

Going beyond the prototypical: Special interrogatives and special declaratives

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1 Introduction

Aims¹

1. Understand the parameters relevant to distinguishing between different types of interrogatives and the speech acts they are used to perform

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|-----|--|-----------------------------------|
| (1) | <i>English</i> | |
| | a. Is Jocelyn here? | [Unmarked Polar Interrogative] |
| | b. Jocelyn's here? | [Rising Declarative] |
| | c. Jocelyn's here, isn't she? | [Tag Interrogative] |
| (2) | <i>Romanian</i> | |
| | a. Ioana e aici? | [Unmarked Polar Interrogative] |
| | 'Is Ioana here?' | |
| | b. <i>Oare</i> Ioana e aici? | [<i>Oare</i> Interrogative] |
| | 'Is Ioana here, I wonder.' | |
| (3) | <i>German</i> (Eckardt, 2017) | |
| | a. Wo ist Oma untergekommen? | [Unmarked Polar Interrogative] |
| | 'Where is Granny?' | |
| | b. Wo ist Oma <i>wohl</i> untergekommen? | <i>wohl</i> Interrogative |
| | 'Can you guess Granny's whereabouts?' | |
| | c. Wo Oma <i>wohl</i> untergekommen ist? | V-final <i>wohl</i> Interrogative |
| | 'Can you and me figure out where Granny is?' | |

2. Extend the approach to declaratives

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|-----|-----------------------------------|------------------------|
| (4) | <i>German</i> (Eckardt, 2017) | |
| | a. Die Oma ist im Hotel Viktoria. | [Unmarked Declarative] |
| | 'Granny is in Hotel Viktoria.' | |

¹Much of what follows is based on work with Floris Roelofsen, some of which made it into Farkas and Roelofsen (2017), and some of which did not. Proposals made below concerning marked declaratives are rooted in work Roelofsen and I presented at ESSLLI 25, Düsseldorf, 2013. I am grateful to Floris Roelofsen for useful comments on the material presented here and to Regine Eckardt sharing her insights on *wohl*.

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| | | |
| | b. Die Oma ist <i>wohl</i> im Hotel Viktoria. | [<i>Wohl</i> Declarative] |
| | 'Granny is in Hotel Viktoria, my possibly unreliable evidence shows.' | |
| (5) | <i>Romanian</i> | |
| | a. Bunica e acasă. | [Unmarked declarative] |
| | b. Poate că bunica e acasă. | [Pseudo-embedded Declarative] |
| | 'Perhaps Granny is home.' | |
| (6) | <i>English</i> | |
| | a. Granny is at home. | [Unmarked declarative] |
| | b. Perhaps/maybe Granny is at home. | [Epistemic Declarative] |
| | c. Granny is at home, I guess. | [Hedged Declarative] |

Hypothesis

Sentence types (declaratives, interrogatives, also exclamatives and imperatives) are associated with

- **semantic content** – compositional semantics
- **conventional discourse effects** – conventional ways in which the sentence type affects the discourse context against which it is uttered (Condoravdi and Lauer (2012) and references therein)
- **non-conventional effects** – effects due to
 - pragmatic reasoning
 - competition between available forms

To take an example:

- (7) Is this the best possible analysis?

Conventional discourse effect

- raise the question of whether this is the best possible analysis
- project an immediate future in which the Addressee resolves it one way or another, and the Speaker accepts the Addressee's response

Non-conventional effects

The Speaker may be pursuing various goals in asking her question

- *information seeking question*: the Speaker is ignorant, and she assumes the Addressee is competent
- *rhetorical question*: the answer is obvious in context, and the Speaker wishes to point this out
- *self-addressed rhetorical question*: the Speaker is competent and assumes the Addressee is not; the Speaker provides the answer in the next turn
- *'quiz' question*: the Speaker knows the answer and the aim of the question is to check whether the Addressee does as well

The semantics and the conventional discourse effects of the interrogative are the same; what is different are pragmatic assumptions about why the Speaker raises the question

Two types of conventional discourse effects – – Farkas and Roelofsen (2017), henceforth F&R

- **basic**: determined by the semantic content
- **special**: additional, special effects contributed by special forms whose role is precisely to contribute special discourse effects

Two types of sentence forms

- **unmarked**: conventional discourse effects determined by the semantics
- **marked**: conventional discourse effects determined by the semantics + effects contributed by special markers

Tag interrogatives in F&R

(8) This is the best possible analysis, isn't it?

