ALTERNATIVE QUESTIONS

Claire BEYSSADE
SFL-Paris 8 Univ.

Elisabeth DELAIS-ROUSSARIE
LLING, Nantes Univ.
Introduction

There are several types of question with a disjunction (1), (2), (3) and (4). Among them, two types are referred to as alternative questions (1) and (2).

(1) Are you coming or not ?
(2) Do you want tea or coffee ? (Alt Q)
(3) Do you want tea of coffee ?
   with a meaning : do you want something to drink or something alike, i.e a polar Q)
(4) Do you want tea, coffee, hot chocolate or... ?

Aim of the session:
- Clarifying what distinguish these different question types ;
- Analyzing the intonational patterns associated with these forms in order to see which intonational cues are crucial to distinguish them and which meaning they convey.
- Presenting a study on Alternative constructions in French since some intonational features my be used to encode the « call –on- addressee »
Outline

1. Alternative questions: Types and characteristics
   a. Polar question and
   b. Alternative Question and Polar Q with a disjunction
   c. Alternative questions and focus
2. Intonational forms attributed to these forms (mostly in English)
   a. Alt Q und Pol Q
   b. Summary: differences
   c. Perception experiment
3. Experimental analysis: Alternative constructions and prosodic events in French
   a. Motivations and facts
   b. Results obtained in a production experiment
   c. Discussion
   d. Conclusion and perspectives
I. Alternative questions: Types and characteristics

1.1 Polar questions and Negative Alternative questions

Are you coming?
Are you coming or not? (NAltQ)

Asking such NAltQ is similar to asking the plain PolQ. These two forms have been analyzed as having the same form.

*Will you marry me or not?*

\{λ w. you marry me in w, λw. ¬ you marry me in w\}

This similarity leads several authors to derive PolQ from AltQ (see Stockwell at al. 1968, Langacker 1970 among others)

but differences in use were pointed out by Bolinger (1978) as the two forms are not interchangeable in a discourse.

Examples from Beltrama et al.

**Invites:**

a. √ Do you want something to drink?
b. # Do you want something to drink or not?

**Inferences:**

   B: √ Is he back from Toronto?
   B: # Is he back from Toronto or not?
In addition to the fact that it is difficult to argue that a simple syntactic structure derives from a complex one (see Bartels 1999), several arguments have been put forward to account for differences between NAltQ and PolQ, i.e. it cannot be used discourse initially (see, among other, Bolinger 1978, Biezma & Rawlins, 2015)

- Van Rooy & Safarova (2005) tried to account for the differences in a game-theoretic approach and explained the differences from the fact that PolQ have a higher utility value than AltQ.
  
  We can consider utility value as related to the way propositions satisfy certain conversational goals (e.g. gaining information).

- Biezma (2009) : ALTQVNs are the last possible discourse move regarding a particular alternative and are hence unsuitable in other discourse situations. (cornering effect).
1.2 Polar questions with a disjunction and Complement Alternative questions

**Disjunctive polar question**

\[ \text{[Does Bill like coffee or tea?]_{L^*H-H^*}} \]

= \{ \text{that Bill likes coffee and/or tea; that Bill likes neither coffee nor tea} \}

= \{ \lambda w_s \cdot (B \text{ likes coffee in } w \lor B \text{ likes tea in } w), \}

\quad \{ \lambda w_s \cdot \neg (B \text{ likes coffee in } w \lor B \text{ likes tea in } w) \} \}

\[ \text{[Does Bill want coffee or tea?]_{H^*L-L^*}} \] = \{ \lambda w_s \cdot B \text{ wants coffee in } w, \}

\quad \{ \lambda w_s \cdot B \text{ wants tea in } w \} \}

In various studies, the distinction between these two forms is analyzed as involving

(i) different operators (a question operator and something else, or distinct types of question operators);

(ii) A different analysis of the disjunction

(iii) the contribution of focus.

