Identifying Q

In the two languages we’re looking at, there’s a single particle which:

• Turns declaratives into yes/no questions
• Forms indefinites (like something) from wh-words
• Appears in wh-questions.

(1) Taroo-ga hon-o kaimasita.  
Japanese
Taroo-NOM book-ACC bought.polite
‘Taro bought a book.’

(2) Taroo-ga hon-o kaimasita ka?  
Japanese
Taroo-NOM book-ACC bought.polite Q
‘Did Taro buy a book?’

(3) Taroo-ga nani-ka kaimasita.  
Japanese
Taroo-NOM what-Q bought.polite
‘Taro bought something.’

(4) Taroo-ga nani-o kaimasita ka?  
Japanese
Taroo-NOM what-ACC bought.polite Q
‘What did Taro buy?’

(5) Chitra pota gatta.  
Sinhala
Chitra book bought
‘Chitra bought a book.’

(6) Chitra pota gatta da?  
Sinhala
Chitra book bought Q
‘Did Chitra buy?’

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

(8) Chitra mokak da gatte?  
Sinhala
Chitra what Q bought-E
‘What did Chitra buy?’

Other similarities:
• -ka and da both mean ‘or’ (at least in questions)
• -ka and da both can have a ‘dubative’ meaning.

Points:
• Japanese -ka corresponds to Sinhala da.
• Both are implicated in question formation.
• Both are implicated in indefinite formation (with wh-words).
• There’s a funny difference between Sinhala and Japanese wh-questions.

2. Some properties of Sinhala Q

Yes-no questions: a focused reading comes from clause-internal da. Note the -e.

(9) a. Chitra ee pota kieawa da?  
Chitra that book read Q
‘Did Chitra read that book?’

b. Chitra da ee pota kieuw?  
Chitra Q that book read-E
‘Did Chitra read that book?’

Under certain verbs, like dannawa ‘know’, da can be either by the wh-word or at the edge.

Ranjit who Q came that know
‘Ranjit knows who came.’

Ranjit who came Q that know
‘Ranjit knows who came.’

Points:
• Sinhala da seems to have some flexibility re: clause-internal vs. peripheral.
• Sinhala -e suffix appears on the verb only when da is clause-internal.

Now, check this out: Islands can’t intervene between da and -e. But, da is ok just outside the island.

(11) a. * oyaa [kau liy pu pot] kieuw?  
you who wrote book read-
‘You read the book that who wrote?’

b. oyaa [kauru liy pu] da kieuw?  
you who wrote book Q read-E
‘You read the book that who wrote?’

The pattern is:

(12) a. * ... [island ... wh-word Q ...] ... V-E ?

b. * ... [island ... wh-word ...] Q ... V-E ?

c. * ... [island ... wh-word ...] ... Q ... V-E ?

What kind of relationship is constrained by islands?
Hint: *What did John leave [t before Mary bought t]?

Proposal 1: Sinhala Q moves from a clause-internal position to the clause periphery.
(and where there’s an -e, this movement is covert).

Recall: Japanese -ka (a) always appears clause peripherally, (b) corresponds to da.

Proposal 2: Japanese Q moves from a clause-internal position to the clause periphery overtly, always.
3. Japanese, islands, and *ittai*

So, if -ka is moving overtly in Japanese, how come *wh*-words are ok in islands?

(13) Mary-*w*[a [ John-ni nani-o ageta hito-ni] atta no? Mary-*TOP John-*DAT what-*ACC gave man-*DAT met Q‘Mary met the man who gave what to John?’

Idea: Remember, *wh*-words are ok in islands in Sinhala too—if *d* moves from outside.

Point: We can’t see where -ka is moving from, so we don’t know it crossed the island.

Is there a way to see where it comes from? Emphatic *ittai* might be a way.

(14) Mary-*w*a John-ni *ittai* nani-o ageta no? Mary-*TOP John-*DAT ittai what-*ACC gave Q‘What in the world did Mary give to John?’

