Engaging Questions
wohl in German V_{end}-questions

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1. Verb-end questions
2. *wohl*: nonmonotonic inferences by me, by you, by us
3. Conversational themes and the table
4. Conversational themes of *wh*-V_e-questions
5. Conversational themes of *ob*-questions

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1. Verb-end questions

German allows matrix questions in subordinate clause syntax.

(1)   main clause syntax
*Wo **ist** der Bahnhof?* ('where is the train station?')

(2)   subordinate clause syntax
*Wo wohl der Bahnhof **ist**?*

Verb-end (V_e) questions:

"deliberative" question, do not request an answer, do not aim at an addressee

invitations to enter conversation on a certain topic (Grohne, p.c.)[1]

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[1] Verb-end questions can also be used as „repeat questions" to ask back on the speaker. We'll leave this use aside.

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A puzzle:

Polar V_e questions <u>can</u> host *wohl*

(3) *Ob Karl (wohl) immer noch diese schwarzen Zigarren raucht?*
whether Karl (wohl) still these black cigars smokes

'I wonder whether Karl still smokes these black cigars'

Constituent V_e questions <u>must</u> host *wohl* or modal *mag*

(4) *Wo es *(wohl) zum Bahnhof geht?*
where it (wohl) to-the station goes
'In which direction might be the train station, I wonder.'

- Does *wohl* contribute to the pragmatics of V_e questions?
- Constituent V_e questions: Why can *wohl* alternate with *mag*, but one of them has to appear?
- Polar V_e questions: Does verb-end syntax suffice to convey "deliberation"?

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2. *wohl*

2.1 Zimmermann (2011, 2006)

In assertions: *wohl S*

> the speaker (sp) asserts *S*
> non-at-issue: ASSUME(x,*S*) (ASSUME less certain than KNOW)

In questions: *wohl Q?*

> the addressee (ad) must provide answer $p \in Q$
> ASSUME(ad, *p*) suffices for ad to answer *p*

Uniform epistemic content of *wohl* in assertions and questions.

wohl is blocked/marked in contexts where the respective speaker knows proposition *p* for sure (Maxim of Quantity).

(5)   Policeman at the border control:
       # *Wie heißen Sie wohl?*

> ≈ # 'Can you give a guess as to what's your name?'

2.2 Make ASSUME more precise

Intuition: In assertions, *wohl* indicates that sp has unreliable evidence in favour of *p*. (Eckardt 2012, 2015)

(6) *Wo ist eigentlich die Oma jetzt?* (Where is Granny?)
Die ist wohl einkaufen. (She's gone shopping I guess)

Evidence: (a) it is Friday afternoon and she usually goes shopping on Friday afternoon
(b) her slippers are in the hall
(c) the shopping bag is missing.

Statistic likelihood can not be expressed by *wohl*.

(7) Granny is on a bus trip with 60 people. I know that 50 of them will be accommodated in *Hotel Viktoria,* 8 will stay in *Pension Erika* and 2 in some other little pension.
My sister asks: *Where will Granny stay?*

√ *Sie ist wahrscheinlich im Hotel Viktoria.*

√ *Sie ist höchstwahrscheinlich im Hotel Viktoria.*

Sie ist wohl im Hotel Viktoria.

'she is probably / highly likely / #wohl in hotel Viktoria'

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Likelihood:

chances are 5:1 for Granny to be in Hotel Viktoria

sp should have sufficient evidence to ASSUME that Granny is in HV

=> Zimmermann: *wohl* licensed?

Problem: sp lacks *specific* clues that she is staying there

Gaining evidence:

(8)   Granny is still on her bus trip. I am phoning places to find out where she'll stay. I first reach the owner of *Pension Erika* who has never heard her name. Next I call the other little place, where Granny is neither. I can now tell my sister:

*Die Oma ist **wohl** im Hotel Viktoria.*

Evidence: *Granny is not in Erika.*

Granny is not in little place.

Unreliable: people on the phone, in particular in small places, may not know all guests. I have not positively spotted Granny.

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(9) Alternative search scenario. In search of Granny, I reach Hotel Viktoria and am told that Ms. Eckardt senior has indeed checked in.

Die Oma ist im Hotel Viktoria.

#Die Oma ist wohl im Hotel Viktoria.

Unless I have reason to distrust the receptionist, it is hard to think about a reason why Granny should not be in HV.

A disclaimer: *different speakers may consider different types of information "unreliable".*

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Hypothesis: *wohl* marks non-monotonic inference

For individual *a*, let $Bel_w(a)$ be the beliefs of *a* in index *w*.

