

At-issue / Not-at-issue pilots

The goal of these pilots was to identify suitable response paradigms for exploring the (not-)at-issue status of various types of implications.

Pilot 1: Responses: No, not p. (AI) / No, and not p. (NAI)

Stimuli / implications:

1. **Main clause:** Mary brought a fruit salad. No, (and) she didn't bring a fruit salad
2. **Main clause:** Sue, a teacher, works even on Sundays. No, (and) she doesn't work on Sundays
3. **Nominal appositive:** Phillip, a yoga teacher, came wearing sweat pants. No, (and) he's not a yoga teacher.
4. **NRRC:** Jack, who works for a bank, is giving out investment tips. No, (and) he doesn't work for a bank.
5. **Complement of "glad":** Raul is glad that he left his wife at home. No, (and) he didn't leave her at home.
6. **Complement of "annoyed":** Tamara is annoyed that the pizza is gone. No, (and) it's not gone.
7. **Complement of "discover":** Paula discovered that her husband is cheating. No, (and) he's not cheating.
8. **Presupposition of "again":** Carl brought his dog again. No, (and) he didn't bring it before.
9. **Main clause of "discover":** Andrew discovered that his neighbor is getting a divorce. No, (and) he didn't discover that.
10. **Main clause of "glad":** Eve is glad that her husband didn't come to the party. No, (and) she's not glad.
11. **Main clause of "annoyed":** Susi is annoyed that nobody is dancing. No, (and) she is not annoyed.
12. **Scalar implicature:** The soup is warm. No, (and) it is hot.

Instructions: In this experiment, we ask you to imagine that you are at a party. You walk into the kitchen and overhear Debby, the party host, say something to another guest. We ask you to choose the response this other guest gives to Debby: You will be given two options and are asked to choose one of the two options.

Please don't think too long about your choice and just answer based on your first impression.

There are a total of 12 sentences for which you will choose a response.

Participants: 40 Turkers participated, removed 5 for giving NAI responses to main clause content, removed 9 for only giving AI responses, 29 Turkers remain

Results:

14/24	nominal appositive	58%
13/24	ps of again	54%
12 of 24	NRRC	50%
11 of 24	complement of "glad"	46%
9 of 24	complement of "annoyed"	38%
7 of 24	main clause "discover"	29%
5 of 24	complement of "discover"	21%
3 of 24	main clause of "glad"	13%
1 of 24	main clause of "annoyed"	4%
0 of 24	implicature	0%

Discussion: The relative not-at-issueness of the contents makes a lot of sense, but the not-at-issue status is not very clear even for nominal appositives (58%). The next pilot tries to make the NAI response more clearly NAI by adding “by the way”.

Pilot 2: Responses: No, not p. (AI) / No, and, by the way, not p. (NAI)

Stimuli / implications: Same as in pilot 1, except that the second main clause stimulus was “Sue works even on Sundays” instead of “Sue, a teacher, works even on Sundays.”

Instructions: In this experiment, we ask you to imagine that you are at a party. You walk into the kitchen and overhear Debby, the party host, say something to another guest. The other guest always denies Debby's utterance. We ask you to choose the denial response this other guest gives to Debby: You will be given two options and are asked to choose the option that sounds best to you.

There are a total of 12 sentences for which you will choose a response.

Participants: 40 Turkers participated, removed 6 for only giving AI responses, removed 5 for giving NAI responses to main clause, removed 1 for skipping an answer, 28 Turkers remain

Results:

20 of 28	71%	Nominal appositive
16 of 28	57%	again
13 of 28	46%	Complement of "glad", NRRC
10 of 28	36%	Complement of "annoyed"
7 of 28	25%	Main clause of "discovered, complement of "discovered"
6 of 28	21%	Main clause of "glad"
5 of 28	18%	Main clause of "annoyed"
1 of 28	4%	Implicature

Discussion: Adding “by the way” to the NAI response has led to higher NAI responses for nominal appositives. The relative not-at-issueness of the various contents still makes a lot of sense. The goal of pilot 3 was to make the AI response more clearly AI by adding “that’s not true”.