See Biezma & Rawlins 2015 for a review.
The importance of F-marking in AltQ has also been mentioned by several authors (Han & Romero 2004, Truckenbrodt 2013).

“In sum, there is evidence that the F-effect on the alternatives is inherent in alternative questions. It cannot be derived from the assumed existence of a true answer, nor from a deletion derivation.” Truckenbrodt 2013

Did Mary or John finish the paper?
   (alternative question reading available)

Did Mary or John finish the paper?
   (yes/no-reading, no alt-reading)

Did Mary buy or borrow the book?
   (alt. reading)

Did Mary buy or borrow the book?
   (yes/no-reading, no alt-reading)
II. The intonation of these forms

Three prosodic features have found to play a role in the encoding the distinction: phrasing, accentuation and the phonological form of the final contour (see, among others, Bartels 1999; Pruitt 2008 and Pruitt & Roelofsen 2013).

2.1 Complement Alternative Questions and Polar Questions with a disjunction

*Do you want coffee or tea?*

( H*/L* H- ) ( H* L- L%)

• Each conjunct is accented and usually phrased as a separate prosodic constituent ⇒ This realization reflects the fact that each conjunct is F-marked (+ focus) (see, among others, Han and Romero 2004; Truckenbrodt 2013).

• The final conjunct is typically realized with a falling contour which is analysed as indicating an exhaustive mention of the set of alternatives (see Bartels 1999; Biezma and Rawlins 2015).
• The intonation associated with disjunctive polar Q is different. It differs in two ways:
  – non-final conjuncts may be accented but they are not phrased separately,
  – the final conjunct is realized with a rising contour (Bartels 1999).

Do you want coffee or tea?

( (H*)(L*) H*/L* H- H%)

If you have any questions or need further assistance, please let me know! 😊
2.2 Summary: intonational differences
The prosody associated with polar questions differs in several ways:

– final contour,
– phrasing
– Accent on each conjunct

“The canonical contours show that alternative questions and their disjunctive yes/no question counterparts may differ along several prosodic dimensions—likelihood of disjunct pitch accents, presence or absence of a prosodic phrase boundary with H-, and the final contour. One of the central issues that arises, then is which of these prosodic features play a decisive role in determining whether a given disjunctive question is interpreted as an alternative question or as a yes/no question.” (Pruitt & Roelofsen 2013: 635)
2.3 Perception experiment on prosodic cues

- Evaluation of the relative weight of the cues in a perception experiment (Pruitt & Roelofsen 2013)

<table>
<thead>
<tr>
<th>Factors crossed in design of stimuli</th>
<th>Accent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Multiple</td>
</tr>
<tr>
<td>Fall</td>
<td>$M \downarrow$</td>
</tr>
<tr>
<td>Rise</td>
<td>$M \uparrow$</td>
</tr>
</tbody>
</table>

$M \downarrow =$ canonical alternative question

$S \uparrow =$ canonical yes/no question

Expectation from the authors: the canonical prosodies, $M \downarrow$ and $S \uparrow$ will be properly interpreted as respectively altQ and yes/no Q.

Specific interest on the other stimuli since they could tell which cue is crucial.
Results obtained

Number of responses for each stimulus type

<table>
<thead>
<tr>
<th>Heard</th>
<th>Paraphrase choice</th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alternative</td>
<td>Yes/no question</td>
<td>“Other”</td>
<td></td>
</tr>
<tr>
<td>M↓ Alternative question</td>
<td>204</td>
<td>16</td>
<td>2</td>
<td>222</td>
</tr>
<tr>
<td>M↑ Multiple accents, rise</td>
<td>35</td>
<td>185</td>
<td>2</td>
<td>222</td>
</tr>
<tr>
<td>S↑ Yes/no question</td>
<td>24</td>
<td>197</td>
<td>1</td>
<td>222</td>
</tr>
<tr>
<td>S↓ Single accent, fall</td>
<td>181</td>
<td>39</td>
<td>2</td>
<td>222</td>
</tr>
<tr>
<td>Total</td>
<td>444</td>
<td>437</td>
<td>7</td>
<td>888</td>
</tr>
</tbody>
</table>
3.1 Motivations and facts

- In French, a third dimension comes into play: alternative question/disjunctive question have a similar form as a statement with a coordination/disjunction.
  
