



Polar Questions vs. *Kya*-Questions in Hindi/Urdu

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- Part of a Research Unit (FOR 2111) *Questions at the Interfaces* at Konstanz
- Looking at non-canonical uses of questions across languages
- We are projects P2 and P4, working on Urdu/Hindi and Romance.
- Today: polar *kya* in Urdu/Hindi.

Introduction: Polar Questions in Urdu/Hindi

- Urdu/Hindi has basic SOV word order.
- Question vs. declarative status is signalled via intonation.

Declarative: Intonational phrase boundary is L-L%

(1) jahina=ne norina=ko mara
 Shahina.F=Erg Norina.F=Acc hit-Perf.M.Sg
 'Shahina hit Norina.'

Polar Question: Intonational phrase boundary is L/H-H%

(2) jahina=ne norina=ko mara?
 Shahina.F=Erg Norina.F=Acc hit-Perf.M.Sg
 'Did Shahina hit Norina?'

Polar *kya*

- Polar questions can 'optionally' be expressed with *kya*.

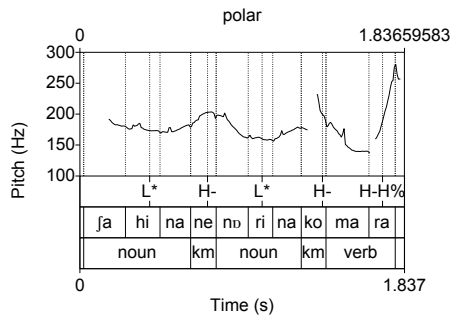
(2) jahina=ne norina=ko mara?
 Shahina.F=Erg Norina.F=Acc hit-Perf.M.Sg
 'Did Shahina hit Norina?'

(3) **kya** jahina=ne norina=ko mara?
 KYA Shahina.F=Erg Norina.F=Acc hit-Perf.M.Sg
 'Did Shahina hit Norina?'

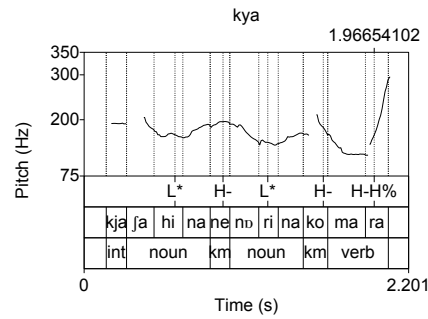
What's the difference between plain PolQs and *kya*-questions?



- Prosodic investigations show that polar *kya* always has a flat intonation.
 - *wh-kya* ('what') have a H* accent.



Play Sound



Play Sound

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The distribution of *kya*

Today's talk

- 1 *kya*
 - The distribution of *kya*
 - A first approximation to the meaning difference between PolQs and *kya*-questions
- 2 More data: Speakers' assumptions and focus sensitivity
 - Speaker assumptions and *kya*-questions
 - *kya* as a focus sensitive operator
- 3 An analysis of polar-*kya*

The distribution of (polar-)*kya* I

- Grammars and previous literature report polar *kya* as appearing only clause initially in Urdu/Hindi.
 - However, Bhatt and Dayal (2014) point out that it can appear anywhere in the clause.

- (4) (kya) anu=ne (kya) uma=ko (kya) kitab
 KYA A.F=Erg KYA U.F=Dat KYA book.F.Sg.Nom
 (%kya) d-i (kya)?
 KYA give-Perf.F.Sg KYA
 'Did Anu give a/the book to Uma?

The immediately preverbal position is dispreferred for polar *kya*:
 The preverbal position is the default position for *wh-kya*.



- Bhatt&Dayal establish that polar *kya* is NOT a question marker.
 - It is optional in matrix clauses.
 - *kya* + L-L% = *
 - Generally disallowed in embedded clauses (complements of "rogative" predicates are an exception).

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A first approximation to the meaning difference
between PolQs and *kya*-questions

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The meaning of *kya*-questions

- Descriptively, it appears to partition a clause into given vs. new (see Bhatt and Dayal 2014).
 - Material to the left of polar *kya* is taken as given and not available for being questioned (Bhatt and Dayal 2014).
- (5) A: **anu=ne** **kya** uma=ko tofa
Anu.F=Erg KYA Uma.F=Dat present.M.Sg.Nom
di-ya?
give-Perf.M.Sg
'Did Anu give a/the present to Uma?'
- B: #nahĩ, **asim=ne** di-ya
no Asim.M=Erg give-Perf.M.Sg
'No, Asim did.'