Pilot 3: Responses: No, that’s not true, not p. (AI) / No, and, by the way, not p. (NAI)

Stimuli: As in pilot 1, except that responses are now “No, (and, by the way,) she is not annoyed about that” instead of “No, (and) she is not annoyed.” And “No, (and, by the way,) she’s not glad about that” instead of “No, (and) she’s not glad.”

Instructions: As in pilot 2.

20 participants were run with the AI response presented before the NAI response, and 20 participants were run with the responses in the reverse order.

Participants AI-NAI: 20 Turkers participated, 3 removed for only giving AI responses, 3 removed for responding NAI to main clause, 14 Turkers remain.

Participants NAI-AI: 20 Turkers participated, 3 removed for only giving AI responses, 5 removed for responding NAI to main clauses, 12 Turkers remain

Results AI-NAI:

12 of 14	86%	Nominal appositive
9 of 14	64%	again
8 of 14	57%	NRRC
6 of 14	43%	Complement of "glad", complement of "annoyed"
3 of 12	25%	Main clause "annoyed"
2 of 14	14%	Main clause "discover", complement of "discover"
1 of 14	7%	Main clause of "glad"
0 of 14	0%	Implicature

Results NAI-AI:

9 of 12	75%	NRRC
5 of 12	42%	Nominal appositive, complement of "annoyed"
4 of 12	33%	Complement of "glad", complement of "discover"
3 of 11	27%	Main clause of "annoyed"
3 of 12	25%	Main clause of "glad", again
2 of 12	17%	Implicature, main clause of "discover"

Discussion: Presenting the AI response before the NAI response gives clearer results, than the NAI-AI response pattern. The NAI responses are again a bit higher than in pilot

2. The goal of the pilot 4 was to identify whether positive responses would lead to better results.

Pilot 4: Responses: I agree with you: p (AI) / Right – and, yeah, p (NAI)

Stimuli / implications:

1. **Main clause:** Mary brought a delicious fruit salad. I agree with you: she brought a delicious fruit salad. / Right – and, yeah, she brought a delicious fruit salad.
2. **Main clause:** Sue, a teacher, works even on Sundays. I agree with you: she works even on Sundays. / Right – and, yeah, she works even on Sundays.
3. **Nominal appositive:** Phillip, a yoga teacher, is wearing an inappropriate outfit. I agree with you: he is a yoga teacher. / Right – and, yeah, he is a yoga teacher.
4. **NRRC:** Jack, who works for an untrustworthy bank, is giving out investment tips. I agree with you: he works for an untrustworthy bank. / Right – and, yeah, he works for an untrustworthy bank.
5. **Complement of “glad”:** Raul is glad that he left his wife at home. I agree with you: Raul left her at home. / Right – and, yeah, Raul left her at home.
6. **Complement of “annoyed”:** Tamara is annoyed that the pizza is gone. I agree with you: the pizza is gone. / Right – and, yeah, the pizza is gone.
7. **Complement of “discover”:** Paula discovered that her husband is cheating. I agree with you: her husband is cheating. / Right – and, yeah, her husband is cheating.
8. **Presupposition of “again”:** Carl brought his dog again. I agree with you: Carl has brought the dog before. / Right – and, yeah, Carl has brought the dog before.
9. **Main clause of “discover”:** Andrew discovered that his neighbor is getting a divorce. I agree with you: Andrew discovered that. / Right – and, yeah, Andrew discovered that.
10. **Main clause of “glad”:** Eve is glad that her husband didn't come to the party. I agree with you: Eve is glad about that. / Right – and, yeah, Eve is glad about that.
11. **Main clause of “annoyed”:** Susi is annoyed that nobody is dancing. I agree with you: she is annoyed about that. / Right – and, yeah, she is annoyed about that.
12. **Scalar implicature:** The soup is warm. I agree with you: it isn't hot. / Right – and, yeah, it isn't hot.

Instructions: Imagine you're at a party. You walk into the kitchen and overhear Debby, the party host, say something.

