When does a clause become a question?
On the fine structure of the interrogative left periphery

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Overview

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I: THE INTERROGATIVE LEFT PERIPHERY

1.1. The profile of matrix vs. embedded questions

**ENGLISH:**

Matrix Q: subject-aux inversion, wh fronting, ↑matrix intonation.
Embedded Q: no inversion, no discernible Q intonation, dedicated wh C for polar questions, wh fronting

1a. Will Mary leave?
   b. John knows whether/if Mary will leave.

2a. Who will Sue see?
   b. John knows who Sue will see.
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HINDI-URDU:

Matrix Q:  Optional polar question particle (PQP) *kyaa*, ↑matrix intonation, Wh in situ/preverbal-focus mvt
Embedded Q:  Optional neutral C, no discernible Q intonation, no monoclausal polar Q, wh in situ/preverbal-focus mvt

3a. *(kyaa)* anu jaaegii?
   PQP   Anu will-go
   “Will Anu go?”

b. * ravi  jaantaa hai ki  *(kyaa)* anu  jaaegii
   Ravi knows   SUB   PQP   Anu will-go
   Intended: “Ravi knows whether Anu will go.”

c. ravi  jaantaa hai ki       anu  jaaegii  yaa nahiiN
   Ravi knows   SUB  Anu will-go or  not
   “Ravi knows whether Anu will go or not.”

4a. anu  kis-se       milegii
   Anu who-with will-meet
   “Who will Anu meet?”

b.  ravi  jaantaa hai (ki)       anu  kis-se milegii
   Ravi knows   SUB  Anu who-with will meet
   “Ravi knows who Anu will meet.”
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JAPANESE:
Matrix Q: optional Q-Particle \textit{ka/no}, \uparrow matrix intonation, wh in situ.
Embedded Q: obligatory Q-Particle \textit{ka/no}, no discernible Q intonation, wh in situ

5a. Mary-wa hon-o kai-masi-ta (ka)?
   M-TOP book- ACC buy-POL-PAST Q
   “Did Mary buy a book?”

   T- TOP M- NOM book- ACC buy- PAST Q know-PROG- POL- PR
   “Tanaka knows whether Mary bought a book.”

6a. Mary-wa nani-o kai-masi-ta (↑/ka)?
   M- TOP what- ACC buy-POL-PAST Q
   “What did Mary buy?”

   T- TOP M- NOM what- ACC buy- PAST Q know- PROG-POL-PR
   “Tanaka knows what Mary bought.”
### 7. Matrix vs. Embedded Interrogative Profiles

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Matrix Q = [SAP [CP [TP]]]   Embedded Q = […V [CP [TP]]]

But this picture is incomplete – cross-linguistically, there is evidence of interrogative clauses with mixed properties.
1.2: A three-way distinction among rogative predicates

INVERSION AND SPEAKER-ORIENTED EXPRESSIONS


The possibility holds across dialects, or at least the contrast between (8)-(9) is generally accepted.

The predicates in (8) are rogative, those in (9) responsive

8a. I wondered [was he illiterate ↑].
   b. I asked him [from what source could the reprisals come↑].

9a. * I knew [was he illiterate ↑].
   b. * I told him [from what source could the reprisals come↑].

These cases of embedded inversion have the characteristic $\uparrow_{\text{MATRIX}}$ and a slight pause before the embedded Q, but they are not quotations (10b, slightly modified to make it gender neutral):

10a. Everybody wants to know [did ISP succeed in buying chocolate for Winifred↑].
   b. Every physicist wonders [will they$_{\text{AGENT}}$ be awarded the Nobel prize↑].