For sets of propositions A and proposition p,
let A $|\approx$ p $\Leftrightarrow$ p follows from A as a non-monotonic inference.
(See Gabbay et al. 1987 for the basics of non-monotonic logic).

(10) Speaker *sp* utters: *wohl p* $\Leftrightarrow$
    assertion: *p*
    non-at-issue information: $Bel_w(sp) |\approx p$

Possible paraphrase: "As far as I know, *p* holds true. But further evidence may entail that *p* is still false." (evidence may be weak, inconclusive, incomplete)

Non-monotonic entailment extends classical entailment.

If A $|= p$ then A $|\approx p$.

Prediction: Assertions *wohl S* are subject to scalar implicatures.

sp utters: "*wohl p*" => sp conveys that $Bel(sp) |\approx$ p
sp utters: "*p*" => *sp* conveys that $Bel(sp) |= p$. This would be more informative
"wohl *p*" implicates $Bel(sp) |\neq$ p.

Justified: see (9)

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2.3 wohl in questions

(11) Speaker sp asks: *wohl Q?* ⇔
Addressee ad is requested to provide proposition *p*
with $p \in Q$ and $Bel_w(ad) \; |\approx p$

= Zimmermann's analysis of *wohl* in questions.

- Addressee is not obliged to utter "*wohl p*" in the answer
- $Bel_w(ad) \; |= p$ entails $Bel_w(ad) \; |\approx p$
- If ad utters "*p*", he follows the request

Prediction: addressee can provide certain answers as well as weak answers. √

2.4 *wohl*-V_e-questions are *engaging questions*

Inference is *additive*: When two people A and B pool their information, they can possibly draw more or better inferences than A alone or B alone.

Let *Joint-Bel*(A,B) := { T | T $\subset$ *Bel$_w$(A)* $\cup$ *Bel$_w$(B)* and T maximally consistent }

If *Bel$_w$(A)* |$\approx$ p, there can be
T $\in$ *Joint-Bel*(A,B) such that T |$\approx$ ¬p

If *Bel$_w$(A)* |$\approx/\approx$ p, there can be
T $\in$ *Joint-Bel(*A,B) such that T |$\approx$ p

Likelihoods are not additive

Certain information is not additive. If A believes that he knows *p* for sure, B can only change this belief by proving A wrong. Which, A thinks, can not happen.

(12) ***wohl* in V$_e$-questions, first analysis**

If speaker sp utters "*wohl* + V$_e$-Question Q"
she raises Q as a QuD and
proposes to resolve Q by finding T $\in$ *Joint-Bel$_w$*(sp, ad) and a $\in$ Q
such that T $|\approx$ a.

A QuD together with a plan to find an answer will be called a CONVERSATIONAL THEME.

Earlier CONVERSATIONAL THEMES:

Question plus request to answer.
QuD plus strategy (by sp or ad) (Roberts 1996, Büring 2003 a.o.)

"Deliberation": *Let us pool our private beliefs as far as they can lead to answers to Q.*

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(13) Granny on the road again. I have called Pension Erika and learned that she doesn't stay there. My sister has called the other little place where Granny is neither. Together we can conclude:

Oma wohnt wohl im Hotel Viktoria.
'Granny is staying wohl in Hotel Viktoria'

Together = we pool our information. As soon as we share T, either of us could utter (13).

(14) Granny on the road (last variant).

Wo Oma wohl untergekommen ist?
= *'Can we guess where Granny is staying if we pool our knowledge?'*

The question "Where is Granny" has been raised.

You and me should pool information to find T such that T|≈ "Granny is in …" for some place.

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3. What's the purpose of raising a question that doesn't need an answer?

Truckenbrodt (2006):

- Empty C_o in questions ⇔ do not request an answer.

Too unspecific.

sp asserts interest — for what purpose?

(15) *I would like to know the way to the train station.*
    Entschuldigung, ich müsste wissen, wo der Bahnhof ist.

=> Indirect question acts: <u>Assert interest</u>, trigger answer.

(16) *Ich frage mich, wann der Zug kommt.*
    I wonder when the train will arrive.

=> *Ich-frage-mich* constructions (*I wonder* constructions): <u>Assert interest</u>, invitation to speculation is missing, can have other points (e.g., to express impatience). Not equivalent to V_e-questions.

V$_e$ questions in a table model (Farkas & Bruce, 2010)

> After V$_e$-question is uttered,
>> the interest of *sp* <u>has been asserted,</u>
>> => the QuD is up
>> but the table is in a stable state.
>
> *wohl* Q ⇔ *sp* proposes to resolve Q by finding T ∈ *Joint-Bel$_w$*(sp, ad) and a ∈ Q
> such that T |≈ a.