You agree with what Debby said!

We give you two options for expressing your agreement. **Please consider both responses and choose the one that sounds best to you.**

There are 12 statements for which you will choose a response. Please make sure you don't skip one.

Participants: 40 Turkers, 2 removed for giving only AI responses, 13 removed for giving NAI responses to main clause content, 25 Turkers remain.

Results:

18 of 25	72%	Nominal appositive
17 of 25	68%	Complement of annoyed
15 of 25	60%	Again
14 of 25	56%	Complement of glad
13 of 25	52%	NRRC, Complement of discover
8 of 25	32%	Main clause discover
6 of 25	24%	Implicature
5 of 25	20%	Main clause annoyed
4 of 25	16%	Main clause of glad

Discussion: Positive responses do not yield a clearer division between AI and NAI content. To the contrary, it seems.

Overview of the NAI responses in the 4 pilots:

Content	1: No, (and) not p	2: No, (and, by the way,) not p	3a: No, (that's not true / and, by the way) not p. AI-NAI	3b: as in 3a NAI-AI	4: I agree with you: p / Right – and, yeah, p
No NAI resp.	10	6	3/20	3/20	2
MC NAI resp.	6	5	3/20	5/20	13
Nom App	58%	71%	86%	42%	72%
NRRC	50%	46%	57%	75%	52%
again	54%	57%	64%	25%	60%
C glad	46%	46%	43%	33%	56%
C annoyed	38%	36%	43%	42%	68%
C discover	21%	25%	14%	33%	52%
MC discover	29%	25%	14%	17%	32%
MC glad	13%	21%	7%	25%	16%
MC annoyed	4%	18%	25%	27%	20%
Implicature	0%	4%	0%	17%	24%

Comparison to other (N)AI studies:

- **Xue & Onea 2011:** German, forced choice, NAI: “Yes, and not p” / “Yes, but not p”, AI: “No, not p” Responses: know (28% NAI, 72% AI), find out (50% NAI, 50% AI), too (75% NAI, 25% AI), again (78% NAI, 22% AI)
==> Maximum NAI response (for too and again) at around 75-58%
- **Amaral, Cummins & Katsos 2011:** English, acceptability (1-5) of response “No,

AI” / “No, NAI” to polar question with trigger; Responses for AI/NAI content: continue (3.97/2.38), stop (3.42/2.45), only (4.48/3.08), again (4.13/2.87), comparative (4.37/2.6)

==> Responding with NAI content is not at bottom of acceptability scale (1)

- [Cummins, Amaral & Katsos 2012: English, acceptability (1-5) of response “No, AI” / “No, NAI” to polar question with trigger
Responses for AI/NAI content: continue, stop, only (erroneously omitted in paper), other results as in 2011 paper]

- **Cummins, Amaral & Katsos 2013:** English, acceptability (1-5) of response “Yes, AI” / “Yes, although not NAI” / “No, not AI” / “No, because not NAI” to polar question with trigger

Responses for “Yes, AI” and “No, not AI” are all above 4 (though not all at 5); responses for “Yes, although not NAI” are between 1.3 (only) and 2.95 (too), responses for “No, because not NAI” are between 2.35 (too, comparative) and 3.55 (regret)

==> Responding with NAI content is not at bottom of scale, even with “Yes, although not NAI”

- **Amaral & Cummins 2015:** Spanish, acceptability (1-5) of response “Yes, AI” / “Yes, although not NAI” / “No, not AI” / “No, because not NAI” to polar question with trigger

Responses for “Yes, AI” and “No, not AI” are generally higher than the other two, but more around 4 than at ceiling, overall 3.7 and 3.84; responses to “Yes, although not NAI” are between 1.2 (stop) and 2.64 (better than), overall 2.14; responses to “No, because not NAI” are between 1.88 (tampoco) and 3.6 (still), overall 2.9.

==> Responding with NAI content is not at bottom of scale

- **Syrett & Koev 2014 (Exp 2):** English, stimuli with nominal appositive or NRRC in medial or final position, forced choice between “No, not app” (NAI) and “No, not main clause” (AI).