McCloskey 2006
Rogative predicates that do and do not allow embedded inversion

**DO** -- *The question is*, wonder, ask, want to know

**DO NOT** -- *Depend on/be up to/investigate*

11a. **The question is** [whether Mary will leave]/[who Mary will see].
    b. **The question is**, [will Mary leave↑]/ [who will Mary see ↑]

12a.  *[Whether Mary will leave]/[Who Mary will see] depends on/is up to Sue.
    b. * *[Will Mary leave ↑]/*[Who will Mary see↑] depends on/is up to Sue.
Predicates that allow embedded inversion (*the question is*, *wonder*) nevertheless resist (non-neutral) declarative questions (Gunlogson (2003, 2008, McCloskey 2006)):

13a. Is it raining outside↑ felicitous with/without evidence of p
   b. It’s raining outside ↑ felicitous only with evidence of p

14a. The question is, [is it raining ↑]
   b. She wondered, [did he have a haircut ↑]

15a. * The question is, [it’s raining ↑]
   b. * She wondered, [he had a haircut ↑]

Ask, selects for interrogative quotations (Grimshaw 2012).
It accepts declarative questions, attesting to bona fide status of declarative questions as questions.

16a. She asked, “Is it raining↑”
   b. *She asked, “It’s raining.”
   c. She asked, “It’s raining ↑”

3 Subgroups of Rogatives
(i) rogatives (*depend on, investigate*): Only Qs with embedded profile
(ii) rogatives (*ask, wonder, the question is*): A subset of Qs with matrix profile
& Qs with embedded profile
(iii) rogatives: (*ask*): All Qs with matrix profile
I: THE INTERROGATIVE LEFT PERIPHERY

INTERROGATIVE PARTICLES (Q-PARTICLES, POLAR Q-PARTICLES, META Q-PARTICLES)

Japanese Q-particle *ka*: required for all embedded questions - clause typing

5b. Tanaka-kun-wa [Mary-ga hon-o kat-ta (ka)] sit-tei-mas-u.
  T- TOP M- NOM book- ACC buy- PAST Q know-PROG- POL- PR
  “Tanaka knows whether Mary bought a book.”          With *ka*
  “Tanaka knows that Mary bought a book.”             Without *ka*

Hindi-Urdu PQP *kyaa*, and Mandarin *ma*, cannot be considered Q-particles of the Japanese kind, they do type a clause +WH (Bhatt and Dayal 2020, contra Cheng 1991):

3b. ravi jaantaa hai ki anu jaaegii
    Ravi knows SUB Anu will-go
    “Ravi knows that Anu will go.”           Without *kyaa*

b’. *ravi jaantaa hai ki kyaa anu jaaegii     With *kyaa* ⇒ unacceptable
    Ravi knows SUB PQP Anu will-go
    Intended: “Ravi knows whether Anu will go.”
**I: THE INTERROGATIVE LEFT PERIPHERY**

*Kyaa*, furthermore, only occurs with polar questions; its distribution closely tracks that of English embedded inversion. The same holds for Mandarin –*ma* (see also Song 2018).

*kyaa* is acceptable with *know* (3b’), OK with *ask, the question is*, but not with *depend on:*

17a. Tiichar-ne  anu-se  puuchaa ki  kyaa vo caai piyegii↑
  Teacher-ERG anu-INSTR asked SUB PQP she tea will-drink “The teacher asked Anu if she will drink tea.”
  b. savaal  yeh hai ki  kyaa nayii vyavasthaa kaagar saabit hogii ↑
  question this is SUB PQP new arrangement effective prove will-be “The question is whether the new arrangement will prove effective.”
  c. * (kyaa) vo  jaayegii yaa nahii uske mood par nirbhar kartaa hai
  PQP she will-go or not her mood on depend does “Whether she will go or not depends on her mood.”
Meta Question Particles (MQP): interrogative particles that can only appear in matrix questions or quotations: English quick (Dayal 2016), again, Japanese kke (Sauerland and Yatsushiro 2017), Mandarin nandao (Xu 2017), Bangla naki (Bhadra 2017, 2020)

18a. Quick/quickly, where did you hide the matza↑
   b. What is your name, again↑

Dayal (2016)

19a. Mary asked Sue *quick/quickly where she hid the matza where did she hide the matza↑
   b. ? Mary asked Sue what was her name, again↑

Sauerland and Yatsushiro (2017)

20a. namae-wa nan-da-kke
    name-Top what-Cop-kke
    “What is your name, again?”

Sauerland and Yatsushiro (2017: 653)

b. *Boku-wa [(kimi-no) namae-ga nan-da-kke (ka)] siri-ta-i.
    I-top you-gen name-nom what-COP-KKE Q know-want-PRES
    'I want to know what your name is again.'