  Pierre parle anglais ou allemand ? Polar  
  Pierre parle anglais... ou allemand... ? Open list Q  
  Pierre parle anglais ou allemand ? Alternative Q  
  Pierre parle anglais ou allemand. Statement

- According to Di Cristo (2016), the difference between $alt_Q$ and statement with a disjunction occurs at the end of the sentence only.
  
  – Fall in statements vs. Plateau/ fall to mid in alternative questions  
  – No difference in the realization of the first/ non final conjunct
• To our mind, it is doubtful that the hearer has to wait until the end of a sentence to interpret it as an assertion / a question

• Aim of our study was to evaluate:
  – What is crucial at the prosodic level for interpreting an alternative construction?
    • Final contour as stated by Di Cristo;
    • Several cues realized through the sentence (prenuclear domain);
    • Contours on the non-final conjunct(s).
  – Some cues may indicate interrogativity, and occur earlier in the sentence.
  – Do the different cues play a role in other question types / sentence types
Participants
• 2 males
• 2 females

Stimuli

Experiment 1
10 experimental pairs (a question and a statement) produced once by all 4 speakers: $2 \times 10 \times 4 = 80$ sentences

Dans l’école de commerce de mon fils, la seconde année se fait à l’étranger. Il a posé ses choix. Il veut aller à Madrid, à Amsterdam ou à Berlin.

Pendant leur formation, les enfants doivent passer leur seconde année à l’étranger. Je sais où ma fille ira. Est-ce que ton fils a fait son choix ? Il veut aller à Madrid, à Amsterdam ou à Berlin ?
Examples

statement

question
Je/tu veux lire un roman, des nouvelles ou un polar
‘I/ you want to read a novel, short stories or a detective story’
2.2 Results

There is a difference in the realization of the tonal contour at the end of the final conjunct

- It is always a fall in statements, whereas it may be a plateau at the end of questions.
- In addition, falls are realized differently at the end of questions and statements
  - Fall to low in statements
  - Fall to mid in questions

This difference could result from a difference in phonetic implementation.

⇒ Identical to what was said by Di Cristo 2016
Prosodic events in non-final position

• In our data, there is a clear difference between questions and statements in the way rises are implemented:
  – They are more important in questions than in statements;
  – There is no downstep in questions, when several non-final conjuncts are present, but the rise is almost always downstepped in statements;
  – There is a frequent upstep in the realization of the last rise in questions;
  – The segmentation in phrase may be clearer in statements than in questions with the use of pauses.

⇒ These findings disconfirm what is claimed by Di Cristo (2016)
3.3 Discussion
To account for the difference, two distinct approaches/hypotheses were considered:
• In terms of phrasing
• In terms of intonational analysis, and more specifically by arguing for an illocutionary tone associated with F-marked constituents.
**First hypothesis** : Phrasing

Differences may result from a different syntax/phonology mapping. This difference in phrasing (expressed in terms of boundary strength) is reflected:

- By a larger register and higher rises in questions in comparison to statements;
- By no downstep in questions in contradistinction to what happens in statements

• Difference in boundary strength: IP vs. ip

  \[
  \text{[ Il prend du chocolat,]}_{\text{IP}} \text{[du café]}_{\text{IP}} \text{[ou du thé]}_{\text{IP}} \\
  \text{[\{il prend du chocolat\} \{du café\} \{ou du thé\}]} \\
  \]

This would mean that we have a sequence of questions in the case of an alternative question, the first one being a declarative question, the other one elliptical questions. By contrast, the conjunction is at the level of the NP in statements.
An analysis in terms of syntax-phonology mapping makes predictions that weren’t observed in our data.

