Alternative Questions, Markedness and Illocution: an Experimental Study

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Similar content, different properties

I heard you have a new puppet!
Similar content, different properties

I heard you have a new puppet!

Is it a male? Polar Question (PQ)
Similar content, different properties

I heard you have a new puppet!

Is it a male? Polar Question (PQ)

Is it a male or not? Negative Alternative Questions (NAQ)
I heard you have a new puppet!

Is it a male? Polar Question (PQ)

Is it a male or not? Negative Alternative Questions (NAQ)

Is it a male or a female? Comp Alternative Questions (CAQ)
Roadmap

1- Polar vs alternative questions: divergent distributions

2 - Two lines of analysis

3- The experiments

4 - Discussion and further research
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Polar vs. Alternative Questions

Non-canonical uses

- Bolinger 1978: Neg Alternative Questions (NAQs) are more restricted than Polar Questions (PQs)
Polar vs. Alternative Questions

Non-canonical uses

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- Invites:
  (1a) ✔ Do you want something to drink?
  (1b) # Do you want something to drink or not?

-
Polar vs. Alternative Questions

Non-canonical uses

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- Invites:
  (1a) ✔ Do you want something to drink?
  (1b) # Do you want something to drink or not?

- Inferences:
  I just saw David
  (2a) ✔ Is David back from Toronto?
  (2b) # Is David back from Toronto or not?
Polar vs. Alternative Questions

Non-canonical uses

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- Invites:
  (1a) ✔ Do you want something to drink?
  (1b) # Do you want something to drink or not?

- Inferences:
  I just saw David
  (2a) ✔ Is David back from Toronto?
  (2b) # Is David back from Toronto or not?

- Rhetorical questions:
  (3a) ✔ Are you crazy?
  (3b) #Are you crazy or not?
Information-seeking uses

- Biezma 2009 and following: NAQs, but not PQs, can be used to re-ask a question that went unanswered:
Information-seeking uses

- Biezma 2009 and following: NAQs, but not PQs, can be used to re-ask a question that went unanswered:

  Scenario: You are in charge of coordinating the cooks for the colloquium dinner. John is one of the cooks. Dinner is tomorrow and you need to know what is happening with the pasta.

  You: Are you making pasta?  
  John: (Silence and dubitative faces)  
  You: (4a) ✔ Are you making pasta or not?  
  You: (4b) # Are you making pasta?
The lay of the land

<table>
<thead>
<tr>
<th>Question type</th>
<th>Invite</th>
<th>Inference</th>
<th>Rhetorical</th>
<th>Info-seeking: ask 1st time</th>
<th>Info seeking: ask again</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polar</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>#</td>
</tr>
<tr>
<td>Negative Alternative</td>
<td>#</td>
<td>#</td>
<td>#</td>
<td>#</td>
<td>✔</td>
</tr>
</tbody>
</table>

How can we account for these observations?
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Two lines of analysis

Analysis 1: a pragmatic account (Van Rooij and Safarova 2003)

- PQs and NAQs have equal denotations: \{p ; \neg p\}

- However, they have different pragmatic properties:
  - PQs signals that the pronounced alternative (i.e., \(p\)) has higher *Utility Value* than the silent one (i.e., \(\neg p\)), either in terms of Informativity or Desirability
  - NAQs, by pronouncing both alternatives, signal indifference between the alternatives
Two lines of analysis

Analysis 1: a pragmatic account (Van Rooij and Safarova 2003)

- For different reasons, invites, inferences and rhetorical questions presuppose a Utility Asymmetry between the two alternatives
  - Inferences: $p$ allows us to explain a state of affairs
  - Invites: $p$ has high Utility Value for the hearer
  - Rhetorical: $p$ has higher informativity

- By signaling indifference between the alternatives, NAQs are not felicitous
Two lines of analysis

Analysis 2: a semantic account (Biezma 2009, Biezma and Rawlins 2011)

- PQ and Alternative Questions at-large have different denotations:
  - PQs: \{p;…\} - p plus contextually salient alternatives
  - AltQs: \{p; q\} - Exhaustive, mutually exclusive alternatives

- NAQs are a special case of AltQs
  - They denote *logically* opposite alternatives
  - NAQs force the hearer to provide an answer (*cornering effect*).

