Dealing with some special cases that could constitute counterexamples.

A brief review of the ‘Q’ controversy in English (does English have a ‘Q’?)

- Katz & Postal (1964):
  - DS: Bill past see John
  - SS: Bill saw John
  - Did Bill see John?
  - Can’t be the same DS, because DS determines meaning.
  - So, posit “Q Bill past see John” as DS for Did Bill see John?
  - Then, SAI refers to Q (replace Q with verb), semantics interprets Q.
  - Note: “Embedded questions” have no Q (no SAI).

- Baker (1970):
  - But embedded questions are questions too. They have a right to a Q.
  - In fact, you can see it: if and whether spell out Q.
  - Q coindexation (binding) determines scope of wh-words:
    - We discovered that the police know who Clyde shot.
    - We discovered who the police know that Clyde shot.
    - Note: The direction of implication seems correct—Wh remembers where we bought which book?

- Grimshaw (1977):
  - We don’t need Q for semantics if we interpret at the end (LF not DS).

  - Right on. We don’t need a Q in English, we want to use Q as a parameter to differentiate English and Japanese.
  - Reminder—my take on what Q is differs from Cheng’s…come back to this.

So, English whether and if—are they an overt realization of ‘Q’?

- Distribution differs from typing particles in less controversial languages (whether/if only in embedded clauses, vs. the matrix preference for Q)
- whether actually acts like a wh-word, not a complementizer.
  - (Larson 1985 proposes that it moves from next to the disjunction, marking the scope of or.)
- if—well, more of a hand-waving story. Idea: if isn’t specified as [+Q] because it is related to the conditional if, and requires an unpronounced whether-type operator to give it interrogative force.

Ok, so good. English has no Q, which we want, since it has overt wh-movement.

Similar question arises for Polish czy—is it Q? (Cheng says “no”, but is she right?)

- Note: The question is actually moot for the purposes of the CTH.
  - Polish is a multiple wh-movement language (so it could be classified as a wh-in-situ language under the “careful” CTH categorization).
- czy means ‘or’—Cheng makes a weak argument from this that it is like whether or wherever and therefore not an X. But note—this property makes it look an awful lot like Q particles in other languages!
**Wh-particles as themselves objects in motion (Hagstrom 1999)**

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|(2)  | a.  **dare**-**ka**-ga hon-o kaimasita.  
     | Someone-NOM book-ACC bought.POLITE  
     | *Someone bought a book.*
|   | b.  **dare**-ga hon-o kaimasita **ka**.  
     | Who-NOM book-ACC bought.POLITE Q  
     | *Who bought a book?*

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|(3)  | **‘Q-movement’**—
     | In Japanese questions, -**ka** reaches the clause periphery via syntactic movement.
|   | **dare**-**t**u-ga hon-o kaimasita **ka**?  
     | *(b)*

This is a somewhat different concept of Q than what Cheng proposes.
(In her system, Q is generated in its final position—or very near it).
(In this system, Q is not inherently part of the complementizer system at all).

The fundamental idea *could* still be considered parallel, though:

- **Something** moves to C in all languages, perhaps to ‘type’ the clause.
- In **wh-in-situ** languages, Q moves to C.
- In **wh-movement** languages, a **wh-word** moves to C.

[Caveat: Chomsky 1998:45 takes that view of Q-movement given above, i.e., as satisfying the same requirement as wh-movement, and therefore being in complementary distribution to wh-movement. **However**, the semantics I will propose points in a different direction—that is, that Q-movement is important to the semantics and therefore must occur in all languages, wh-movement or no wh-movement. More on this later.]

**Testing the hypothesis in (3): Intervention effects to diagnose movement**

**Assumption 1:** Movement occurs only if **motivated.**
There is some requirement which is **satisfied** by movement.

**Assumption 2:** The requirement is a feature of the **landing site.** (*C*-inversion needs a Q’)

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|(4)  | **Y intervenes** for movement of X if Y is equally eligible to move, since Y is closer to the target of movement than X was.

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|(5)  | **Attract Closest**
Movement is motivated by the need to check a feature.
Only the closest element with the relevant feature is eligible for movement.

Motivating **Attract Closest** (a commonly assumed 'economy' condition in various forms)

- “Superiority”: (6b) forces a particular reading if acceptable (“D-linking”).

