Urdu/Hindi polar *kya* as an expression of uncertainty

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Abstract

In their seminal work on Urdu/Hindi polar *kya*, Bhatt and Dayal (2020) propose a new class of question particles, *polar question particles*. As part of their analysis, the authors also argue that alternative questions (AltQs) in Urdu/Hindi are disjunctions of polar questions (PolQs). However, Bhatt and Dayal's (2020) pioneering work leaves unexplained potential counter-examples to their proposal found in embedded contexts, as well as speakers' intuitions regarding the use of *kya* to trigger sometimes sarcasm and sometimes politeness inferences. In this paper, we pay attention to those cases in conjunction with other available empirical observations to paint a much simpler yet more explanatory picture of what *kya* is and what *kya* does. In this picture, *kya* is not the first representative of a new class of question particles, rather it functions as a marker for the attitude holder's uncertainty. We also argue that an analysis of Urdu/Hindi AltQs as disjunction of PolQs (across the board) is untenable in view of the new empirical evidence.

Keywords: Urdu/Hindi, polar questions, syntax, semantics, prosody

1 The Puzzle of Hindu/Urdu Polar *kya*

Urdu/Hindi is an SOV Indo-Aryan language with a relatively free word order in that major constituents can be scrambled. The difference between declaratives and polar non-*wh*-interrogatives in Urdu/Hindi is only signaled via prosodic cues: while declaratives end with a low boundary tone as in (1),[1] non-*wh*-interrogatives show a final rise, see (2).[2]

(1) ʃahina=ne norina=ko mar-a$_{\text{L\%}}$ (Declarative, L%)
Shahina.F=Erg Norina.F=Acc hit-Perf.M.Sg
'Shahina hit Norina.'

(2) ʃahina=ne norina=ko mar-a$_{\text{LH\%/H\%}}$? (Polar Int., LH%/H%)
Shahina.F=Erg Norina.F=Acc hit-Perf.M.Sg
'Did Shahina hit Norina?'

Polar Questions (PolQs) in Urdu/Hindi can also contain *kya*, which is an unstressed version of the *wh*-word 'what', which we write KYA. This item, dubbed "polar *kya*" by Bhatt and Dayal (2020), is assumed to be optional and to not contribute any meaning to the utterance. For example, the meaning of (3) is claimed to be the same with and without *kya*.

(3) (*kya*) ʃahina=ne norina=ko mar-a$_{\text{LH\%/H\%}}$?
kya Shahina.F=Erg Norina.F=Acc hit-Perf.M.Sg
'Did Shahina hit Norina?'

In (3) *kya* appears in sentence initial position, its canonical position (see, e.g., Montaut 2004). However, as Bhatt and Dayal (2020) (henceforth B&D) point out, *kya* can also felicitously appear easily in other positions in the clause with the exception of the immediately preverbal position. The preverbal position is also the default position for *wh*-words (see also Féry et al. 2016; Butt et al. 2017). This is illustrated in (4) (B&D's ex. (6)).[3]

(4) (*kya*) ɑnu=ne (*kya*) uma=ko (*kya*) kɪtab (%*kya*)
kya Anu.F=Erg *kya* Uma.F=Dat *kya* book.F.Sg.Nom *kya*
d-i (*kya*)?
give-Perf.F.Sg *kya*
'Did Anu give a/the book to Uma?

[1] The transliteration scheme used for the Urdu/Hindi examples is as follows. Short vowels are transcribed as ɑ, ʊ, ɪ. Long vowels are transcribed as a, e, i, o, u. Note that there is no short /o/. Additionally, we use ɛ for what is also commonly transliterated as "ai" in the literature. Retroflexes are marked with a dot underneath the consonant, e.g., ʈ. Nasalization on vowels is indicated via a tilde, e.g., ũ and geminates via doubling. Note also that we have transliterated the word for 'that' as 'ke', rather than 'ki'. The latter is a variant found in Hindi but not available in Urdu.

[2] Hindi (spoken mainly in India) and Urdu (spoken mainly in Pakistan) are structurally very close variants. The informants for this paper are predominantly from Lahore, Pakistan. However, as their judgements have been in complete agreement with previously reported judgements on Hindi questions, we do not anticipate discrepancies between varieties of Hindi and Urdu with respect to our data.

[3] We have standardized the transliteration and have applied our transliteration and glossing schemes to the examples taken from B&D as well.

The broad research question tackled by this paper is what the precise nature and interpretational contribution of *kya* is.

There are to date two main approaches to understanding *kya* in the literature: 1) the syntax-semantics approach in B&D; 2) the semantics-pragmatics approach in Biezma et al. (2017, 2018). In B&D *kya* is optional and does not contribute any semantic meaning. However, as B&D point out, *kya* has some distributional constraints, which sets it apart from other known question particles in other languages, such as Japanese *ka*.[4] B&D's thorough and pioneering investigation of *kya* uncovered several interesting properties that led them to further theoretical claims, namely, that natural languages have Polar Question Particles (of which *kya* is the first reported representative) and, additionally, that alternative questions in Urdu/Hindi are disjunctions of polar questions. B&D draw their conclusions from the behavior of *kya* in embedded contexts, the behavior in alternative questions (AltQs) and the impossibility of finding *kya* in *wh*-questions. We summarize their main empirical and theoretical claims in §2 but the section is not simply a summary of B&D's work. Taking B&D's observations and analysis as a starting point, we adduce further, new empirical evidence which in turn uncovers challenges for their original analysis. The discussion is meant to set up the basis for our own alternative analysis of *kya*, which is spelled out in §3.

The analysis in §3 builds on Biezma et al.'s (2017) and Biezma et al.'s (2018) work but departs from it in crucial points. In line with Biezma et al. we take *kya* to be a focus sensitive particle. This is also in line with proposals made for similar data in the closely related languages Bangla and Oṛiya (Syed and Dash, 2017). However, over and beyond this, we show that *kya* conveys that the attitude holder is uncertain of whether the proffered alternative or another contextually salient alternative is the case. We show how this proposal explains why it may seem as if *kya* is not making any semantic contribution in PolQs while explaining the empirical puzzles described in B&D (see §2) as well as the additional new data we present.

At the theoretical level, besides the claim that *kya* is not a representative of a new class of question particles, we reject the claim that AltQs in Urdu/Hindi are (across the board) disjunctions of PolQs. On the positive side, the take-home message is that *kya* is a focus sensitive particle that marks the speaker's uncertainty and, as such, it is not alone in natural language. In §4 we show that besides the possibility of extending the analysis for *kya* to other close cousins in South Asian languages, we find relatives in other language families, for example, the Bulgarian particle *li*. More broadly, the overall moral of the paper is that paying attention to apparent outliers, as well as data that considers patterns beyond the mere exchange of factual information and portrays additional discursive effects, allows us to arrive at a unifying and

[4]One reasonable hypothesis to pursue is that *kya* is a clause typing particle designed to mark polar interrogatives (Cheng, 1991). However, as B&D show, if it were marking interrogativity (e.g., the spell-out of a Q operator), it should obligatorily appear in embedded contexts where prosody cannot be used to mark the embedded clause as interrogative. However, this is not the case and, hence, this hypothesis is discarded, see §2.1 for more data and discussion.

simple picture, which does not require an appeal to ad-hoc assumptions at the syntax-semantics interface.

2 A closer look at *kya*

In this section we briefly list the general claims made in B&D before diving into an examination of the empirical puzzles they identified. We adopt this approach so that we can take full advantage of the previous insights and data B&D have adduced, while also setting the stage for our alternative analysis.

Recall that B&D argue that *kya* is a Polar Question Particle (a representative of a new class of particles).[5] Their analysis places *kya* in a projection above CP (ForceP).

(5) *kya* ɑnu=ne uma=ko kɪtab d-i?
kya Anu.F=Erg Uma.F=Acc book.F.Sg.Nom give-Perf.F.Sg
'Did Anu give a/the book to Uma?'

(6) [$_{\text{ForceP}}$ ***kya*** [$_{\text{CP}}$ C^0 [+Q][$_{\text{TP}}$ ɑnu-ne uma-ko kɪtab di]]]

The syntactic stipulation aims at explaining the (rough) behavior of *kya* in embedded contexts. As we will see in §2.1, in general, *kya* cannot appear in clauses embedded under responsive predicates, but can appear under rogatives. By placing *kya* in ForceP, B&D rely on syntactic argument selection for their explanation of the distribution of *kya* in embedded contexts: according to B&D *kya* can only embed under predicates that can embed clauses big enough, namely, with a ForceP projection, where *kya* is placed. B&D submit that responsives do not embed clauses big enough (they only embed CPs) while rogatives do, allowing for *kya*. B&D acknowledge, however, that this solution forces them to "set aside the issue of why selection of a complement should be a fluid matter" (p. 1123), since it is not the case that rogatives never embed clauses with *kya*.

In terms of meaning, *kya* is the identity function. Semantically, in B&D's analysis *kya* only imposes a selectional constraint: *kya* requires that its argument be a set containing only one proposition:

(7) $[\![kya]\!] = \lambda P_{\langle\langle s,t\rangle t\rangle} : \exists p \in P[\forall q[q \in P \rightarrow q = p]].P$

[5] A brief clarification about terminology. In this paper we are concerned with interrogative clauses, whose semantic interpretation is that of questions. We call polar questions (PolQs) those non-*wh*-interrogative clauses that present one alternative to the addressee for evaluation. These clauses have a *Q* operator at LF (see (6)). Alternative questions (AltQs) are non-*wh*-interrogative clauses presenting more than one alternative (and, in fact, all the contextually available alternatives). String-identical sentences, however, can often have a PolQ or an AltQ interpretation. This is illustrated below for English:

(i) Do you want tea or coffee?
PolQ:Is it the case that you want either tea or coffee?
AltQ:Which of the next alternatives is true: that you want tea or that you want coffee?

As in Urdu/Hindi, the final contour in (i) is taken to be an important cue in triggering one interpretation or the other: PolQs finish in a final rise while AltQs finish in a final fall (see e.g. Bartels 1999; Pruitt 2008; Biezma 2009; Biezma and Rawlins 2012; Pruitt and Roelofsen 2013).

B&D assume that PolQs denote singleton sets (see Biezma and Rawlins 2012 for an overview) and also that declaratives and *wh*-interrogatives do not,[6] These two assumptions, together with the semantic constraint introduced by *kya* explains in B&D's analysis why *kya* only appears in PolQs. In §2.1 we argue against this solution in view of new empirical evidence.

In §2.2 we address the overall distribution of *kya* in the clause. We argue that its distribution is tied to focus and focus association and provide new data anticipating our analysis in §3. The relation between *kya* and focus is also part of the discussion in B&D. Although this relation is not formalized in B&D (i.e., it is not part of the denotation of *kya* or straightforwardly derived from the syntactic assumptions), in B&D's proposal "*kya* demarcates the domain that can be focused, which is minimally its c-command domain. This means that in the schema in [(8)], YP and ZP can be focused. Deferring discussion of XP_2 for the moment, we can also say that XP_1 cannot be focused." (p. 1132).

(8) $[XP_1[XP_2\ [_{ForceP}\ kya\ [_{CP}\ C[+Q]\ [_{TP}\ \ldots YP\ \ldots\ ZP\ ]]]]]$

The deferred discussion regarding XP_2 concerns the complication pointed out in Biezma et al. (2018): the element to the left of *kya*, XP_2 in (8), can also be focused. Additionally, *kya* can also appear in sentence final position, in which case elements to the left can still be focused. In §2.2 we sharpen the available data set to establish the basis for our analysis in which the relation between *kya* and focus is more intimate than what B&D allow for.

Finally, while *kya* is claimed to be a representative of a new class, polar question particles, it can also appear in AltQs. This leads B&D to a further major theoretical claim, that AltQs in Urdu-Hindi are a disjunction of PolQs. We review B&D's arguments in §2.3 and provide new data showing that this is not the case.

In §2.4 we build on intuitions from Biezma et al. (2017) and Biezma et al. (2018) to show that *kya* is closely tied to the attitude holder's assumptions. We also introduce new data showing that *kya* is not optional in that it triggers additional inferences in some contexts while it is banned in others. Finally, in §2.5 we address the impossibility of having *kya* in *wh*-questions. In B&D's proposal this is explained by the semantic constraint that *kya* can only embed singleton sets (in principle, *wh*-interrogatives are not singletons). While this seems like a plausible explanation nicely derived from their assumptions and semantic analysis, we will see that it faces problems. Furthermore, as B&D acknowledge, this explanation does not connect *kya* with the Urdu/Hindi *wh*-word for 'what', which is the accented version of *kya*, KYA. In §3 we postulate that *kya* is the result of a historical development from KYA.

[6] That PolQs and declaratives differ on their semantic type is not an assumption shared across the board in the literature within Hamblin semantics (see, e.g., Biezma and Rawlins 2012) or in other approches (see, e.g., Roelofsen (2019), for inquisitive semantics).

