**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?
Prosody and *kya*

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

**The distribution of *kya***

- 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) *aunu=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).

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

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: \textit{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: #nahi, \textit{asim=ne} di-ya
no Asim.M=Erg give-Perf.M.Sg
'No, Asim did.'

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.
Pragmatic dimensions of polar *kya*

**Surprise/incredulity...**

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

(7) acc³-i nahi lag-i *kya*?
good-F.Sg. not attach-Perf.F.Sg KYA
‘You didn’t like her?’

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

**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?’

**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
b³ai=ko?
brother.M.Sg=Acc
‘You don’t even recognize your own brother?’

(10) A: When John came to visit, he brought a toy for Amra.
B: jon=ne amra=ko kya kʰɪlona
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!’

**Surprise II**

b. tum b³ai=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?’
(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?'

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.

**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 khilona 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 khilona 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 khilona 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]
Polar Questions: with and without kya

(13) Context: I know that John gave a toy to someone . . .
   Eng. ✓ . . . Did John give a toy to Amra?
   Plain ✓ . . . jon=ne amra=ko kʰɪlona di-ya?
       John=Erg Amra=Dat toy.M.Sg.Nom give-Perf.M.Sg
       ‘Did John give a toy to Amra?’
   kya # . . . jon=ne kya amra=ko kʰɪlona di-ya?
       John=Erg Amra=Dat toy.M.Sg.Nom give-Perf.M.Sg
       ‘Did John give a toy to Amra?’
   kya ✓ . . . jon=ne kya kya amra=ko kʰɪlona di-ya?
       John=Erg KYA Amra=Dat toy.M.Sg.Nom give-Perf.M.Sg
       ‘Did John give a toy to Amra?’

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 t opi la-ya?
    ‘Did John bring a hat for Amra?’
    B: #t opi=ke bare=mē kyū puc roh-i
        you.Fam hat.M.Sg=about=in why ask Prog-F.Sg
        ho, amra=ke bare=mē kyū nihī?
        be.Pres.2.Sg Amra=about=in why not
        ‘Why are you asking about a hat and not about Amra?’
    B’:#t opi=ke bare=mē kyū puc roh-i
        you.Fam Amra=about=in why ask Prog-F.Sg
        ho, t opi=ke bare=mē kyū nihī?
        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]

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.
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 topi la-ya?
'Did John bring a hat for Amra?'

B: ✓ tom topi=ke bare=mē kyū puc ruh-i ho,
you.Fam.Nom hat.M.Sg=about=in why ask Prog-F.Sg be.Prog-2.Sg
amra=ke bare=mē kyū nahi?
Amra=about=in why not
'Why are you asking about a hat and not about Amra?'

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

(17) A: jon kya amra=ke liye topi la-ya?
'Did John bring a hat for Amra?'

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

B': ✓ tom amra=ke bare=mē kyū puc ruh-i ho,
you.Fam.Nom Amra=about=in why ask Prog-F.Sg be.Prog-2.Sg
topi=ke bare=mē kyū nahi?
hat.M.Sg=about=in why not
'Why are you asking about Amra and not about a hat?'

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.

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. ahu=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. #nahi, asim=ne di-ya
no Asim.M=Erg give-Perf.M.Sg
'No, Asim did.'
When the constituent to the left of polar *kya* is stressed, it can be questioned.

(18) A.  
\[ \text{Anu} = \text{ne Stressed} \text{ kya uma=ko tofa} \]  
\[ \text{Anu} = \text{Erg} \text{ kya Uma} = \text{Dat} \text{ present.M.Sg.Nom} \]  
\[ \text{di-ya?} \]  
'Did ANU give a/the present to Uma?'

B.  
\[ \text{nahi, asim=ne di-ya} \]  
no Asim = 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.

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**Polar *kya* as a Focus Sensitive Operator**

**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.

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**An analysis of polar-*kya***

**Polar questions (based on Biezma and Rawlins 2012)**

(19) \[ [\{q\} [ \alpha ] ]^c = [\alpha]^c \]  
defined only if

a. \[ [\alpha]^c \subseteq \text{QUD} (M_{\kappa_{\alpha}}) \]  
b. \[ | [\alpha]^c \cup \text{QUD} (M_{\kappa_{\alpha}}) | > 1 \]

**Polar *kya*-questions**

(20) \[ [\{q\} [\_\_ \text{ kya } m_F \_\_ ] ]^c = [\_\_ m \_\_]^c \]  
defined only if

a. \[ [\_\_ m \_\_ ]^c \subseteq \text{QUD} (M_{\kappa_{\text{ky}}} \text{)} \]  
b. \[ | [\_\_ m \_\_]^c \cup \text{QUD} (M_{\kappa_{\text{ky}}} \text{)} | > 1 \]  
c. \[ \text{QUD} (M_{\kappa_{\text{ky}}} \text{)} \subseteq [\_\_ m_F \_\_]^f \]

- 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?
   [John gave kya [a toy]f to Amra]c =
   [John gave a toy to Amra]c =
   {John gave a toy to Amra}

defined only if
a. {John gave a toy to Amra} ⊆ QUD(Mkya)
b. |{John gave a toy to Amra} ∪ QUD(Mkya)| > 1
c. QUD(Mkya) ⊆
   {John gave a toy to Amra;
    John gave a book to Amra;
    John gave a game to Amra;
    . . .

≃ What did John give to Amra?

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 kʰɪlona 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-questions on the QUD, we rule out the possibility of having ‘John didn’t give anything to Amra’ as an answer to (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).

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. ✓ jon=ne amra=ko kʰɪlona 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 kʰɪlona 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.

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 kʰɪlona di-ya ?
        John=Erg Amra=Dat kya toy.M.Sg.Nom give-Perf.M.Sg
        ‘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.
(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 le-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?’

(7) **aach-i nahi lag-i kya?**
   good-F.Sg. not attach-Perf.F.Sg KYA
   ‘You didn’t like her?’

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?’

*kya* can associate with the entire proposition.

Discussion and Summary

- 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.
Acknowledgements

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References I


Bhatt, Rajesh and Veneeta Dayal. 2017. Polar questions, disjunction and focus: Clues from Hindi-Urdu polar kya.. Ms. UMass Amherst and Rutgers University.


The distribution of polar kya (Bhatt and Dayal 2017)

(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.’

(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 diii?
KYA who=Erg Uma=Dat book.F give.Pfv.F
Intended: ‘Who gave Uma a/the book?’
**Declarative vs. Polar Question Intonation**

- 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.

<table>
<thead>
<tr>
<th></th>
<th>Subject Questioned (n=28)</th>
<th>Object Questioned (n=26)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SOV</strong></td>
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<td>26</td>
</tr>
<tr>
<td><strong>OSV</strong></td>
<td>22</td>
<td>—</td>
</tr>
</tbody>
</table>

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

⇒ Default information focus position is immediately preverbal.
Function of polar *kya*

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

Watershed Questionnaire

**Questionnaire Results**

<table>
<thead>
<tr>
<th>Contrast</th>
<th>Initial</th>
<th>Medial</th>
<th>Preverbal</th>
<th>Final</th>
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<tbody>
<tr>
<td>Subject</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>Verb</td>
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<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Sub + Obj</td>
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<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Sub + Obj + V</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
</tr>
</tbody>
</table>

*✓ = most acceptable*  
*x = least acceptable*

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.