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Additional Evidence — Plunged into Confusion

- We set out to adduce more evidence for this very intuitive analysis via experimental evidence from:
 - prosodic analysis
 - corpora (Bollywood Scripts, WhatsApp Chats)
- **But** — the data confused the picture rather than supported it.
 - The given vs. new partition does not always hold.
 - Polar *kya* is overwhelmingly (but not exclusively) associated with some kind of special pragmatic meaning.

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Surprise/incredulity...

- (6) **kya** ye sac hai?
 KYA this true be.Pres.3Sg
 'Could this be true?' *Socha Na Tha*
- (7) acc^h-i nahi lag-i **kya**?
 good-F.Sg. not attach-Perf.F.Sg KYA
 'You didn't like her?' *WhatsApp*

Questions with *kya* are often used when the speaker wants to convey **surprise/incredulity** that something is the case.

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Sarcasm

- (8) Context: A is telling B how to behave in a situation. B says (with sarcasm):
 B: (kya) tum (?kya) meri ammā ho (kya)?
 KYA you KYA my mother.F.Sg be.Pres kya
 'Are you my mother?'

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Surprise I + *kya* V

- (9) a. tum **kya** jan-ti nahi ho
 you.Fam.Nom KYA know-Impf.F.Sg not be.Pres.2.Sg
 b^hai=ko?
 brother.M.Sg=Acc
 'You don't even recognize your own brother?' *Ankhon Dekhi*
- b. tum b^hai=ko **kya** jan-ti nahi
 you.Fam.Nom brother.M.Sg=Acc KYA know-Impf.F.Sg not
 ho ?
 be.Pres.2.Sg
 'You don't even recognize your own brother?'

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Surprise II

- (10) A: When John came to visit, he brought a toy for Amra.
 B: jon=ne amra=ko kya k^hilona
 John=Erg Amra=Dat KYA toy.M.Sg.Nom
 di-ya ? (magar) wo 17=ki hai
 give-Perf.M.Sg (but) she 17 is
 'John gave a toy to Amra?! She is 17!'

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(11) A doesn't feel like offering coffee to their visitor and wishes s/he declines the offer. If the speaker is not afraid of this coming across, s/he wouldn't utter the *kya*-question:

A: (kya) ap coffee lē-ge?
 KYA you.Hon coffee.F.Sg take-Fut
 'Will you have coffee?'

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In the following, we adduce new data and

- 1 differentiate between the pragmatic import of polar questions without and with *kya*
- 2 propose a new analysis of polar *kya*.

The analysis sees polar *kya* as a focus sensitive operator which operates to constrain the set of possible answers viable in the context of utterance.

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Polar Questions: with and without *kya*

Wanting to ask for something specific

(12) Me: *I know that John gave something to Amra ...*
 Eng. ✓... Did John give a toy to Amra?

Plain ✓... jon=ne amra=ko k^hilona di-ya?
 John=Erg Amra=Dat toy.M.Sg.Nom give-Perf.M.Sg
 'Did John give a toy to Amra?'

kya ✓... jon=ne amra=ko **kya** k^hilona di-ya?
 John=Erg Amra=Dat KYA toy.M.Sg.Nom give-Perf.M.Sg
 'Did John give a toy to Amra?'

kya #... jon=ne **kya** amra=ko k^hilona di-ya?
 John=Erg KYA Amra=Dat toy.M.Sg.Nom give-Perf.M.Sg
 'Did John give a toy to Amra?'

[Assuming 'neutral' prosody]

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More data:

Speakers' assumptions and focus sensitivity

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- (13) Context: *I know that John gave a toy to someone ...*
 Eng. ✓... Did John give a toy to Amra?

Plain ✓... jon=ne amra=ko k^hilona di-ya?
 John=Erg Amra=Dat toy.M.Sg.Nom give-Perf.M.Sg
 'Did John give a toy to Amra?'

kya #... jon=ne amra=ko **kya** k^hilona di-ya?
 John=Erg Amra=Dat *kya* toy.M.Sg.Nom give-Perf.M.Sg
 'Did John give a toy to Amra?'

kya ✓... jon=ne **kya** amra=ko k^hilona di-ya?
 John=Erg *kya* Amra=Dat toy.M.Sg.Nom give-Perf.M.Sg
 'Did John give a toy to Amra?'