• In statements with disjunction, when conjuncts are clauses, we should have the same phrasing as in questions, as an IP boundary should be realized at the end of each conjunct.

J’ai eu Pierre au téléphone hier soir. **Il va accueillir Nicolas || ou il va aller en vacances chez Julien.||**

vs.

Tu as des nouvelles de Pierre ? Tu sais ce qu’il a décidé pour les vacances ? **Il va accueillir Nicolas || ou il va aller chez Julien ? ||**

• Pausing is more frequent in statements than in questions
Realization of the intonational movement at the end of the first conjunct (clause-type) in comparison to the movement observed at the end of a Declarative question

- Il va accueillir Nicolas ?
**Second hypothesis**: F-Marking, illocutionary tone, speech act

We could also assume that the tonal event occurring at the end of the first conjunct is related to the nature of the speech act, whereas it is a mere continuation rise in the case of statements.

- Such analysis echoes what was argued for in the case of narrow focus in questions and statements (cf. Beyssade et al. 2004)
• The higher rising movements observed at the end of the various conjuncts in AltQ could result from the realization of tonal differences. In addition to the minor or major continuation rise (H*H- and H*H-H%) at the end of the prosodic phrase containing a conjunct – which is observed in AltQ as well as in statements –, a tonal event will be also realized in AltQ.

• The distribution of this tonal event would derive from pragmatic and semantic information and more specifically from the fact that each conjunct is F-marked in AltQ. As for the form of the tonal event, it should be a H as the sentence of a whole carries a Q-marker (question), (for F-marking in French, see Beyssade et al.2004, Di Cristo and Jankowksi 1999),
NB: In French, a rising contour is realized at the end of the focus element, and is then copied at the end of the utterance (copy).

"Jean-Marie is free Monday"
The tonal movements observed at the end of each non-final conjunct in AltQ could derive from the tonal rise pointed in the cleft sentence when it has to be interpreted as a question.

The last syllable of each non-final conjunct will be associated not only with a continuation rise (H*H- or H*H%), but also with the tonal event indicating focus in questions (H_{F-to-Q}).
The intonational movement is clearly at the end of the F-marked element, but its form may not directly reflect the illocutionary force. Recall what was said in the first course in relation to speech act and illocutionary force.

<table>
<thead>
<tr>
<th>Sentence</th>
<th>Speech act</th>
<th>Speaker Commit-ment</th>
<th>Call-on Addresse</th>
</tr>
</thead>
</table>
Marking should be crucial in case of declarative questions since the syntactic form does not “encode” the call on addressee.

We thus decide to add in the comparison interrogative alternative questions (2) in order to compare interrogative and declarative alternative questions.

(1) Grégoire va s’acheter un pantalon ou un gilet ?
  . Decl. Alt
(2) Est-ce que Grégoire va s’acheter un pantalon ou un gilet ?
  Q Inter. Alt Q
  Gregory will buy himself trousers or a cardigan

Predictions

The rise on the first disjunct is expected to be less important in (2) than in (1) since the speaker commits to a question, whose content is similar to the call-on addressee.
1. Gregoire va s'acheter un pantalon ou un gilet

2. Est-ce que Gregoire va s'acheter un pantalon ou un gilet?
3.4 Conclusion and perspectives

• The analysis of the data shows prosodic differences between alternative questions & statements with a disjonction
  – Fall to low vs. Fall to mid at the end of the sentence;
  – Realization of the non-final conjuncts with a steeper and larger rise in questions than in statements;
  – Different scaling in questions than in statements, with more upstepped rises in questions, and downstepped one in statements.
• To capture the differences an analysis in terms of phrasing isn’t satisfactory;
  ⇒ It is necessary to argue for specific tonal elements that are meaningful (interrogativity, closure);
  ⇒ These elements could be assigned to text in a strict autosegmental way.

In order to account for the difference, we would argue for a strong autosegmental approach.
References


References


References