NAI responses: 18% (nom app medial), 25% (nom app final), 21% (NRRC medial), 35% (NRRC final)

==> Main clause responses are not chosen at 100% but at 81%-64%

- **Castroviejo, Mayol & Smith 2013:** English, Spanish, Catalan; acceptability (no range indicated) of response “No, that’s not true, not p”, “No, not p”, “No, that’s not true, q”, “No, q” to an assertion with the trigger

Due to cryptic nature of short paper the responses are hard to understand, but it is not the case that the acceptability of refutations of a lexical presupposition

(again), the cleft, the appositive, or the referential expression are near the end of the scale. (That, however, is the case for an emotive expressive.)

- **Destrue et al 2015:**

- Section 3 (German): forced choice, “Yes, and not p”, “Yes, but not p”, “No, not p”

Responses: relevance (97% NAI), scalar (92% AI), NRRC (89% NAI), appositives (90% NAI)

==> Here, AI and NAI responses are very close to ceiling

- Section 5 (English): forced choice, “Yes, and not p”, “Yes, but not p”, “No, not p”

Responses (can only surmise from text because Fig 1 not produced with good grey-scale distinctions):

About 250/350 (71%) AI responses to canonical (Phillip bought his sister a necklace)

About 620/720 (86%) “Yes, and/but” responses to cleft or only

==> AI and NAI responses not close to ceiling

This comparison reveals only one study that gets AI/NAI responses close to ceiling/bottom, namely Xue & Onea as reported in Destrue et al (for relevance implicature, scalar implicature, NRRC, nominal appositive

Pilot 5: Really? Judging misunderstanding

Stimuli / implications:

1. **Debby:** *Mary brought a fruit salad.*
Harry: *Really?*
Debby: *Yes, she really brought a fruit salad.*
2. **Debby:** *Jack, who works for a bank, is giving out investment tips.*
Harry: *Really?*
Debby: *Yes, he really works for a bank.*
3. **Debby:** *That idiot Larry just fell into the pool.*
Harry: *Really?*
Debby: *Yes, he really is an idiot.*
4. **Debby:** *Andrew discovered that his brother is getting a divorce.*
Harry: *Really?*
Debby: *Yes, he really discovered that.*
5. **Debby:** *Sue, a teacher, runs three times a week.*
Harry: *Really?*
Debby: *Yes, she really runs three times a week.*

6. **Debby:** *Raul is glad that he left his wife at home.*
Harry: *Really?*
Debby: *Yes, he really left her at home.*
7. **Debby:** *Phillip, a yoga teacher, is wearing jeans.*
Harry: *Really?*
Debby: *Yes, he really is a yoga teacher.*
8. **Debby:** *Tamara is annoyed that the pizza is gone.*
Harry: *Really?*
Debby: *Yes, the pizza really is gone.*
9. **Debby:** *Eve is glad that her husband didn't come to the party.*
Harry: *Really?*
Debby: *Yes, she really is glad about that.*
10. **Debby:** *Carl brought his dog again.*
Harry: *Really?*
Debby: *Yes, he really brought it to the last party already.*
11. **Debby:** *Paula discovered that her husband is cheating.*
Harry: *Really?*
Debby: *Yes, he really is cheating.*
12. **Debby:** *Susi is annoyed that nobody is dancing.*
Harry: *Really?*
Debby: *Yes, she really is annoyed about that.*

Instructions: Imagine you are at a party. You walk into the kitchen and overhear a small dialogue between Debby, the party host, and another guest, Harry. Here's an example:

Debby: *My dog is playing in the garden.*
Harry: *Really?*

Debby now responds to Harry's "Really?" question. If she responds with "Yes, he really is playing in the garden", it sounds like she correctly understood his question. But if she responds "Yes, I really have a dog", it sounds like she misunderstood his question.

We ask you to read 12 dialogues between Debby and Harry. In each dialogue, Harry asks "Really?" and Debby responds to Harry's "Really?" question. We ask you to identify, for each dialogue, whether Debby misunderstood Harry's "Really?" question or not.