The CONVERSATIONAL THEME suggests how the ongoing dialogue could continue.

Ad can react in all ways permitted by table: take up question, comment on interest, change topic altogether, etc.

(17) *Wo Oma wohl ist?* (I wonder where Granny might be)

> a. *I heard that she called from Mallorca.* (speculation)
> b. *Yeah, I'd like to know, too.* (shared interest)
> c. *No idea.*
> d. *Have you done the shopping?* ('I don't care')

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4. More about Conversational themes: *wh*-V_e-questions

(18) *Wo   Oma   wohl   ist?*
     where   Granny wohl   is

(19) *Wo   Oma   sein   mag?*
     where   Granny   be   might

A tentative analysis of *mag* in serious and V_e questions

(19') *Wo mag Oma sein?*

Mag depends on the doxastic background of some individual *x*.

     [[*Mag$_x$* (*Wo ist Oma?*)]] =
     { *q* | *q* ∈ [[Wo ist Oma?]] and *q* ∩ *Bel$_w$(x)* ≠ Ø }

In questions, the relevant individual must be the addressee (again):

[[(19')]], uttered by *sp* to *ad* = [[*Mag$_{ad}$* (*Wo ist Oma?*)]] =
     { *q* | *q* ∈ [[Wo ist Oma?]] and *q* ∩ *Bel$_w$(ad)* ≠ Ø }

"What, do *you* think*,* is the range of possible answers to Q?"

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(20) **The meaning of *mag* in V_e-questions Q**

(i.) V_e-questions do not request an answer:

After V_e-question is uttered,
the interest of sp becomes part of CG
=> the QuD is open.
the table is in a stable state.

(ii.) V_e-questions need a CONVERSATIONAL THEME:
$[[\text{Mag}_{sp, ad} (Q)]] = \{ q \mid q \in Q \text{ and } q \cap T \neq \emptyset \}$ for $T \in$ *Joint-Bel(sp, ad)*
sp proposes a discourse with the aim of spelling out $[[\text{Mag}_{sp, ad}(Q)]]$.

"Let us see which answers to Q we *both* hold possible".

Ideally, Q is reduced to singleton => answer has been found.

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Constituent V$_e$-questions

require one of the two ways to indicate a conversational theme.

> => CONVERSATIONAL THEMES are obligatory.
> Questions can't simply not request answers and have no further purpose.
> There are at least two conversational themes for "non-questioning" questions.[2]

Which leaves us with the mystery of polar V$_e$-questions.

Why can speakers make sense of polar V$_e$-questions without any signal?

Do V$_e$-questions also have more than one possible CONVERSATIONAL THEME?

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[2] We leave aside the exasperated use with *wieder: Wo Oma wieder bleibt?* ≈ 'where the heck is Granny? (She always is late…)')

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5. Conversational themes of *ob*-questions

…or: why can *wohl* be left out in polar V_e-questions?

Observation: *To **some** informants, **some** ob-V_e-questions without 'wohl' **sometimes** sound marked.* (Gutzmann 2011). — Speakers usually agree on acceptablilty of standard examples.

(21) *Ich hab schon lang nichts mehr von Karl gehört. — Ob er immer noch diese schwarzen kubanischen Zigarren raucht?*

'I haven't heard from Karl in a long time' — 'I wonder whether he still smokes these black Cuban cigars.'

A difference: ***anchored*** vs. ***non-anchored*** polar V_e-questions.

anchored = has an aboutness topic (introduced in discourse or by situation)

non-anchored = if it does not refer to referential topic (was mentioned)

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Non-anchored utterances:

Testing: 'out of the blue' questions preceded by *Dúhuu, <name>?*

> *Dúhuu, <name>?*
> H LH*, LH%
>
> can precede any utterance,
>
> provided that sp and ad were not engaged in conversation before.
>
> Marks the utterance as discourse-initial.

Fact: *Dúhuu?* polar V_e-questions require *wohl.*

(22) Couple, sitting on the sofa reading. Anton to Bertha:
   a. *Dúhuu, Bertha? Ob es morgen wohl regnet?*
   b. # *Dúhuu, Bertha? Ob es morgen regnet?*
   You, Bertha? whether it (wohl) rains tomorrow?

(23) Couple in a café, silently looking out of the window.
   a. *Dúhuu, Anton? Ob der VFB wohl am Samstag gewinnt?*
   b. *#Dúhuu, Anton? Ob der VFB am Samstag gewinnt?*

   You, Anton? whether the VFB (wohl) will win on Saturday?