The contrast between (12) and (13) shows that *kya*-Qs are not just like plain polar questions:

- *kya*-Qs impose restrictions on what the question is about.
- It seems that we ask about the material immediately right to *kya*.

Speaker's assumptions — English Baseline

Confirmation from contrast in interpretations

Context: *A group of teachers is putting together the costumes for the kids' end of the year play. There is a list of things that each kid needs and it's not clear who is going to be able to bring what for each kid or if they are going to be able to find everything.*

(14) A: Did John bring a hat for Amra?

B: #Why are you asking about a hat and not about Amra?

B': #Why are you asking about Amra and not about a hat?

Speaker's assumptions — Urdu Plain Polar

Context: *A group of teachers is putting together the costumes for the kids' end of the year play. There is a list of things that each kid needs and it's not clear who is going to be able to bring what for each kid or if they are going to be able to find everything.*

(15) A: jon amra=ke liye ṭopi la-ya?
 John.Nom Amra=for hat.M.Sg.Nom bring-Perf.M.Sg
 'Did John bring a hat for Amra?'

B: #tūm ṭopi=ke bare=mē kyū puc rah-i
 you.Fam.Nom hat.M.Sg=about=in why ask Prog-F.Sg
 ho, amra=ke bare=mē kyū nahī?
 be.Pres.2.Sg Amra=about=in why not
 'Why are you asking about a hat and not about Amra?'

B': #tūm amra=ke bare=mē kyū puc rah-i
 you.Fam.Nom Amra=about=in why ask Prog-F.Sg
 ho, ṭopi=ke bare=mē kyū nahī?
 be.Pres.2.Sg hat.M.Sg=about=in why not
 'Why are you asking about Amra and not about a hat?'

[Assuming 'neutral' prosody]



Context: A group of teachers is putting together the costumes for the kids' end of the year play. There is a list of things that each kid needs and it's not clear who is going to be able to bring what for each kid or if they are going to be able to find everything.

(16) A: jon amra=ke liye **kya** **ṭopi** la-ya?
John.Nom Amra=for KYA hat.M.Sg.Nom bring-Perf.M.Sg
'Did John bring a hat for Amra?'

B: ✓təm **ṭopi**=ke bare=mē kyū puc rah-i ho,
you.Fam.Nom hat.M.Sg=about=in why ask Prog-F.Sg be.Pres.2.Sg
amra=ke bare=mē kyū nahī?
Amra=about=in why not
'Why are you asking about a hat and not about Amra?'

B': #təm **amra**=ke bare=mē kyū puc rah-i ho,
you.Fam.Nom Amra=about=in why ask Prog-F.Sg be.Pres.2.Sg
ṭopi=ke bare=mē kyū nahī?
hat.M.Sg=about=in why not
'Why are you asking about Amra and not about a hat?'

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Context: A group of teachers is putting together the costumes for the kids' end of the year play. There is a list of things that each kid needs and it's not clear who is going to be able to bring what for each kid or if they are going to be able to find everything.

(17) A: jon **kya** **amra**=ke liye ṭopi la-ya?
John.Nom KYA Amra=for hat.M.Sg.Nom bring-Perf.M.Sg
'Did John bring a hat for Amra?'

B: #təm **ṭopi**=ke bare=mē kyū puc rah-i ho,
you.Fam.Nom hat.M.Sg=about=in why ask Prog-F.Sg be.Pres.2.Sg
amra=ke bare=mē kyū nahī?
Amra=about=in why not
'Why are you asking about a hat and not about Amra?'

B': ✓təm **amra**=ke bare=mē kyū puc rah-i ho,
you.Fam.Nom Amra=about=in why ask Prog-F.Sg be.Pres.2.Sg
ṭopi=ke bare=mē kyū nahī?
hat.M.Sg=about=in why not
'Why are you asking about Amra and not about a hat?'

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Interim Summary:

- *kya*-questions are not plain polar questions
 - *kya*-questions have a more constrained distribution than plain-info-seeking polar questions
 - they constrain 'what the question is about'.
- *kya*-questions convey some assumptions regarding the answers that plain-info-seeking polar questions do not convey.

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Association with Focus

We see polar *kya* as a focus sensitive operator.