- Semantics of a polar interrogative
- Conventional discourse effect:
 - *Basic effect* determined by the semantics
 - *Special effect* contributed by the tag: the Speaker registers bias in favor of the semantic content of the anchor

Here I extend the approach in F&R with the following three questions in mind:

1. *Theoretical question*: What type of conventional discourse effects are encoded in special forms?
2. *Empirical question*: How to extend the empirical reach to a wider range of special questions and special assertions?
3. *General question*: How to divide labor between the semantic and the discourse components?
 - What type of 'content' is best treated in the semantics?
 - What type of 'content' is best treated in the discourse component?

Inquisitive Semantics terminology

- *state, possibility, s*: set of worlds
- *proposition p* – the semantic content of sentences: set of states with a particular structure
- *an alternative a in a proposition*: a maximal state in the proposition
- *inquisitive proposition*: a proposition that contains more than one alternative
- *non-inquisitive proposition*: a proposition that contains a unique alternative

- *a highlighted alternative a in a proposition*: an alternative contributed by the sentence radical; salient, prominent alternative in p

Plan

- Section 2: Old context structure with new details
- Section 3: Questions and interrogative sentences
- Section 4: Assertions and declarative sentences
- Section 5: Summary and outlook

2 Old context structure with new details

2.1 Point of departure

Context structure components in F&R:

1. Discourse commitments: list of states (Gunlogson, 2001)
 - DC_X for each interlocutor X: list of states X presents herself as committed to for the purposes of the conversation; for every s in DC_X , X presents herself as assuming $w_a \in s$
 - needed to record individual commitments that are not (yet) shared commitments
 - in canonical cases: X's commitments are entailed by her epistemic state (Quality Maxim)
 - EP_X for each interlocutor X: list of possibilities X presents herself as having some evidence for
 - needed to record the contextual effects of non-neutral interrogatives

Proposed way of treating discourse commitments

- discourse commitment list: stack of states
- DC_X : discourse commitments of X; divided into two sub-parts
 - (a) FC_X : **firm commitments** of X; X presents herself as holding on to these commitments in the future of the conversation
 - (b) EC_X : **evidenced commitments** of X; X presents herself as having some evidence for the states on this list



- (c) Within EC_X further distinctions can be drawn based on strength of commitment to s or the nature of the evidence X has for s^2
- (d) Within FC_X , further distinctions can be drawn wrt the type of evidence X has for s

²Note that one may commit to having evidence for s but not to necessarily having credence in s . This is, in fact, is what happens in the case of RDs under the account in F&R.

2. Table: stack of propositions

- needed to model questions under discussion

3. Projected set: the set of context sets reached once the issues on the Table are resolved in a canonical way, i.e., in a way that leads to *monotonic information increase*

- needed to model the proposal nature of discourse moves

Conventional discourse effects

- Ways in which the utterance of a sentence type S expressing a proposition p affects the context structure against which it is uttered
- They should be defined as context change potentials: functions from input context structures to output context structures
- Conventional discourse effects will be characterized by specifying the changes they bring about on the affected context components
- As mentioned above, conventional discourse effects can be **basic** or **special**

The basic conventional discourse effect of uttering a sentence S expressing a proposition p:

(9) Basic conventional discourse effect(take 1)

1. $DC_{Sp,o} = DC_{Sp,i} + \text{info}(p)$ (info(p) added to DC_{Sp} , where info(p) is the union of all states in p and + is the symbol used when adding an item to the top of a stack)
2. $Table_o = Table_i + p$
3. ps_o is created by intersecting each element of the input ps, ps_i , with each alternative in p

Basic conventional discourse effect of a simple declarative³

- (10) a. Anna's sister misses her.
b. Proposition expressed: $p = \{\mathbf{a}\}$

1. $DC_{Sp,o} = DC_{Sp,i} + a$
2. $Table_o = Table_i + p$
3. $ps_o: \{cs_i \cap a\}$

Basic conventional discourse effect of simple polar interrogative⁴

- (11) a. Does Anna's sister miss her?
b. Proposition expressed: $p = \{\mathbf{a}, \bar{\mathbf{a}}\}$

1. $DC_{Sp,o} = DC_{Sp,i} + (a \cup \bar{a})$ – trivial commitment
2. $Table_o = Table_i + p$
3. $ps_o: \{cs_i \cap a, cs_i \cap \bar{a}\}$

³For the sake of simplicity, the input ps is assumed to be a singleton. The subscripts *o* and *i* stand for *input* and *output* respectively.

