Discourse particles and the connection between conditionals and questions

Eva Csipak & Sarah Zobel

Uni Konstanz & Uni Göttingen/Uni Tübingen

Conditionals at the crossroads of semantics and pragmatics
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Starting point

Recent and not-so-recent literature: intuition that conditional antecedents and polar questions are connected

(1) Geht er spazieren?
goes he for-a-walk
‘Is he going for a walk?’ [German]

(2) Geht er spazieren, nimmt er einen Schirm mit.
goes he for-a-walk takes he an umbrella with
‘If he goes for a walk, he takes an umbrella.’

▷ (surface) question-syntax and antecedent-syntax are suspiciously similar:
  – wh-pronouns and/or interrogative complementizers introduce antecedents (e.g., Bhatt & Pancheva 2006)
  – V1 antecedents share the word-order with polar interrogatives (e.g., Reis & Wöllstein 2010, Onea & Steinbach 2011)
▷ Questions and antecedents both seem to ‘raise the issue’ of whether p (e.g., Starr 2014, Romero 2015).
Our goal

What is the relationship between conditional antecedents and polar questions?
⇒ Discourse particles can be used as a diagnostic tool.

Ingredients:
- insights about the discourse effects of polar questions and declaratives (Farkas & Bruce 2010)
- insights about the discourse effects of discourse particles (e.g., Eckardt 2011, Rojas-Esponda 2015)
Introduction

Background on discourse particles

Antecedents as declaratives & interrogatives

A pattern

Proposal
  Farkas & Bruce 2010
  Our proposal

Conclusion
Discourse particles – I

Following Eckardt 2011, Repp 2013, Rojas-Esponda 2015, Zimmermann 2011, and others: particles are “discourse navigating devices” or means to perform “discourse management”.

- Particles contribute *not-at-issue content* (e.g., Potts 2005, Simons et al. 2010, Potts 2011)
  - no contribution to truth conditions of utterance they occur in
  - always scope above sentential operators, e.g. negation
  - cannot be the target of denial or hypotheticalization

- Particle contributions are speaker attitudes regarding content contributed by host utterance.
Discourse particles – II

Example: The scope behavior of *ja* with respect to sentential negation

(3) Alex ist *ja* groß.
Alex is *JA* tall
‘Alex is tall.’ + speaker attitude *ja*(p)

(4) Alex ist *ja* nicht groß.
Alex is *JA* not tall
‘Alex is not tall.’ + speaker attitude *ja*(not(p))
Discourse particles – III

Distribution of discourse particles: connected to the complex interaction of the semantics/pragmatics of the host clause and the contribution of the particles.

One determining factor is sentence type.

(5)  

a.  *Er kann* **halt** *kochen*. 

   (He can HALT cook.)

b.  #*Kann er* **halt** *kochen?* 

   (Can he HALT cook?)

c.  #*Was kocht er** halt?* 

   (What does he HALT cook?)

(6)  

a.  #*Er kann* **etwa** *kochen.* 

   (He can ETWA cook.)

b.  *Kann er* **etwa** *kochen?* 

   (Can he ETWA cook?)

c.  #*Was kocht er** etwa?* 

   (What does he ETWA cook?)

Focus on the core sentence types: declarative, interrogative, imperative
Conditional antecedents and sentence types

Traditionally: conditional antecedents are adverbial clauses (see Bhatt & Pancheva 2006).

In antecedents of conditionals: *denn, doch, eh, halt, ja, überhaupt* a.o.

(7) *Peter kann mitkommen, wenn er denn / überhaupt will.*
   ‘Peter can join us if he DENN / ÜBERHAUPT wants to.’

(8) *Wenn Peter doch / eh / halt / ja mitkommen will, ruf ich ihn an.*
   ‘If Peter DOCH / EH / HALT / JA wants to join, I’ll call him.’

⇒ assume that the distribution of particles in conditional antecedents is regulated by sentence type
⇒ exclude the imperative for German for morphological reasons
⇒ consider the declarative and interrogative in turn
Antecedents as embedded declaratives – I

**Assumption:** Antecedents of conditionals are embedded declaratives.  
⇒ host only discourse particles that can occur in declaratives ("declarative discourse particles")

**Further restriction:** discourse particles are discourse navigating devices  
⇒ they are sensitive to the make-up of the previous discourse  
⇒ expect a subset of the declarative discourse particles to be able to occur in conditional antecedents
Antecedents as embedded declaratives – II

We find discourse particles that behave as expected:

(9) Alex ist ja Lehrer.
    Alex is ja a teacher
    ‘Alex is ja a teacher.’