- *kya*-questions are interpreted by default as asking for alternatives to the closest constituent in its scope.
- This scope can be determined:
 - either syntactically via word order
 - or prosodically
- Recall this data, showing syntactic scope:

(5) A. anu=ne **kya** **uma=ko** tofa
Anu.F=Erg KYA Uma.F=Dat present.M.Sg.Nom
di-ya?
give-Perf.M.Sg
'Did Anu give a/the present to Uma?'

B. #nahī, **asim=ne** di-ya
no Asim.M=Erg give-Perf.M.Sg
'No, Asim did.'

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- When the constituent to the left of polar *kya* is stressed, it can be questioned.

(18) A. **anu=ne**_{Stressed} **kya** uma=ko tofa
 Anu.F=Erg KYA Uma.F=Dat present.M.Sg.Nom
 di-ya?
 give-Perf.M.Sg
 'Did ANU give a/the present to Uma?'

B. nahĩ, **asim=ne** di-ya
 no Asim.M=Erg give-Perf.M.Sg
 'No, Asim did.'

- We propose that polar *kya* associates with material to its right by default via syntactic scope.
- But that this can be overridden via prosodic focus marking.

→ Polar *kya* is focus-sensitive and associates with focused material.

An analysis of polar-*kya*

Distribution of *kya* and interpretations:

- Syntactic position: the default is to interpret these utterances as asking about the constituent in its immediate scope.
- Prosody: prosodic focus marking overrides syntactic encoding – polar *kya* associates with the prosodically focused element.

→ Polar *kya* is focus-sensitive and associates with focused material.

An analysis of polar-*kya*

Polar questions (based on Biezma and Rawlins 2012)

- (19) $[[[Q] \alpha]]^c = [[\alpha]]^c$
 defined only if
- $[[\alpha]]^c \subseteq \text{QUD}(M_{\alpha})$
 - $| [[\alpha]]^c \cup \text{QUD}(M_{\alpha}) | > 1$

Polar *kya*-questions

- (20) $[[[Q][_ _ \textit{kya} m_F _ _]]]^c = [[[_ _ m _ _]]]^c$
 defined only if
- $[[[_ _ m _ _]]]^c \subseteq \text{QUD}(M_{kya})$
 - $| [[[_ _ m _ _]]]^c \cup \text{QUD}(M_{kya}) | > 1$
 - $\text{QUD}(M_{kya}) \subseteq [[[_ _ m_F _ _]]]^f$

- Polar-*kya* is a focus sensitive question operator.
- It constrains the alternatives that the speaker is entertaining.



An example

- (21) John gave *kya* [a toy]_F to Amra?
 $\llbracket \text{John gave } kya \text{ [a toy]}_F \text{ to Amra?} \rrbracket^c =$
 $\llbracket \text{John gave a toy to Amra} \rrbracket^c =$
 $\{ \text{John gave a toy to Amra} \}$

defined only if

- a. $\{ \text{John gave a toy to Amra} \} \subseteq \text{QUD}(M_{kya})$
 b. $|\{ \text{John gave a toy to Amra} \} \cup \text{QUD}(M_{kya})| > 1$

c.
$$\text{QUD}(M_{kya}) \subseteq \left\{ \begin{array}{l} \text{John gave a toy to Amra;} \\ \text{John gave a book to Amra;} \\ \text{John gave a game to Amra;} \\ \dots \end{array} \right\}$$

\simeq What did John give to Amra?

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Further Predictions — The Answer “Nothing”

- The ‘topic’ / QUD has to be regarding what John gave to Amra in (22).

(22) jon=ne amra=ko **kya k^hilona** di-ya?
 John=Erg Amra=Dat KYA toy.M.Sg.Nom give-Perf.M.Sg
 ‘Did John give a toy to Amra?’

- The QUD conventionally enforced with a polar *kya*-question entails that John gave something to Amra in (22).

Given the constraints (conventionally) imposed by polar *kya*-questions on the QUD, we rule out the possibility of having ‘John didn’t give anything to Amra’ as an answer to (22).

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Testing the Prediction

Context: *Maybe John gave a toy to Amra, but I don’t think John gave anything to Amra, because he is such a scrooge.*

Me: I guess John didn’t bring anything to Amra this time either...