To make sure you are paying attention, we have included some dialogues for which we know the right answer. If you read the dialogues carefully, you will definitely get those right.

Participants: 40 Turkers, 2 removed for giving only AI responses, 10 removed for giving NAI responses to main clause (8 gave NAI responses to Q1, 9 gave NAI response to Q5), 28 Turkers remain

Results:

27 of 28	96%	nominal app
23 of 28	82%	expressive, complement of annoyed
21 of 28	75%	NRRC, complement of glad
15 of 28	54%	main clause discover
14 of 28	50%	again
8 of 28	29%	complement of discover
6 of 28	21%	main clause of annoyed
1 of 28	4%	main clause of glad

Pilot 6: Are you sure? Judging whether the question was answered

Stimuli / implications:

1. **Debby:** *Mary brought a fruit salad.*
Harry: *Are you sure?*
Debby: *Yes, I am sure that she brought a fruit salad.*
2. **Debby:** *Jack, who works for a bank, is giving out investment tips.*
Harry: *Are you sure?*
Debby: *Yes, I am sure that he works for a bank.*
3. **Debby:** *That idiot Larry went to the store to get more beer.*
Harry: *Are you sure?*
Debby: *Yes, I am sure that he is an idiot.*
4. **Debby:** *Andrew discovered that his brother is getting a divorce.*
Harry: *Are you sure?*
Debby: *Yes, I am sure that he discovered that.*
5. **Debby:** *Sue, a teacher, runs three times a week.*
Harry: *Are you sure?*
Debby: *Yes, I am sure that she runs three times a week.*
6. **Debby:** *Sam was stupid to post his social security number on Facebook.*
Harry: *Are you sure?*
Debby: *Yes, I am sure that he posted the number on Facebook.*
7. **Debby:** *Raul is glad that he left his wife at home.*
Harry: *Are you sure?*
Debby: *Yes, I am sure that he left her at home.*
8. **Debby:** *Phillip, a yoga teacher, is wearing jeans.*
Harry: *Are you sure?*
Debby: *Yes, I am sure that he is a yoga teacher.*
9. **Debby:** *Tamara is annoyed that the pizza is gone.*
Harry: *Are you sure?*
Debby: *Yes, I am sure that the pizza is gone.*
10. **Debby:** *Rose was smart to learn Spanish before moving to Spain.*
Harry: *Are you sure?*
Debby: *Yes, I am sure that she learned Spanish before her move.*

11. **Debby:** *Eve is glad that her husband didn't come to the party.*
Harry: *Are you sure?*
Debby: *Yes, I am sure that she is glad about that.*
12. **Debby:** *Carl brought his dog again.*
Harry: *Are you sure?*
Debby: *Yes, I am sure that he brought it to the last party.*
13. **Debby:** *Paula discovered that her husband is cheating.*
Harry: *Are you sure?*
Debby: *Yes, I am sure that he is cheating.*
14. **Debby:** *Susi is annoyed that nobody is dancing.*
Harry: *Are you sure?*
Debby: *Yes, I am sure that she is annoyed about that.*

In this pilot, I added a box for Turkers to (optionally) leave comments.

Instructions: Imagine you are at a party. You walk into the kitchen and overhear a small dialogue between Debby, the party host, and another guest, Harry. Here's an example:

Debby: *My dog is playing in the garden.*
Harry: *Are you sure?*

Debby now responds to Harry's "*Are you sure?*" question. If she responds with "*Yes, I am sure that he is playing in the garden*", it sounds like she answered Harry's question. But if she responds "*Yes, I am sure that I have a dog*", it sounds like she didn't answer Harry's question.

We ask you to read 14 dialogues between Debby and Harry. In each dialogue, Harry asks "*Are you sure?*" and Debby responds to Harry's question. We ask you to identify, for each dialogue, whether Debby answered Harry's question, or not.

To make sure you are paying attention, we have included some dialogues for which we know the right answer. If you read the dialogues carefully, you will definitely get those right.