2.1 The selection puzzle

B&D frame their discussion on embedded contexts working with the assumption that embedded clauses are selected by the embedding predicate (see Grimshaw 1979, Pesetsky 1982, 1991). Following Lahiri (2002) they take that predicates embedding interrogatives fall into one of two major classes: *rogatives* (e.g., *wonder, ask, depend on, be determined by*), which only embed interrogatives, and *responsives* (e.g., *know, say, tell* and predicates of relevance such as *care, matter, be relevant*), which may embed both interrogatives and declaratives. In this classification, *antirogative* predicates are those that do not embed interrogatives (e.g., *think, believe, want, expect, be true/false*). B&D notice that sentences with *kya* can, in general, embed only under rogatives, but not under responsives ((9a) is B&D's ex. (17); (10a) is B&D's ex. (8); we add the intended interpretation in their English close counterpart):[7]

(9) a. 'know' + declarative: 'know that'
ɑnu jan-t-i hɛ [ke tʊm
Anu.F.Nom know-Impf-F.Sg be.Pres.3.Sg that you
tʃɑe pi-yo-g-e]
tea.F.Sg.Nom drink-2-Fut-M.Pl
'Anu knows that you will drink tea.'

b. Anu knows that you will drink tea. [English]

(10) a. *ɑnu jan-t-i hɛ [ke *kya* tʊm
Anu.F.Nom know-Impf-F.Sg be.Pres.3.Sg that *kya* you
tʃɑe pi-yo-g-e]
tea.F.Sg.Nom drink-2-Fut-M.Pl
Intended: 'Anu knows whether you will drink tea.'

b. Anu knows whether you will drink tea. [English]

However, rogatives allow for *kya* in the case of 'want to know', (11b), which B&D assimilate to the case of rogatives like 'wonder', (11a) (B&D's ex. (9)):

(11) a. titʃər=ne ɑnu=se puc^{h}-a [ke (*kya*)
teacher=Erg Anu.F=Com ask-Perf.M.Sg that *kya*
vo tʃɑe pi-ye-g-i]
Pron.3.Sg.Nom tea.F.Sg.Nom drink-3.Sg-Fut-F.Sg
'The teacher asked Anu whether she would drink tea.'

b. ɑnu jan-na cɑh-t-i hɛ [ke
Anu.F.Nom know-Inf.M.Sg want-Impf-F.Sg be.Pres.3.Sg that
(*kya*) tʊm tʃɑe pi-yo-g-e]
kya you tea.F.Sg.Nom drink-2-Fut-M.Pl
'Anu wants to know whether you will drink tea.'

[7] Grammaticality judgements, '*', are B&D's and align with their analysis of the phenomenon. In our analysis, the anomaly of (10a) will respond to infelicity ('#').

B&D point out that the fact that 'know' in Urdu/Hindi does not allow embedded clauses with *kya* does not mean that 'know' cannot embed interrogatives. According to B&D, 'know' can embed interrogatives when it has *ya nahĩ* ('or not') but, as they point out later in the paper, *kya* is not possible in this context either (B&D ex. (18)):

(12) a. 'know' + 'or not'
ɑnu jan-t-i hɛ [ke tʊm tʃɑe
Anu.F.Nom know-Impf-F.Sg be.Pres.3.Sg that you tea.F.Sg.Nom
pi-yo-g-e ya nɑhĩ]
drink-2-Fut-M.Pl or not
'Anu knows whether you will drink tea or not.'

b. 'know': + *kya* + 'or not' - bad
*ɑnu jan-t-i hɛ [ke *kya* tʊm
Anu.F.Nom know-Impf-F.Sg be.Pres.3.Sg that *kya* you
tʃɑe pi-yo-g-e ya nɑhĩ]
tea.F.Sg.Nom drink-2-Fut-M.Pl or not
'Anu knows whether you will drink tea or not.'

Under standard assumptions, 'or not' questions are AltQs in which the second disjunct is elided and only the polarity head remains (see, e.g., Biezma 2009; Biezma and Rawlins 2012). The data in (12b) thus illustrates that *kya* is not possible with AltQs embedded under 'know', but notice that *kya* is possible in matrix AltQs with 'or not', shown in (13) (we return to AltQs in §2.3).

(13) *kya* tʊm tʃɑe pi-yo-g-e ya nɑhĩ?
kya you tea.F.Sg.Nom drink-2-Fut-M.Pl or not
'Will you drink tea or not?'

Notice also that 'know' can embed *wh*-interrogatives, as illustrated in (14) (B&D's ex. (24a)). Since B&D's proposal rightly predicts that *kya* is not possible in *wh*-interrogatives, it derives why it is not possible in this case either.

(14) ɑnu jan-t-i hɛ (ke) kɪs=ne kɪtab
Anu know-Impf-F.Sg be.Pres.3.Sg that who.Obl=Erg book.F.Sg.Nom
xarid-i
buy-Perf.F.Sg
'Anu knows who bought the book.'

These facts raise the question as to why responsives can embed (*kya*-less) AltQs and *wh*-questions but can never embed PolQs, as illustrated by the unavailability of the embedded question reading in (15) (B&D's ex. (24b)):

(15) ɑnu jan-t-i hɛ (ke) rɑvi gʰɑr=pɑr hɛ
Anu know-Impf-F.Sg be.Pres.3.Sg that Ravi home=on be.Pres.3.Sg
a. Intended but unavailable: 'Anu knows whether Ravi is at home.'
b. Available: 'Anu knows that Ravi is at home.'

Starting with the ban of PolQs, B&D claim that the reason why (15a) is not available is that while "in English the presence of the complementizer *if/whether* allows for an indirect question interpretation [...] Urdu-Hindi requires matrix clause intonation for this purpose." (B&D p. 1125). With "matrix clause intonation" B&D here mean the final rise which characterizes PolQs. Notice, however, that this "matrix clause intonation" is not necessary in the case of rogatives (see (16); B&D's (9a)), where clauses with *kya* can embed without any problem. It is, hence, odd that a final rise characteristic of PolQs should be necessary in the case of responsives but not rogatives without further arguments supporting this stipulation.[8]

(16) tit∫ɑr=ne anu=se put∫^{h}-a [ke *kya* vo t∫ɑe
teacher=Erg Anu.F=Com ask-Perf.M.Sg that *kya* s/he tea.F.Sg.Nom
pi-ye-g-i]$_{L\%}$
drink-3.Sg-Fut-F.Sg
'The teacher asked Anu whether she would drink tea.'

A different way of explaining the impossibility of obtaining an embedded polar reading with 'know' is that, if *kya* is not available (regardless of what analysis explains its unavailability; see §3.2 for our proposal), and assuming that *kya* can only appear in PolQs, the only thing that marks the clause as a polar interrogative and not a declarative is rising intonation. Since rising intonation is not possible in embedded contexts, the only interpretation readily available is that of an embedded declarative, (15b). After all, there is a different way to achieve an interpretation similar to that of an embedded PolQ (an interpretation in which the addressee is asked to evaluate whether a specific alternative is true): we can make use of AltQs formed with opposite alternatives, i.e., AltQs with 'or not', as in (12a).[9]

With respect to the impossibility of *kya* under responsives and its availability under rogatives, as noted above, B&D's proposal is that the contrast is due to syntactic constraints. By placing *kya* in a projection above CP, namely, ForceP, B&D argue that the solution to the selection puzzle rests on constraints on argument selection: 'know' does not embed a clause 'big' enough for *kya* to be licensed, i.e., responsives like 'know' only embed CPs, while rogatives like 'wonder' embed clauses with ForceP projections and, hence, license *kya*. This idea follows up on a suggestion in McCloskey (2006) regarding how different predicates may embed clauses of different sizes.[10]

[8] It has been pointed out to us that sentences with rogatives can have a final rise. Notice, however, that while (16), with final fall, is a declarative passing on the information of what the teacher asked Anu and can be felicitously responded to by saying "Great the teacher cares!", with a final rise this response is not felicitous: rather, the interpretation is that of a question regarding what Anu wants to drink and felicitous responses involve addressing the question. The interrogative here is actually not embedded.

[9] 'Or not' matrix interrogatives display a "cornering effect". See Biezma (2009) for a proposal deriving the cornering effect in matrix questions and predicting its absence in embedded contexts.

[10] Working with Irish English, McCloskey (2006) pointed out that subject-auxiliary inversion in embedded contexts is possible with rogatives, but not with responsives. According to McCloskey (2006), a possible explanation to this contrast is that responsives embed clauses with a larger structure, i.e., with a Force projection. This said, the acceptability of inversion in responsives improves when questioning or negating the responsive predicate:

(17) a. rogatives (*wonder*): $[_{\text{ForceP}}[_{\text{CP}}\ C^0_{+\text{Q}}\ [_{\text{TP}}]]]$
b. responsives (*know*): $[_{\text{CP}}\ C^0_{+\text{Q}}\ [_{\text{TP}}]]$

However, responsive predicates do allow for embedded clauses with *kya*(B&D leave these cases unexplained). The examples where embedded *kya* is possible crucially involve future marking, negation, and imperatives (B&D's ex. (10)).

(18) a. jan-na ho-ga 'will have to come to know'
ɪs=ke liye ye jan-na ho-g-a [ke
this=Gen.Obl for this know-Inf.M.Sg be-Fut-M.Sg that
kya sacmuc koi nɑhĩ a-ya]
kya really someone not come-Perf.M.Sg
'For this, one needs to determine whether it is really the case that no one came.'
b. Neg + 'know'
koi nɑhĩ jan-t-a [ke *kya* tito
someone not know-Impf-M.Sg that *kya* Tito.M.Nom
stalɪn=se mɪl-e tʰ-e]
Stalin.M=Com meet-Perf.M.Pl be.Past-M.Pl
'Nobody knows whether Tito had met with Stalin.'
c. Imperative + 'know'
jan-ẽ [ke *kya* ap=ke bɑtʃtʃe=ke pas
know-Imp.2 that *kya* you.Hon=Gen.Obl child.Obl=Gen.Obl near
imel ɑkaunt hɛ]
email account be.Pres.3.Sg
'Find out whether your child has an email account.'

The proposal we develop in §3 accounts for both the impossibility of *kya* with 'know' and its simultaneous licensing with responsives in other environments such as in (18). We argue that the crux to understanding the difference in distribution lies in the fact that *kya* semantically conveys that the speaker is **uncertain about the truth** of the alternative proffered. This makes *kya*

(i) a. *I remember was Henry a communist.
b. Do you remember was Henry a communist?
c. ?I don't remember was Henry a communist.

B&D draw a parallelism between inversion in polar interrogatives in Irish English and McCloskey's (2006) proposal and Urdu-Hindi *kya*. We remain agnostic regarding the McCloskey's proposal for Irish English, but in our proposal the direct parallelism with *kya* is lost and the "size" of the clause does not play a direct role in explaining the selection puzzle.

incompatible with *knowing* but compatible with, e.g., *wanting to know* as in (11), or *not knowing* and the other examples in (18).[11]

Support for our proposal comes from studying antirogatives. (19a) shows that predicates that fall traditionally within the antirogative schema also allow for *kya* (see Dayal (2016)).[12]

(19) a. rɑvi sotʃ rɑh-ɑ t^h-a, ke *kya*
Ravi.M.Nom think Prog-M.Sg be.Past-3.Sg that *kya*
vo kɪtab amra=ko d-e-g-a?
Pron.3.Sg.Nom book.F.Sg.Nom Amra.F=Dat give-3.Sg-Fut-M.Sg
'Ravi was thinking whether he will give a book to Amra.'

b. #rɑvi=ne sotʃ-a, ke *kya* vo
Ravi.M.Nom think-Perf.M.Sg that *kya* Pron.3.Sg.Nom
kɪtab amra=ko d-e-g-a?
book.F.Sg.Nom Amra.F=Dat give-3.Sg-Fut-M.Sg
'Ravi thought whether he will give a book to Amra.'

Kya is possible with progressive marking with 'think' in a reading in which the attitude holder is uncertain but in the process of settling for an alternative, (19a), but not without progressive marking, when the attitude holder has settled in for one option, (19b). These data provide further evidence that the syntactic 'size' proposal does not seem to be getting at the right generalization for explaining the distribution of *kya* in embedded contexts. All the cases above (cases with 'want to know', 'not know', 'will know', 'know' with imperative marking, as well as with antirogatives like 'think' with progressive marking) can embed clauses with *kya*, but they do not, intuitively, form a natural class defined by embedding a clause with a ForceP projection. However, what they

[11] X (p.c.) offers (ia) to show that responsives with negation are (sometimes) degraded. Notice, however, that (ia) is degraded because negation appears postverbally and within the verbal complex (not its usual position). This example improves vastly when the negation is in the default position before the verb, (ib). See Butt et al. (2016) for discussion on pragmatic effects associated with the immediately postverbal position within the verbal complex in Urdu/Hindi.