- a. \surd jon=ne amra=ko **k^hilona** di-ya?
 John=Erg Amra=Dat toy.M.Sg.Nom give-Perf.M.Sg
 ‘Did John give a toy to Amra?’
- b. #jon=ne amra=ko **kya k^hilona** di-ya?
 John=Erg Amra=Dat KYA toy.M.Sg.Nom give-Perf.M.Sg
 ‘Did John give a toy to Amra?’

A regular-polar question can be uttered when the speaker thinks that John did not give anything to Amra is a possible answer:

- Regular polar-questions allow some flexibility on what the other answers in the QUD are (see also Abusch 2009 for possible answers to *wh*-questions).
- Polar *kya* questions do not.

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Surprise I (and felicitous S O *kya* V)

- (10) A: When John came to visit, he brought a toy for Amra.
 B: jon=ne amra=ko **kya k^hilona** di-ya ?
 John=Erg Amra=Dat KYA toy.M.Sg.Nom give-Perf.M.Sg
 (magar) wo 17=ki hai
 (but) she 17 is
 ‘**John gave a toy to Amra?! She is 17!**’

In a scenario in which the speaker has no reasons to not accept A’s claim, the speaker can still use a *kya*-question to indicate that part of the information is harder to accept given their state of knowledge about the world by questioning only the starting part.

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(11) A doesn't feel like offering coffee to their visitor and wishes s/he declines the offer. If the speaker is not afraid of this coming across, s/he wouldn't utter the *kya*-question:

A: (kya) ap (kya) coffee lē-ge?
 KYA you.Hon KYA coffee.F.Sg take-Fut
'Will you have coffee?'

The *kya*-question excludes *nothing*.

(6) **kya** ye sac hai?
 KYA this true be.Pres.3Sg
'Could this be true?'

Socha Na Tha

(7) acc^h-i nahī lag-i **kya**?
 good-F.Sg. not attach-Perf.F.Sg KYA
'You didn't like her?'

WhatsApp

kya can associate with the entire proposition.

(8) Context: A is telling B how to behave in a situation. B says (with sarcasm):

B: (kya) tum (?kya) meri ammā ho (kya)?
 KYA you KYA my mother.F.Sg be.Pres kya
'Are you my mother?'

kya can associate with the entire proposition.

- Our Proposal:
 - Polar *kya* is a focus sensitive operator.
 - It adds conventional constraints on the QUD as to the alternatives the speaker is entertaining.
- Related Work
 - Bhatt and Dayal (2014) invoke given vs. new in their analysis. and see the polar *kya* as a particle interacting with topicalization.
 - Syed and Dash (2017) compares similar phenomena (*kya*-particles) across Hindi, Bangla and Oriya and also see polar *kya* related to focus.
 - Both approaches treat polar *kya* on a par with plain polar questions — not aware of the extra constraints signaled about the speaker's assumptions.
 - Neither proposal factors in the interaction with prosodic marking.



Thanks!

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- Abusch, Dorit. 2009. Presupposition triggering from alternatives. *Journal of Semantics* 27(1):37–80.
- Bhatt, Rajesh and Veneeta Dayal. 2014. Polar questions and disjunction: clues from hindi-urdu polar *kya*. Talk presented Israel Association for Theoretical Linguistics: 30th Annual Meeting Ben Gurion University of the Negev.
- Bhatt, Rajesh and Veneeta Dayal. 2017. Polar questions, disjunction and focus: Clues from Hindi-Urdu polar *kya*. Ms. UMass Amherst and Rutgers University.
- Biezma, Maria and Kyle Rawlins. 2012. Responding to alternative and polar questions. *Linguistics and Philosophy* 35:361–406.
- Farkas, Donka and Kim Bruce. 2010. On reacting to assertions and polar questions. *Journal of Semantics* 27(1):81–118.
- Féry, Caroline, Pramod Pandey, and Gerrit Kentner. 2016. The prosody of focus and givenness in Hindi and Indian English. *Studies in Language* 40(2):302–339.
- Roberts, Craige. 1996. Information Structure in Discourse: Towards an Integrated Formal Theory of Pragmatics. In J. H. Yoon and A. Kathol, eds., *OSU Working papers in linguistics 49: Papers in semantics*, pages 91–136. Columbus, Ohio: The Ohio State University Department of Linguistics.
- Syed, Saurov and Bhamati Dash. 2017. *Kya* high ki low? an investigation of the yes/no particle in hindi, bangla & odia. Handout for talk presented at FASAL 7, MIT.