Question to participants:

Did Debby answer Harry's question?

Yes

No

Participants: 40 Turkers participated, 0 gave only AI responses, 0 gave NAI responses to Q1 (main clause, no appositive), 0 gave NAI response to Q5 (main clause with nom app); data from all 40 Turkers

Results:

39 out of 40	98%	expressive, sentence-medial nominal appositive
37 out of 40	93%	sentence-medial NRRC
31 out of 40	78%	complement of annoyed
29 out of 40	73%	complement of glad
25 out of 40	63%	again
19 out of 40	48%	main clause of discover
18 out of 40	45%	complement of discover
13 out of 40	33%	VP implication of smart
9 out of 40	23%	VP implication of stupid
3 out of 40	8%	main clause of annoyed, main clause of glad
0 out of 40	0%	main clauses

Pilot 7: What does “no” mean?

Stimuli:

1. Dialogue #1
Debby: *Did Mary bring a fruit salad?*
Jane: *No.*
 Is Jane saying that Mary did not bring a fruit salad?
2. Dialogue #2
Debby: *Is Jack, who works for a bank, giving out investment tips?*
Jane: *No.*
 Is Jane saying that Jack does not work for a bank?
3. Dialogue #3
Debby: *Did Larry stop dancing?*
Jane: *No.*
 Is Jane saying that Larry has not been dancing?
4. Dialogue #4
Debby: *Did Paula discover that her husband is cheating?*
Jane: *No.*
 Is Jane saying that Paula's husband is not cheating?
5. Dialogue #5
Debby: *Does Sue, a teacher, run three times a week?*
Jane: *No.*
 Is Jane saying that Sue does not run three times a week?
6. Dialogue #6
Debby: *Was Sam stupid to post his social security number on Facebook?*
Jane: *No.*
 Is Jane saying that Sam did not post his social security number on Facebook?
7. Dialogue #7
Debby: *Is Phillip, a yoga teacher, wearing sweat pants?*
Jane: *No.*
 Is Jane saying that Phillip is not a yoga teacher?

8. Dialogue #8
Debby: *Did Eve dance terribly?*
Jane: *No.*
Is Jane saying that Eve did not dance?
9. Dialogue #9
Debby: *Is Tamara annoyed that the pizza is gone?*
Jane: *No.*
Is Jane saying that the pizza is not gone?
10. Dialogue #10
Debby: *Is Carl getting drunk again?*
Jane: *No.*
Is Jane saying that Carl has not gotten drunk before?
11. Dialogue #11
Debby: *Is Susan flirting with her neighbor?*
Jane: *No.*
Is Jane saying that Susan does not have a neighbor?
12. Dialogue #12
Debby: *Is the soup warm?*
Jane: *No.*
Is Jane saying that the soup is hot?
13. Optional: Do you have any comments? We appreciate them!

Instructions: Imagine you are at a party. You walk into the kitchen and overhear Debby, the party host, ask a question. Her friend Jane responds "*No*", as in this example:

Debby: *Does Frank's brother own a dog?*
Jane: *No.*

We ask you to judge what Jane's "no" means. For example, we might ask you to judge whether Jane is saying that Frank's brother does not own a dog. You would select "Yes" since, presumably, that **is** what Jane is saying.

Or we might ask you to judge whether Jane is saying that Frank does not have a brother. You would select "No" since, presumably, that is **not** what Jane is saying.

There are 12 dialogues between Debby and Jane.

To make sure you are paying attention, we have included some dialogues for which we know the right answer. If you read the dialogues carefully, you will definitely get those right.