- NAQs come with a flavor of insistence
  - Inconsistent with the illocutionary moves of drawing inferences, making invite and asking rhetorical questions;
  - Highly functional to re-ask a question that previously went unanswered
Does the specific formulation of the second disjunct as "or not" play a role in determining the restrictions on NAQs?
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- Test case: CAQs
  (5a) Is it a boy or a girl?
  (5b) Is it heads or tails?
Does the specific formulation of the second disjunct as "or not" play a role in determining the restrictions on NAQs?

- **Test case: CAQs**
  1. (5a) Is it a boy or a girl?
  2. (5b) Is it heads or tails?

- **Predictions of previous accounts:**
  - They pronounce both alternatives \[\rightarrow\] They should communicate indifference, as per Analysis 1
  - They pose logically opposite alternatives \[\rightarrow\] They should induce *cornering*, as per Analysis 2
Assessing the proposals

Does the specific formulation of the second disjunct as "or not" play a role in determining the restrictions on NAQs?

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− Predictions of previous accounts:
  − They pronounce both alternatives \(\rightarrow\) They should communicate indifference, as per Analysis 1
  − They pose logically opposite alternatives \(\rightarrow\) They should induce cornering, as per Analysis 2

− If CAQs and NAQs do not pattern together, then the specific nature of "or not" also plays a role
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The studies

The study:

- We compared the naturalness of PQs, NAQs and CAQs in two studies:
  - Study 1 - Non-canonical uses
  - Study 2 - Info-seeking uses

- Goals:
  - Compare the distribution of NAQ vs CAQ
  - Replicate the intuitions on the contrast between PQ and NAQ
Study n.1: design

Study 1: Design

- Factor 1: Type of question.
  - Levels: PQs, NAQs, CAQs, control
- Factor 2: illocutionary goal of the speaker
  - Inferences, Invites and Rhetorical Questions

- A sample stimulus for Invite
  Context: Joe and Fred are at a party. Joe receives a call from Mary, who invites him over to her own party. John wants to invite Fred to join. John thus asks:
  
PQ: Hey, do you want to come to Mary’s?
NAQ: Hey, do you want to come to Mary’s or not?
CAQ: Hey, do you want to come to Mary’s or do you want to stay here?
Control: Hey, do you want a beer?

Prompt: How natural does this question sound in light of the goal of the speaker? 1…7
Study n.1: design

- A sample stimulus for **Inference**
  
  **Context:** Right before the beginning of spring break, George sees camping equipment all around Joe’s house and wonders why it is there. Thinking that Joe might be going camping during the break, George thus asks him:

  **PQ:** Are you going camping for spring break?
  **NAQ:** Are you going camping for spring break or not?
  **CAQ:** Are you going camping for spring break or are you doing something else?
  **Control:** Are you having a good day today?

- A sample stimulus for **Rhetorical**
  
  **Context:** A football player complains that the drills in practice are too hard and asks for a day off. The coach wants to remind him that going through difficulties is an essential part of becoming a good player and intends to deny the request. He thus asks:

  **PQ:** Are you a child?
  **NAQ:** Are you a child or not?
  **CAQ:** Are you a child or are you an adult?
  **Control:** Is there any beer in the fridge?
Study n.1: results

![Bar chart showing results of experimental study](chart.png)
Study n.1: results
Study n.1: results
Study n.1: discussion

Results

- The distribution of CAQs diverges from that of NAQs

- CAQs pattern in between NAQs and PQs:
  - They are as (un)natural as NAQs for drawing inferences
  - But they are more natural than NAQs for Invites and Rhetorical Questions

- Does the same discrepancy emerge in Info-seeking uses?

Study 2: Design

- Factor 1: Type of question: PQs, NAQs, CAQs, control
- Factor 2: illocutionary goal of the speaker: Ask for info, 1st time; Ask for info, again
Study 2: design

− A sample stimulus for Ask, 1st time
Mary runs into Greg on the street. It’s been one year since they last saw each other, so they want to catch up:
Greg: "Hey! What's new?"
Mary: "I just got a puppet!"
**PQ:** Greg: Oh! Cool! Is it a male?
**NAQ:** Greg: Oh! Cool! Is it a male or not?
**CAQ:** Greg: Oh! Cool! Is it a male or a female?
**Control:** Greg: Oh! Cool! Do you like baseball?

