Language and Mind
HONR 218L

Class #6
Yes-no questions
Tag-questions

Yes-no Questions
Hypothesis Creating and Testing

1a) Ian will stay at his brother’s house
1b) Will Ian stay at his brother’s house?
1c) *Stay Ian will at his brother’s house?

The auxiliary verb (will, can) moves to form a question
The main verb (stay) apparently cannot move to form a question
(1 exception: main verb be)

5a) Ian ran a 4 minute mile
5b) Did Ian run a 4 minute mile?
5c) *Ran Ian a 4 minute mile?

Main verbs (run) do not move even if there is no auxiliary in the sentence.
In that case, we insert a dummy auxiliary (do) entirely for the purpose of moving to indicate a yes-no question
The dummy auxiliary (do) gets marked for tense (past tense)
The main verb (run) gets past tense taken away
11a) Ian is picking up a friend who is going to Chicago with him.
11b) Is Ian picking up a friend who is going to Chicago with him?
11c) *Is Ian is picking up a friend who going to Chicago with him?

Not just any auxiliary verb can move to form a yes-no question. It has to be the first auxiliary verb in the sentence.

13a) Ian picked up some pebbles that were lying on the beach.
13b) *Were Ian pick/picked up some pebbles that lying on the beach?
13c) Did Ian pick up some pebbles that were lying on the beach.

It is not the first auxiliary verb in the sentence that moves. Rather, you find the first “verbal complex” in the sentence, and then...
If it has an auxiliary verb, move it
If it does not, insert do and move it

15a) The man who is watching the Simpsons is laughing.
15b) *Is the man who watching the Simpsons is laughing?
15c) Is the man who is watching the Simpsons laughing?

The auxiliary verb that moves is not the one from the first “verbal complex” in the sentence. Rather, it is the one from the verbal complex of the main clause of the sentence.

Non-structure-dependent Hypothesis
(rule stated in terms of the linear position of words in the sentence)

a) Find the first verbal complex in the sentence, and...
b) ...if there is an auxiliary verb, invert it with the subject
c) ...if there is not an auxiliary verb, add the appropriate (tensed) form of “do”, invert it with the subject, and remove the tense from the main verb.
(Main verb “be” is an exception to part c), as it is allowed to invert)
Structure-dependent Hypothesis
(rule stated in terms of structural positions in the sentence)

a) Find the verbal complex of the main clause, and...
b) ...if there is an auxiliary verb, invert it with the subject
c) ...if there is not an auxiliary verb, add the appropriate (tensed) form of “do”, invert it with the subject, and remove the tense from the main verb.
(Main verb “be” is an exception to part c), as it is allowed to invert)

17a) Gilchrist has been playing well this year.
17b) Has Gilchrist been playing well this year?
17c) *Been Gilchrist has playing well this year?
17d) * Has been Gilchrist playing well this year?

There seems to still be a role for linearity to play:
It is not just any auxiliary from the verbal complex of the main clause of the sentence that moves. Rather, it has to be the first auxiliary from the verbal complex of the main clause

Revised Structure-dependent Hypothesis
(rule stated in terms of structural positions in the sentence)

a) Find the verbal complex of the main clause, and...
b) ...if there are any auxiliary verbs, invert the first one with the subject
c) ...if there are no auxiliary verbs, add the appropriate (tensed) form of “do”, invert it with the subject, and remove the tense from the main verb.
(Main verb “be” is an exception to part c), as it is allowed to invert)

Yes-no Questions
Is there a simpler way to state this rule?
Yes.
**Simplified Hypothesis for Yes-No Questions**

Move whatever is sitting in the Infl position of the main clause to the beginning of the sentence, and if there isn’t anything sitting there, put something there (do) and then move it.

**Tag Questions**

**Tag Questions: Auxiliary**

1. Ian can stay at his brother’s house.
2. Ian is staying at his brother’s house.
3. Ian will stay at his brother’s house.

16. Ian had been staying at his brother’s house.
17. Ian is wondering whether he can stay at his brother’s house.

The tag auxiliary must match the first auxiliary in the verbal complex of the main clause.

**Tag Questions: Auxiliary**

11. Ian stays at his brother’s house every Thanksgiving.
12. Ian picked up some pebbles.
13. Ian ran a 4 minute mile.

The tag auxiliary must match the first auxiliary in the verbal complex of the main clause, and if there is not an auxiliary, add the appropriate (tensed) form of “do”.
Tag Questions: Pronoun

4. Grandma and Grandpa can stay at the Y.
5. You can stay at the Y.
6. We can stay at the Y
7. I can stay at the Y

The tag subject must be a pronoun, and it must match the person, number, and gender of the main clause subject.

Tag Questions: Polarity

1. Ian can stay at his brother’s house.
2. Ian is staying at his brother’s house.
3. Ian will stay at his brother’s house.

8. Ian can’t stay at his brother’s house.
9. Ian isn’t staying at his brother’s house.
10. Ian won’t stay at his brother’s house.

15. Ian never ran a 4 minute mile.

The tag polarity must be the opposite of the polarity of the main clause.