(10) *Ist Alex ja Lehrer?
    is Alex ja teacher
    *Intended: ‘Is Alex ja a teacher?’

(11) Wenn Alex ja Lehrer ist, dann muss er früh aufstehen.
    if Alex ja teacher is then must he early get-up
    ‘If Alex is ja a teacher, then he has to get up early.’

⇒ ja is only possible in declaratives, but not in interrogatives
Antecedents as embedded declaratives – III

But: other discourse particles do not fit this prediction

(12) *Alex ist denn Lehrer.
Alex is DENN teacher
*Intended: ‘Alex is denn a teacher.’

(13) Ist Alex denn Lehrer?
is Alex DENN teacher
‘Is Alex denn a teacher?’

(14) Wenn Alex denn Lehrer ist, muss er früh aufstehen.
if Alex DENN teacher is must he early get-up
‘If Alex is denn a teacher, he has to get up early.’

⇒ denn is only possible in interrogatives, but not in declaratives
Antecedents as embedded interrogatives

The distribution of *denn* instead fits with the assumption that antecedents of conditionals are have an interrogative sentence type.

⇒ *denn* is only possible in interrogatives, but not in declaratives

But: the distribution of *ja* speaks against antecedents of conditionals having an interrogative sentence type.

⇒ *ja* is only possible in declaratives, but not in interrogatives
The distribution of some more discourse particles

<table>
<thead>
<tr>
<th>particle</th>
<th>decl.</th>
<th>polar</th>
<th>interv.</th>
<th>antecedent of cond.</th>
</tr>
</thead>
<tbody>
<tr>
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<td>–</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>doch</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>eh</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
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<tr>
<td>etwa</td>
<td>–</td>
<td>✓</td>
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<td>halt</td>
<td>✓</td>
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<td>✓</td>
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<td>ja</td>
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<tr>
<td>überhaupt</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>–</td>
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<tr>
<td>wohl</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>–</td>
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</tbody>
</table>

problems for “declarative”

problems for “interrogative”
First consequences: antecedents and sentence type

▶ They cannot be simply of ‘declarative’ sentence type: acceptability of *denn, überhaupt*

▶ They cannot simply be of ‘interrogative’ sentence type: acceptability of *ja, halt*

⇒ The data shows that the deciding factor for the distribution of discourse particles is not (only) sentence type (see also Rapp 2016).

⇒ **Hence**: sentence type is not the connecting link between antecedents and interrogatives
First consequences: antecedents have question semantics

- Onea & Steinbach 2011 argue that V1 antecedents in German have the same denotation as polar interrogatives.
- A strict proposal like O&S’s is empirically inadequate: V1 antecedents do not behave like embedded interrogatives.

(15) Kommt Alex etwa?
    ‘Is Alex etwa coming?’ (matrix interrogative)

(16) Ich frage mich, ob Alex etwa kommt.
    I ask myself whether Alex etwa comes
    ‘I wonder whether Alex is etwa coming.’ (embedded interrogative)

(17) #Kommt Alex etwa, gehe ich.
    Comes Alex etwa go I
    intended: ‘If Alex is etwa coming, I will leave.’

Against the semantic equivalence of conditional antecedents and interrogatives see also Schulz 2012.
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Proposal

Farkas & Bruce 2010

Our proposal

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A pattern

Returning to the data: we find that conditional type co-varies with the particles that occur in the antecedent.

(18) *Peter kann mitkommen, wenn er denn / überhaupt will.*

‘Peter can join us if he DENN / ÜBERHAUPT wants to.’

⇒ hypothetical conditional

(19) *Wenn Peter doch / eh / halt / ja mitkommen will, ruf ich ihn an.*

‘If Peter DOCH / EH / HALT / JA wants to join, I’ll call him.’

⇒ factual conditional
Hypothetical conditionals

(20) Peter kann mitkommen, wenn er denn / überhaupt will.  
‘Peter can join us if he denn / überhaupt wants to.’

(21) #Peter kann mitkommen, wenn er doch / eh / halt / ja will.  
intended: ‘Peter can join us if he doch / eh / halt / ja wants to.’

▶ hypothetical conditional + declarative discourse particle: ✧
▶ hypothetical conditional + interrogative discourse particle: ✔
Factual conditionals

(22) A: Peter said he wants to join us.
B: Wenn Peter *doch* / *eh* / *halt* / *ja* mitkommen will, rufe ich ihn an.
‘If Peter *doch* / *eh* / *halt* / *ja* wants to join us, I will call him.’