Takeo Kurafuji, Satoshi Tomioka, Yoshiki Fujiwara (p.c)
I: THE INTERROGATIVE LEFT PERIPHERY

There are 3 points in the left periphery for a clause to become a question

22a.

\[ \text{[SAP \ SA\ ASK \ \ [ForceP \ Force+CTR \ \ [CP \ C^0+WH \ \ [TP\ldots\ ]\ ]\ ]\ ]} \]

MQP, Declarative Q inversion, PQP, ↑MATRIX Q-particles, wh fronting nucleus

These distinctions explain a potential puzzle (Donka Farkas, p.c.): how can we refer to declarative questions as a “question” but block them from being embedded under a rogative predicate?

23a. The question is, did he pass the exam ↑ / * he passed the exam ↑

   b. Speaker A: Oh, he passed the exam↑
   Speaker B: That’s a silly question.

There are three interrogative structures, with distinct grammatical properties. Different rogative predicates select for different interrogative structures. All three structures can all be referred to by the term “question” (apropos discussion following Bernard Schwarz’s talk yesterday).
II: THE PROPOSAL IN A NUTSHELL

2.1. What Happens Where

What Happens Where: CP+WH

Clause-typing happens at CP: $[[\text{CP}_{+\text{WH}}]] \neq [[\text{CP}_{-\text{WH}}]]$

24a. $[[\text{CP}_{+\text{WH}} \text{ Whether Sue will leave}] [\text{VP depends on Mary}]]$

b. $[[C_{+\text{WH}}]] = \lambda q \lambda p [p = q]$

$[[\text{TP Sue will leave}]] = ^{\text{sue will leave}}$

$[[\text{CP whether Sue will leave}]] = \{^{\text{sue will leave}}, ^{\neg\text{sue will leave}}\}$

special OP/coercion

$[[\text{TP [CP whether sue will leave] depends on Mary}]] = ^{\text{depend-on (m)}} (\text{Ans} \{^{\text{sue will leave}}, ^{\neg\text{sue will leave}}\})$

Clause-typing happens at the lowest of the three projections.

Putting clause-typing lower in the structure explains
(i) the selectional difference between believe and depend on.
(ii) the obligatoriness of Q-morphemes (Japanese ka/no) in all embedded Qs.
What Happens Where: FORCE+CTR

Force has a feature +CTR (Perspectival Center, judge) which:
- is prosodically interpreted as ↑matrix (rising for info-seeking polar questions);
- syntactically triggers inversion;
- does not make an at-issue contribution
  but:
  (i) it introduces an argument whose perspective wrt Q is relevant
  (ii) it introduces a not-at-issue proposition: Q is potentially ACTIVE for the center.
  (this not-at-issue proposition enters CG without negotiation: Murray 2014)

\[25a. \text{[ForceP PRO [Force'} \text{ Force+CTR [CP will Sue leave]}\text{]}\]  
\[\text{b. } [\text{Force}_+\text{CTR}] = \lambda Q \lambda x: \text{ Q is P-ACTIVE for x. Q}\]  
\[\text{c. } \forall x \forall Q \ [\text{P-ACTIVE-for}(Q, x) \leftrightarrow \Diamond \neg \text{Know}(x, \text{Ans}(Q))] \quad \text{information seeking Q}\]

The term ForceP is from Rizzi (1997) but used differently here:
- ForceP is not associated with illocutionary force (which is located at SAP)
- ForceP is not associated with clause-typing (which is located at CP)
- ForceP is a centered question.
II: THE PROPOSAL IN A NUTSHELL

Why can ForceP be embedded under rogative but not under responsive predicates? Because of the NAI condition of possible ignorance on the part of the perspectival center. In embedded contexts the center is the matrix subject.