⁴This is straightforwardly generalizable to constituent interrogatives

2.2 The ps revisited

The ps in terms of projected Addressee commitments – see Meriçli (2016)

- in Farkas and Bruce (2010), F&R: placing a proposition on the Table projects future contexts in which the issue is resolved in terms of future context sets– see (10), (11)
- Meriçli (2016) notes that this future state is to be reached only after the relevant commitments appear on both the Speaker's and the Addressee's commitment lists
 - in the case of declaratives, the projected *cs* is reached only after the unique alternative in the proposition expressed is added to DC_{Ad}
 - in the case of interrogatives, a projected *cs* is reached only after one of the relevant states (in our case, *a* or \bar{a}) is added first to DC_{Ad} and then to DC_{Sp}

Proposal

Following Meriçli

- Characterize the ps in terms of the first step, namely projected DC_{Ad}
- Therefore: discourse moves project future canonical Addressee commitments

Basic conventional discourse effect of uttering a sentence S expressing a proposition p:

(12) Basic conventional effect(take 2)

- a. $DC_{Sp,o} = DC_{Sp,i} + \text{info}(p)$
- b. $Table_o = Table_i + p$
- c. $ps_o =$ set formed by adding every alternative $a \in p$ to every element of ps_i , where the elements of ps_i are Addressee commitments.⁵

Conventional effect on the ps of a simple declarative expressing a singleton $p = \{\mathbf{a}\}$:

- (13) $ps_o = \{DC_{Ad,i} + a\}$

Conventional effect on the ps of a simple polar interrogative expressing $p = \{\mathbf{a}, \bar{\mathbf{a}}\}$:

- (14) $ps_o = \{DC_{Ad,i} + a, DC_{Ad,i} + \bar{a}\}$

2.3 Two parameters

1. Discourse commitment parameter: which DC list is to be affected, FC or EC?

- default value: FC
- marked value: EC

2. When is the projected state to be reached?

ps_o has a temporal parameter specifying whether one of the projected states is to be reached in the immediate future (IF) or in a possibly delayed future (DF)

- default value: IF – possibility added to the top of the $DC_{Ad,i}$
- marked value: DF – possibility added to $DC_{Ad,i}$ only after potentially further future additions to commitment lists of both Speaker and Addressee

⁵The split between firm and evidenced commitments will be addressed shortly.

Justification of the choice of default values

- Default conversational goal: increase information in the cg
- Adding a state on a FC list is a more effective way of reaching this goal than adding a state to an EC list
- The sooner the Addressee responds in the canonical way, the sooner the goal is reached

Upshot

Basic conventional discourse effect with default parameters specified:

- (15) *Basic conventional effect*(take 3)
- a. $FC_{Sp,o} = FC_{Sp,i} + \text{info}(p)$
 - b. $\text{Table}_o = \text{Table}_i + p$
 - c. $\text{ps}_{o,IF}$ = set formed by adding every alternative $a \in p$ to every element of ps_i , where the elements of ps_i are FC_{Ad} .

2.3.1 Conclusion

The new details:

1. affected discourse commitments DC can be firm commitments (FC) or evidenced commitments (EC)
 - default: FC
2. the output projected set ps_o is characterized in terms of Addressee commitments
3. ps_o has a temporal parameter set to immediate future (IF) or delayed future (DF)
 - default: IF

3 Questions and interrogative sentences

Aims

- characterize what counts as a *prototypical question act*
- characterize unmarked polar interrogative sentence types as used to ask a prototypical question
- characterize marked interrogatives as signaling departures from prototypical questions

3.1 Prototypical questions

Core questioning act

- raise an issue: steer the conversation towards several possible continuations, each modeling a state where the issue is settled
- get the Addressee to settle the issue: get the Addressee to make a commitment to one of the answers

Default pragmatic assumptions

- Conversational goal: increase information
- The Speaker is ignorant: otherwise she would provide the information rather than ask for it
- Authors of proposals assume that it is possible to carry out the proposal, and therefore
- The Speaker assumes that the Addressee is able to settle the issue
- Ideally, the sooner the better

(16) *Characteristics of the prototypical question*

- a. The Speaker places an inquisitive proposition p on the Table
- b. Speaker ignorance: the Speaker's epistemic state is neutral relative to all $a \in p$
- c. Assumed Addressee competence: the Speaker assumes that there is an alternative $a \in p$ such that the epistemic state of the Addressee supports the addition of a to FC_{Ad}
- d. The projected Addressee commitment is in the immediate future.

