

Discourse particles and the connection between conditionals and questions

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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 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

| particle | decl. | polar interr. | antecedent of cond. |
|------------------|-------|---------------|---------------------|
| <i>denn</i> | – | ✓ | ✓ |
| <i>doch</i> | ✓ | ✓ | ✓ |
| <i>eh</i> | ✓ | ✓ | ✓ |
| <i>etwa</i> | – | ✓ | – |
| <i>halt</i> | ✓ | – | ✓ |
| <i>ja</i> | ✓ | – | ✓ |
| <i>überhaupt</i> | ✓ | ✓ | ✓ |
| <i>wohl</i> | ✓ | ✓ | – |

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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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

| particle | decl. | factual ant. | polar interr. | hypoth. ant. |
|------------------|-------|--------------|---------------|--------------|
| <i>denn</i> | – | – | ✓ | ✓ |
| <i>doch</i> | ✓ | ✓ | ✓ | – |
| <i>eh</i> | ✓ | ✓ | ✓ | ✓ |
| <i>etwa</i> | – | – | ✓ | – |
| <i>halt</i> | ✓ | ✓ | – | – |
| <i>ja</i> | ✓ | ✓ | – | – |
| <i>überhaupt</i> | ✓ | – | ✓ | ✓ |
| <i>wohl</i> | ✓ | – | ✓ | – |

Consequences of the distribution

- ▶ Explaining the distribution of discourse particles in conditional antecedents in terms of sentence type is problematic
 - ↪ “antecedents of different types of conditionals have different sentence types”
- ▶ **Instead:** Hypothetical and factual conditionals have different discourse effects
 - ↪ 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 : discourse initial context state

| | | |
|----------------------------|---------------------------------------|----------|
| A | Table | B |
| | | |
| 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”.

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 $\llbracket S \rrbracket = p$ are added to the Table (to be accepted/rejected); the speaker is committed to p .
- ▶ **Polar interrogatives:** The form $S[I]$ and content $\llbracket S \rrbracket = \{p, \neg p\}$ 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

K_2 : A asserted *Sam is home* relative to K_1

| A | Table | B |
|----------------------------------|-----------------------------------------------|--------------------------------------------------|
| p | $\langle \text{Sam is home}[D]:\{p\} \rangle$ | |
| 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

K_4 : A asked *Is Sam home?* relative to K_1

| | | |
|-------------------------------------|--------------------------------------------------------------------------|----------|
| A | Table | B |
| | $\langle \text{Sam is home}[l]:\{p, \neg p\} \rangle$ | |
| Common Ground $s_4 = s_1$ | Projected Set $ps_4 = \{s_1 \cup \{p\}, s_1 \cup \{\neg p\}\}$ | |

(Farkas & Bruce 2010: 95)

$\Rightarrow ps_4$ is not a singleton set: there are open issues (the state is “inquisitive”)

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

K_{4a} : B signals that she cannot answer A's question

| A | Table | B |
|----------------------------------------------------------------------------|-------|--------------------------------------------|
| | | |
| Common Ground $s_{4a} = \{s_1 \cup \{p\}, s_1 \cup \{\neg p\}\}$ | | Projected Set $ps_{4a} = s_{4a}$ |

⇒ If A and B decide to drop the issue: the new *cg* is
 $(s_1 \cup \{p\}) \cap (s_1 \cup \{\neg p\}) = s_1$

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

K_5 : A asserted *Sam is PRT home* relative to K_1

| A | Table | B |
|----------------------------------|-----------------------------------------------|------------------------------------------------------------------------------|
| p $\text{PRT}_A(p)$ | $\langle \text{Sam is home}[D]:\{p\} \rangle$ | |
| Common Ground $s_5 = s_1$ | | Projected Set $ps_5 = \{s_1 \cup \{p\} \cup \{\text{PRT}_A(p)\}\}$ |

Our proposal: The effect of discourse particles – II

K_6 : A asked *Is Sam PRT home?* relative to K_1

| A | Table | B |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|---|
| PRT _A (?p) | $\langle \text{Sam is home}[I]: \{p, \neg p\} \rangle$ | |
| Common Ground $s_6 = s_1$ | Projected Set $ps_6 = \{s_1 \cup \{p\} \cup \{\text{PRT}_A(?p)\},$ $s_1 \cup \{\neg p\} \cup \{\text{PRT}_A(?p)\}\}$ | |

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).
⇒ For a world w of resulting context state: either p and q are true in w or $\neg p$ 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

K_7 : A asserted *If Sam is home, I will come* relative to K_1

| A | Table | B |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------|---|
| r | $\langle \text{If Sam is home, I will come}[D]:\{r\} \rangle$ | |
| Common Ground $s_7 = s_1$ | Projected Set $ps_7 = \{s_1 \cup \{r\} \cup \{p\} \cup \{q\},$ $s_1 \cup \{r\} \cup \{\neg p\}\}$ | |

- ▶ **Crucial point:** similarity to interrogative – presence of alternatives in ps_7
- ▶ The open issue $\{p, \neg p\}$ 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 Stechow 2011).