26a. \[ \text{SAP SA} \text{ASSERT} \[ \text{cp Mary} \text{; asked/*knew} \]
\[ \text{[ForceP [PRO] [Force+CTR [CP+WH will Sue leave]]]]] \]

b. \[ \text{[ForceP]} = \text{P-ACTIVE} (\{^\text{sue will leave}, ^\text{¬sue will leave}\}, x_i). \]
\[ \{^\text{sue will leave}, ^\text{¬sue will leave}\} \]

c. \[ \text{[Mary asked will Sue leave]} = \]
\[ \text{The question Will Sue leave? is potentially ACTIVE for Mary; SpeakerC makes public their commitment to the proposition:} \]
\[ \text{Mary wants to know the answer to the question will sue leave?} \]
\[ \text{consistent} \]

d. \[ \text{[ Mary asked will Sue leave ]} = \]
\[ \text{The question Will Sue leave? is potentially ACTIVE for Mary; SpeakerC makes public their commitment to the proposition:} \]
\[ \text{Mary knows the answer to the question will Sue leave?} \]
\[ \text{contradictory} \]

The acceptability/unacceptability of (26a) rests on whether the NAI condition \[ \lozenge \neg \text{know(Ans(will sue leave?)}) \] is consistent with Mary being in the ask/know relation to the embedded Q.
II: THE PROPOSAL IN A NUTSHELL

What Happens Where: SAP\textsubscript{ASK}

Co-ordinates for speaker and addressee (Speas and Tenny 2003) and a semantics for SAP in terms of discourse moves by discourse participants (Szabolcsi 1982, Krifka 2014 a.o.). The binding of PRO by the speaker co-ordinate of SAP delivers consistency between the NAI condition of possible ignorance and the speech act of asking:

27a. $\left[\text{SAP} \ \text{Speaker}_{c-i} \ [\text{SA}', \ \text{Addressee}_{c} \ [\text{SA}', \ \text{SA}\text{ASK}]}
\left[\text{Force}_{P} \ \text{PRO}_{i} \ [\text{Force}_{+CTR} \ [\text{C}^{0}_{P} \ +WH} \ [\text{TP}]]\right]\right]\right]$

b. $\left[\text{SA}\text{ASK}\right] = \lambda Q^{<<s,t>>,t} \ \lambda x \ \lambda y. \ y \ \text{puts} \ x \ \text{under obligation to ASSERT} \ (\text{Ans}(Q))$

MQPs modify the speech act. For example, \textit{quick} modifies the illocutionary force:

$\ y \ \text{puts} \ x \ \text{under obligation to} \ \text{quickly(ASSERT)} \ (\text{Ans}(Q))$

The restriction of MQPs to matrix questions/quotations is predicted if SAPs do not embed, except as quotations.
II: THE PROPOSAL IN A NUTSHELL

2.2. Subordination & Shifty Responsives

The hybrid character of quasi-subordination: Pronouns in English

28a. [SAP SpeakerC AddresseeC ASSERT
   [CP Mary [VP asked
      [CP+WH who she should talk to]
      I
      you
   ] = Mary; Jane
   = SpeakerC
   = AddresseeC

b. [SAP SpeakerC AddresseeC ASSERT
   [CP Mary [VP asked
      [ForceP+CTR who should she talk to ↑]
      I
      you
   ] = Mary/Jane
   = SpeakerC
   = AddresseeC

b. [SAP SpeakerC AddresseeC ASSERT
   [CP Mary [VP asked
      [SAP “who should she talk to ↑”]
      I
      you
   ] ≠ Mary; = Jane
   ≠ SpeakerC; = Mary
   ≠ AddresseeC; = ?
II: THE PROPOSAL IN A NUTSHELL

The hybrid character of quasi-subordination: Bound variables in English

The hybrid character of quasi-surbordination is reflected in the interpretation of pronouns (cf: 28)

29a. Everyone wants to know [did I succeed in buying chocolate for Winifred].  1st person = SpC
b. Every physicist wonders [will they be awarded the Nobel prize].  3rd person = ∀Physicist

The hybrid character of quasi-subordination: The rogative-responsive divide

Another important point is the rogative/responsive difference wrt to embedded inversion in English and PQP in Hindi-Urdu, which was explained by the condition on possible ignorance:

30a. Everybody wants to know [did I succeed in buying chocolate for Winifred↑]
b. * Everybody knows [did I succeed in buying chocolate for Winifred ↑].