(15) Mary-*wa [ John-ni *ittai* nani-o ageta hito-ni] atta no? Mary-*TOP John-*DAT ittai what-*ACC gave man-*DAT met Q‘Mary met the man who gave what (in the world) to John?’

Point: If *ittai* is inside an island, the question is bad.

Idea: *ittai* indicates the “launching site” of -ka.

So *ittai* is bad in an island because -ka had to cross an island boundary.

This makes Japanese look basically like Sinhala.


Proposing that -ka moves in Japanese is a little abstract—after all, we never see -ka in its base position (at least not in modern Japanese).

But—it turns out that -ka can’t move over another -ka. That sounds like Shortest Move. This suggests that -ka really is moving, even if it’s always overt.

Several items “contain” -ka:

- *sika* ‘only NPI ’ (perhaps better, ‘except’),
- *dareka* ‘someone’
- *disjunctive -ka (e.g., Taroo-ka Hanako(-ka) ‘Taro or Hanako’)
- *kadooka* ‘whether’

And none of these can be on the path of the hypothesized -ka-movement…

(17) a. ?* [John-*ka Bill*]-ga nani-o nomimasita ka? John-or Bill-*NOM what-*ACC drank Q (‘What did John or Bill drink?’)

b. nani-o, [ John-*ka Bill*]-ga t, nomimasita ka? what-*ACC John-or Bill-*NOM drank Q‘What did John or Bill drink?’

c. dare-*ga [ sake-ka biiru(-ka)]-o nomimasita ka? who-*NOM sake-or beer(or)-ACC drank Q ‘Who drank either sake or beer?’

A weird prediction:

Remember how *wh*-words were good in islands? It was because -ka moves from outside the island.

Intervention effects are caused by -ka crossing an intervenor.

So an intervenor inside an island should not be a problem.

That is, we predict:

(19) a. ?* Intervenor … … … Intervenor … \(t\)a \(ka\) … -ka ?

b. … \(island\) Intervenor … \(t\)a … -ka ?

c. … \(island\) \(w\)h … Intervenor … \(t\)a … -ka ?

And, lo, it is thus:

(20) a. ?* [John-*ka Bill*]-ga nani-o katta no? John-or Bill-*NOM what-*ACC bought Q (‘What did John or Bill buy?’)

b. Mary-*wa [ John-*ka Bill*]-ga nani-o katta ato de dekaketa no? Mary-*TOP John-or Bill-*NOM what-*ACC bought after left Q ‘Mary left after John or Bill bought what?’

c. Mary-*wa [ nani-o, [ John-*ka Bill*]-ga t, katta ato de] dekaketa no? Mary-*TOP what-*ACC John-or Bill-*NOM bought after left Q ‘Mary left after John or Bill bought what?’

d. ?* [John-*ka Bill*]-wa [ Mary-ga nani-o katta ato de] dekaketa no? John-or Bill-*TOP Mary-*NOM what-*ACC bought after left Q ‘John or Bill left after Mary bought what?’
5. The problem of multiple questions—how many Q’s and where do they start?

(21) Who bought what?

(22) Dare-ga nani-o kaimasita-ka?

‘Who bought what?’

(23) a. kau-ru mo kaK da kieuwe?

qwho w what Q read-E

‘Who read what?’ (PL possible)

b. * kau da mo kaK kieuwe?

qwho Q what Q read-E

(‘Who read what?’)

(24) kau da mo na wa da kieuwe?

qwho Q what Q read-E

‘Who read what?’ (PL)

(25) kau da kieuwe mo na wa da kieuwe?

qwho Q what Q read-E qwho Q what Q read-E

‘Who read, what did s/he read?’ (*PL)

The answer is not straightforward.

Tendencies in Sinhala, Okinawan, Navajo that seem to favor Q starting low.

But the judgments are very hard to pin down.

Gamble: The tendencies are right.

The variation is a factor we could control for eventually.

Proposal: Q-INTRODUCTION ANTI-SUPERIORITY GENERALIZATION.