(i) a. ???mɛ̃ jan-t-i nɑhĩ hũ ke kya tʊm KARATʃI
I.Nom know-Impf-F.Sg not be.Pres.1.Sg that *kya* you.Nom Karachi.Loc
gɑ-yi t^h-i
go-Perf.F.Sg be.Past-F.Sg
'I don't know whether you had gone to Karachi.'

b. mɛ̃ nɑhĩ jan-t-i hũ ke kya tʊm KARATʃI
I.Nom know-Impf-F.Sg not be.Pres.1.Sg that *kya* you.Nom Karachi.Loc
gɑ-yi t^h-i
go-Perf.F.Sg be.Past-F.Sg
'I don't know whether you had gone to Karachi.'

[12] Dayal (2016) provides the following contrast in English (Dayal 2016, ex. (45), pg. 145):

(i) a. *I thought whether to invite Bill/who will be invited to the party.
b. I'm thinking whether to invite Bill.
c. I'm thinking who to invite to the party.

Note that our examples in (19) are past tense and not present tense in parallel to (i). This is because the present tense in Urdu/Hindi is formed via the imperfective participle, which also (naturally) has habitual readings (cf. Deo 2015). The use of the past in our examples thus avoids potential interpretational confusions/ambiguity.

all have in common is that the attitude holder is uncertain. When the attitude holder wants to know, does not know, will know or is in the process of still thinking, the attitude holder is entertaining different alternatives. In all those scenarios, *kya* is available. In contrast, when the attitude holder 'knows', the speaker does not entertain different alternatives. In those cases the attitude holder is certain (there is only one alternative compatible with their beliefs), and *kya* is not available. This is the idea that will guide our proposal in §3. We present additional support for this idea in §2.4 after discussions of the relation to focus in §2.2 and AltQs in §2.3.

2.2 The distribution of *kya* in the clause and its relation with focus

The default position for *kya* is the clause initial position. However, as B&D show, it can also appear naturally elsewhere in the clause, with the exception of the immediately preverbal position(we repeat (4), B&D's ex. (6)).

(4) (*kya*) ɑnu=ne (*kya*) uma=ko (*kya*) kɪtab (%*kya*) *kya* Anu.F=Erg *kya* Uma.F=Dat *kya* book.F.Sg.Nom *kya* d-i (*kya*)?
give-Perf.F.Sg *kya*
'Did Anu give a/the book to Uma?

In B&D's proposal, the distribution of *kya* in the clause is achieved via scrambling of material in the clause to the left of *kya*.[13] They agree with Biezma et al. (2018) on that the overall interpreation of utterances with *kya* is related

[13] B&D argue that the linear order with respect to *kya* in the clause is obtained via movement to the left of *kya*. To partly support the movement proposal they point out that when objects are hard to move, *kya* is not possible preverbally. They illustrate this with the case of weak indefinites:

(i) weak indefinite object:
(*kya*) ram=ne (*kya*) kʊc (**kya*) [k^{h}a-ya]↑?
kya Ram=Erg *kya* something.Nom *kya* eat-Perf.M.Sg
'Did Ram eat something?'

Weak indefinites are known to always appear in preverbal position and immediately preceding the verb predicate (see Butt 1993; Bhatt and Anagnostopoulou 1996; Butt and King 1996 for discussion), as exemplified below (B&D ex. (29)):

(ii) a. kʊc 'something' is in-situ
ram=ne kal kʊc k^{h}a-ya t^{h}-a
Ram.M=Erg yesterday something.Nom eat-Perf.M.Sg be.Past-M.Sg
'Ram had eaten something yesterday.'
b. kʊc 'something' is scrambled: #
#ram=ne [kʊc]$_i$ kal t$_i$ k^{h}a-ya t^{h}-a
Ram.M=Erg something.Nom yesterday eat-Perf.M.Sg be.Past-M.Sg
Intended: 'Ram had eaten something yesterday.'

B&D frame the impossibility of having *kya* in preverbal position, following a weak indefinite, as support for their movement account: the deviance of *kya* in (i) is for them the result of the object not being able to move out of its position. However, in a non-movement proposal (see Butt and King 1996 for example), the same data could illustrate the impossibility of inserting something between the weak indefinite object and the verb predicate.

to focus. This can be shown by the fact that when *kya* is sentence initial, anything on the right may be 'asked about', i.e., the contextual salient alternatives to the proffered alternative in the PolQ may vary with respect to any of the elements on the right of *kya*. This is illustrated in (20) (B&D ex. (33)), where the continuation makes explicit what possible alternatives to the first disjunct are. When *kya* is not sentence initial, material to the left of *kya* is assumed not to be able to evoke salient alternatives relevant for the interpretation of the question, i.e., can't be focused, (21) (B&D's ex. (34)):

(20) initial/absent *kya*

(*kya*) ram=ne sita=ko kɑl kɪtab
kya Ram.M=Erg Sita.F=Dat yesterday book.F.Sg.Nom
d-i t^{h}-i
give-Perf.F.Sg be.Past-F.Sg
'Had Ram given a/the book to Sita yesterday...
(i) ya mina=ne?
or Mina.F=Erg
'or had Mina?'
(ii) ya vina=ko?
or Vina.F=Dat
'or to Vina?'
(iii) ya parsõ?
or day before yesterday
'or the day before yesterday?'
(iv) ya mɛgɛzin?
or magazine.F.Sg.Nom
'or a magazine?'

(21) S IO *kya* Adv DO Verb Aux

ram=ne sita=ko *kya* kɑl kɪtab
Ram.M=Erg Sita.F=Dat *kya* yesterday book.F.Sg.Nom
d-i t^{h}-i
give-Perf.F.Sg be.Past-F.Sg
'Had Ram given a/the book to Sita yesterday,...
(i) #ya mina=ne?
or Mina.F=Erg
'or had Mina?'
(ii) #ya vina=ko?
or Vina.F=Dat
'or to Vina?'
(iii) ya parsõ?
or day before yesterday
'or the day before yesterday?'
(iv) ya mɛgɛzin?
or magazine.F.Sg.Nom
'or a magazine?'

As pointed out in pg. 5, in B&D's proposal "*kya* demarcates the domain that can be focused, which is minimally its c-command domain." This predicts that YP and ZP in (8) can be focused but not the XPs on the left.

(8) $[XP_1[XP_2\ [_{\text{ForceP}}\ kya\ [_{\text{CP}}\ C[+Q]\ [_{\text{TP}}\ \ldots YP\ \ldots\ ZP\ ]]]]]$

The main problem is that when an XP to the left of *kya* is manipulated by employing the focus-marking strategies available in the language, such as stress, the utterance is felicitous and the XP to the left is understood as the focus (i.e., the XP to the left of *kya* can be the constituent evoking alternatives relevant for the interpretation; what the question is ultimately about) and need additional stipulations to explain these cases.[14]

While B&D do not formalize the relation of *kya* and focus in their proposal, they point out that the possibility of the element to the left of *kya* being the focus is similar to what is observed with other particles in Urdu/Hindi, i.e., *hi* 'only', *bʰi* 'also' and *nahĩ* 'not'. Interestingly, all these particles are focus sensitive and their interpretation requires focus association. Hence, in a way, B&D agree here with Biezma et al.'s (2018) and Syed and Dash's (2017) proposals in which *kya* is a focus sensitive particle while their semantics for *kya* does not reflect it. Note also that B&D's stipulation regarding the position of *kya* with respect to focus marking aligns with well known constraints on focus particles and their relation with their focus associate, namely, that the the focus element be in the scope or be c-commanded by the focus sensitive particle (see, e.g., Jackendoff 1972; Rooth 1985).

In this section we show that the different positions and focus associations of *kya* correspond to different interpretational scenarios. The correlation between the position of *kya* and the differences evoked in the sets of alternatives is difficult to model in B&D's movement proposal (or Syed and Dash's 2017), since movement is invoked to create the right domain focus domain, but this does not immediately translate into predictions for the range of interpretational possibilities we find associated with the different positions of *kya*. For example, the data above shows that with sentence initial *kya* utterances may evoke alternatives relevant to the interpretation with respect to any element in the sentence. However, those elements need to be prosodically marked as focus.[15] One question that arises is why *kya* in initial position seems to behave like any neutral polar question, as opposed to *kya* in other positions. Our answer is that, by default, the prosodically prominent element in SOV polar questions

[14] B&D argue that only XP_2 can be focused (the constituent on the immediate left). These judgments are not clear for all speakers and for some XP_1 can also be focused by employing prosodic means. Syed and Dash (2017), who take a comparative look at Urdu/Hindi *kya* and the corresponding particle *ki* in Bangla and Oṛiya, similarly identify *kya* as a focus sensitive operator. Like B&D, Syed and Dash (2017) assume that *kya* defines the domain under which the focused element can be found. However, unlike B&D, Syed and Dash assume two different focus positions (one clause initial, one preverbal). The authors note that the restrictions on focus assumed by B&D on items to the left of *kya* cannot be maintained, as was pointed out in Biezma et al. (2017).

[15] Several prosodic/phonetic cues for focus in Urdu/Hindi have been reported in the literature (Harnsberger 1994; Patil et al. 2008; Butt et al. 2016; Jabeen and Braun 2018) including increased f0 height of the basic LH contour found on prosodic words, longer syllable duration within the focused element, greater intensity and postfocal compression after the focused element. Of these, the increased pitch span and pitch compression seem most robust.

with or without *kya* is the verb predicate, located by default at the end of the clause where the final rise occurs:

(22) (*kya*) ɑnu=ne uma=ko kɪtab d-i$_{\text{LH\%/H\%}}$?
kya Anu.F=Erg Uma.F=Dat book.F.Sg.Nom give-Perf.F.Sg
'Did Anu give a/the book to Uma?

This means that in a (verb final) PolQ the verb-predicate is the default focus constituent. In this default situation, focus can project to the verb complex, i.e. the verb predicate and its internal argument, the object. Hence, a question like (22) can be easily interpreted as asking about the existence of an event of giving a book (we return to this below).

When *kya* is in medial position the salient alternatives to the proffered alternative vary with respect to the element to the right of *kya* by default, i.e., the element on the right of *kya* is taken to be the focus by default. In terms of linguistic marking, this correlates with the speaker's preference to make such an element prosodically prominent. Put differently, if *kya* is not in sentence initial position, it appears next to the focus element in the sentence by default and, hence, salient alternatives vary on that element (i.e. the utterance cannot be interpreted as wondering about constituents further right, as reflected in the judgements in (23d), which assume default prosodic preferences) nor with elements preceding it (see (24c)). The judgements in (23) reflect speaker preferences when asked about the felicity of the sentences with *kya* in contrast to *kya*-less PolQs with the default prosody for each of them. In contrast to *kya*-PolQs, all cases of default/neutral PolQs without *kya* are felicitous, (23b) and (24b), just as in English (see (23a) and (24a)). As we already pointed out, in the case of *kya*-less PolQs, the verb is made prominent and the question is about the existence of a particular event (possibly with some properties expressed by its arguments), a default interpretation that can be accommodated to all the cases below, making the *kya*-less PolQ felicitous:

(23) Assuming default prosody for each sentence.
Me: I know that Ravi gave <u>something</u> to Amra ...
a. ✓... Did Ravi give a toy to Amra? [English]
b. ✓... rɑvi=ne amra=ko kʰɪlona di-ya? [U/H]
Ravi.M=Erg Amra.F=Dat toy.M.Sg.Nom give-Perf.M.Sg
'Did Ravi give a toy to Amra?'
c. ✓... rɑvi=ne amra=ko *kya* kʰɪlona
Ravi.M=Erg Amra.F=Dat *kya* toy.M.Sg.Nom
di-ya?
give-Perf.M.Sg
'Did Ravi give a toy to Amra?'
d. #... rɑvi=ne *kya* amra=ko kʰɪlona di-ya?
Ravi.M=Erg *kya* Amra.F=Dat toy.M.Sg.Nom give-Perf.M.Sg
'Did Ravi give a toy to Amra?'

(24) Assuming default prosody for each sentence.

Me: I know that Ravi gave a toy to someone ...

a. ✓... Did Ravi give a toy to Amra? [English]

b. ✓... rɑvi=ne amra=ko kʰɪlona di-ya? [U/H]
Ravi.M=Erg Amra.F=Dat toy.M.Sg.Nom give-Perf.M.Sg
'Did Ravi give a toy to Amra?'

c. #... rɑvi=ne amra=ko *kya* kʰɪlona di-ya?
Ravi.M=Erg Amra.F=Dat *kya* toy.M.Sg.Nom give-Perf.M.Sg
'Did Ravi give a toy to Amra?'

d. ✓... rɑvi=ne *kya* amra=ko kʰɪlona
Ravi.M=Erg *kya* Amra.F=Dat toy.M.Sg.Nom
di-ya?
give-Perf.M.Sg
'Did Ravi give a toy to Amra?'