3.2 Unmarked interrogatives

Terminology:

- 'Interrogative': sentence forms the language uses to express inquisitive propositions

Unmarked interrogative sentence

- Formally marked to express an inquisitive proposition (word order, intonation, interrogative particle)
- The conventional discourse effect of an unmarked interrogative: the basic effect with under-specified parameters set to default value
 - Projected Addressee commitments added to FC_{Ad} by default
 - ps_o temporal parameter set to IF by default

(17) *Conventional effect of an unmarked polar interrogative expressing a proposition p*

- a. $FC_{Sp,o} = FC_{Sp,i} + (a \cup \bar{a})$
- b. $\text{Table}_o = \text{Table}_i + p$
- c. $\text{ps}_{o,IF} = \{FC_{Ad,i} + a, FC_{Ad,i} + \bar{a}\}$ ⁶

3.3 Special questions, marked interrogatives

- Languages often employ special formal means in interrogative sentences to mark that a question departs from the prototypical case.
- These marked interrogatives are associated with special conventional discourse effects

Two families of special questions signaled by marked interrogatives

⁶For simplicity, I assume that the input Table was empty and therefore the input ps was a singleton whose element was $FC_{Ad,i}$.

- *Non-neutral* polar questions: give up the default assumption of Speaker ignorance
- *Deliberative* questions (Truckenbrodt, 2006): give up the assumption that the Addressee will settle the issue in the immediate future
 - *Non-intrusive* questions: give up the default assumption that the Addressee will engage with the issue in the immediate future
 - *Tentative* questions: give up the default assumption of Addressee competence

3.3.1 Non-neutral polar questions

- Common characteristic: give up the assumption of Speaker ignorance by signaling a special epistemic stance on the part of the Speaker relative to the highlighted alternative in p
- Common effect: add the highlighted alternative a on a Speaker commitment stack
- This commitment cannot be firm, given that projected futures include Addressee commitment to \bar{a} , and given that projected commitments cannot contradict firm Speaker commitments
- Therefore, non-neutral polar questions enter the highlighted alternative on EC_{Sp}
- Further differentiations are possible with respect to the strength of this commitment or the nature of evidence the Speaker has for it, resulting in signaling bias for the highlighted alternative or not

Non-neutral polar questions in English – see F&R

- Rising declaratives

(18) Anna's sister misses her?
- Tag interrogatives

(19) a. Anna's sister misses her, doesn't she?
b. Anna's sister misses her, does she?
- HNPQ

(20) Doesn't Anna's sister miss her?

Debated issue: status of RD – see Westera (2017), Rudin (2017), Jeong (2017)

- Do they express an inquisitive proposition?
 - if so, rising intonation in English can be semantically significant, as it is in other languages - F&R, Jeong (2017)
 - if not, rising intonation in English can be seen as signaling purely special effects - Westera (2017), Rudin (2017)
- For F&R:

- declarative form: signals that the highlighted alternative is to be added to DC_{Sp} ('true to form' – Gunlogson (2001))
- which commitment set is to be chosen depends on the semantics of the sentence

Non-neutral polar questions in Japanese – Sudo (2012), Hirayama (2017)

- Japanese question particles are sensitive to the distinction between private vs. contextually present evidence

Upshot
Non-neutral questions

- give up the assumption of Speaker ignorance characterizing prototypical questions

Non-neutral questions are expressed by marked interrogatives

- the marked form signals that the highlighted alternative is added to $EC_{Sp,i}$ in F&R

We now turn to 'deliberative' questions by looking first at non-intrusive questions in Romanian and then at tentative questions in German.

3.3.2 Non-intrusive questions: Romanian *oare* interrogatives

Romanian *oare* interrogatives (Farkas and Bruce, 2010)⁷

- (21) a. Oare cine mă va ajuta?
oare who me will help?
'Who will help me, I wonder.'
b. Oare te mai gândești la mine?
oare you still thinking of me?
'Are you still thinking of me, I wonder.'

- *oare* is a morpheme used elsewhere to signal free choice (sometimes under the form *or*):

- (22) a. *oare-care*
oare - what
'any' in pejorative use (any old)
b. *oricine/orice*
or-who/what
'anybody/anything'

- *oare* may not occur in a declarative sentence

- (23) *Petru oare a plecat.
'Petru *oare* has left.'

Oare in interrogative sentences

- it can occur in both polar and constituent questions – see (21)

⁷There is a Hungarian close relative of *oare*, namely *vajon*. The material in this section owes a lot to discussion with Sabine Iatridou.

- it can occur sentence initially, sentence finally, or immediately after the verb⁸

- (24) a. Oare cine îl va ajuta pe Petru?
Oare who him will help Ac. Peter
b. Cine îl va ajuta pe Petru oare?
Who him will help Ac. Peter
c. Cine îl va ajuta oare pe Petru?
Who him will help oare Ac. Peter
'Who will help Peter, I wonder.'