31a  anu jaannaa caahtii hai [ki (kyaa) tum cai piyoge ↑]
    Anu to-know wants SUB PQP you tea will-drink
    “Anu wants to know whether you’ll drink tea.

b. * anu jaantii hai [ki (kyaa) tum cai piyoge (↑)]
    Anu knows SUB PQP you tea will-drink
    Intended: “Anu knows whether you’ll drink tea.”
II: THE PROPOSAL IN A NUTSHELL

Shifty responsives

But the ban on responsive predicates is not absolute; when the matrix is negated or questioned the unacceptability goes away, and this seems to hold X-linguistically:

32a. * I remember [was Henry a communist ↑]
   b. ? I don’t remember [was Henry a communist ↑]
   c. Do you remember [was Henry a communist ↑]  
      McCloskey 2006: 112

33a. koi nahiiN jaantaa [ki kyaa Tito stalin-se mile the ↑]
     Someone not knows SUB PQP Tito Stalin-with met
     “Nobody knows whether Tito had met with Stalin.”
   b. kisii-ko bhii maalum hai ↑ [ki (kyaa) Tito stalin-se mile the ↑]
     someone-ACC at all know SUB PQP Tito Stalin-with met  
     Bhatt & Dayal 2020

McCloskey entertains a structural distinction in embedding of the kind I have presented but gives it up because of paradigms like (32), “the necessary discriminatory work is done by ultimately pragmatic conditions…we do not want to hardwire into the lexical entry of a resolutive [responsive] predicate a constraint which forbids it to combine with a complement of the higher type.” (McCloskey 2006: 116).
II: THE PROPOSAL IN A NUTSHELL

Shifty responsives

The proposed NAI condition on Q being potentially ACTIVE in composition with the AI assertion derives the shiftiness of responsives.

34a. * [Sue remember [was Henry a communist ↑]]
   \[\Diamond \neg \text{know}(Sue, \text{Ans}(Q)); \text{remember}(Sue, \text{Ans}(Q))\]
   \[\Rightarrow \text{contradiction}\]

   b. [Sue doesn’t remember [was Henry a communist ↑]]
   \[\Diamond \neg \text{know}(Sue, \text{Ans}(Q)); \neg \text{remember}(Sue, \text{Ans}(Q))\]
   \[\not\Rightarrow \text{contradiction}\]

   c. [Does Sue remember ↑ [was Henry a communist ↑]]
   \[\Diamond \neg \text{know}(Sue, \text{Ans}(Q)); \begin{array}{c}
     \text{remember}(Sue, \text{Ans}(Q)) \\
     \neg \text{remember}(Sue, \text{Ans}(Q))
   \end{array}\]
   \[\not\Rightarrow \text{contradiction}\]

The last case justifies the choice of potentially ACTIVE rather than ACTIVE simpliciter in the NAI condition.
Cancelation vs. Choice


35a. What is your name? **Or (rather)**, what is your SSN?
   b. What is your name **or** what is your SSN?

(35a): **Cancellation type.** The speaker, in effect, cancels the first question and moves to a more specific question or a question better suited to the current conversational goals.

(35b): **Choice type.** The two questions are equally efficient ways of serving the current conversational goals and the speaker leaves it up to the addressee to answer whichever question they want to answer.
Cancelation vs. Choice

Can both types of disjunction be embedded?

36a. Mary is asking what is your name or what is your SSN?  
    b. Mary is asking what is your name or rather what is your SSN?

In (36a) Mary is said to give the addressee the choice of providing their name or their SSN (either will do) – embedded Choice Type disjunction.

In (36b) it isn’t Mary who cancels the first question and replaces it with a better question; it is the speaker who does the cancellation. It has to be analyzed as (37a), not (37b). That is, its base form is (37c):

37a. [SAP Mary wants to know what is your name] or rather  
     [SAP Mary wants to know what is your SSN]

b.* [Mary wants to know [ [SAP what is your name] or rather  
       [SAP what is your SSN] ]]

c. Mary wants to know what is your name, or rather, she wants to know what is your SSN.

Cancellation Type disjunction occurs at SAP and cannot be (quasi-)subordinated.
Cancelation vs. Choice

What about Choice Type disjunction? Where does that fit into this interrogative left periphery and how does it relate to the embedding verb?

Can one derive the choice reading of (36a) from the permissible structures in (36a’) or (36a’’) and with what type of an Ans operator? This is the challenge from Schwarz et al (2020):

36a. Mary is asking what is your name or what is your SSN?