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|(6)  | a.  **Who** did John persuade [ _ to buy what ] ?  
     | b.  # **What** did John persuade [ who to buy _ ] ?  
     | c.  **What** did John persuade [ Mary to buy _ ] ?

Some Icelandic ECM facts: Closest argument moves to pre-‘seem’ position.
(Dative argument is closer than embedded subject—if present).

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|(7)  | a.  Jón telur [ **mér** virðast t Haraldur hafa gert þetta vel ]  
     | J.nom believes me.dat to.seem H.nom to.have done this well
     | *Jon believes Harald to seem to me to have done this well.*
|   | b.  * Jón telur [ Harald virðast **mér** t hafa gert þetta vel ]  
     | J.nom believes H.acce to.seem me.dat to have done this well
     | *Jon believes Harald to seem to have done this well.*
|   | c.  Jón telur [ Harald virðast **t** hafa gert þetta vel ]  
     | J.nom believes H.acc to.seem to.have done this well
     | *Jon believes Harald to seem to have done this well.*

Anyway, it’s a very common belief among syntacticians that long movement relations are ruled out in favor of shorter, equally functional, movement relations.

Prediction wrt “Q-movement”: If we put a (different) Q closer to C than the Q which has to move to C, we should run into trouble.

Can we find another Q? Yes. Observe an interesting crosslinguistic pattern:
Q seems to commonly take on disjunctive and indefinite-forming roles.

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|(8)  | a.  **Japanese** dare ‘who’ nani ‘what’  
     | dare-**k**a ‘someone’ nani-**k**a ‘something’
     | Taroo-**k**a Hanako-ga kita.  
     | ‘Taroo or Hanako came.’
|   | b.  **Korean** nwukwu ‘who’ mwues ‘what’  
     | nwukwu-**n**ka ‘someone’ mwues-**n**ka ‘something’
     | Sunhi-ka yeppu-**n**ka yo?  
     | ‘Is Sunhi pretty?’
     | *I wonder who is coming.*

---
A note about SOV and Japanese

(9) CP
   IP complementizer(s)
   VP tense

Q moves to complementizer position
Q moves from next to question word
Moving from object position crosses the subject position.
To test: Object question word, intervening -ka inside subject.

Independent -ka cannot be on the path of Q-movement (as predicted) (Hoji 1985)

(10) a. ?* John-ka Bill-ga nani-o kaimasita ka?
     John-or Bill-NOM what-ACC bought.POLITE Q
     ("What did John or Bill buy?")
Comp -ka [ John-ka Bill-ga nani-o ] kaimasita

b. nani-o John-ka Bill-ga t, kaimasita ka?
     what-ACC John-or Bill-NOM bought.POLITE Q
     ("What did John or Bill buy?")
Comp -ka [ nani-o t ], John-ka Bill-ga t, kaimasita

Above: Works for -ka ‘or’.
Below: Works for -ka in indefinites, and when subject and object roles are reversed.

(11) a. ?* dareka-ga nani-o kaimasita ka?
     someone-NOM what-ACC bought.POLITE Q
     ("What did someone buy?")
Comp -ka [ nani-o t ] dareka-ga t, kaimasita ka?

b. nani-o, dareka-ga t, kaimasita ka?
     what-ACC someone-NOM bought.POLITE Q
     ("What did someone buy?")

(12) a. dare-ga sake-ka beeiru-o nomimasita ka?
     who-NOM sake-or beer-ACC drank.POLITE Q
     ("Who drank sake or beer?")
Comp -ka [ sake-ka beeiru-o ] dare-ga t, nomasita ka?

b. ?* [sake-ka beeiru-o], dare-ga t, nomasita ka?
     sake-or beer-ACC who-NOM drank.POLITE Q
     ("Who drank sake or beer?")

Conclude: We saw what we wanted to see.
It looks like there’s a relation from about where the wh-word is to C,
a relation which can’t cross other instances of Q
(suggesting something like Attract Closest—i.e. movement).

Note: We might also have expected these effects on an alternative hypothesis:
Alternative: All wh-words move (perhaps covertly) to CP.
This would mean: Covert wh-movement cannot cross independent Q.
Which would mean: Q and wh-words must share the feature.

This explanation is not obviously wrong, but note that we don’t need to
stipulate that wh-words and Q share the relevant feature if it is Q moving
(since Q is certainly featurally equivalent to itself).
3. Island effects (or a lack thereof?)