Participants: 30

- Every Turker gave between 7 and 10 not-at-issue responses ("no")
- 1 Turker gave a not-at-issue response to Q1 (main clause1)
- 3 Turkers gave a not-at-issue response to Q5 (main clause2)

- 1 Turker skipped last question

Results over all participants:

Results (out of 30, except for scalar impl which is out of 29)

30	100%	possNP
		main clause of manner adverb, pre-state of stop, NRRC, C of
29	97%	annoyed
28	97%	scalar implicature
27	90%	again, VP of stupid
21	70%	C of discover
3	10%	main clause2
1	3%	main clause 1

Results with Turker who got both main clauses wrong excluded:

Results (out of 29, except for scalar implicature which is out of 28)

29	100%	NRRC, nomapp, possNP
28	97%	pre-state of stop, manner main clause, C of annoyed
28	100%	scalar implicature
27	93%	VP stupid
26	90%	again
20	69%	C of discover
2	7%	main clause2
0	0%	main clause1

Pilot 8: “What is Debby wondering about?”

Stimuli:

- Question #1
Debby: *Did Mary bring a fruit salad?*

Is Debby wondering whether Mary brought a fruit salad?
- Question #2
Debby: *Is Jack, who works for a bank, giving out investment tips?*

Is Debby wondering whether Jack works for a bank?
- Question #3
Debby: *Did Larry stop dancing?*

Is Debby wondering whether Larry has been dancing?

- Question #4

Debby: *Did Paula discover that her husband is cheating?*

Is Debby wondering whether Paula's husband is cheating?

- Question #5

Debby: *Does Sue, a teacher, run three times a week?*

Is Debby wondering whether Sue runs three times a week?

- Question #6

Debby: *Was Sam stupid to post his social security number on Facebook?*

Is Debby wondering whether Sam posted his social security number on Facebook?

- Question #7

Debby: *Is Phillip, a yoga teacher, wearing sweat pants?*

Is Debby wondering whether Phillip is a yoga teacher?

- Question #8

Debby: *Did Eve dance terribly?*

Is Debby wondering whether Eve danced?

- Question #9

Debby: *Is Tamara annoyed that the pizza is gone?*

Is Debby wondering whether the pizza is gone?

- Question #10

Debby: *Is Carl getting drunk again?*

Is Debby wondering whether Carl got drunk before?

- Question #11

Debby: *Is Susan flirting with her neighbor?*

Is Debby wondering whether Susan has a neighbor?

- Question #12

Debby: *Is Raul glad that he left his wife at home?*

Is Debby wondering whether Raul left his wife at home?

- Optional: Do you have any comments? We appreciate them!

Instructions: Imagine you are at a party. You walk into the kitchen and overhear Debby, the party host, ask a question. Here's an example:

Debby: *Does Frank's brother own a dog?*

We ask you to judge what Debby is wondering about. For example, we might ask you if Debby is wondering whether Frank's brother owns a dog. (You answer

"Yes" or "No".) Or we might ask you if Debby is wondering whether Frank has a brother. (Again, you answer "Yes" or "No".)

There are 12 questions we ask you to judge.

To make sure you are paying attention, we have included some questions for which we know the right answer. If you read the questions carefully, you will definitely get those right.

Participants: 30 Turkers

- None gave only AI or only NAI responses
- 2 gave NAI response to main clause1 (Q1)
- 0 gave NAI response to main clause2 (Q5)

Results (out of 30, except for "glad", which is out of 29):

	30	100%	possNP
	29	97%	c of annoyed
	28	93%	NRRC
27 out of 29		93%	c of glad
27 out of 30		90%	nomapp, main clause with manner adverb
	26	87%	again, VP of stupid
	24	80%	stop
	23	77%	c of discover
	2	7%	main clause1
	0	0%	main clause2

Results (out of 28, except for c of glad which is out of 27)

	28	100%	possNP
	27	96%	NRRC, c of annoyed
26 out of 27		96%	c of glad
26 out of 28		93%	nomapp
	25	89%	main clause w manner adv, again
	24	86%	VP of stupid
	23	82%	stop
	21	75%	c of discover
	0	0%	main clause1, main clause2

Comparison of NAI and projection paradigm results with questions:

	Projection: Is Debby sure about p?	NAI 1: What does “no” mean?	NAI 2: Is Debby wondering about p?	NAI 3: Are you sure?
possNP	77%	100%	100%	
C of annoyed	93%	97%	97%	78%
NRRC	93%	97%	93%	93%
C of glad			93%	73%
NomApp	93%	100%	90%	98%
Main clause w manner	57%	97%	90%	
again	97%	90%	87%	63%
VP of stupid	87%	90%	87%	23%
stop	77%	97%	80%	
C of discover	73%	70%	77%	45%
main clause1	97% ass	3%	7%	0%
main clause2	3% ques	10%	0%	0%

Pilot 9: “What is Debby asking about?”