Development of Tag Questions in Children

Case studies suggest that getting the polarity right in tag questions is really difficult for some children

Audrey, from age 3;2 to age 5;0 (Todd, 1980)

These are too little for me, are they?
I was shy when we come here, was I?
That was silly, was it?
I tricked you, did I?
That was a long time ago, was that?
They make you strong, do they?
Those are pretty girls, are they?
Experimental results suggest that the difficulty of polarity is widespread

Percent Errors in Elicited Production

<table>
<thead>
<tr>
<th>Age</th>
<th>Pronoun</th>
<th>Auxiliary</th>
<th>Polarity</th>
</tr>
</thead>
<tbody>
<tr>
<td>4–7 yrs</td>
<td>n=9</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>8–11 yrs</td>
<td>n=9</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>12–16 yrs</td>
<td>n=6</td>
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<td>0</td>
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</table>

Weckerly et al., 2004

What role do children think polarity plays in tag questions?

Do they "know" the adult rule, but only probabilistically follow it?

Do they have a non-adult polarity rule?

Options for Polarity in Children's Rules for Tag Questions

Hypothesis | Disconfirmatory Input | Revised Hypothesis
---|---|---
All Tags Affirm | + - | Anything Goes
All Tags Negative | - + | Anything Goes
Matching Polarity | - + | Mismatched Polarity
Anything Goes | ? | ?

Tag Questions: Elicited Production Method

Set-up: Children meet a mommy goose (puppet) who “is always sure of what she says” and a baby goose who is not.

3 examples of how they talk are modeled:
- It's going to snow! It's going to snow, isn't it?
- We're leaving tomorrow! We're leaving tomorrow, aren't we?
- You're coming over for dinner! You're coming over for dinner, aren't you?

Task: Children listen to sentences that the mommy goose says, and have to play the role of the baby goose and repeat the sentence, but with a tag attached.

Stimuli: 42 declaratives:
- A variety of subjects (none matching those in the examples)
- A variety of auxiliaries (none matching those in the examples)
- 21 are affirmative, 21 negative
Example Statements

Grandma could make lasagne for dinner tonight.
Aunt Mary and Uncle John won’t drive with us.
He couldn’t lift the box.
She played the guitar last night.

Tag Questions: Participants

- 21 control children, age 4–9 yrs

Elicited Production Results

<table>
<thead>
<tr>
<th>Age</th>
<th>Control Children</th>
<th>Polarity Patterns Produced</th>
<th>% Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>14 12 3 2</td>
<td>83% 39%</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>19 21 2 0</td>
<td>100% 98%</td>
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<td>7</td>
<td>1 1 19 21</td>
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<td>5</td>
<td>1 1 21 18</td>
<td>73% 38%</td>
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<tr>
<td>6</td>
<td>0 0 21 21</td>
<td>8% 24%</td>
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<td>4</td>
<td>1 0 30 9</td>
<td>100% 43%</td>
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<td>6</td>
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Tag Questions: Judgment Method

Set-up: Children meet a baby dinosaur (puppet) who ‘is still learning how to speak English and makes a lot of mistakes’.

Example sentences (good and bad) are modeled:
I getting very hungry. I’m taking swimming lessons.
I want I to speak better. I think I can learn fast.

Task: Children listen to the dinosaur’s pre-recorded sentences and score each as right or wrong. Children are sporadically asked to correct sentences that they judged to be wrong.

Stimuli: 60 statement+tag sentences:
12 Pronoun Violations He will see a movie tonight, won’t she?
24 Auxiliary Violations She couldn’t see the airplane, did she?
12 Polarity Violations (6 +, 6 –) He didn’t make a pie, didn’t he?
12 No Violation (6 +, 6 –) They couldn’t see the stars, could they?
Tag Questions
Summary regarding controls

- Although many children have a polarity bias in their production of tags, the judgment results suggest that most children actually allow all polarity patterns.

- Results from both tasks confirm that children genuinely allow non-adult polarity patterns in their tag questions.

- Learnability problem: How will they get rid of non-adult polarity patterns?

- Problem: No one is going to tell children they are bad.

Wait a minute…

Why does polarity have to be mis-matched in adults anyway?
Possibility #1: Polarity mis-matching is an arbitrary syntactic requirement of tag questions

It’s just a random fact about English that children have to learn

If true, children will only stop producing + + and/or – – polarity patterns IF and WHEN they:

- Notice their absence in the input
- Interpret this as a meaningful absence

Possibility #2: Polarity mis-matching in tags is a natural consequence of pragmatics

• The stressed auxiliary in a tag question indicates focused polarity (Romero & Han, 2004)

Evidence that the stressed auxiliary in a tag question indicates focused polarity

• We’re professionals, AREN’T we?
• We’re professionals, are we NOT?
• *We’re professionals, ARE we not?

An Alternative View: Polarity mis-matching in tags is a natural consequence of pragmatics

• The stressed auxiliary in a tag question indicates focused polarity (Romero & Han, 2004)

• Simplest assumption is that this focus on tag polarity is contrastive focus
An Alternative View: Polarity mis-matching in tags is a natural consequence of pragmatics

- The stressed auxiliary in a tag question indicates focused polarity (Romero & Han, 2004)
- Simplest assumption is that this focus on tag polarity is contrastive focus
- Tags with contrastive focus on one polarity are pragmatically ill-formed if they follow a statement of the same polarity (contrastive focus requires a contrast)

Possibility #2: Polarity mis-matching is natural consequence of pragmatics

This hypothesis has a better chance of solving the “learnability problem”:

Children will stop producing + + and/or – – polarity patterns IF and WHEN they:

- Realize that the stressed auxiliary in the tag indicates focused polarity
- Realize that contrastive focus requires a contrast
- Care about being pragmatically coherent

Homework

Download the “trees” program from the class website by Wednesday

Arrange to meet with Lisa if you think you need help