name: 'Tony', pronoun: 'he',
- 'jackson': name: 'Jackson', pronoun: 'he'

5. Predifining an attitude holder name for each content, opposite gender of content name (ahs):

- 'sophia': name: 'Patrick', pronoun: 'He',
- 'emma': name: 'Mike', pronoun: 'He',
- 'mia': name: 'David', pronoun: 'He',
- 'danny': name: 'Linda', pronoun: 'She',
- 'tony': name: 'Jessica', pronoun: 'She',
- 'jackson': name: 'Patricia', pronoun: 'She'

6. Generating questions for each content (questions for both the main clause (mc) and the content of complements (cc)):

- 'sophia': 'mc' : "What about Patrick? Why is he angry?",
  cc: "What about Sophia? What did she do?",
- 'emma': 'mc' : "What about Mike? Why is he annoyed?",
  cc: "What about Emma? What did she do?",
- 'mia': 'mc' : "What about David? Why is he smirking?",
  cc: "What about Mia? What did she do?",
- 'danny': 'mc' : "What about Linda? Why is she pouting?",
  cc: "What about Danny? What did he do?",
- 'tony': 'mc' : "What about Jessica? Why is she upset?",
  cc: "What about Tony? What did he do?",
- 'jackson': 'mc' : "What about Patricia? Why is she proud?",
  cc: "What about Jackson? What did he do?"

7. Generating a function to get random predicate and remove it from array.

8. Generating a function to get random content and remove it from array.

9. Generating a function to get the mc or cc question for a content.

10. Generating a function to make an item (target stimuli):

- get a content and a predicate
- get a question for that content
- get long content from the content and the names of the content
- get an attitude holder and the corresponding pronoun

- initialize empty array of items
- loop to create an array of items: one item for each predicate, half with mc questions, and half with cc questions. Whether the pronoun or the proper name are used in the main clause and the cc depend on the type of item.
- Generating the questions that we are going to ask our participants: How natural is item.speakers2's answer to item.speaker1's question? To get the names of speaker 1 and speaker 2, we first shuffle the array of names, pick one from the array, and shift it.

11. Generating four control stimuli

- Mary: Do these muffins have blueberries in them?
  John: Linda claimed that she likes drinking coffee.
  How natural is John's answer to Mary's question?
- Jennifer: What about Ann? Where did she go?
  Robert: Ann, who loves travelling, went to London.
  How natural is Robert's answer to Jennifer's question?
- Michael: What about Samantha? What did she buy?
  Elizabeth: Samantha, who is really into fashion, bought a new hat.
  How natural is Elizabeth's answer to Michael's question?
- Richard: What about John's kids? Are they in the garage?
  Susan: Linda claimed that John's kids are good at math.
  How natural is Susan's answer to Richard's question?

4.2   Participants

We hire our participants from Prolific. They should be based in the United States, and English should be their first language. We require that participants have at least 99% tasks approved, and have done at least 100 tasks.

4.3   Procedure

In experiment 1A, our participants will read 10 question-answer pairs, including six target stimuli and four control stimuli. We ask them to rate how natural the second speakers' answers to the first speakers' questions are. They will give their response on a slider from 'totally unnatural' to 'totally natural'. In the end, we will ask our participants some optional demographic questions (age, gender, native language). This study can only be done on tablet or desktop (not mobile). It will take about three minutes to complete.