The base position of Q is as low in the tree as possible;

Q starts close to the lowest wh-word.

Another tendency: Availability of the Pair-List reading seems to be tied to launching Q from below another wh-word.

(26) a. dono hito-ga ittai nani-o katta no?

which person-NOMittai what-ACC bought Q

‘Which person bought what (in the world)?’ (PL, (*SP)

b. ittai dono hito-ga nani-o katta no?

ittai which person-NOMittai what-ACC bought Q

‘Which person (in the world) bought what?’ (PL, ?SP)

(27) Taroo-ga [dare-ga nani-o katta toki-ni] okotta no?

Taroo-NOM who-NOM what-ACC bought when got angry Q

‘Taroo got angry when who bought what?’ (*PL, SP)

Proposal: PAIR-LIST ANTI-SUPERIORITY GENERALIZATION.

A multiple-wh-question gets a pair-list reading when not all wh-words are in the scope of Q.

Together, the Antisuperiority Generalizations predict this:

(28) a. dare-ga kinoo nani-o katta no?

who-NOM yesterday what-ACC bought Q

‘Who bought what yesterday?’ (PL, SP)

b. nani-o, kinoo dare-ga ti katta no?

what-ACC yesterday who-NOM bought Q

‘Who bought what yesterday?’ (*PL, SP)

(29) a. dare-ga kinoo [nani-o t0] katta no?

‘Who bought what yesterday?’ (PL, SP)

b. [nani-o t0] i dare-ga kinoo ti katta no?

‘Who bought what yesterday?’ (?*PL, SP)

But facts get fuzzier from here on… still work to be done here.

6. Remote vs. Local Generation of Q

There are two possibilities about where Q starts in the context of islands. One (Remote Generation) is that it is base generated outside the island. The other (Local Generation) is that it is base generated inside the island.

(30) a. Remote Generation (to be rejected)

[to be rejected]

b. Local Generation (to be adopted)

Remote Generation sounds good, right?

After all, Local Generation requires moving out of an island, no?

The problem is, there is data showing that it is wrong.
The structure of the paradigm:

(31) a. ??? …[Island … [ … Int. … wh … that] … ] tka -ka ?
    b. …[Island … [ … wh, … Int. … t, … that] … ] tka -ka ?

We know: There is an intervention effect inside the island.

Intervention effects come from movement of Q over an intervenor.

Therefore: Q must have, at some point, been inside the island.

The actual data:

(32) a. ?? Taroo-wa [Hanako-ga [John-ka Mary-ga nani-o sita to]]
    Taroo- TOP Hanako-NOM John- NOM what-ACC did that
    said after go.home Q
    (‘What did Taro go home after Hanako said John or Mary did?’)

b. Taroo-wa [Hanako-ga [nani-o John-ka Mary-ga t, sita to]]
    Taroo- TOP Hanako-NOM what-ACC John- NOM said that
    said after go.home Q
    ‘What did Taro go home after Hanako said John or Mary did?’

So, we now have two different kinds of movement.

Type A: Driven by feature attraction (intervenors block)

Feature mnt. Constrained by islands

Type B: Not driven by feature attraction (can get over intervenors easily)

Q-migration Can get from inside an island to the edge.

Note also: Type B movement can only happen to get out of an island—
If it could happen anywhere, we would never see intervention effects.

I don’t understand Q-migration really, but here’s how it appears to be characterized:

(33) Q-MIGRATION
    At a point where (a) an island is constructed, or (b) a wh-word is merged, Q may migrate to adjoin (overtly) to the root.

• It is limited to overt movement
  (Sinhala tells us that you can’t covertly migrate, since no island boundaries are allowed between do and -e).
• (a) limits it only to movement to the edges of islands.
• (b) limits it to cases where a different reading would result
  (Pair-list reading comes from launching Q below another wh-word.
  Single-pair reading comes from launching Q high. But, Q-introduction Antisuperiority says that Q always starts low, so the only way it can get into a higher position is to migrate when the higher wh-word is introduced).