When the default prosody is altered to make prominent an element other than the (default prosodically prominent) element on the right, marking it as focus this way, as in (25), (23d) in the context in (23) becomes felicitous (small caps signal non-default prosodic focus-marking), and so does (24c) in the context in (24) with the prosodic marking in (26) (see Biezma et al. 2017, 2018).

(25) Non-default prosodic marking.
... rɑvi=ne *kya* amra=ko KʰILONA di-ya?
Ravi.M=Erg *kya* Amra.F=Dat toy.M.Sg.Nom give-Perf.M.Sg
'Did Ravi give a toy to Amra?'

(26) Non-default prosodic marking.
... rɑvi=ne AMRA=KO *kya* kʰɪlona di-ya?
Ravi.M=Erg Amra.F=Dat *kya* toy.M.Sg.Nom give-Perf.M.Sg
'Did Ravi give a toy to Amra?'

Hence, as Biezma et al. (2017, 2018) point out, the relation between *kya* and focus is made evident by the fact that *kya* appears preferentially besides the element marked as focus when *kya* is not in sentence initial position. The prediction in Biezma et al.'s proposal is that, in the right context, as that in (27), *kya* is possible and perfectly natural in pre-verbal position (contra (4)). This is borne out (we discuss sentence-final *kya* below):

(27) Sita: I'm not sure whether Ravi lent or gave a toy to Amra,
... (✓*kya*) rɑvi=ne (%*kya*) amra=ko (%*kya*)
kya Ravi.M=Erg *kya* Amra.F=Dat *kya*
kʰɪlona (✓*kya*) DI-YA (?*kya*)?
toy.M.Sg.Nom *kya* give-Perf.M.Sg *kya*
'Did Ravi give a toy to Amra?'

Finally, *kya* can also appear at the end of the sentence. B&D argue that in those cases the questions with *kya* behave similarly to the sentence initial *kya*. However, this does not seem to be completely the case. The contrast

between (28) and (29) shows that in sentence final position *kya* takes broad focus (the context is built to provide live contextually salient alternatives not corresponding to narrow-focus alternatives) so the PolQ is ultimately addressing the question "what happened?") while sentence initial *kya* is degraded in this context (although it is not completely out, since its interpretation can be accommodated). In sentence initial position, *kya* takes the verb predicate to be the focus of the utterance very naturally and is, hence, felicitous in (29) (where a broad focus reading is not enforced) and so is final *kya*:

(28) Sita didn't go to work yesterday, and today she is inquiring whether something happened the day before (she likes knowing about the stories in the office): often Ravi gives a book to Amra, sometimes Tina brings sweets to the office and occasionally at other times Anu passes by to say Hi. Sita: Come on, Something must have happened during my absence,

... (?*kya*) rɑvi=ne amra=ko kitab (#*kya*)
kya Ravi.M=Erg Amra.F=Dat book.M.Sg.Nom *kya*
d-i (✓*kya*)? At least that should have happened.
give-Perf.F.Sg *kya*
'Did Ravi give a book to Amra? At least that must have happened.'

(29) Sita: Surely something has happened between Ravi and Amra but I do not know what,

... (✓*kya*) rɑvi=ne amra=ko kɪtab (?*kya*)
kya Ravi.M=Erg Amra.F=Dat book.F.Sg.Nom *kya*
d-i (✓kya)?
give-Perf.F.Sg *kya*
'Did Ravi give a book to Amra?'

Additionally, recall also that while *kya* in final position is perfect in broad focus readings (see also final-*kya* in AltQs in pg. 20), as we saw in (27) final *kya* is marked when the element to its immediate left is marked as narrow-focus.

Summing up, the questioner uttering a PolQ with sentence initial *kya* wonders, by default, about the verb predicate/complex. This aligns with *kya* being a focus sensitive particle, given that the verb predicate/complex is made prosodically prominent and understood as the focus by default. In order for the question to be interpreted as being about any other constituent, that constituent needs to be prosodically marked as focus. If *kya* does not appear in sentence initial position, the speakers' preference is that *kya* appear to the left of the focus element (the prosodically prominent element). As with other focus sensitive particles, backwards association is possible explaining that the element to the left of *kya* be marked as focus, as in (26). Ultimately, the data argues against a "partition account" and supports an analysis of *kya* in which *kya* is a focus sensitive particle.This is taken up in our analysis in §3.

2.3 The alternative questions puzzle

As anticipated above, *kya* is possible in AltQs in Urdu/Hindi. This is a potential issue for B&D, since in their proposal *kya* can only compose with singleton sets and AltQs do not (in general) denote singletons: the denotation of an AltQ (within Hamblin-style semantics) is the set containing the propositions proffered in the question (e.g., that the addressee will drink coffee and that the addressee will drink tea in (30b)). In order to explain why *kya* is nevertheless possible with AltQs, B&D argue that AltQs in Urdu/Hindi are a disjunction of two PolQs. Let us examine how the argument works.

B&D offer the following comparison between PolQs and AltQs (adapted from B&D's ex. (42)):

(30) a. (*kya*) tʊm tʃɑe ya/*ke kafi
kya you.Nom tea.F.Sg.Nom or/or coffee.F.Sg.Nom
pi-yo-g-e$_{H\%}$? [PolQ]
drink-2-Fut-M.Pl
'Will you drink either tea or coffee?'

b. (*kya*) tʊm [tʃɑe]$_F$ pi-yo-g-e ya/ke
kya you.Nom tea.F.Sg.Nom drink-2-Fut-M.Pl or/or
[kafi]$_{F\ L\%}$? [AltQ]
coffee.F.Sg.Nom
'Which of the next is true, that you will drink tea or that you will drink coffee?'

In Urdu/Hindi PolQs have a final rising contour, while AltQs have pitch accents in each disjunct and a final fall. Additionally, AltQs are said to have two possible disjunctions: the regular *ya*, and *ke*, the latter not possible as disjunction outside of AltQs. To support their argument that AltQs in Urdu/Hindi are a disjunction of PolQs, B&D show examples of overt disjunctions of two PolQs (B&D ex. (46)):

(31) *kya* tʊm ja-o-g-e ya *kya* vo a-e-g-a?
kya you.Nom go-2-Fut-M.Pl or *kya* he.Nom come-3.Sg-Fut-M.Sg
'Will you go or will he come?'

That (31) is possible is certainly not surprising, since similar facts have been noted for other languages, for example for English. B&D argue that the interpretation of (31), with one *kya* per disjunct, is the same as the interpretation of the *kya*-less utterance. In fact, the following combinations of *kya* in the different disjuncts are possible (B&D's ex. (47)):

(32) a. *kya* p or *kya* q?
kya tʊm ja-o-g-e ya *kya* vo
kya you.Nom go-2-Fut-M.Pl or *kya* he.Nom
a-e-g-a?
come-3.Sg-Fut-M.Sg
'Will you go or will he come?'

b. *kya* p or q?
kya tʊm ja-o-g-e ya vo
kya you.Nom go-2-Fut-M.Pl or he.Nom
a-e-g-a?
come-3.Sg-Fut-M.Sg
'Will you go or will he come?'

c. p or *kya* q?
tʊm ja-o-g-e ya *kya* vo
you.Nom go-2-Fut-M.Pl or *kya* he.Nom
a-e-g-a?
come-3.Sg-Fut-M.Sg
'Will you go or will he come?'

d. p or q?
tʊm ja-o-g-e ya vo a-e-g-a?
you.Nom go-2-Fut-M.Pl or he.Nom come-3.Sg-Fut-M.Sg
'Will you go or will he come?'

In view of these data, B&D argue that AltQs with *kya* are indeed disjunctions of PolQs (B&D's ex. (44)):

(33) [ForceP [ForceP *kya* [CP C^0[+*Q*][TP...]]] OR [ForceP *kya* [CP C^0[+*Q*][TP...]]]]

By having two polar questions, denoting singleton sets, the overall denotation of the structure in (33) is the set containing the two alternatives proffered (see also Biezma and Rawlins 2012, p. 396 on Belnap and Steel's 1976 example *Is it a bird or is it a plane?*).

The problem for this proposal is that not all AltQs seem to be disjunctions of PolQs. First, notice that in B&D's example in (31) we can have *ya* as a disjunctive conjunction, but the other form, *ke*, which is also found in utterances whose interpretation is that of an AltQ, is not available:

(34) #*kya* tʊm ja-o-g-e ke *kya* vo a-e-g-a?
kya you.Nom go-2-Fut-M.Pl or *kya* he.Nom come-3.Sg-Fut-M.Sg

Second, notice also that, while (31) has an AltQ interpretation (the addressee is asked to choose between the two proffered alternatives), forming AltQs in Urdu/Hindi as in (31) is not the most common way (just as it is not in English). The example in (35) presents a more common strategy for AltQ with *kya*:

(35) *kya* rɑvi=ne amra=ko kɪtab d-i ya
kya Ravi.M=Erg Amra.F=Dat book.F.Sg.Nom give-Perf.F.Sg or
pensɪl?
pencil.F.Sg.Nom
'Did Ravi give a book to Amra or a pencil?'

In cases like (35), *kya* can be placed wherever in the first disjunct (as far as it is licensed in the context of utterance; see discussion above), not just at the beginning. Crucially, however, there cannot be two *kya*s, one in each disjunct,

(36a). Additionally, speakers find it very strange to have *kya* in the second disjunct (the reaction is that "it is too late for *kya* to appear there"; we return to this below), (36b):

(36) a. *kya* rɑvi=ne amra=ko kıtab d-i
kya Ravi.M=Erg Amra.F=Dat book.F.Sg.Nom give-Perf.F.Sg
ya/ke (#*kya*) pensıl?
or/or *kya* pencil.F.Sg.Nom
'Did Ravi give a book to Amra or a pencil?'

b. rɑvi=ne amra=ko kıtab d-i ya/ke
Ravi.M=Erg Amra.F=Dat book.F.Sg.Nom give-Perf.F.Sg or/or
(?*kya*) pensıl?
kya pencil.F.Sg.Nom
'Did Ravi give a book to Amra or a pencil?'

The data in (36) is not expected if (33) is the right analysis and AltQs in Urdu/Hindi are disjunction of PolQs across the board. We would expect, according to (33), to be able to have one *kya* per disjunct and that, if only one *kya* is present, that appearing in either disjunct would be equally good. The data in (36), thus, casts serious doubts on the analysis of AltQs in (33).

This said, one could still try to amend (33) and argue that *kya* is in ForceP at the top of the clause (if one were to try to maintain B&D's "size" proposal for *kya* in embedded contexts), (37), but then we immediately encounter a problem with the singleton constraint posited by B&D for *kya* as an explanation for why *kya* can only occur in PolQs and not in *wh*-interrogatives (WhQs): if we place *kya* in a single ForceP projection, as in (37), *kya* would then be forced to combine with a non-singleton set, since the denotation of the CP combining with *kya* is the set containing as many propositions as disjuncts there are, in this case two. This alternative analysis therefore cannot be made to work in combination with B&D's singleton constraint.

(37) Attempt to rescue *kya* as head of ForceP
[$_{\text{ForceP}}$ *kya* [$_{\text{CP}}$ [+Q] [$_{\text{TP}}$...] OR [$_{\text{TP}}$ ...]]

There is one more piece of data that is difficult for B&D's analysis. With *kya* in sentence final position, the only possible reading for (39) is that of a PolQ (B&D are aware of this problem, see pp. 1138–1139), while both a PolQ and an AltQ are possible without *kya* with the appropriate final contour, (38).

(38) ravi=ne amra=ko kıtab ya pensıl
Ravi.M=Erg Amra.F=Dat book.F.Sg.Nom or pencil.F.Sg.Nom
di?
give-Perf.F.Sg
AltQ: Which of the next is true: that Ravi gave Amra a book or that Ravi gave Amra a pencil?
PolQ: Is it the case that Ravi gave either a book or a pencil to Amra?

(39) ravi=ne amra=ko kıtab ya pensıl
Ravi.M=Erg Amra.F=Dat book.F.Sg.Nom or pencil.F.Sg.Nom
di *kya*?
give-Perf.F.Sg *kya*
AltQ **unavailable**: Which of the next is true: that Ravi gave Amra a book or that Ravi gave Amra a pencil?
PolQ: Is it the case that Ravi gave either a book or a pencil to Amra?

Under B&D's analysis of AltQs as disjunctions of PolQs in (33), one would expect that the sentence final *kya* only has scope over the second disjunct because the sentence final position is achieved when everything in the second clause moves to the left over the *kya* in ForceP in the second disjunct. However, the *kya* in (39) only allows for a reading in which the *kya* has scope over the entire sentence, that is, it composes with a set of two propositions.