- Constituent interrogatives in R: inquisitiveness is marked by the fronted interrogative pronoun
- Polar interrogatives in R: inquisitiveness is signaled primarily by the rising intonation contour

When can *oare*-interrogatives **not** be used?

- Any time the situation is such that the Addressee is under an obligation to answer the question

- (25) *Context: Policeman to driver he stopped*
#Oare cum te cheamă?
Oare how you call
'What is your name, I wonder.'

- (26) *Context: Teacher to pupil*
#Oare ce ai avut pentru azi?
Oare what you-have for today
'What is your lesson for today, I wonder.'

Hypothesis (Farkas and Bruce, 2010)

- (27) *Non-intrusive question*
Effect of *oare*: remove the expectation of a response; add to the ps a cs state identical to the input cs

Implementation:

- **Semantics of an *oare*-question:** same as that of a regular interrogative
- **Conventional discourse effects of an *oare* question**
 - Basic effect dictated by the semantics
 - Special effect: ps_o includes a context state where $FC_{Ad,o} = FC_{Ad,i}$

- (28) *Effect of an *oare* polar interrogative on ps*
 $ps_{o,IF} = \{FC_{Ad,i} + a, FC_{Ad,i} + \bar{a}, FC_{Ad,i}\}$

Effect of *oare* in questions: signals a departure from the canonical effect in that the Addressee is not necessarily projected to answer the question

⁸I do not detect any interpretive differences associated with the different positions but the matter needs further investigation. Sentence final *oare* seems to me slightly degraded relative to the other two possibilities. For the claim that *oare* is a complementizer, see Hill (2002).

- This means that a future conversational move on her part in which she in fact does not answer the question is considered canonical
- This does not mean that she is *invited* not to answer the question – ps defines canonical future conversational states, not invited ones
- It simply means that there is a signal that she is not assumed to answer it.
- The effect of *oare* is to widen ps_o , an effect that is consistent with the free choice nature of *oare* elsewhere

Properties of *oare* questions captured

- Non-intrusiveness: main contribution of *oare* is to mark non-resolution as one of the immediate canonical futures
- This does not mean that the question has not changed the input context – futures where the question is answered have been projected
- Speaker still expresses desire to get an answer:
 - she asked a question thereby placing an issue on the Table
 - the Speaker is, by default, assumed not to know the answer
 - the Addressee is, by default, assumed to know the answer
 - reaching a state where the issue is resolved is preferable to not reaching such as state
 - the more informative projected states are preferable to the less informative one, which could have been reached by not saying anything at all

Three predictions

- *Oare* questions cannot be rhetorical questions of the 'obvious answer' type because the widening they achieve is pragmatically useless in such cases

(29) #Păi oare am de a face cu idioți?
Part. oare I-have to deal with idiots
'Am I dealing with idiots?'
- *Oare* questions are fine in the type of rhetorical questions where the Speaker answers her own question showing that they, just like ordinary questions, do not presuppose Speaker ignorance

(30) Oare ecuația asta are o soluție?
Oare equation this has a solution
'Does this equation have a solution, I wonder.'
- *Oare* questions are fine as 'engaging' questions, where the Speaker is ignorant and does not assume that the Addressee is competent; by raising the question, and thereby indicating her wish to find an answer, she is inviting her Addressee to engage with the question if she so wishes.

Alternative hypothesis

- *Oare* questions presuppose that the Addressee does not know the answer to the question

Reason to reject this alternative hypothesis⁹

- *Oare* questions are fine in situations in which the Addressee is the sole authority over the answer; in such cases, the Addressee is in fact presupposed to know the answer, given the semantics of the question

(31) Addressee epistemic authority question

- a. Oare mai ai migrene?
oare still you.have migraines
'Do you still have migraines, I wonder.'
- b. Oare ai avea chef sa vii cu mine la piață?
oare you.have.Cond inclination Subj you.come with me to market
'Would you feel like coming with me to the market, I wonder?'
- c. Oare unde ești? [overheard as someone was speaking on the phone]
oare where you.are
'Where are you, I wonder.'

These are 'shy' questions: the Speaker asks them but does not want to impose on the Addressee by requesting her to actually commit to an answer; (31-a) is perfect in a written communication (e-mail, letter) to blunt the expectation of an answer

Two further questions

- Are *oare*-questions questions?
- Do *oare* questions have an Addressee?

Answers:

- *Oare* questions are questions and they are addressed to the Addressee:

- (32) a. A: Oare e gata supa?
oare is ready soup.the
'Is the soup ready, I wonder.'
- b. P: De ce mă întrebi pe mine?
why me you.ask Ac. me
'Why are you asking ME?'