(23) A: Peter said he wants to join us.
B: #Wenn Peter *denn* / *überhaupt* mitkommen will, rufe ich ihn an.
‘If Peter *denn* / *überhaupt* wants to join us, I will call him.’

- hypothetical conditional + declarative discourse particle: ✓
- hypothetical conditional + interrogative discourse particle: ⬤
The full picture

<table>
<thead>
<tr>
<th>particle</th>
<th>decl.</th>
<th>factual ant.</th>
<th>polar interr.</th>
<th>hypoth. ant.</th>
</tr>
</thead>
<tbody>
<tr>
<td>denn</td>
<td>–</td>
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<td>✓</td>
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<tr>
<td>doch</td>
<td>✓</td>
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<td>eh</td>
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<td>etwa</td>
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<td>halt</td>
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<td>✓</td>
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<td>ja</td>
<td>✓</td>
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<tr>
<td>überhaupt</td>
<td>✓</td>
<td>–</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>wohl</td>
<td>✓</td>
<td>–</td>
<td>✓</td>
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</table>
Consequences of the distribution

- Explaining the distribution of discourse particles in conditional antecedents in terms of sentence type is problematic
  \[ \Rightarrow \text{“antecedents of different types of conditionals have different sentence types”} \]

- Instead: Hypothetical and factual conditionals have different discourse effects
  \[ \Rightarrow \text{the different discourse effects explain the distribution of discourse particles} \]

- We need: a formal discourse model to help us track discourse effects
The discourse model – I

Farkas & Bruce’s model distinguishes:

▶ **Common ground**: what the interlocutors have agreed on up until the current utterance (\(cg\))

▶ **Public commitments**: what the interlocutors are publicly committed to through their utterances, but which has not been generally agreed on (\(DC_X\) for interlocutor \(X\))

▶ **Table**: what is currently up for discussion (the form and content) (\(\approx\) current QUD)

▶ **Projected set**: potential future states of the common ground given the material on the Table (\(ps\))
The discourse model – II

\[ K_1: \text{discourse initial context state} \]

<table>
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<tr>
<th>A</th>
<th>Table</th>
<th>B</th>
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</table>

**Common Ground** \( s_1 \)  
**Projected Set** \( ps_1 = \{ s_1 \} \)

(Farkas & Bruce 2010: 91)

- No public commitments are registered for either A or B.
- No at-issue material is on the Table for discussion.
- The common ground only contains shared “background propositions”.

(Farkas & Bruce 2010: 91)
The discourse model – III

“Discourse function” of an utterance: the sum of all changes to the input context that results from performing the utterance

Discourse function depends (at least) on sentence type:

- **Declaratives:** The form $S[D]$ and content $[S] = p$ are added to the Table (to be accepted/rejected); the speaker is committed to $p$.
- **Polar interrogatives:** The form $S[I]$ and content $[S] = \{p, \neg p\}$ are added to the Table (to be answered); the speaker is not committed to either $p$ or $\neg p$.

Non-default declaratives and polar interrogatives can depart from this default.
The discourse model – IV

Example 1: A uttered/asserted a declarative

K₂: A asserted *Sam is home* relative to K₁

<table>
<thead>
<tr>
<th>A</th>
<th>Table</th>
<th>B</th>
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</thead>
<tbody>
<tr>
<td>$p$</td>
<td>⟨<em>Sam is home</em>[D]:{$p$}⟩</td>
<td></td>
</tr>
</tbody>
</table>

Common Ground $s_2 = s_1$  Projected Set $ps_2 = \{s_1 \cup \{p\}\}$

(Farkas & Bruce 2010: 91)
The discourse model – V

Example 2: A uttered/asked a polar interrogative

K₄: A asked *Is Sam home?* relative to K₁

<table>
<thead>
<tr>
<th>A</th>
<th>Table</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>⟨Sam is home[I]:{p, ¬p}⟩</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Common Ground

s₄ = s₁

Projected Set

ps₄ = {s₁ ∪ {p}, s₁ ∪ {¬p}}

(Farkas & Bruce 2010: 95)

⇒ ps₄ is not a singleton set: there are open issues (the state is “inquisitive”)

(Farkas & Bruce 2010: 95)
The discourse model – VI

- To return an inquisitive state to a stable state one has to resolve the issue. Farkas & Bruce 2010 discuss “confirmation” (yes) and “reversal” (no) of polar questions.