Summing up, we have shown that the analysis in (33) cannot be right as an across the board analysis of AltQs in Urdu/Hindi (although, of course, we can have an AltQ-like meaning with disjunction of two PolQs in Urdu/Hindi, as we do in other languages). Given the infeasibility of the analysis in (33), the semantic constraint that *kya* can only combine with singleton sets (which aimed at explaining why *kya* cannot appear in *wh*-interrogatives) is left with the status of a stipulation in the current state of our discussion.[16] The fact that *kya* is compatible with AltQs, but only in certain positions is in need of an explanation.

Let us take stock. The key components in B&D's analysis are the singleton constraint, to explain why *kya* is not possible in *wh*-interrogatives or declaratives, and the placement of *kya* in ForceP, to enable a "size" explanation to the distribution of *kya* in embedded contexts. To explain that *kya* is possible with AltQs (not singletons), B&D argue that AltQs in Urdu/Hindi are disjunction of polar questions. However, we saw above that B&D's analysis of AltQs is not tenable since it does not explain the distribution of *kya* in AltQs. We also saw above that it is difficult to maintain that *kya* is in ForceP (to explain the selection puzzle) while maintaining the singleton constraint. This does not mean necessarily that *kya* combines with non-singleton sets, it just means that if we want to maintain that *kya* is in the head of ForceP to try to maintain a "size" approach for the selection puzzle, we are in need of an explanation for why *kya* can appear in AltQs while maintaining the singleton contraint ((33) is not viable). This said, the discussion in §2.1 above already argued against the "size" proposal as an explanation for the selection puzzle and, hence, we are left without reasons to maintain either the "size" approach or the analysis of AltQs in (33) across the board as disjunction of PolQs.

[16] B&D also use the singleton constraint to justify why *kya* cannot appear in declaratives. Their assumption being that declaratives and polar interrogatives have different semantic types. Current theories of questions do not necessarily make that assumptions and, e.g., in Hamblin-style semantics where PolQs are singleton sets, there is no type difference between declaratives and PolQs (their meaning differences are captured somehow else, e.g., in their dynamic meaning). Similarly, other current proposals in the literature within inquisitive semantics do not need to make this type distinction (see, e.g., Roelofsen 2019; see also discussion on B&D, pg. 1124).

In the next sections, we work towards developing an alternative proposal explaining the behavior of *kya* and its interpretation. We crucially take into consideration new data illustrating when *kya* is in fact not available.

2.4 Probing Contexts for *kya*

In trying to account for the interpretation of *kya*, Biezma et al. (2017, 2018) argue that *kya* questions are special in not allowing for null answers. This is what they take (40): a speaker using *kya* cannot be taken to entertain as a live alternative that nothing was given to Amra, and hence the infelicity/markedness of the continuation in (40ii) in the given context, contra the felicity of the corresponding *kya*-less PolQin (40i) (keep in mind that these utterances are meant to be information-seeking questions).[17]

(40) Context: I had to work and couldn't attend Amra's birthday party but you were there. Ravi is a well known scrooge and while I don't have evidence of this...

Me: I'm sure Ravi didn't bring anything for Amra this time either. Come on, confirm what happened yesterday, ...

(i) ✓ rɑvi=ne amra=ko kʰILONA di-ya?
Ravi.M=Erg Amra.F=Dat toy.M.Sg.Nom give-Perf.M.Sg
'Did Ravi give a toy to Amra?'

(ii) #/? rɑvi=ne amra=ko *kya* kʰILONA
Ravi.M=Erg Amra.F=Dat *kya* toy.M.Sg.Nom
di-ya?
give-Perf.M.Sg
'Did Ravi give a toy to Amra?'

In the same way, based on the data in (41), Biezma et al. (2017, 2018) argue that the speaker cannot be taken to consider as a possibility that no one gave anything to Amra. Again, *kya*-less PolQs are fine in these contexts.

(41) Context: I had to work and couldn't attend Amra's birthday party but you were there. The people attending never bring gifts, they are such money-grubbers. Even Ravi, her brother, is a well known scrooge and while I don't have evidence of this ...

Me: I'm sure nobody brought anything for Amra for her birthday party this time either, not even Ravi. Come on, confirm what happened yesterday, ...

(i) ✓ RɑVI=NE amra=ko kʰɪlona di-ya?
Ravi.M=Erg Amra.F=Dat toy.M.Sg.Nom give-Perf.M.Sg
'Did Ravi give a toy to Amra?'

[17] ZZ point out that *kya kɪs=hi=ne bʰi amra=ko kʰɪlona di-ya?* (≈ *Did anyone at all give a toy to Amra?*) would be good in (41). However this would be in a sarcastic rhetorical question interpretation (made prominent through the combination of *kɪs=hi=ne* ('who+even') and *bʰ* ('also'), not in an information seeking question. We return to rhetorical questions and sarcasm in §3.3.

(ii)#/? *kya* RɑVI=NE amra=ko kʰɪlona
kya Ravi.M=Erg Amra.F=Dat toy.M.Sg.Nom
di-ya?
give-Perf.M.Sg
'Did Ravi give a toy to Amra?'

Based on these observations, Biezma et al. (2017, 2018) argue that the semantic contribution of *kya* is that the null-alternative is not a live alternative (besides *kya* being a focus-sensitive particle). However, the following example shows that *kya* is fine with the speaker considering the possibility of the null alternative being the case (compare with (40)):

(42) Context: It is equally possible that Ravi gave a toy to Amra for her birthday or that he didn't bring anything. It all depends on whether he had time to pass by a toy store on his way to the party.
Me: So, what happened at the end?
(i) ✓ rɑvi=ne amra=ko KʰILONA di-ya?
Ravi.M=Erg Amra.F=Dat toy.M.Sg.Nom give-Perf.M.Sg
'Did Ravi give a toy to Amra?'
(ii) ✓ rɑvi=ne amra=ko *kya* KʰILONA
Ravi.M=Erg Amra.F=Dat *kya* toy.M.Sg.Nom
di-ya?
give-Perf.M.Sg
'Did Ravi give a toy to Amra?'

The data in (42) show that the speaker in uttering a *kya* POLQ can still consider the null-alternative as an answer. Notice, however, that the contrast between (40) and (42) still needs to be explained. We argue that the contrast is the speaker's attitude: in (42) the speaker has not made up their mind, they are uncertain about the answer, while in (40) the speaker is certain about what the answer is. We use 'certain' to mean that the speaker is convinced of/ believes that a particular alternative from a relevant set is the only one that is true. Notice that (plain) believes are defeasible, weaker than other attitudes,[18] and while the speaker may believe that a particular alternative is the answer to a question, they may ask the question to confirm their belief and coordinate with the other discourse participants. That certainty is at the core of the distribution of *kya* is supported by the data in (43) and (44), which are the mirror image of (40) and (42), but with no null-answers: in (43), where the speaker is actually certain of what the answer is, *kya* is not possible; when the speaker is uncertain of what the answer is, *kya* is available:

(43) I had to work and couldn't attend Amra's birthday party but you were there. People are always encouraged to give Amra books, but I'm sure Ravi gave her a toy, as always...

[18] In short, following much literature on epistemic modality, we assume that there is a difference between *believing* and *knowing* (see, e.g., Kratzer 1981; Von Fintel and Gillies 2010 for discussion).

Me: I'm sure Ravi gave Amra a toy this time too. Come on, confirm what happened yesterday. . .,

(i) ✓ ɾɑvi=ne amra=ko kʰILONA di-ya?
Ravi.M=Erg Amra.F=Dat toy.M.Sg.Nom give-Perf.M.Sg
'Did Ravi give a toy to Amra?'

(ii)#/? ɾɑvi=ne amra=ko *kya* kʰILONA
Ravi.M=Erg Amra.F=Dat *kya* toy.M.Sg.Nom
di-ya?
give-Perf.M.Sg
'Did Ravi give a toy to Amra?'

(44) Context: It is equally possible that Ravi gave a toy to Amra for her birthday or that he gave her a book. It all depends on what store he passed by on his way to the party.

Me: So, what happened at the end?

(i) ✓ ɾɑvi=ne amra=ko kʰILONA di-ya?
Ravi.M=Erg Amra.F=Dat toy.M.Sg.Nom give-Perf.M.Sg
'Did Ravi give a toy to Amra?'

(ii) ✓ ɾɑvi=ne amra=ko *kya* kʰILONA
Ravi.M=Erg Amra.F=Dat *kya* toy.M.Sg.Nom
di-ya?
give-Perf.M.Sg
'Did Ravi give a toy to Amra?'

Summing up, the discussion above supports the proposal that the availability of *kya* can be tied to the speaker's attitude: *kya* is only possible when the speaker is **uncertain** of the truth of the proffered alternative. This agrees with the conclusion we drew in §2.1, and is also what explains the data B&D identify as an outstanding puzzle (B&D ex. (56); in their proposal *kya* is ungrammatical, hence their '*' judgement):

(45) a. ɑre, (**kya*) tʊm yɑhĩ ho?
oh *kya* you.Nom here be.2.Pl
'Oh, you are still here?'

b. ɑre, (**kya*) tʊm gɑ-ye nahĩ?
oh *kya* you.Nom go-Perf.M.Pl not
'Oh, you didn't leave?'

Our uncertainty hypothesis explains these data nicely: *kya* is not possible in (45) because the speaker knows that the proffered proposition is true, the addressee is in front of them! But now imagine a scenario in which the speaker is temporarily blind after a small surgery. A friend takes them home and leaves them in the living room while presumably running out for groceries. There is a noise and the speaker does not know whether the addressee did not leave or whether it was just the cat. In this context, (45a), with *kya*, is perfectly fine. In §3.3 we explore additional data illustrating how the presence of *kya* also contributes to an overall overtone of sarcasm or politeness in different contexts.

2.5 The *wh*-questions puzzle

Let us finish this section with a puzzle that has remained unaccounted for in the literature. This is the relation between *kya* in PolQs and WhQs. As mentioned above, 'what' in Urdu/Hindi is a stressed version of (polar-)*kya*, KYA, illustrated in (46). To be more precise, *wh*--KYA in Urdu/Hindi exhibits the same basic LH pattern as content words and, in contrast, polar-*kya* either has a flat intonation (generally at the beginning of a clause) or has a falling intonation (generally clause-medial; Butt et al. 2020).

(46) ɑnu=ne uma=ko kYɑ di-ya$_{L\%}$?
Anu.F=Erg Uma.F=Acc what.Nom give-Perf.M.Sg
'What did Anu give to Uma?'

As B&D point out, *wh*--KYA appears most naturally in preverbal position ((47) is B&D's ex. (7) with their judgments). However, Manetta (2012) shows that *wh*-words generally exhibit the same scrambling distribution as NPs and *wh*--KYA can appear felicitously in all of the positions in (47) (see also the discussion in Butt et al. 2020).

(47) (??KYA) ɑnu=ne (??KYA) uma=ko (KYA) [di-ya]$_{L\%}$ (??KYA)?
what Anu=Erg what Uma=Acc what give-Perf what
'What did Anu give to Uma?'

In sum, *wh*--KYA appears by default immediately preceding the verb predicate and differs from polar-*kya* in PolQs in its prosody. Polar-*kya* is not available in any *wh*-interrogative. As stated by B&D, an analysis of *kya* would be desirably linked to its *wh*-counterpart, but such a link is not made in their proposal. We dub this the *wh*-puzzle, which we also address in §3.

2.6 Interim summary

The discussion in the previous sections has served to set up the basis for the analysis we develop in §3. We have presented arguments rejecting the claim that AltQs in Urdu/Hindi are (always) disjunctions of PolQs. On the way, we have seen that keeping *kya* in ForceP forces us to relinquish the singleton-constraint on the argument of *kya* that B&D posited. Given that the postulation of this constraint was meant to explain why *kya* does not appear in declaratives or *wh*-interrogatives, one could entertain eliminating this constraint entirely from the semantics of *kya* and find an alternative explanation as to *kya*'s distributional restrictions. Additionally, any alternative analysis of *kya* should hopefully explain the relation between *kya* and KYA.

The placement of *kya* in ForceP in B&D's analysis was intended to explain the distribution of *kya* in embedded contexts. The argument was that *kya* is not available in clauses embedded under responsive predicates because responsives can only embed CPs and *kya* is placed in a higher projection. We have referred to this as the "size" approach to the selection puzzle. However, as we saw in §2.1, this syntax-based analysis does not fully explain the distribution of

kya in embedded contexts, since responsives can indeed license *kya* given the right conditions. In sum, B&D's two major parts of the analysis (*kya* placed in ForceP and the singleton constraint) do not mix well, do not fulfill the purpose for which they were invoked and also lack independent support.