36a’. Mary is asking \([_{\text{ForceP} \ [_{\text{ForceP+CTR} \text{ what is your name}}]} \text{ or } [_{\text{ForceP+CTR} \text{ what is your name}}]\)\]

36a’’. \([_{\text{SAP} \text{ Mary is asking } [_{\text{ForceP+CTR} \text{ what is your name}}] \text{ or }}[_{\text{SAP} \text{ Mary is asking } [_{\text{ForceP+CTR} \text{ what is your name}}]}]\)\]
The Prosody of Alt-Qs

The prosodic profile of alternative questions includes: pitch accent on the alternatives, prosodic break between alternatives, a final fall (Bartels 1997, a.o)

These three features are in evidence in direct questions as well as in embedded alternative questions, including those embedded under predicates like *depend on* identified as selecting CPs.

38a. Do they want [coffee]$_F$, or do they want [tea]$_F$ ↓?

   b. John wants to know/The question is,
      [\[ForceP do they want [coffee]$_F$, or do they want [tea]$_F$ ↓\]]

   c. [\[CP Whether they will want [coffee]$_F$ or whether they will want [tea]$_F$ (↓)\]
      will depend on when they get here.

While pitch accents and the prosodic break is determined within the nucleus proposition, the final fall comes at ForceP.

Does that make the final fall in (38c) a potential counterexample for a view of the interrogative left periphery where matrix intonation, ↓ in the case of Alt-Q, enters at ForceP?
III: EMBEDDING SAP (ALT-QUESTIONS)

The Prosody of Alt-Qs

But not all alternative questions have a final fall (Roelofsen and van Gool 2010, Roelofsen and Farkas 2015, Hoeks 2020).

Open disjunctive questions show sensitivity in embeddability

39a. Do they want [coffee]F, or do they want [tea]F↑?
   b. John wants to know/The question is,
      [ForceP do they want [coffee]F, or do they want [tea]F↑]

40a. * [CP Whether they will want [coffee]F or whether they will want [tea]F↑]
     will depend on when they get here.

   b. * John wants to know/The question is,
      [CP whether they want [coffee]F, or whether they want [tea]F↑]

Final fall/rise does enter at ForceP and is possible with quasi-subordination but not with regular subordination.

Interrogative CPs in embedded position do not have final fall/rise, though the absence of a final prosodic feature may not be detectable as distinct from a final fall.
III: EMBEDDING SAP (QUESTIONS WITH QUANTIFIERS)

Quantifying into Question Speech Acts

Questions with quantifiers on their pair-list readings are possible in direct and embedded position, with responsive and with rogative predicates:

41a. Which book did every student read?  

b. Mary wondered [which book every student read] 

c. Mary wondered [which book did every student read] 

d. Mary knew [which book every student read] 

e. [Which book every student will read] depends on the teacher.

This raises doubts about an analysis that involves questioning into speech acts (Krifka 2003). Pair-list readings of questions with quantifiers in matrix and embedded contexts have different properties (Moltmann and Szabolcsi 1994, Szabolcsi 1997).

It is possible that quantifying into speech acts is reserved for matrix questions, and an alternative analysis accounts for embedded cases of questions with quantifiers.
IV: FURTHER IMPLICATIONS

S-selection

Two notions of ‘selection’

- It is a lexically marked feature of predicates what complement type they can and cannot combine with. This suggests that a predicate P and a closely related predicate P’ (in terms of lexical meaning) may select different types of complements.

- It is a matter of composition whether a particular predicate can combine with a particular complement type. This suggests that a predicate P and closely related predicate P’ (in terms of lexical meaning) are likely to select similar types of complements.

Grimshaw (1979) argues for a two-dimensional selection system: c-selection (for category selection) and s-selection (for semantic selection), but do we need a theory of s-selection?

Grimshaw herself holds that s-selection should be derivable from the lexical semantics of the embedding predicate and the semantics of the complement clause.
S-selection

Grimshaw: rogative predicates require uncertainty and are therefore incompatible with exclamatives, which are factive.

42a. John knows how very tall she is!
   b. *John wonders how very tall she is!