- **Extension**: If the other participant cannot answer the question, the issue stays open and becomes part of the common ground.

**Example 2a**: After A asks *Is Sam home?*, B signals that she cannot answer

K₄ₐ: B signals that she cannot answer A’s question

<table>
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<th>A</th>
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</table>

**Common Ground**

s₄ₐ = \{s₁ \cup \{p\}, s₁ \cup \{¬p\}\}

**Projected Set**

ps₄ₐ = s₄ₐ

⇒ If A and B decide to drop the issue: the new cg is

\((s₁ \cup \{p\}) \cap (s₁ \cup \{¬p\}) = s₁\)
Our proposal – The distribution of discourse particles

- Using Farkas & Bruce’s model, we can model the distribution of discourse particles in terms of two factors:
  - requirements on the input state (‘conditions on the use’; ‘presuppositions’)
  - requirements on the output state (compatibility of the new *ps* with particle contribution)

- Reminder:
  - particle contributions are speaker attitudes regarding content contributed by host utterance
  - types of discourse particles and types of conditionals pattern together

⇒ look at discourse function of different types of conditionals (see also Biezma 2014)
Our proposal: The effect of discourse particles – I

K₅: A asserted *Sam is PRT home* relative to K₁

<table>
<thead>
<tr>
<th>A</th>
<th>Table</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td>⟨<em>Sam is home</em>[D]:{p}⟩</td>
<td></td>
</tr>
<tr>
<td>PRTₐ(p)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Common Ground s₅ = s₁ | Projected Set ps₅ = {s₁ ∪ {p} ∪ {PRTₐ(p)}} |

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K₆: A asked *Is Sam PRT home?* relative to K₁

<table>
<thead>
<tr>
<th>A</th>
<th>Table</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRTₐ(?p)</td>
<td>⟨<em>Sam is home</em>[l]:{p, ¬p}⟩</td>
<td></td>
</tr>
</tbody>
</table>

Common Ground

s₆ = s₁

Projected Set

ps₆ = {s₁ ∪ {p} ∪ {PRTₐ(?p)}},

s₁ ∪ {¬p} ∪ {PRTₐ(?p)}
Our proposal: The effect of hypothetical conditionals – I

- Traditional dynamic semantics: the result of updating the context state (a set of worlds) with a hypothetical conditional is to discard all worlds in which the antecedent $p$ is true and the consequent $q$ is false (Stalnaker 1975, Veltman 1985, 1996).
  \[\Rightarrow \text{For a world } w \text{ of resulting context state: either } p \text{ and } q \text{ are true in } w \text{ or } \neg p \text{ is true in } w\]

- Accepting a conditional is endorsing the link between $p$ and $q$ and accepting that in case of $p$, one is automatically committed to $q$.

- The discourse effect of hypothetical conditionals: add two possible continuations to the $ps$ – (i) the conditional proposition $r$ and $p$ and $q$ and (ii) the conditional proposition $r$ and $\neg p$. 
Our proposal: The effect of hypothetical conditionals – II

K₁: A asserted *If Sam is home, I will come* relative to K₁

<table>
<thead>
<tr>
<th>A</th>
<th>Table</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>r</td>
<td>⟨If Sam is home, I will come⟩[D]:{r}</td>
<td></td>
</tr>
</tbody>
</table>

Common Ground

\[ s₇ = s₁ \]

Projected Set

\[ ps₇ = \{s₁ \cup \{r\} \cup \{p\} \cup \{q\}, \]
\[ s₁ \cup \{r\} \cup \{¬p\}\] ⏩ Crucial point: similarity to interrogative – presence of alternatives in \( ps₇ \)

بدو الأمر المثير: المتشابهة مع الأسئلة السؤالية – يكون المدخلات البديلة في \( ps₇ \)

بدو الأمر المثير: المتشابهة مع الأسئلة السؤالية – يكون المدخلات البديلة في \( ps₇ \)

The open issue \( \{p, ¬p\} \) does not become the current QUD; no corresponding question on the Table.

Fits with Romero’s (2015) proposal for the connection between interrogatives and conditional antecedents.
Our proposal: The effect of factual conditionals – I

- Factual conditionals often echo someone else’s introduction of the antecedent (Iatridou 1991, von Fintel 2011).
  \( \Rightarrow \) the antecedent \( p \) is already common ground

(24) A: Sam wants to come to the party.
    B: Well, if Sam wants to come, I will call him.