We also saw that while Biezma et al. (2018, 2017) seem to be right in considering *kya* as a focus sensitive particle (see also Syed and Dash 2017), they were wrong in arguing that questions with *kya* do not allow for null answers.

We also learned some new things in the sections above. We adduced new facts about what needs to be encoded in the semantics of *kya*. We saw that *kya* behaves like a focus sensitive particle and, additionally, that *kya* is possible when the attitude holder is uncertain of whether the proffered alternative, i.e. the proposition denoted by the clause in the question, is true. We consequently build on these findings in our alternative analysis, presented in §3.

3 An uncertainty analysis for *kya*

The discussion above has established that *kya* appears only in contexts in which the attitude holder is **uncertain** about the truth of the question's content proposition, both in matrix clauses, when the speaker is requesting information, or in embedded contexts. It was important to notice that in embedded contexts, *kya* generally embeds under rogatives, but only embeds under responsives when the attitude holder is uncertain of the truth of the content proposition (e.g., when the attitude holder does not know, or wants to know). The second major ingredient in the analysis is that *kya* is a focus sensitive particle. In what follows we develop a formal analysis that captures the intuitive characterization in (48):

(48) *kya* intuitively: $[\![[_Q[kya\ [\sim \Phi]]]]\!] = [\![[_Q \sim \Phi]]\!]$
defined only if the speaker believes that there are more than one live salient alternatives in the context of utterance.

Our proposal capitalizes on the difference between the denotation of interrogatives, which refers to alternatives agreed upon and live in the context set, and the questioner's private beliefs, which may differ from the former. A speaker can ask a question to confirm that their beliefs about what is the case are correct and, thus, synchronize the public record, i.e., the context set (this is what we observe in, e.g., (40)–(44) above; see also discussion in pg. 30). According to (48), the meaning of an interrogative with *kya* is the meaning of the interrogative without *kya* with the added caveat that the utterance with *kya* conventionally conveys that the attitude holder's beliefs are compatible with more than one contextually salient alternative. What *kya* conveys conventionally is what we assume by default when someone asks a question but, importantly, is not conventionally conveyed in plain interrogatives (it is just an inference). This, we argue, explains why *kya* may seem not to have any semantic contribution to the naked eye. It also explains why *kya* is not licensed

when the attitude holder has hard evidence supporting the truth of the content proposition, e.g., when the attitude holder *knows*, but is licensed when they do not. With respect to focus sensitivity, this is captured in our analysis by appealing to the contextually salient alternatives, which are mainly the live focus alternatives, but not only (see discussion below). Thus, to formalize the meaning of *kya*, we also introduce some basic assumptions on the semantics of focus below.

To appeal to the questioner's private beliefs, we introduce the set of doxastic alternatives of an agent x as in the standard definition in (49):

(49) $Dox_{x,w} = \{w' : w' \text{ is compatible with what } x \text{ believes to be true in } w\}$

As pointed out above, that p is the only alternative from a set of possible alternatives compatible with an attitude's holder doxastic alternatives is weaker than knowing that p is true. In that sense, this private attitude is defeasible.

Regarding focus association, we saw that with *kya* in sentence initial position we can have narrow focus on the verb predicate (which is the element prosodically prominent by default in SOV PolQs and, hence, the default focus) or on the element on the immediate right of *kya*. Broad focus is obtained via backwards association with *kya* in sentence final position. Let us introduce some minimal assumptions on this matter to capture the meaning of *kya*. In the Hamblin tradition to questions, declaratives are sets of propositions (singleton sets) and, following Biezma and Rawlins (2012), i.a., so are PolQs (this latter assumption is shared with B&D). In order to derive the focus alternatives we need to extract the element in these singleton sets, the *content proposition*. We define the auxiliary definition for content propositions in (50) and exemplify it in (51) ('$\langle s,t\rangle$' is the semantic type corresponding to propositions). Following standard assumptions within the Roothian tradition we assume that sentences have an ordinary semantic value ($[\![\cdot]\!]^o$) and a focus semantic value ($[\![\cdot]\!]^f$).

(50) Let Φ be a syntactic expression s.t. $[\![\Phi]\!]^o = \mathit{\Phi}$, where $\mathit{\Phi}$ is a singleton set containing $\phi_{\langle s,t\rangle}$ ($[\![\Phi]\!]^o = \{\phi_{\langle s,t\rangle}\}$). We call $\phi_{\langle s,t\rangle}$ *contentProp*(Φ)).

(51) Consider the interrogative sentence *Did Ravi give a toy to Amra?*, with the syntactic representation [$_Q$Ravi gave a toy to Amra] and denoting the singleton set . $\{\lambda w.$ Ravi gave a toy to Amra in $w\}$: *contentProp*([$_Q$Ravi gave a toy to Amra]) = $\lambda w.$ Ravi gave a toy to Amra in w.

The focus meaning of a sentence is the set of propositions resulting from replacing the focus-element by any element of the same semantic type. In our system, this will be the set of *content propositions* as defined in (50) obtained by substituting the focus element in the syntactic expression by an object of the same type. A rough definition that suffices for our purposes is provided in (52) and exemplified in (53) (the focus meaning is, roughly, the meaning of the question *What did Ravi give to Amra?*, i.e., alternatives differing on what was given).

(52) Let Φ be a sentence with focus marking.
$[\![\Phi]\!]^f = \{p : p = \mathit{contentProp}(\Psi),$ for all Ψ resulting from replacing in Φ the focus element with expressions of the same type $\}$

(53) $[\![$[Ravi gave a toy to $\textsc{Amra}_{\text{F}}$]$]\!]^f = \{\lambda w.$ Ravi gave a toy to Amra in w; $\lambda w.$ Ravi gave a toy to Sita in w; $\lambda w.$ Ravi gave a toy to Volkswagen in $w; \ldots\}$

The last ingredient we need in a system that considers Roothian alternatives is '∼', but we limit the discussion to the Roothian formal system and '∼' to a bare minimum here. Focus marking in the Roothian tradition is represented in the syntax and '∼' is in charge of making the link between sentence and discourse: '∼' will require that the utterance be embedded in a discourse where there is an open question containing a subset of the focus alternatives. A rendition of the Roothian '∼' to work within Hamblin semantics from Biezma (2020) (building on Constant 2014) is as follows:

(54) Roothian '∼' adapted to Hamblin semantics, where OP is an operator collecting alternatives in the Hamblin system (e.g., '∃' or 'Q') if there is one:
a. $[\![\text{OP} \sim \phi]\!]^o = [\![\text{OP}\phi]\!]^o$ b. $[\![\text{OP} \sim \phi]\!]^f = [\![\text{OP}\phi]\!]^o$
c. ... and presupposes that the context contain an antecedent C such that:
(i) $C \subseteq [\![\phi]\!]^f$ (ii) $|C| > 1$ (iii) $[\![\phi]\!]^o \subset C$

The main work of '∼' is to trigger the presupposition regarding the discourse in which the utterance is embedded (54c): it establishes that there is a discourse antecedent that is a subset of the focus value. For example, it enforces that the utterance of *Ravi gave a toy to* $\textsc{Amra}_F$ has as discourse antecedent, C, a set like (53), which is in fact (roughly) the meaning of the question *to whom did Ravi give a toy?* (we constrain what C is in (55)). It also enforces that that Ravi gave a toy to Amra be one of the members of that set (i.e., a possible answer to the question). At the ordinary level '∼' is the identity function.

In our system, following Rooth, we consider the focus of a sentence the element evoking alternatives relevant for the interpretation. However, we need to determine exactly what alternatives are relevant to the speaker to tie the focus alternatives to the actual possible answers to the question (i.e., the exact meaning of the question) and the attitude holder's doxastic alternatives. The focus alternatives we are interested in are the ones that are possible/live in the context of an utterance (e.g., in (53) that Ravi gave a toy to a car company, Volkswagen, is likely not to be one of the live alternatives). So, C is really just the live focus alternatives. Additionally, in some contexts, one of the alternatives compatible with the attitude holder's doxastic alternatives might be that none of the live focus alternatives is true. This is the situation in which it is a live alternative that Ravi did not give anything to Amra for her birthday,

as in (40) (the reader is referred to Biezma 2020 for discussion).[19] We call the resulting set of live alternatives, the *salient alternatives*:[20]

(55) Let *cs* be the Stalnakerian *context set*, the set of worlds at the intersection of the propositions in the (Stalnakerian) common ground, and Φ a sentence.

a. $\text{SalientAlts}(\Phi) = \{p : p \neq \emptyset \wedge \exists q \in [\![\Phi]\!]^f \text{ s.t. } p = q \cap cs\}$ or

b. $\text{SalientAlts}(\Phi) = \{p : p \neq \emptyset \wedge \exists q \in [\![\Phi]\!]^f \text{ s.t. } p = q \cap cs\} \cup \{\lambda w.\forall p \in [\![\Phi]\!]^f, p(w) = 0\}$

PARAPHRASE: The set of focus alternatives that are live alternatives in *cs*. If the context allows it, it may contain the alternative that none of the live focus alternatives is true.

We borrow the meaning of *Q* from Biezma and Rawlins (2012); Biezma (2020) (who build on Kratzer and Shimoyama (2002) a.o.). $[\![Q]\!]^o$ is the identity function, but it also imposes that the set of propositions it inherits be a subset of the salient alternatives evoked by the embedded expression and that there be more than one:[21]

(56) Let Φ be a syntactic expression and $[\![\Phi]\!]$ a set of propositions.
$[\![[_Q \Phi]]\!]^o = [\![\Phi]\!]^o$,
defined only if $[\![\Phi]\!]^o \subseteq \text{SalientAlts}(\Phi)$ & $|\text{SalientAlts}(\Phi)| > 1$

Let us see how this works. We start with a *kya*-less question. The syntactic expression of *did Ravi give a toy to* AMRA*?* is in (57a). The focus semantic value of the clause under '∼' is the set of propositions forming the meaning of a question of the form *to whom did Ravi give a toy?*, (57b), the discourse antecedent:[22]

(57) a. $[_Q\sim$ [Ravi gave a toy to $\text{AMRA}_F]]$

b. $[\![[$ Ravi gave a toy to $\text{AMRA}_F]]\!]^f$ = {Ravi gave a toy to Amra; Ravi gave a toy to Sita; Ravi gave a toy to Tina;...}

(58) $[\![[_Q\sim$ [Ravi gave a toy to $\text{AMRA}_F]]]\!]^o$= {λw.Ravi gave a toy to Amra in *w*}, felicitous only if there is a question open in the discourse of the form *to whom did Ravi give a toy?*, thatRavi gave a toy to Amra is a live alternative and there is at least another live alternative.

[19] Notice that this "null alternative" is not itself a focus alternative.

[20] Notice that SalientAlts(Φ) is indeed the Question Under discussion, the question that participants agree to pursue in their quest to understand what the world looks like. The QUD is crucially shaped by focus (formalized in the Roothian tradition; Roberts 2012) and, following Biezma (2020), may also include the null alternative. Biezma (2020) builds on observations in Abusch (2009) and Stalnaker (2014) i.a. on the contextual licensing of the null-alternative as an answer to the question (i.e., on the context dependence of the so called 'existential presupposition' often arising in interrogatives).

[21] The constraint on there being more than one live alternative is relaxed in Biezma and Rawlins (2017a) to deal with rhetorical questions. We don't dwell on this here.

[22] As illustrated in (58), in this system, non-*wh*-interrogatives are subquestions of higher questions, which can be represented by *wh*-interrogatives in which the *wh*-word is in place of focus (see, e.g., Biezma 2009, Biezma and Rawlins 2012, building on Roberts 1996/2012).

Let us now add *kya*, (59). We argued above that *kya* is a focus sensitive particle. For the sake of simplicity we take an approach to focus sensitive particles in which they may appear in different places in the clause but their appearance in the surface simply signals the pressence of an operator in the clause that takes propositions as arguments (see Hirsch 2017). This allows us to keep a single semantics for *kya* while the surface appearance is constrained in an independent manner (see Hirsch 2017, Ch. 6 for comparison with other approaches).[23] Nothing in our proposal, however, depends on this.

(59) $[\![[_Q[kya\ [\sim \Phi]]]]\!]^o = [\![[_Q \sim \Phi]]\!]^o$
defined only if $\exists m_1,\ m_2 \in \text{SalientAlts}(\Phi), m_1 \neq m_2$, $m_i \cap Dox_{x,w} \neq \emptyset$ for $i \in \{1,2\}$, where w is the world of evaluation and x the attitude holder.[24]
PARAPHRASE: An utterance with *kya* has the meaning of the utterance without *kya* but imposes the condition that there are different possible answers compatible with the attitude's holder doxastic alternatives (i.e., the attitude holder is 'uncertain').