Believe and +WH

Even the basic +/- WH selection seems subject to shiftiness (Elliott 1974, Grimshaw 1979, Huddleston 1993):

43a. *I can believe who is going out with who.
   b. I can’t believe who is going out with who.
   c. Can you believe who is going out with who?

One may argue whether the complements in (43b)-(43c) are interrogatives or exclamatives, but that is orthogonal to the issue of how the selectional properties of believe should be characterized.

Certainly, the shiftiness of responsive predicates wrt to embedded inversion and ↑MATRIX suggests that compositional semantics/pragmatics may be the locus of selectional restrictions (though sadly investigate doesn’t fit the picture)
S-selection

There is a small but significant literature on deriving s-selection from compositional semantics/pragmatics – early efforts in this direction include: D’Avis 2002, Abels 2007, Guerzoni 2007 (a.o). Much work in this direction has been done more recently.

While the idea that s-selection is derivable is only just beginning to move out of the programmatic level, the empirical imperative for it is clear.

“Current research makes it seem unlikely that s-selection is lexically specified once and for all for predicates. While we may continue to talk about a predicate selecting a particular type of complement, we need to be cautious about investing too much theoretical capital in this distinction. An adequate elaboration of the combinatorial possibilities, taking into account all aspects of meaning and conversational dynamics, may ultimately make a theory of s-selection redundant. Interestingly, Grimshaw herself anticipates this in her arguments for s-selection.”

Dayal 2016:147
Further Effects in Shiftiness

There is a basic difference between rogative and responsive predicates wrt embedding ForceP_{+CTR}

Modifying responsives with negation and questioning shifts the unacceptability.

There may be more to take into account.

The judgements for (44a)-(44b) can get flipped with a change in quantifiers (Carolyn Anderson p.c.):

44a. Everybody wants to know [did I succeed in buying chocolate for Winifred↑]
   b. * Everybody knows [did I succeed in buying chocolate for Winifred ↑].

45a. * Nobody wants to know [did I succeed in buying chocolate for Winifred↑]
   b. Nobody knows [did I succeed in buying chocolate for Winifred ↑]
**IV: FURTHER IMPLICATIONS**

**Answering with embedded inversion**

The lexical semantics of the embedding verb can also be an influencing factor, as is first person subject and present-tense in the matrix – factors leading to a de facto direct question interpretation.

46. I forget/have forgotten, [*did Ann get As in her 1st year courses ↑*]

Presupposition of *forget*: I used to know Ans(Q)

Contribution of ForceP<sub>CTR</sub>: I don’t know Ans(Q) now.  

Can (46) be used to answer a question? It appears that it cannot be used in this way but why?

47. Speaker A: Did Ann get As in her 1st year courses?
   
   Speaker B: I used to know but now I've forgotten [*whether she did/got As in her 1st year courses]  
   * [*did she get As in her 1st year courses ↑*]

When there are alternative ways of eliciting the same information, there seem to be additional pragmatic conditions on the use of non-canonical forms.
IV: FURTHER IMPLICATIONS

What about Free Indirect Discourse and Wh Slifting?

48. She wondered if she he was still asleep. How did she even fall asleep and on top of him?! Was he … shirtless? Oh … he was… cited by Maier 2012

49. How old is she, did you say? Haddican et al 2014

IV: FURTHER IMPLICATIONS

Quasi-subordination & Discourse-active Complements

50a. Everyone wants to know did I succeed in buying chocolate for Winifred.

b. Dept Secy: [The Chair wants to know [\text{ForceP+CTR} \text{ can you teach Semantics 1 next semester?}]

[\text{CP if you can teach Semantics 1 next semester.}]]

Faculty Member: Yes, I can.________________________

Embedded inversion:
Is not a necessary condition for an interrogative complement to be discourse-active.
Is not a sufficient condition for an interrogative complement to be discourse-active.

51. Everyone wants to know [\text{ForceP+CTR} \text{ did I succeed in buying chocolate for Winifred?}]


Centering tracks a middle path.
CONCLUSION

[SAP  SAASK  [ForceP  Force+CTR  [CP  C⁰+WH  [TP... ] ]] ]

Illocutionary Force  Matrix Intonation  Clause-Typing
THANK YOU!

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