- Since \( p \) is already common ground: the discourse effect of the factual conditional is to propose the consequent \( q \) for update.
Our proposal: The effect of factual conditionals – II

$K_8$: A asserted *If Sam wants to come, I will call him* relative to $K_1$

<table>
<thead>
<tr>
<th>A</th>
<th>Table</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>$q$</td>
<td>$\langle A ; \text{will call Sam}[D]:{q} \rangle$</td>
<td></td>
</tr>
</tbody>
</table>

**Common Ground**

$s_8 = s_1$ (with $\{p\} \in s_1$)

**Projected Set**

$ps_8 = \{s_1 \cup \{q\}\}$

**Crucial point:** similarity to declaratives – absence of alternatives in $ps_8$
‘Interrogative’ particles

(25) \(K_7\): A asserted *If Sam PRT is home, I will come* relative to \(K_1\)

<table>
<thead>
<tr>
<th>A</th>
<th>Table</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>(r)</td>
<td>\langle If Sam is home, I will come[D] : {r} \rangle</td>
<td></td>
</tr>
<tr>
<td>PRT(_A)(p)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Common Ground**
\(s_7 = s_1\)

**Projected Set**
\(ps_7 = s_1 \cup \{r\} \cup \{p\} \cup \{q\} \cup \{\text{PRT}_A(p)\},\)
\(s_1 \cup \{r\} \cup \{\neg p\} \cup \{\text{PRT}_A(p)\}\)

(26) \(K_6\): A asked *Is Sam PRT home?* relative to \(K_1\)

<table>
<thead>
<tr>
<th>A</th>
<th>Table</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRT(_A)(?p)</td>
<td>\langle Sam is home[I] : {p, \neg p} \rangle</td>
<td></td>
</tr>
</tbody>
</table>

**Common Ground**
\(s_6 = s_1\)

**Projected Set**
\(ps_6 = s_1 \cup \{p\} \cup \{\text{PRT}_A(p)\},\)
\(s_1 \cup \{\neg p\} \cup \{\text{PRT}_A(?p)\}\)
‘Declarative’ particles

(27) \[ K_8: \text{A asserted } \text{If Sam PRT wants to come, I will call him relative to } K_1 \]

| \( q \) | \( \langle A \text{ will call Sam[D]}:\{q\} \) | \( \) |
| \( \text{PRT}_A(p) \) | \( \) | \( \) |

Common Ground: \( s_8 = s_1 \) (with \( \{p\} \in s_1 \))

Projected Set: \( ps_8 = \{s_1 \cup \{q\} \cup \{\text{PRT}_A(p)\}\} \)

(28) \[ K_5: \text{A asserted } \text{Sam is PRT home relative to } K_1 \]

| \( p \) | \( \langle \text{Sam is home[D]}:\{p\} \) | \( \) |
| \( \text{PRT}_A(p) \) | \( \) | \( \) |

Common Ground: \( s_5 = s_1 \)

Projected Set: \( ps_5 = \{s_1 \cup \{p\} \cup \{\text{PRT}_A(p)\}\} \)
Putting the pieces together

- ‘Interrogative’ particles like *denn* and *überhaupt* require the absence of speaker commitment to the proposition they occur in and the presence of alternatives in the output *ps*

- ‘Declarative’ particles like *ja* and *halt* require the presence of speaker commitment to the proposition they occur in and the absence of alternatives in the output *ps*
Summary and conclusion

- There is a conditional-interrogative link
  - patterning of discourse particles as a diagnostic tool
  - discourse effects of hypothetical conditional antecedents similar to polar questions: non-committal to $p$; alternatives in the $ps$

- Factual conditionals behave very differently
  - similarity between declaratives and factual conditionals
  - existing commitment regarding $p$
  - commitment to $q$; no alternatives in the $ps$

- Tracking discourse effects in a model is worthwhile!
Open issues

▶ Unconditionals (Rawlins 2008, Ciardelli 2016)

$K_9$: A asserted \textit{Whether Sam comes or not, I will come} relative to $K_1$

<table>
<thead>
<tr>
<th>A</th>
<th>Table</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>$r$</td>
<td>$\langle \text{Whether Sam comes or not, I will come}\rangle$</td>
<td>${r}$</td>
</tr>
</tbody>
</table>

\begin{align*}
\text{Common Ground} & \quad \text{Projected Set} \\
S_9 = S_1 & \quad p_{S_9} = \{S_1 \cup \{r\}, \{p\}, \{q\}, S_1 \cup \{r\} \cup \{\neg p\} \cup \{q\}\}
\end{align*}