The denotation in (59) underlines the difference between the alternatives live in the context of utterance and the alternatives the speaker considers live alternatives. E.g., there may be a discrepancy between what the speaker considers to be possible/live and what is mutually accepted by participants in the context of utterance (private beliefs vs. common ground). See (40), where the speaker is convinced that Ravi did not give anything to Amra: while the speaker considers that the answer to the question is that Ravi didn't give anything to Amra (but lacks evidence and, hence, uses the question to check), this is not something that participants have already publicly mutually accepted (is not common ground) and, hence, *cs* is compatible with other alternatives.[25]

According to (59), *kya* is a focus sensitive operator (its semantic contribution refers to the set of salient alternatives, mainly focus alternatives, (55)). As shown in §2.2, its distribution in the clause matches that of other focus sensitive operators (recall, e.g., the distribution of English *only*; see Erlewine 2014 or Hirsch 2017 for a recent overview and crosslinguistic comparison). Different proposals for focus sensitive operators constrain this differently and, e.g., in Hirsch's system, this is done via an Agree operation and mediated by the phonology. We have nothing to add to this matter here. Let us illustrate with (43) from above how (59) works:

[23] In Hirsch (2017) the surface distributions is constrained by the possibilities provided by an Agree operation and mediated by the phonology.

[24] In matrix contexts the attitude holder is by default the speaker. In embedded contexts the attitude holder variable needs to be bound by the subject, and we leave the mechanism open here (see, e.g., Pearson 2020 or Anand and Korotkova 2021 for a recent overview of analytical options).

[25] Notice also that the denotation in (59) does not require that the content proposition in the utterance be amongst the alternatives that the attitude holder considers a live alternative. According to (59), the only constraint imposed by *kya* is that the attitude holder believe there is more than one live alternative.

(43) I had to work and couldn't attend Amra's birthday party but you were there. People are always encouraged to give Amra books, but I'm sure Ravi gave her a toy, as always...

Me: I'm sure Ravi gave Amra a toy this time too. Come on, confirm what happened yesterday...,

(i) ✓ rɑvi=ne amra=ko kʰILONA di-ya?
Ravi.M=Erg Amra.F=Dat toy.M.Sg.Nom give-Perf.M.Sg
'Did Ravi give a toy to Amra?'

(ii) #/? rɑvi=ne amra=ko *kya* kʰILONA
Ravi.M=Erg Amra.F=Dat *kya* toy.M.Sg.Nom
di-ya?
give-Perf.M.Sg
'Did Ravi give a toy to Amra?'

The case of (43i) is just a polar question and its meaning is just as in (58) above. In (43ii) we have *kya* and the definition in (59) delivers the following meaning (recall from above that we take *kya* to be high in the derivation following Hirsch 2017 i.a.).

(60) $[\![[_Q kya[\sim$ [rɑvi=ne amra=ko kʰɪlona$_F$ diya]]]$]\!]^o =$
$[\![[_Q \sim$ [rɑvi=ne amra=ko kʰɪlona$_F$ diya]]$]\!]^o$, defined only if
$\exists m_1,\ m_2 \in \text{SalientAlts}([$rɑvi=ne amra=ko kʰɪlona$_F$ diya$]), m_1 \neq m_2,$
$m_i \cap Dox_{x,w} \neq \emptyset$ for $i \in \{1,2\}$

For the sake of illustration, let us further spell out a rough paraphrase for this denotation:

(61) $[\![[_Q kya[\sim$ [rɑvi=ne amra=ko kʰɪlona$_F$ diya]]]$]\!]^o =$
[PolQ] $[\![[_Q kya[\sim$ [rɑvi=ne amra=ko kʰɪlona$_F$ diya]]]$]\!]^o$
[*kya*] defined only if the speaker believes that there are at least two live alternatives in the set of salient alternatives concerning what Ravi gave to Amra.

The meaning of the PolQ with *kya* thus imposes that the speaker entertains that there is more than one live alternative amongst the salient alternatives. As pointed out above, the salient alternatives refer to what is mutually accepted by participants at the time of the utterance, but the speaker may very well hold different (private) beliefs. In (43), even though it has not been mutually accepted yet that Ravi gave a toy to Amra (the context set is compatible with different options), the speaker is convinced that Ravi gave Amra a toy. That is, that Ravi gave Amra a toy is the only live alternative from the set of salient alternatives in the context of utterance compatible with the attitude holder's beliefs. A PolQ can be asked here to confirm their beliefs and put everybody on the same page, but the utterance with *kya* is predicted to be infelicitous and our proposal rightly predicts so. The same happens in (40) and (41), where *kya* is rightly predicted not to be good. On the other hand, in (42) and (44)

or, in general, with examples in which the speaker is entertaining more than one possibility, *kya* is rightly predicted to be good.[26]

The reader may wonder whether our proposal predicts that when the attitude holder is uncertain *kya* should be used (its absence may lead to the inference that the speaker is not uncertain; we thank X for bringing up this issue). Notice that *kya* does not have an overt lexical competitor. *Kya* is comparable to, e.g., *even*, which, in a classic analysis, presupposes that the prejacent be the least expected alternative, or to *then*, which in *if p*, *then q* enforces that *p* and *q* be causally related. Their absence, however, does not trigger the inference that the proposition is not the least expected alternative or that *p* and *q* are not causally related respectively. Similarly, the absence of *kya* does not trigger the inference that the speaker is certain.

On a different matter, let us point out that in our proposal the distribution of *kya* in AltQs is not problematic. Since it is a focus sensitive particle, its distribution within the disjunct is constrained in the same manner as in other clauses.[27] Additionally, given that by the second disjunct the speaker has already indicated that they are entertaining different alternatives, the use of *kya* is, at this point not necessary and may leave us wondering why the first disjunct wasn't marked. This explains native speakers' intuitions that *kya* in the second disjunct in alternative questions appears too late (see discussion on pg. 19 above). Two *kya*s are just redundant.

Let us now turn to the other puzzles presented by *kya*. We first address why *kya* can only appear in non-*wh*-interrogatives, §3.1. In §3.2 we show how our proposal accounts for the behavior of *kya* in embedded contexts and in §3.3 we explain the behavior of *kya* in contexts involving disbelief and sarcasm.

3.1 Explaining the distribution of *kya* across clauses

The proposal presented above does not explain why *kya* can only appear in non-*wh*-interrogatives. In order to address this problem we need to consider the relation between polar-*kya* and *wh*–KYA ('what'). As noted in §2, *wh*–KYA is the accented counterpart of (polar) *kya*. The preferred position for KYA is the immediately preverbal position (Féry et al. 2016; Butt et al. 2017):

[26] In a refinement of B&D, Dayal (2020) places *kya* in a projection that introduces a perspectival center, namely the individual for whom the question is 'active'. *Kya* is placed in this projection and one may wonder whether Dayal's proposal differ from the one presented here regarding uncertainty. Besides the arguments provided above regarding why B&D's syntactic approach doesn't explain the distribution of *kya* within the clause and in embedded contexts, placing *kya* in this perspectival position doesn't capture by itself either the contrast between PolQs with and without *kya*. Notice that Dayal also places in that position all other markers of interrogativity, namely, subject-auxiliary inversion and matrix intonation. Hence, even though if we were to place *kya* in a perspectival position, one would still have to give it a specific semantics like the one we are providing here to capture the differences between PolQs with and without *kya*.

[27] The reader is referred to, e.g., Meertens et al. (2019) for discussion on focus marking and AltQs. Meertens et al. offer the following representation of AltQs, where ϕ and ψ are full syntactic clauses, i.e. TPs ($[_Q[\sim \phi]$ or $[\sim \psi]]$). The set of salient alternatives evoked by each disjunct has to be the same for the AltQ to be felicitous, warranting constraints regarding parallelism in the focus structure of the two disjuncts.

(62) ɑnu=ne uma=ko KYA [di-ya]$_{L\%}$?
Anu.F=Erg Uma.F=Dat what give-Perf.M.Sg
'What did Anu give to Uma?'

It is important to notice that, unlike in other languages such as Japanese and Tlingit, where interrogative-*wh*-words and indefinites have the same (surface) form (see e.g., Kratzer and Shimoyama 2002; Cable 2010), in Urdu/Hindi this is not the case. The words for *some, something, someone* or *somewhere* are unrelated (they are *kʊcʰ, koi ciz, koi* and *kahĩ*, respectively). Hence, *wh-* -KYA is a word that only appears in the syntactic-semantic environment of interrogatives. This leads us to speculate that KYA is a form licensed only in interrogative clauses, however this is cashed out in a given framework. What about *kya* then? There should be a connection between the *wh*-word and the uncertainty meaning in polar-*kya*.

Although we have not conducted a diachronic investigation, it is likely that *kya* has historically developed from the original *wh*-word via a process of grammaticalization from a more to a less referential meaning (see, e.g., Traugott 1982; Traugott and König 1991; Traugott 1995; Hopper and Traugott 2003). Under this scenario, the original *wh*-word would have extended its meaning to become a focus-marker in polar questions, assuming pragmatic attributes. This new use is, of course, still clearly related to the *wh*-word status: *wh*-words are the focus element in *wh*-interrogatives and, at the end of the day, bring into the semantic derivation live alternatives in the context of utterance. Similarly, in the case of polar-*kya*, we have a focus particle, a particle that associates with the element and that evokes alternatives relevant for the interpretation.

This diachronic perspective would explain why *kya* only appears in polar interrogatives. It appears only in interrogatives because that is also the constraint in the original *wh*–KYA, an item that only appears in interrogatives. As for why, amongst all the *wh*-words in interrogatives, 'what' is the one that extends to become a focus particle, a possible answer is that this is the least marked (/least constrained) of all the *wh*-words (other words are marked for, e.g., person, place, location or time; see Biezma and Rawlins 2017a for a similar argument for *what* in 'or what' questions).

One question that so far remains unanswered is why *kya* is not possible in *wh*-interrogatives. A preliminary answer to this question is that having *kya* in a *wh*-interrogative would lead to an incoherent focus marking. Let us take the example in (63):

(63) #rɑvi=ne *kya* AMRA=KO KYA di-ya?
Ravi.M=Erg *kya* AMRA.F=DAT what give-Perf.M.Sg

The focus element in the *wh*-interrogative is the *wh*-word and the question put forward (without *kya*) would be equivalent to *what did Ravi give to* AMRA*?* Namely, without *kya*, the sentence in (63) would be interpreted as asking about what Ravi gave to Amra amongst the set of people contextually salient to whom Ravi could have given something. However, with *kya*, according to our

definition in (59), the utterance of (63) could have two interpretations depending on whether *kya* associates with the *wh*-word (which is naturally focused), in which case *kya* would be superfluous, or with the secondary focus Amra. In this last case, the utterance would be taken to simultaneously convey that the question the speaker is trying to answer is what Ravi gave to Amra (just the *wh*-question) and, because of the association of *kya* with Amra and not the *wh*-word, the question regarding to whom Ravi gave x, for some contextually salient x. There would be, then, two different questions that the utterance would be taken to be ultimately addressing! These two questions cannot be, at the same time, question open in discourse that the utterance tries to address.[28] One can, of course, convey in Urdu/Hindi that there is a complex question open in discourse similar to *To whom did Ravi give what?* by using multiple (different) *wh*-words, as illustrated in (64).

(64) rɑvi=ne kɪs=ko kya di-ya?
Ravi.M=Erg who.Obl=Dat what.Nom give-Perf.M.Sg
'What did Ravi give to whom?'

However, *kya* could still associate with the *wh*-word without bringing about incoherent focus marking. This is a logical possibility and we do not have an explanation for why this is not available. One may speculate that in the historical evolution of *kya* we have not reached that point yet and maybe this will be a future development (thanks to Y for this suggestion), but this remains here a speculation.

3.2 Accounting for the selection puzzle

Our proposal in (59) also explains the selection puzzles. The first puzzle was related to the unavailability of *kya* in clauses embedded under responsives. We saw in §2.1 above that interrogatives can embed under 'know', *wh*-- and AltQs, but not interrogatives with *kya*: AltQs with *kya* are not possible even though *kya* is possible in AltQs. *Kya*-PolQs are not possible either. We argued in §2.1 that B&D's 'size' solution is not suitable, since it left unexplained why interrogatives with *kya* can embed under 'not know', 'know' with future marking, 'know' with imperative marking and 'want to know'.

There are different theories regarding the semantics of embedding predicates, and, in particular, of responsives (see, e.g., Uegaki 2019 for a recent survey article). We don't have anything to add to the discussion here. Ultimately, what matters to us is that in all approaches, knowing a question (roughly) amounts to knowing the answer. An attitude holder that knows the answer is *certain* in the sense that is relevant here.[29]

[28] Put differently, there cannot be two different QUDs the question is trying to answer. See footnotes 20 and 22 above.