P's answer would not be appropriate were A to pose an indirect question using a declarative:

- (33) a. A: Mă întreb dacă e gata supa.
Me ask if is ready soup.the
'I wonder whether the soup is ready.'

⁹Of course *oare* questions, just like prototypical questions, do not necessarily presuppose that the Addressee knows the answer.

- b. P: #De ce mă întrebi pe mine?
why me you.ask Ac. me
'Why are you asking ME?'

Upshot

Non-intrusive questions

- give up the assumption that the Addressee will engage with the question, which is present in prototypical questions
- they are 'deliberative' in the sense that they give up the assumption that the issue will be settled by the Addressee in the immediate future of the conversation

Non-intrusive questions are expressed by marked interrogatives

- the marked form signals that ps_o also includes $FC_{Ad,i}$, in addition to the Addressee commitments projected by the basic conventional discourse effect

Next: 'deliberative' questions that signal departure from the prototypical assumption of Addressee competence

3.3.3 Tentative questions: German *wohl* questions

- In German, interrogatives may be marked with *wohl* signaling special effects – Zimmermann (2004) and Zimmermann (2011); the discussion here follows Eckardt (2017), which is also the source for all the examples
- Two types of *wohl* interrogatives
 - V2 *wohl* interrogatives – main clause word order
 - V-final *wohl* interrogatives – subordinate clause word order¹⁰

Type 1 tentative questions: V2 *wohl* interrogatives

- (34) Wo ist Oma *wohl* untergekommen?
'Do you know something that allows you to guess where Oma is?'

- Intuitive characterization in Zimmermann (2011): request the Addressee to provide an answer p to the question such that the Addressee's epistemic base defeasibly entails p
- Infelicitous when Addressee is an authority over the answer

- (35) Policeman at the border control:
#Wie heißen Sie *wohl*?
'Can you give a guess as to what your name is?'

Suggested account: V2 *wohl* questions are special in that they project non-firm Addressee commitment in response

- **Semantics:** same as regular interrogatives; $p = \{a, a'\}$

¹⁰An issue that I will not address here is the connection between acceptability of V-final order in a root clause and the presence of *wohl*.

- **Conventional discourse effects**

- *Basic effect* triggered by the semantics
- of relevance here, basic effect on ps:

$$(36) \quad ps_o = \{DC_{Ad,i} + a, DC_{Ad,i} + a'\}$$

- *Special effect*, triggered by the presence of *wohl*: choose the marked value for DC, namely EC; the ps_o contains future states where the Addressee registers commitments on EC_{Ad}

$$(37) \quad ps_{o,IF} = \{EC_{Ad,i} + a, EC_{Ad,i} + a'\}$$

- note that the IF subscript is there by default
- effect on Speaker commitment and the Table are unchanged

Type 2 tentative questions: V-final *wohl* interrogatives

- (38) Wo Oma *wohl* untergekommen ist?
'Can we guess where Oma is if we pool our knowledge?'

- Intuitive characterization: invitation to the Addressee to pool knowledge with the Speaker and find an answer together

Suggested account: V-final *wohl* questions are just like V2 *wohl* questions except that they project delayed resolution

- **Semantics:** same as regular interrogatives
- **Conventional discourse effects**

- *Basic effect* triggered by the semantics
- of relevance here, basic effect on ps:
 $ps_o = \{DC_{Ad,i} + a, DC_{Ad,i} + a'\}$
- *Special effect*, triggered by the presence of *wohl*: in addition, the ps_o contains future states where Addressee registers possible answers on EC_{Ad} , as before
- *Additional special effect*, triggered by subordinate clause syntax: remove default assumption that the projected states in ps are *immediate* futures; give the temporal parameter the marked DF value¹¹

$$(39) \quad ps_{o,DF} = \{EC_{Ad,i} + \dots + a, EC_{Ad,i} \dots + a'\}$$

- the 'pooling knowledge' effect arises because the projected resolution is marked as not immediate and therefore several future moves from both participants are projected before resolution, even if tentative

Some predictions

- overlap between *wohl* questions and *oare* questions:

¹¹An open question is whether this special effect can be attributed to V-final order in root interrogatives more generally, independently of the presence of *wohl*.

- both can be used in contexts where the Addressee is not assumed to be competent (*Where is Granny, I wonder*)
- neither can be used in contexts where the Addressee is required to provide a definitive answer in the immediate future (police questions, form questions, quiz questions)

- contrast between *wohl* questions and *oare* questions: *wohl* questions are not good in contexts where the Addressee is assumed to be competent, while *oare* questions are good in such cases

- (40) a. Oare mai ai migrene? [Romanian shy *oare* question]
'Do you still have migraines, I wonder.'
b. #(Ob) Sie wohl noch Migräne haben? [German *wohl* question]
'Do you still have migraines?' (Eckardt, p.c.)