$\Rightarrow$ a subset of interrogative particles can occur; we find \textit{denn}

$\Rightarrow$ declarative particles cannot occur \hspace{1cm} (→ see below)

▶ Variable scope of discourse particles: \textit{halt}

(29) Ob Sam halt kommt oder nicht, wir gehen zur Party.  
whether Sam \textit{Halt} comes or not we go to-the party \hspace{1cm} \text{‘Whether Sam is \textit{Halt} coming or not, we’ll go to the party.’}

$\Rightarrow$ \textit{halt} seems to have scope over the entire unconditional
Thank you!
References I


References II


References III


References IV


Attested examples: *doch, eh, halt*

(30) Wenn es **doch** störende Macken hat, dann wundere ich mich if it **DOCH** distracting faults has then wonder I myself über die wirklich sehr hohen Wertungen. about the really very high ratings ‘If it **DOCH** has distracting faults, I wonder about very high ratings.’

(31) Wenn wir **eh** wach sind, dann können wir auch was essen. if we **EH** awake are then can we also something eat ‘If we are **EH** awake, we can also eat something.’

(32) Wenn er **halt** die Hausschuhe haben wollte und nicht die anderen, if he **HALT** the slippers have wanted and not the others hat sie ihm sie gekauft. has she him them bought ‘If he **HALT** wanted these slippers and not the others, she bought them for him.’
Attested examples: *ja, denn, überhaupt*

(33) Aber wenn er *ja* im Himmel ist, kann man den doch nicht
but if he *JA* in-the heaven is can one him **DOCH** not
wiederbeleben.
resuscitate
‘But if he is JA in heaven, one **DOCH** cannot resuscitate him.’

(34) BREXIT, wenn er *denn* kommt, wird ein langer Prozess.
BREXIT if he **DENN** comes will-be a long process
‘BREXIT will be a long process if it **DENN** happens.’

(35) Zum Freundschaften pflegen hat er später immer noch Zeit, wenn er
to-the friendship **attend** has he later always **still** time if he
**überhaupt** welche will.
**ÜBERHAUPT** some wants
‘He will still have time to attend to friendships later if he **ÜBERHAUPT**
wants any.’
Two cases of retraction

(36)  A: We will have a picknick ... A/B: if it is sunny.

▶ Retraction of unqualified commitment to q

(37)  A: If it is sunny, we will have a picknick.
       B: No, we will have a picknick either way.

▶ Retraction of the conditional relation between p and q
Retracting unqualified commitment

(38) \( K_5 \): A asserted *We will have a picknick* relative to \( K_1 \)

<table>
<thead>
<tr>
<th>A</th>
<th>Table</th>
<th>B</th>
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<tbody>
<tr>
<td>( q )</td>
<td>( \langle \text{We will have a picknick[D]}:{q} \rangle )</td>
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**Common Ground** \( s_5 = s_1 \)  
**Projected Set** \( ps_5 = \{s_1 \cup \{q\}\} \)

\( \Rightarrow \) A notices that \( q \) is dependent on the truth of \( p \)  
\( \Rightarrow \) But: prob(\( p(w_0) = 1 \)) is below the threshold for assertability for A  
\( \Rightarrow \) A qualifies her utterance

(39) \( K_7 \): A asserted *We will have a picknick if it is sunny* relative to \( K_1 \)

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<tr>
<td>( r )</td>
<td>( \langle \text{We will have a picknick if it is sunny[D]}:{r} \rangle )</td>
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**Common Ground** \( s_7 = s_1 \)  
**Projected Set** \( ps_7 = \{s_1 \cup \{r\} \cup \{p\} \cup \{q\}, s_1 \cup \{r\} \cup \{\neg p\}\} \)

For more details, see Csipak & Zobel 2016.
Retracting the causal connection

(40) K₇: A asserted *We will have a picknick if it is sunny* relative to K₁

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<tbody>
<tr>
<td>r</td>
<td>⟨<em>We will have a picknick if it is sunny</em>[D]:{r}⟩</td>
<td></td>
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**Common Ground**

s₇ = s₁

**Projected Set**

ps₇ = {s₁∪{r}∪{p}∪{q}, s₁∪{r}∪{¬p}}

⇒ A is only willing to commit to q in case of p (⇒ r)

⇒ B is unwilling to accept this qualification:

“No, we will have a picknick either way.” (unconditional)

⇒ “Discourse in crisis” (Farkas & Bruce 2010)