[29] Much of the literature on embedding responsive predicates is concerned with how to provide a compositional semantics that allows these predicates to embed either interrogatives or declaratives without assuming ambiguity (e.g., without assuming that there are two entries for *know*). For some approaches this is not a problem, since they do not assume that declaratives and interrogatives differ in their semantic type (see, e.g., Theiler et al. 2018 and literature therein). This is also the assumption adopted here.

With these assumptions, *kya* is predicted not to be licensed in the complement of 'know', since when the attitude holder *knows*, they are certain, i.e., only one alternative from the set of salient alternatives is compatible with their doxastic alternatives. Given that under our analysis *kya* conventionally signals that the attitude holder is uncertain (there are different contextually salient alternatives compatible with their doxastic alternatives), it follows that *kya* is simply not possible in these contexts.

At the same time, our proposal correctly predicts that *kya* is licensed with responsives in the presence of future marking ('will know'), negation ('doesn't know') or imperatives (≈'get to know!') (cf. the discussion around (18)), as well as under anti-rogatives (like 'think') with the progressive (see (19) above): in all these cases there are several alternatives compatible with the attitude-holder's beliefs and, hence, *kya* is licensed in these contexts.

3.3 Accounting for *kya* in marked contexts

So far, our proposal for *kya* explains its distribution in polar and alternative interrogatives as well as in embedded contexts and is able to solve several of the major puzzles introduced in the previous literature. A crucial component of our analysis is that *kya* conventionally conveys that the attitude holder is uncertain regarding what salient alternative is the answer to a question. This also explains why *kya* cannot appear in questions in which the answer is entailed by the context, i.e. as in (45) where we previously saw that the answer is evident because the addressee is clearly standing in front of the speaker. This case was left unexplained in B&D (B&D ex. (56)).

(45) a. ɑre, (**kya*) tʊm yɑhĩ ho?
oh *kya* you.Nom here be.Pres.2
'Oh, you are still here?'

b. ɑre, (**kya*) tʊm gɑ-ye nahĩ?
oh *kya* you.Nom go-Perf.M.Pl not
'Oh, you didn't leave?'

B&D marked the presence of *kya* as ungrammatical ('*'). In contrast, in our proposal *kya* in (45) would only be infelicitous because *kya* in (45) conveys that the speaker is uncertain about the answer to the question, but this is contrary to what is observed in the utterance situation since the addressee is in front of them (there is "hard" evidence supporting the truth of the content proposition and hence the attitude holder *knows*). Our proposal predicts that in these contexts, in which the evidence indicates the answer, *kya* is not licensed. However, when there is no hard/undeniable evidence, the speaker could use *kya* to further add/emphasize a sense of incredulity (since *kya* indicates that their doxastic alternatives are compatible with different alternatives). This is the type of situation that we observe in the examples below, which have been taken from Bollywood movies.[30]

[30]Note that (66) only exists in a script version of the movie, not in the actual movie, but is judged to be good by native speakers.

(65) The speaker is told that the addressee can marry whoever he wants, which is very hard to believe given the previous discussions.

kya ye sɑc hɛ?
kya this true be.Pres.3.Sg
'Could this be true? *Socha Na Tha*

(66) The speaker is being asked to go help out his brother-in-law, but is trying to explain to his wife that his help will not be welcomed because he is perceived as an enemy.

tʊm *kya* jan-ti nɑhĩ ho
you.Nom *kya* know-Impf.F.Sg not be.Pres.2.Sg
bʰai=ko?
brother.M.Sg=Acc
'Don't you know your brother?' Script of *Ankhon Dekhi*

In the same way, *kya* is also very effective for conveying sarcasm in rhetorical questions, i.e., to help the speaker convey that they are pretending not to know the answer to a question in contexts in which it is mutually accepted by all participants that the opposite is the case (i.e., to flout quality à la Grice). This is shown in (67), which is similar to B&D's (54a). We follow Biezma and Rawlins (2017b,a) (who build on Caponigro and Sprouse (2007)) and assume that rhetorical questions are questions conventionally conveying (via prosody or lexical items) that the answer to the question is entailed by the context set. *Kya* is common in rhetorical questions with a sarcastic flavor, like in (68).[31]

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

B: tʊm mer-i ɑmmɑ̃ ho *kya*?
you.Nom my-F.Sg mother.F.Sg.Nom be.Pres.2 *kya*
'Are you my mother?'

(68) Our hero wants to get out of marrying his intended and begins to plot a scheme under which the bride, who is actually very keen on the wedding, would call off the wedding herself. His best friend says:

tu pagɑl hɛ *kya*?
you.Fam.Nom crazy be.Pres.3.Sg *kya*
'Are you crazy?' *Socha Na Tha*

[31] Not all rhetorical questions need to be sarcastic (adapted from Caponigro and Sprouse 2007):

(i) A: I don't understand why Morgan voted for Taylor.
B: Well, after all, who hired Morgan? / is Taylor in charge of promotions?
A: Taylor! You are right!/ You are right!

B's utterance is intended as a rhetorical question and, while it could be uttered with the prosodic features that would elicit a sarcastic reading, this is not necessarily the only possibility. B can use a rhetorical question to point at the relevant fact that explains the situation without necessarily using sarcasm (i.e., without going the extra mile to pretend ignorance). The equivalent Urdu/Hindi Polq, *Taylor promotions committee ka head hɛ?*, assuming the answer is entailed in by the context set, namely, it is a rhetorical question, acquires a sarcastic overtone if *kya* is added.

Of course, in all these cases the *kya*-less version is also possible, but the inclusion of *kya* in (65) and (66) helps to bring across the speaker's incredulity (marking that the speaker is resistant to believe a particular answer and is still entertaining several possibilities). In (67) and (68), contexts in which it is mutually accepted by participants that the answer is entailed by the context set, *kya* helps to bring about sarcasm (i.e., to indicate that the speaker is flouting quality by conveying the opposite to what is the case, namely, to convey that the speaker believes that there are several live alternatives while it is mutually accepted that they are indeed certain of what the answer is). This pretense leads to rudeness, as expected, in some contexts in which the answer is obvious but the speaker pretends it is not:

(69) You have a friend who is an egocentric drama-person, always deeply troubled by the most insignificant thing. You run into each other at the bus stop, your friend looking pale and obviously in distress:

You: koi problem hɛ *kya*?
some problem.Nom be.Pres.3.Sg *kya*
'Is there a problem?'

Given the information available in the utterance situation in (69) together with the evidence (the addressee is in obvious distress), *kya* can only be interpreted as adding a hurtful sarcastic overtone that is hard to ignore. This would not have been the case without *kya*. In the latter case you would have merely been inviting your friend to talk about their problems if they liked.

Conversely, the presence of *kya* can also contribute to the overall 'politeness' of the utterance. Speakers report that when asking for a favor from a neighbor or a friend, using *kya* allows the speaker to convey that the addressee is free(-er) to accept or decline doing the flavor:

(70) *kya* tʊm mʊjʰe ɛrport le ja sɑk-t-e ho?
kya you.Nom I.Obl airport take go can-Impf-M.Pl be.Pres.2.Pl
'Could you take me to the airport?'

In our proposal, all these effects (surprise, sarcasm, politeness) are merely a byproduct of the meaning of *kya* in the different utterance situations.

4 Concluding remarks

Kya is not the only focus sensitive particle reported in polar questions across languages. We leave open the possibility that our analysis can be extended to other particles in South Asian languages upon further investigations. However, for the sake of completeness and to show that there are particles similar to *kya* in languages from other families, we review the behavior of the Bulgarian enclitic *-li* (not to be confused with the particle *dali*) from Dukova-Zheleva (2010). Dukova-Zheleva's (2010) description of *li* is very rich and, studied under

our lens, it paints an empirical picture closely resembling *kya*'s regarding its focus association properties and it's specialization on specific clauses.[32]

Dukova-Zheleva (2010) argues that in Bulgarian the enclitic *li* is focus sensitive and relates the interpretation of the question to the contextually restricted set of alternatives evoked by focus. While Dukova-Zheleva's (2010) proposal for *li* is different from our proposal for *kya*,[33] the description of the data allows us to observe strikingly similarities with *kya* and its relation with focus. We frame the discussion of the data in Dukova-Zheleva (2010) below in the terms of the discussion on *kya* above to facilitate comparison (we leave for future research a more detailed comparison between *kya* and *li*).

The examples below are adapted from Dukova-Zheleva (2010) (SMALLCAPS in the utterance indicate prosodic stress). *Li* appears to the right of the focus.

(71) Narrow focus -*li* interrogatives:

a. A: RISUVA *li* Ivan vseki den?
Draw *li* Ivan every day?
'Does Ivan draw every day or he does something else?'
B_1: Yes, he does (draw every day).
B_2: No, he WATCHES TV every day. (or does something else, depending on the context)

b. A: IVAN *li* risuva vseki den?
Ivan li draw every day
'Is it IVAN the one who draws every day?'

c. A: VSEKI DEN li risuva Ivan?
Every day li draws Ivan
'Is it EVERY DAY that Ivan draws?'

(72) Broad focus -*li* interrogatives:

A: Ivan risuva vseki den li?
Ivan draws every day li
'Does Ivan draw every day?'
B: Yes, he does (draw every day). / No, he does not (draw every day).

In (71a), according to Dukova-Zheleva, a response of the kind 'no, Ivan doesn't draw everyday' would compel A to continue asking about other things that Ivan may do daily (the issue that we understand A to be trying to resolve is which, amongst the contextually salient things, Ivan does everyday). That, is, we understand that (71a) is a sub-question of a question equivalent to *what does Ivan do everyday?*, (e.g., the set containing the proposition that Ivan draws everyday; that Ivan goes for a walk every day, etc.). Similarly, (71b) is

[32]The reader is referred to Dukova-Zheleva (2010) for differences between Bulgarian, Russian and Serbo-Croatian.

[33]Dukova-Zheleva (2010) argues that in Bulgarian *dali* is the spell-out of the regular question operator *Q*: it combines with a proposition and returns the set formed by that proposition and its opposite (following the classic non-singleton approach to polar questions in the Hamblin-semantics tradition). In contrast, Dukova-Zheleva (2010) argues that *li*-interrogatives spell out a *different* question operator in Bulgarian, one that is focus-sensitive. In Dukova-Zheleva's system, this operator combines with a set of propositions, namely, those propositions in the focus value of the utterance that are contextually salient.

possible in contexts in which we can understand that the issue that the speaker is trying to address is equivalent to *who draws everyday?* and in (71c), the question A tries to resolve is equivalent to *when does Ivan draw?* In contrast, (72) is a sub-question of a question whose answers may vary on all aspects (e.g., the set of possible answers could contain that Ivan draws everyday; that Ivan visits his grandma on Sundays; etc.), a broad focus question.

In sum, *li* behaves very much like *kya* in its relation with focus. There are, however, differences between *li* and *kya*. For example, *kya* can only appear in polar interrogatives while *li* can also appear in the antecedent of conditionals (although this is not surprising given the close connection between conditionals and questions already acknowledged in the literature).[34] This said, while a full comparison between *kya* and *li* regarding their interpretation is beyond the scope of this paper, crosslinguistic differences are expected. The only important thing for us here is to show that focus sensitive particles specialized in specific clauses are attested in other languages.

Overall, our proposal for *kya* succeeds at explaining speakers' intuitions with respect to *kya* in matrix contexts and in embedded contexts. We crucially capitalize on data that was left out unexplained as somehow 'quirky', but also on contexts in which *kya* contributes to trigger additional inferences. It was paying attention at these quirky cases what allowed us to paint a clear and simple picture of what *kya* is and what *kya* does.

Further work will be necessary to see whether the analysis presented here for *kya* can be extended to account for related particles in other related languages such as Oṛiya and Bangla. Syed and Dash's (2017) description of what they term polar *ki* (following B&D's label for *kya*) seems not to be far from what we have seen here for *kya*. This said, it wouldn't be surprising if crosslinguistic differences were found and, in fact, *ki* in Oṛiya and Bangla is an enclitic (like Bulgarian *li*), unlike *kya*. The investigation of potential crosslinguistic differences would contribute to our understanding of these particles and their historical development.

Abbreviations

Acc = accusative; Com = comitative; Dat = dative; Erg = ergative; F = feminine; Fam = familiar; Fut = future; Gen = genitive; Hon = honorific; Imp = Imperative; Impf = imperfective; Inf = infinitive; M = masculine; Neg = negation; Nom = nominative; Obl = oblique; Perf = perfective; Pl = plural; Pres = present; Prog = progressive; Pron = pronoun; Past = past; Sg = singular; 2= second person; 3 = third person.

[34] That a particle so tied to questions such as *li* appears also in conditionals is not surprising. As Dukova-Zheleva (2010) points out, the link between conditionals and questions has already been acknowledge in the literature (the reader is referred to Harman 1979; Larson 1985; Kayne 1991; Cheng and Huang 1996; Lasersohn 1996; Romero 2000).

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