Movement can’t get out of islands, e.g.:

(13) a. * What i did John meet \[island the man who wrote t i \]
    
    b. * What i did Mary leave \[island after John bought t i \]

So if Q is moving from by the \textit{wh}-word to C, the movement path shouldn’t be able to cross islands either. But there’s a problem…

Japanese allows question words inside islands

(14) a. Taroo-ga \[island Hanako-ni nani-o ageta hito-ni \] aimasita ka?
    
    Taroo-NOM Hanako-DAT what-ACC gave man-DAT met.POLITE Q
    ‘What did Taro meet the man that gave \textit{t} to Hanako?’
    
    b. Taroo-ga \[island Hanako-ga nani-o yomu maeni \] dekakemasita ka?
    
    Taroo-NOM Hanako-NOM what-ACC read before left.POLITE Q
    ‘What did Taro leave before Hanako read \textit{t}?’

(15) \[island \ldots nani \ldots \] \ldots tka \ldots ka ?

\textbf{Whoa there!} What kind of solution is \textit{that}??

You say: It’s movement.

You see: No island effects.

So: Being movement has no observable effect. (?)

At which point: Rational people begin to fidget in their seats.

\textbf{Trying to salvage some content} from the proposal. A look at \textit{ittai}.

(16) John-ga \textit{ittai} nani-o kaimasita ka?
    
    John-NOM \textit{ittai} what-ACC bought.POLITE Q
    ‘What in the world did John buy?’

\textbf{Idea:} \textit{ittai} has a very close relation to \textit{Q} (they are base-generated together). \textit{Q} can move and leave \textit{ittai} behind.

Where we see \textit{ittai} gives us an indication of where \textit{Q} moved from.

\textit{ittai} requires presence of \textit{-ka}—without \textit{ittai}, \textit{-ka} can sometimes be dropped.

(17) a. Taroo-ga nani-o tabeta?
    
    Taroo-NOM what-ACC ate
    ‘What did Taro eat?’
    
    b. ?? Taroo-ga \textit{ittai} nani-o tabeta?
    
    Taroo-NOM \textit{ittai} what-ACC ate
    (‘What in the world did Taro eat?’)

\textbf{Hypothesis:} \textit{ittai} gets left behind when \textit{-ka} moves

\textit{ittai} inside an island \implies \textit{-ka} moved out of the island \ldots ill-formed

(18) a. * Taroo-ga \[island Hanako-ni \textit{ittai} nani-o ageta hito-ni \] aimasita ka?
    
    Taroo-NOM Hanako-DAT \textit{ittai} what-ACC gave man-DAT met.POLITE Q
    ‘What in the world did Taro meet the man that gave \textit{t} to Hanako?’
    
    b. * Taroo-ga \[island Hanako-ga \textit{ittai} nani-o yomu maeni \] dekakemasita ka?
    
    Taroo-NOM Hanako-NOM \textit{ittai} what-ACC read before left.POLITE Q
    ‘What did Taro leave before Hanako read \textit{t}?’

\textit{ittai} just outside an island, fine (\textit{-ka} moves from outside the island)

(19) Taroo-ga \textit{ittai} \[island Hanako-ni nani-o ageta hito-ni \] aimasita ka?
    
    Taroo-NOM \textit{ittai} Hanako-DAT what-ACC gave man-DAT met.POLITE Q
    ‘What in the world did Taro meet the man that gave \textit{t} to Hanako?’

So now it’s starting to sound slightly more reasonable…

\textbf{Note:} That alternative hypothesis that \textit{wh}-words move covertly becomes harder here. If \textit{wh}-words are moving, they must be only sensitive to island effects with \textit{ittai}.

\textbf{Here’s another prediction the account being developed makes:}

4. Islands and intervention effects

\textbf{Idea:} • Independent \textit{-ka} blocks \textit{Q}-movement (“intervention effect”)   
    • \textit{Q}-movement takes place from \textit{outside} of islands.   
    • \textit{Q}-movement should be \textit{insensitive} to intervenors inside an island
Recall: Paradigm showing intervention effect.

(20) a. ?* John-ka Bill-ga nani-o kaimasita ka?
   John-or Bill-NOM what-ACC bought.POLITE Q
   (‘What did John or Bill buy?’)

   b. nani-o John-ka Bill-ga t i kaimasita ka?
      what-ACC John-or Bill-NOM bought.POLITE Q
      ‘What did John or Bill buy?’