Stimuli:

- Question #1
Debby: *Did Mary bring a fruit salad?*

Is Debby asking whether Mary brought a fruit salad?
- Question #2
Debby: *Is Jack, who works for a bank, giving out investment tips?*

Is Debby asking whether Jack works for a bank?
- Question #3
Debby: *Did Larry stop dancing?*

Is Debby asking whether Larry has been dancing?
- Question #4
Debby: *Did Paula discover that her husband is cheating?*

Is Debby asking whether Paula's husband is cheating?
- Question #5
Debby: *Does Sue, a teacher, run three times a week?*

Is Debby asking whether Sue runs three times a week?
- Question #6
Debby: *Was Sam stupid to post his social security number on Facebook?*

- Is Debby asking whether Sam posted his social security number on Facebook?
- Question #7

Debby: *Is Phillip, a yoga teacher, wearing sweat pants?*

Is Debby asking whether Phillip is a yoga teacher?

- Question #8

Debby: *Did Eve dance terribly?*

Is Debby asking whether Eve danced?

- Question #9

Debby: *Is Tamara annoyed that the pizza is gone?*

Is Debby asking whether the pizza is gone?

- Question #10

Debby: *Is Carl getting drunk again?*

Is Debby asking whether Carl got drunk at a previous party?

- Question #11

Debby: *Is Susan flirting with her neighbor?*

Is Debby asking whether Susan has a neighbor?

- Question #12

Debby: *Is Raul glad that he left his wife at home?*

Is Debby asking whether Raul left his wife at home?

- Question #13

Debby: *Was it Jack who brought a coat?*

Is Debby asking whether Jack is the only person who brought a coat?

- Optional: Do you have any comments? We appreciate them!

Instructions: Imagine you are at a party. You walk into the kitchen and overhear Debby, the party host, ask a question. Here's an example:

Debby: *Does Frank's brother own a dog?*

Your job is to judge what Debby is asking about. For example: Is Debby asking whether Frank's brother owns a dog? (You answer "Yes" or "No".) Or is Debby asking whether Frank has a brother? (Again, you answer "Yes" or "No".)

There are 13 questions we ask you to judge.

To make sure you are paying attention, we have included some questions for which we know the right answer. If you read the questions carefully, you will definitely get those right.

Participants: 30 Turkers

- Everybody gave between 6 and 11 “no” responses (out of 13 possible), i.e. nobody gave only AI or only NAI responses.
- Nobody gave AI response to main clause 1 (Q1) or main clause 2 (Q5)

Results:

Results (out of 30, except for cleft which is out of 29):

30	100%	NRRC, nomapp
29	97%	possNP, complement of glad
28	93%	main clause with manner adverb, complement of annoyed, again
26	87%	stop, complement of discover
25	83%	VP of stupid
15	52%	cleft
0	0%	main clause1, main clause2

Comparison of projection results with results of this AI pilot:

	Projection: Is Debby sure about p?	THIS PILOT	NAI 1: What does “no” mean?	NAI 2: Is Debby wondering about p?	NAI 3: Are you sure?
possNP	77%	97%	100%	100%	
C of annoyed	93%	93%	97%	97%	78%
NRRC	93%	100%	97%	93%	93%
C of glad		97%		93%	73%
NomApp	93%	100%	100%	90%	98%
Main clause w manner	57%	93%	97%	90%	
again	97%	93%	90%	87%	63%
VP of stupid	87%	83%	90%	87%	23%
stop	77%	87%	97%	80%	
C of discover	73%	87%	70%	77%	45%
main clause1	97% ass	0%	3%	7%	0%
main clause2	3% ques	0%	10%	0%	0%