- Note that there is no difficulty in accounting for why responses to *wohl* or *oare* questions may in fact settle the issue – the Addressee may well be more knowledgeable or more willing to address the issue than the Speaker assumes

- The contribution of these special markers are not presuppositions (conditions on input contexts) but rather, post-suppositions (conditions on output contexts) – see Farkas (2002), Brasoveanu (2012)¹²

Upshot

Tentative questions

- give up the assumption of Addressee competence characterizing prototypical questions
- they are 'deliberative' in the sense that they give up the default assumption that the Addressee will settle the issue in the immediate future

Tentative questions are expressed by marked interrogatives

- the marked form signals that the targeted projected Addressee commitments are commitments added to $EC_{Ad,i}$ rather than $FC_{Ad,i}$
- a further special effect may involve signaling that the projected states are not immediate futures

3.4 Conclusion

- Contribution of special interrogative forms is treated here as triggering special conventional discourse effects
- These special effects result in question types that go beyond the prototypical question in various specific ways
 - removing the assumption that the Speaker is ignorant
 - removing the assumption that the Addressee will settle the issue in the immediate future
 - * project Addressee non-engagement
 - * give up assumption of Addressee competence

¹²I do not, of course, rule out special sentence forms that contribute presuppositions.

Advantages of a discourse effect approach

- The approach relying on special conventional discourse effects connects a variety of special interrogatives in a variety of languages using overlapping means
- The conventional discourse effects approach narrows down the possible effects special questions may convey
- The contribution of *wohl/oare* and other special effects markers is predicted to be not at issue

4 Assertions and declarative sentences

Aims

- Characterize what counts as a prototypical assertion and an unmarked declarative sentence
- Identify parameters along which one can depart from the prototypical and ways in which marked declaratives are used to signal them

4.1 Prototypical assertions

Core asserting act

- raise an issue and propose a unique resolution
- commit to the resolution
- project a future conversation state in which the Addressee accepts the resolution, and as a result, information is added to the *cg*

Default pragmatic assumptions

- Conversational goal: add information to the *cg*
- The Speaker is competent and sincere – Quality Maxim: her private epistemic state supports her public commitment
- The Addressee will share the Speaker’s commitment

(41) *Characteristics of prototypical assertions*

- a. The Speaker places a non-inquisitive proposition on the Table.
- b. Speaker competence: the epistemic state of the Speaker supports a firm commitment to the unique alternative in *p*
- c. Projected Addressee acceptance in the immediate future

4.2 Unmarked declaratives

- Sentence that expresses a singleton proposition *p* containing a unique highlighted alternative *a*
- The conventional discourse effect of an unmarked declarative: the basic effect with under-specified parameters set to default values

(42) *Conventional discourse effect of an unmarked declarative expressing a proposition p*

1. $FC_{Sp,o} = FC_{Sp,i} + a$
2. $Table_o = Table_i + p$
3. $ps_{o,IF} = \{DC_A + a\}$

4.3 Special assertions, marked declaratives

Tentative assertions

- Prototypical assertions: *a* is added to the default commitment set, FC_{Sp}
- Tentative assertions: marked sentence forms
- Marked form signals departure from the Speaker competence assumption of prototypical assertions – add future commitments to EC_{Sp}
- Various finer grained distinctions are possible between various tentative commitment markers concerning the nature of the evidence or the strength of the tentative commitment
- There must be Speaker bias for *a* because the Speaker chose to make an assertion – projects acceptance of *a*

Account of tentative assertions

Semantics of tentative assertions: express a singleton proposition *p* (same as ordinary declaratives)

Conventional discourse effects

1. *Basic effect*
2. *Special effect*
 - set the value of affected DC_{Sp} to the non-default EC_{Sp}

German *wohl* declaratives as tentative assertions

- (43) Die Oma ist *wohl* im Hotel Viktoria. [Wohl Declarative]
'Granny is in Hotel Viktoria, my possibly unreliable evidence shows.'