Embed “intervention effect” in an island—becomes well-formed (order becomes free)

(21) a. Mary-wa [island John-ka Bill-ga nani-o katta ato de]
   Mary-TOP John-or Bill-NOM what-ACC bought after
dekakemasita ka? left.POLITE Q
   ‘Mary left after John or Bill bought what?’

   b. Mary-wa [island nani-o i John-ka Bill-ga t i katta ato de]
      Mary- TOP what- ACC John-or Bill- NOM bought after
dekakemasita ka? left.POLITE Q
      ‘Mary left after John or Bill bought what?’

A very striking fact.
Consider what this means in words:
   If a sentence is ill-formed (due to an intervention effect, like (20a)),
you can improve it by embedding it in an island.

Sounds pretty counterintuitive (islands seem like they would add to complexity).
That makes it all the more striking.

5. Question formation in Sinhala & Premodern Japanese


(22) Chitra ee pota gatta.
   Chitra what book bought
   ‘Chitra bought that book.’

(23) Chitra mokak da gatte?
Chitra what Q bought
‘What did Chitra buy?’

Again re: that alternative hypothesis that wh-words (and not Q) move:
If da really does correspond to -ka, then we can see both before and after Q-movement.
Covert wh-movement over and above Q-movement (now established) is gratuitous.

Reasons to believe Sinhala da corresponds to Japanese -ka: (a) Wh+Q = Indefinite

(24) dareka-ga hon-o kaimasita.
   Someone-NOM book-ACC bought.POLITE Q
   ‘Someone bought a book.’

(25) Chitra mokak da gatta.
   Chitra what Q bought
   ‘Chitra bought something.’

Reasons to believe Sinhala da corresponds to Japanese -ka: (b) declarative+Q = y/n ques.

(26) a. Taroo-ga hon-o kaimasita.
   Taro-NOM book-ACC bought.POLITE Q
   ‘Taro bought a book.’

    b. Taroo-ga hon-o kaimasita ka?
       Taro-NOM book-ACC bought.POLITE Q
       ‘Did Taro buy a book?’

(27) a. Chitra ee pota gatta.
   Chitra that book bought
   ‘Chitra bought that book.’

    b. Chitra ee pota gatta da?
       Chitra that book bought Q
       ‘Did Chitra buy that book?’

A speculation about the -e form of the Sinhala verb:

(29) The Sinhala -e verbal form is a morphological reflection of an unchecked feature
     in the complementizer system (the feature which drives movement of da).

Premodern Japanese: Q next to question words, verb takes special (musubi) form.

(30) tare-ka mata hanatatibana-ni omoi-idem
    ‘Who will again remember (me) at the time of the mandarin orange flower?’
    (Shin Kokin Wakashū [1205]:3)
As in Sinhala, Q appears just outside of islands.

(31)  [island ika yoo naru kokorozasi aramu hito-ni ]-ka awamu to obos
       how kind is love have person-DAT-Q wed that think-M
       ‘What kind of love do you think you would want to marry a person that has t?\(^{(*)}\)’

   \(^{(*)}\) Taketori Monogatari [c. 900]

The Q-movement idea

To put it concisely, Q moves from a position by the \(\text{wh}\)-word to the complementizer system—except if the \(\text{wh}\)-word and the complementizer system is separated by an island boundary, in which case Q moves from a position outside the island.

Incidentally: What about that “islands” condition? Kind of stipulative-sounding, no?

What I actually believe: (see ch. 4 of my thesis for discussion)
Q really always starts out by the \(\text{wh}\)-word, even when it’s in an island.

Migration is clearly only available in very limited circumstances, like at the edge of an island, and only for elements like Q.

One possibility is to tie it in with the “phase” as proposed in very recent work by Chomsky, in the minimalist program.

In my defense: Sounds crazy, no?

Or at least it doesn’t sound necessarily preferable to starting Q outside the island.

Here’s why I proposed “migration”:
You can get intervention effects inside of islands—if inside an embedded clause.

(32)  a. ?? … Intervenor … wh \(t_k\) … -ka ?

b. ?* … Intervenor … wh \(t_k\) … -ka ?

c. … Intervenor … \(t_k\) … -ka ?