⇒ 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

| A | Table | B |
|-------------------------------------------------------------|---------------------------------------------------|-----------------------------------------------------|
| q | $\langle A \text{ will call Sam}[D]:\{q\}\rangle$ | |
| 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

| A | Table | B |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|---|
| r $PRT_A(p)$ | $\langle \text{If Sam is home, I will come}[D]:\{r\} \rangle$ | |
| Common Ground $s_7 = s_1$ | Projected Set $p_{s_7} = \{s_1 \cup \{r\} \cup \{p\} \cup \{q\} \cup \{PRT_A(p)\},$ $s_1 \cup \{r\} \cup \{\neg p\} \cup \{PRT_A(p)\}$ | |

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

| A | Table | B |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------|---|
| $PRT_A(?p)$ | $\langle \text{Sam is home}[I]:\{p, \neg p\} \rangle$ | |
| Common Ground $s_6 = s_1$ | Projected Set $p_{s_6} = \{s_1 \cup \{p\} \cup \{PRT_A(p)\},$ $s_1 \cup \{\neg p\} \cup \{PRT_A(?p)\}$ | |

'Declarative' particles

- (27) K_8 : A asserted *If Sam PRT wants to come, I will call him* relative to K_1

| A | Table | B |
|-------------------------------------------------------------|-----------------------------------------------------------------------|---|
| q $PRT_A(p)$ | $\langle A \text{ will call Sam}[D]:\{q\}\rangle$ | |
| Common Ground $s_8 = s_1$ (with $\{p\} \in s_1$) | Projected Set $ps_8 = \{s_1 \cup \{q\} \cup \{PRT_A(p)\}\}$ | |

- (28) K_5 : A asserted *Sam is PRT home* relative to K_1

| A | Table | B |
|-------------------------------------|-----------------------------------------------------------------------|---|
| p $PRT_A(p)$ | $\langle Sam \text{ is home}[D]:\{p\}\rangle$ | |
| Common Ground $s_5 = s_1$ | Projected Set $ps_5 = \{s_1 \cup \{p\} \cup \{PRT_A(p)\}\}$ | |

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 *Whether Sam comes or not, I will come* relative to K_1

| A | Table | | B |
|-------------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|---|
| r | $\langle \text{Whether Sam comes or not, I will come}[D]:\{r\} \rangle$ | | |
| Common Ground $s_9 = s_1$ | | Projected Set $ps_9 = \{s_1 \cup \{r\} \cup \{p\} \cup \{q\}, s_1 \cup \{r\} \cup \{\neg p\} \cup \{q\}\}$ | |

⇒ a subset of interrogative particles can occur; we find *denn*

⇒ declarative particles cannot occur (→ see below)

- ▶ Variable scope of discourse particles: *halt*

(29) Ob Sam *halt* kommt oder nicht, wir gehen zur Party.
 whether Sam *HALT* comes or not we go to-the party
 'Whether Sam is *HALT* coming or not, we'll go to the party.'

⇒ *halt* seems to have scope over the entire unconditional

Thank you!

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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 picnic . . . A/B: if it is sunny.

- ▶ Retraction of unqualified commitment to q

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

- ▶ Retraction of the conditional relation between p and q

Retracting unqualified commitment

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

| A | Table | B |
|-------------------------------------|-----------------------------------------------------------|---|
| q | $\langle \textit{We will have a picnic}[D]:\{q\} \rangle$ | |
| Common Ground $s_5 = s_1$ | Projected Set $ps_5 = \{s_1 \cup \{q\}\}$ | |

- ↪ A notices that q is dependent on the truth of p
- ↪ But: $\text{prob}(p(w_0)=1)$ is below the threshold for assertability for A
- ↪ A qualifies her utterance

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

| A | Table | B |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------|---|
| r | $\langle \textit{We will have a picnic if it is sunny}[D]:\{r\} \rangle$ | |
| 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) K_7 : A asserted *We will have a picnic if it is sunny* relative to K_1

| A | Table | B |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------|---|
| r | $\langle \textit{We will have a picnic if it is sunny}[D]:\{r\} \rangle$ | |
| Common Ground $s_7 = s_1$ | Projected Set $ps_7 = \{s_1 \cup \{r\} \cup \{p\} \cup \{q\}, s_1 \cup \{r\} \cup \{\neg p\}\}$ | |

- \rightsquigarrow A is only willing to commit to q in case of p ($\Rightarrow r$)
- \rightsquigarrow B is unwilling to accept this qualification:
 "No, we will have a picnic either way." (unconditional)
- \rightsquigarrow *"Discourse in crisis"* (Farkas & Bruce 2010)