Non-anchored polar V_e-quesitons need *wohl* to have a conversational theme.
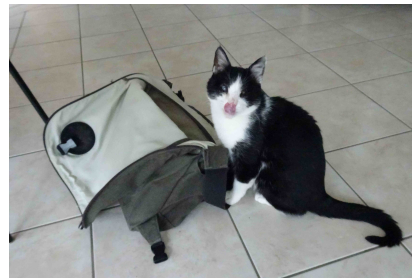
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A question is **anchored** if it is about an entity/person that is topical.

Example (21) "*Cuban cigars",* topic = <u>Karl</u>

Non-monotonic inferences again: One subtype of anchored Q are

Cat-Questions

(24) A and B watch a cat, eagerly sniffing at the bag of its owner
       A to B: Ob ein Würstchen in der Tasche ist
       'Is there sausage in the bag I wonder'

Present observation Φ: 'the cat takes great interest in the bag'
Non-monotonic inference *q*: 'there is sausage in the bag'.

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Examples can be multiplied:

- A and B watch a pale person. *Ob er krank ist?* 'whether he's ill I wonder'
- A and B see a crowd of people in front of a shop. *Ob es da was umsonst gibt?* 'whether you get something for free there I wonder'

Structure of cat-question:

V_e: The question Q has been raised. No answer is requested.

sp and ad share Φ ('the cat is sniffing at the bag')

Φ |≈ 'there is a sausage in the bag' = *p*

sp wants to invite a discussion of this non-monotonic inference (?)

Cat-questions corroborate the importance of defeasible inference

as a means to answer (joint) questions.

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Summary

- V_e questions raise QuD but don not request answers: They lead to a stable state of the table.
- V_e questions have to define a conversational theme (CTH).
- *wohl*
  - marks an assertion as non-monotonic inference
  - questions invite answers that can be nm inferences from ad belief
  - in V_e-questions, it conveys the CTH 'joint speculation'
- *wh*-V_e-questions can not by themselves define a CTH.
  - marked with *mag*: CTH 'let us pool the answers that we both hold possible'.
  - marked with *wohl*: CTH 'let us find a weak answer to Q by pooling beliefs'.
- polar V_e-questions can be
  - marked with *mag*: CTH 'let us pool the answers that we both hold possible'.
  - marked with *wohl*: CTH 'let us find a weak answer to Q by pooling beliefs'.
  - if anchored: CTH 'comment on a referential topic.' In this use *wohl* can be left out.

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To be continued …
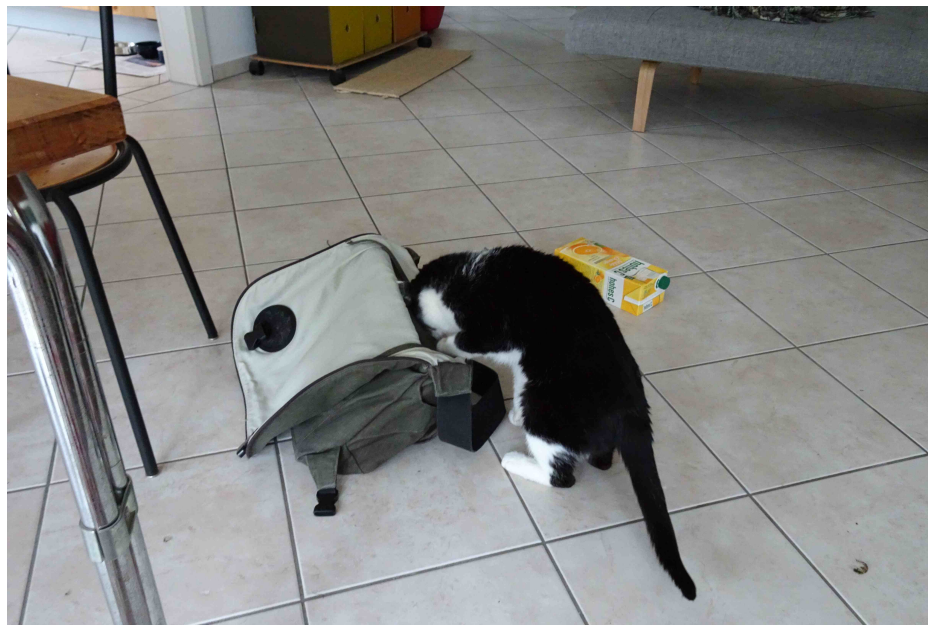
(cat expressed strong interest in more research on *wohl* in V_e-questions)

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