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Nothing

- (23) John=ne Amra=ko kuch nhe di.ja
 John=Erg. Amra=Acc something not give.Perf.M.
 'John didn't give anything to Amra.'

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The distribution of polar *kya* (Bhatt and Dayal 2017)

Not possible with *wh*-questions

- (24)**kya* anu=ne uma=ko *kya* diyaa?
 KYA Anu=Erg Uma=Acc what give.Pfv
 Intended: 'What did Anu give to Uma?'
- (25)**kya* kis=ne uma=ko kitaab dii?
 KYA who=Erg Uma=Dat book.F give.Pfv.F
 Intended: 'Who gave Uma a/the book?'

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Declarative responsives cannot embed polar-*kya*:¹

(26)*Anu jaan-tii hai [ki kya tum cai
 Anu.F know.Hab.F be.Pres.Sg that KYA you tea
 piyoge
 drink.Fut.2MPI
 Intended: 'Anu knows whether you will drink tea.'

(27) a. ti:car=ne Anu=se puuch-aa [ki kya vo caai
 teacher=Erg Anu-from ask-Pfv that KYA s/he tea
 piyegii]
 drink.Fut.3FSg
 'The teacher asked Anu whether she would drink tea.'

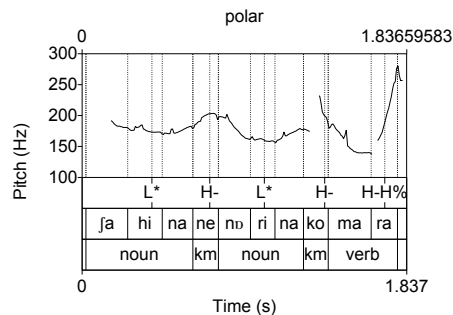
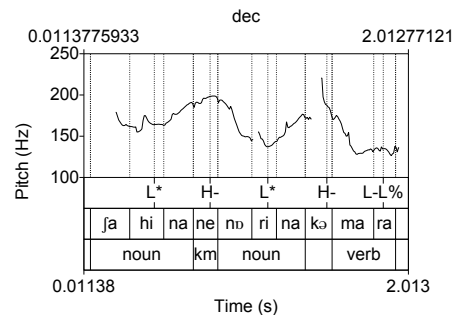
b. anu jaan-naa caah-tii hai [ki kya tum
 Anu.F know-Inf want.Hab.F be.Prs.Sg that KYA you
 cai piyoge]
 tea drink.Fut.2MPI
 'Anu wants to know whether you will drink tea.'

¹Responsive predicates are predicates that can embed either declarative or interrogative complements, e.g. *know* in English.

Alternative questions and *kya*

- *kya p* OR *kya q* (difficult)
- *kya p* OR *q* (natural)
- *p* OR *kya q*
- *p* OR *q* (most natural)

Declarative vs. Polar Question Intonation



Default Position for Wh-Constituent

- Féry et al. (2016) conducted a comparative study of Hindi and Indian English.
- They asked questions like:
 - *In front of the well, who is pushing the car?* (Questioning the Subject)
 - *In front of the well, what is the man pushing?* (Questioning the Object)
- They found the following word orders in the responses.

	SOV	OSV
Subject Questioned (n=28)	6	22
Object Questioned (n=26)	26	-

- Further corroborated by a web-based acceptability judgement test (Jabeen 2017).

⇒ Default information focus position is immediately preverbal.



We designed a questionnaire

- acceptability judgments
- testing various position of polar *kya* in the clause
(*kya*) NP (*kya*) NP (*kya*) V (*kya*)?
- With various types of SOV answers with contrasting
 - Subject
 - Object
 - Verb
 - Subject + object
 - Subject + object + verb

Questionnaire Results

✓ = most acceptable

x = least acceptable

Contrast	Initial	Medial	Preverbal	Final
Subject	✓	✓	x✓	✓
Object	✓	✓	✓	✓
Verb	x	✓	x	x
Sub + Obj	x	x	x	x
Sub + Obj +V	x	x	x	✓

Results are very mixed:

- *kya* in initial position: subject and object individually open to questioning
- *kya* in medial position: all the constituents may individually be questioned.
- Preverbal position: not really possible. Reserved for *wh*-questions
- Final: the whole proposition may be questioned.