Suggested account

- **Semantics:** same as unmarked declaratives – express a singleton proposition *p*
- **Conventional discourse effects**

(44) *Wohl assertions*

1. $EC_{Sp,o} = EC_{Sp,i} + a$
2. $Table_o = Table_i + p$
3. $ps_{o,IF} = \{FC_A + a\}$

Common contribution of *wohl* in declaratives and interrogatives:

- *wohl* in declaratives signals that the targeted **Speaker** commitment is EC_{Sp} rather than FC_{Sp}
- *wohl* in interrogatives signals that the targeted **Addressee** commitment is EC_{Ad} rather than FC_{Ad}
- ‘interrogative flip’:
 - main effect of declaratives is to add a non-trivial commitment to DC_{Sp}
 - main effect of interrogatives is to add non-trivial commitments to projected DC_{Ad}

Upshot

- Tentative assertions add a weaker Speaker commitment, one that the Speaker signals she is more easily willing to give up in the face of new evidence than the default firm commitment
- This connects to notions such as *defeasible inference*, *epistemic possibility*

Open issues

- Distinguishing between these notions and establishing which ones are involved is a big open question
 - Distinguishing between tentative declaratives and ordinary declaratives involving a weak epistemic modal (*may/might*)
 - Generalizing to hedges
- (45) Amy left, I guess / I think / it seems / I see.

4.4 Conclusion

- Tentative assertions depart from the prototypical in that they give up the assumption that the Speaker is competent
- In the account suggested here this is achieved by exploiting the distinction between firm vs. evidenced commitments that has been independently argued for in accounting for marked interrogatives

4.5 Predicting connections between special effect markers and sentence types

Rogative nature of *oare*: *oare* occurs only in interrogatives

The special effect of *oare*:

- (46) Add to ps_i $FC_{Ad,i}$
- With a declarative, this effect would amount to removing the expectation that the Addressee *accepts* the information provided by the Speaker
 - Accepting commitment is the least marked, most expected move of all:
 - Addressee accepts information the Speaker provides

- The reason the Addressee would not accept information the Speaker provides is that her epistemic state is in conflict with the Speaker’s
- This highly marked situation cannot be *projected as canonical*
- With an interrogative, this effect amounts to removing the expectation that the Addressee *provides* information
- Providing new information is a riskier and therefore more marked move
 - the Addressee may not have the relevant information
 - the Addressee may have it but be unwilling to share it for a variety of reasons
- Therefore, a formal marker with the effect of *oare* is useful in interrogatives but much less so in declaratives

Responsive nature of *wohl*: *wohl* occurs with both interrogatives and declaratives

The special effect of *wohl*

- (47) Target the ECs (rather than their FCs) of the participant who commits to *s*
- This effect is useful in declaratives: removes assumption of Speaker competence
 - This effect is useful in interrogatives: signals that the Speaker does not assume Addressee competence

5 Conclusion and outlook

We end up with:

- *Conventional discourse effects*: functions from input to output context structures
 - *Basic effect*: determined by the semantics, with default choices for underspecified parameters (type of commitment, temporal parameter on ps_o)
 - *Special effects*: additional effects, signaling departures from the prototypical case
- Special effects can come in the form of
 - output context conditions: post-suppositions
 - input structure conditions: presupposition (special forms signaling a question as being rhetorical)

EC sets and degrees of commitment

- Commitments on EC lists are less strong than those on FC lists
- There can be further differentiation for EC commitments wrt to credence

Question: Could one collapse the two lists and simply have variable commitment strength?
Answer: No, in as much as different non-neutral questions are sensitive to the nature of the evidence for the commitment – private vs. contextual – see Sudo (2012), Hiramama (2017)

Three questions we started with:

- *Theoretical question*: What type of conventional discourse effects are encoded in special forms?
- *Answer*: Special forms may encode conventional discourse effects that depart from the prototypical
 - special additional changes to the input context structure – additions to ps_o
 - fixing underspecified parameters to non-default values
 - * affect EC rather than FC
 - * fix the temporal parameter of ps_o to delayed future
- *Empirical question*: How can we accommodate a wider range of special questions and special assertions?
- *Answer*: Special effects can be accommodated by exploiting the assumed components of discourse
 - allowing both declaratives and interrogatives to affect EC
 - allowing special effects to target the ps_o
- *Division of labor issue*: What is the optimal division of labor between semantics and discourse? What should be left within the realm of compositional semantics, and what should be relegated to conventional discourse effects?¹³
- *Possible answer*: embeddability as a diagnostic tool
 - if the contribution of a special form is to be treated within the semantics there should be no restrictions on the embeddability of the form
 - if the contribution of a special form is to be treated as a conventional discourse effect, the embeddability of the form should be restricted
 - before ‘root’ effects can be used as a diagnostic, root effects of certain embedded clauses should be understood better

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¹³For a semantic account of the Japanese particle *darou*, whose effects are similar to German *wohl*, see Roelofsen and Uegaki (2017).