− A sample stimulus for Ask Again.
**Context:** Mark checks in at a hotel. After the receptionist hands him the keys, the following ensues:
Receptionist: "Sir, would you like to have breakfast directly served in your room"?
Mark: "Is there a charge for it?"
Receptionist: "It's a great service. Our customers love it"
Mark: "Ok, but is there a charge for it?"
Receptionist: "You can also order food from the special menu".
**PQ:** Mark: "Is there a charge for it?"
**NAQ:** Mark: "Is there a charge for it or not?"
**CAQ:** Mark: "Is there a charge for it or is it free?"
**Control:** Mark: "Is there cable in the room?"
Study 2: results

Alternative Questions, Markedness and Illocution: an Experimental Study
Study 2: results

Alternative Questions, Markedness and Illocution: an Experimental Study
Study 2: discussion

Study 2: Results

- Once again, the distribution of CAQs diverges from that of NAQs

- CAQs are flexible across the two uses:
  - They are as natural as PQs when for asking for the first time
  - They are as natural as NAQs for asking a question again
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General discussion

Summary

- PQs, CAQs and NAQs have different illocutionary properties
- NAQs are restricted to contexts in which the speaker asks a question again
- PQs natural in all tested non-canonical uses, and in discourse-initial info-seeking uses
- CAQs pattern in between these two strategies:
  - Better than NAQs to make invites, ask rhetorical questions and ask info-seeking questions discourse-initially
  - Better than PQs to ask-questions again
- What explanation can we provide to CAQs’ behavior?  
  **Idea:** The "or not" formulation of the second disjunct
General discussion

Markedness and prominence

- While NAQs pronounce both alternatives, they do not present them on equal footing;

- They express the second disjunct in terms of the first one, as opposed to as an independent proposition (see Biezma and Rawlins 2014 on bundling);

- Their effect is twofold:
  - They lead the listener to pick between two exhaustive/exclusive alternatives;
  - They also signal that one of them is to be preferred/is more important than the other.

- NAQs are restricted to contexts in which the combination of insistence and bias for $p$ is consistent with the speaker’s goal – i.e., those in which the speaker aims to re-ask a question about $p$ to wrestle an answer from the listener;
General discussion

Markedness and prominence

- CAQs’ unmarked status grants them the flexibility to operate in a broader range of situations:

- Equal status of alternatives makes them
  - Ok to ask a question for the first time;
  - Ok to make an invitation (give the listener freedom)

- Exclusivity of alternatives makes them
  - Ok to re-ask a polar question that wasn't previously answered
Further research

Directions of further investigation

− Purely semantic or pragmatic accounts of the meaning of Alternative Questions are not sufficient to derive the illocutionary restrictions NAQs

− We need a more fine-grained theory of how pragmatic (e.g., highlighting/prominence) and semantic notions (e.g., exhaustivity/exclusivity) interact to determine the message conveyed by a question

− Next step: Are illocutionary differences preserved in embedded contexts?
Further research

Embedding Contexts:

- Complementizer choice (Bolinger 1978):

  (11a) I asked Joan if / #whether she would marry me but she refused.
  (11b) I asked Joan if / #whether she was crazy and told her to stop.

- Alternative/Complementizer interactions:

  (12a) I asked him if he wanted to come to the party. (invite)
  (12b) I asked him whether he would come to the party. (interest in facts)
  (12c) I asked him whether he would come to the party or not. (interest in facts, insistent)

How do the illocutionary properties of a question interact with complementizer choice?
Thank you!

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For questions, comments, additional materials, please contact Andrea Beltrama (andrea.beltrama@uni-konstanz.de)
Approach 2 - Focus

- PQs are free to place focus (main sentence stress) on different constituents, whereas alternative questions mandatorily place main focal stress on the disjuncts (Truckenbrodt 2012 on English, cf. Kamali 2015 on Turkish, Hagstrom 1998 on Sinhala):
  
  Polar Q         AltQ
  (6a) Did he meet Sue yesterday?   (6b) Did he meet Sue or Pia yesterday?
  (7a) Did he meet Sue yesterday?   (7b)# Did he meet Sue or Pia yesterday?

- Forms with focus on the tensed auxiliary are typically used to re-ask a question (Creswell 2000):
  (8) A: How are we going to the party?
      S: Right! How are we going to the party?

- Minimal pairs (i.a)-(i.b) and (ii.a)-(ii.b), where (b)-versions have a more restricted distribution than the corresponding (a)-versions (via e.g. work line 1):
  (9a) Is the baby a boy?  (9b) Is the bay a boy or a girl?
  (10a) Is the baby a boy?  (10b) Is the baby as boy (yes) or not?