(33)  a. ?? … Intervenor … wh, … Intervenor … \(t_k\) … -ka ?

b. ?* … Intervenor … wh, … Intervenor … \(t_k\) … -ka ?

(34)  a. ?? Taroo-wa [Hanako-ga [John-ka Mary-ga \(nani-o\) sita to ] Taroo-TOP Hanako-NOM John-or Mary-NOM what-ACC did that itta ato de ] kaetta no?

   ‘What did Taro go home after Hanako said John or Mary did?’

Since intervention effects are due to movement of Q over another Q, we know Q was at some point inside the island.

The “\(\text{wh}\)-words are quantifiers” idea (Kim 1989)

Accounting for many of the same facts, but from a quite different perspective.

Starting point: The morphological relationship between indefinites and \(\text{wh}\)-words.

Japanese

dare ‘who’
dareka ‘someone’
nwukwu ‘who’
mwues ‘something’

Korean

\(\text{nwukwu(nka)}\) ‘someone’
nanika ‘something’
mwues(inka) ‘something’

\(\text{wh}\)-word + ka = indefinite
\(\text{wh}\)-word + ((i)nka) = indefinite

Note: Kim (and others) say that \(\text{nwukwu}\) can be either a \(\text{wh}\)-word or an indefinite.

I’ve never bought that. You can disambiguate the indefinite as \(\text{nwukwunka}\), and I take the fact that you can shorten it to \(\text{nwukwu}\) as a fact about contraction not about structure. Aoun & Li (1993) have a footnote reaching the same conclusion.

Kim observes that the Q (at the end of an interrogative clause) seems to be what is “selected for” by an interrogative-embedding complement. (It types the clause?)

Kim’s goal: To show that \(\text{wh}\)-constructions in Japanese/Korean have more in common with English quantifier constructions than \(\text{wh}\)-constructions.

 Argument I: Constraints on J/K \(\text{wh}\)-words pattern with constraints on English QR and not with constraints on English (covert) \(\text{wh}\)-movement.

Quantifier Raising: A syntactic operation moving quantifiers for the purpose of
(a) creating appropriate “operator-variable” relationships, and
(b) affecting their relative scope.

(35) We have something for everyone.

a. There is something \(x\) such that for everyone \(y\), we have \(x\) for \(y\).

   LF: something everyone \([\text{we have } t_i \text{ for } t_j]\)

b. For everyone \(y\), there is something \(x\) such that we have \(x\) for \(y\).

   LF: everyone something \([\text{we have } t_i \text{ for } t_j]\).
Overt wh-movement can’t escape “wh-islands”, covert wh-movement can.

Story: A QP is interpreted like a wh-word if it’s by (in the specifier of) the Q morpheme. QP’s and wh-words (being the same thing) move to the same place (IP).

If there’s a Q there (Q being generated in I°), they have to both be wh-words. (Also, if a QP goes to VP—where no Q could be—it will be interpreted as a QP). (also, ‘referentially independent’ someone is not subject to QR)

Q in I°? Q seems to appear inside what looks like C°. (Or perhaps I might say Q moves to someplace below C°—this is why my thesis is noncommittal [“clause periphery”])

Some papers I may have mentioned:


Note: It is by no means certain that this difference has to do with the LF position of someone, but the assumption Kim makes is that someone > believe yields (i), and believe > someone yields (ii).

Japanese:

Wh-words seems to be constrained more like English quantifiers; They can’t take scope out of wh-islands, but they can seem to take scope out of tensed clauses.

Argument II: QP/wh-interaction is like QP/QP interaction in J/K.

Schematically: 

\[
\begin{align*}
\text{QP} & \ldots \text{[\ldots QP\ldots \ldots \ldots]} \\
\text{QP} & \ldots \text{[\ldots wh\ldots \ldots \ldots]} \\
& \text{\{[QP\ldots QP\ldots \ldots\ldots]\}} \text{\{unmoved\}} \\
& \text{\{[QP\ldots wh\ldots \ldots\ldots]\}} \text{\{unmoved\}} \\
\text{wh\ldots QP\ldots wh\ldots} & \text{\{unmoved\}} \\
\text{\ldots QP\ldots wh\ldots} & \text{\{unmoved\}}
\end{align*}
\]

Generalization: QP’s and wh’s may not have the same scope at LF in J/K.

That doesn’t seem so much like QP = wh does it? After all, they behave differently, no?