7. Preliminary thoughts about Malay

We all know the data… Malay allows wh-in-situ and (some form of) wh-fronting.

(34) a. Ali memberitahu kamu tadi [Fatimah baca apa]?
    Ali informed you just.now Fatimah read what
    ‘What did Ali tell you just now Fatimah read?’

b. Ali memberitahu kamu tadi apa, (yang) [Fatimah baca t,i(?)]
    Ali informed you just.now what YANG Fatimah read
    ‘What did Ali tell you just now Fatimah read?’

    ‘Ali told you what Fatimah was reading.’

c. apa, (yang) Ali beritahu kamu tadi [Fatimah baca t,i]
    what YANG Ali informed you just.now Fatimah read
    ‘What did Ali tell you Fatimah was reading?’
    (Hooi Ling Soh, p.c.)

Generalizations about the Malay data:
  • Fact A: Can’t move a wh-word out of an island.
  • Fact B: Can’t move a wh-word inside of an island.
  • Fact C: Can leave a wh-word in situ inside an island.

(35) a. * apa, (yang) Ali dipecat [ kerana dia beli t,i]?
    Fact A
    what YANG Ali was.fired because he bought
    (‘What was Ali fired because he bought t,i?’) (Cole & Hermon 1997:8)

b. Ali dipecat [ kerana dia beli apa i] ?
    Fact C
    Ali was.fired because he bought what
    (Hooi Ling Soh, p.c.)

(36) a. kamu sayang [perempuan yang Ali fikir [ yang telah makan apa]]?
    Fact C
    you love woman YANG Ali thinks YANG already ate what
    (‘What do you love the woman that Ali thinks ate t,i?’)

b. * kamu sayang [perempuanyang Ali fikir apa i yang telah makan t,i]?
    Fact B
    you love woman YANG Ali thinks what YANG already ate
    (‘What do you love the woman that Ali thinks ate t,i?’)

What does the Q-movement analysis force us to?

Fact A is what we’d expect anyway, movement can’t cross islands.
Fact C implies that Q can start outside the island, like Japanese.
Fact B implies that moving a wh-word inside an island removes the possibility that Q can start outside the island.

Idea: Perhaps wh-word movement is analogous in a way to Japanese ittai.

How?

Proposal: To accomplish fronting a wh-word requires making use of Q.
If Q is used inside the island (to accomplish fronting) it was in the island.
Suppose wh-fronting in Malay/Indonesian is something like a cleft (Cheng 1991, 1997).

(37) [kamar itu (lah)], yang harus kami hias \(e_i\) \(\text{Bahasa Indonesia}\)
room DEM PART YANG must we decorate
‘It is that room that must be decorated.’

(Cheng 1997:45)

Suppose this cleft is attraction of Q and its constituent.

Compare to a cleft construction in Sinhala—rightward extrapolation of Q constituent:

(38) a. Chitra \(e_i\)\(\text{gatte}\) [mokak \(d\)],? \(\text{Sinhala}\)
Chitra bought-E what Q
‘What was it that Chitra bought?’

b. * Chitra \(e_i\)\(\text{da} \text{gatte}\) mokak?,
Chitra Q bought-E what
(‘What was it that Chitra bought?’)

Here, you can’t cleft out of an island, but you can cleft the island (with \(d\) attached)…

(39) a. oyaa \(e_i\) hoyanne [kauru horakankaaru badvugayak \(d\)],?
who you look.for-E who stolen thing Q
‘Who are you looking for things that stole?’

b. * oyaa \(e_i\) hor [kankaru badvugayak] hoyanne [\(kau\) \(d\)],?
who stolen things look.for-E who Q
(‘Who are you looking for things that stole?’)

Suppose: The Sinhala cleft construction is parallel to the Malay case.

We expect: Although you can’t front a wh-word inside an island, you should be able to front the whole island.

(40) a. dia dipecat [sebab dia membeli apa]?
he was.fired reason he bought what
‘What was he fired because he bought what?’

b. * dia dipecat [sebab apa, dia beli \(t\)]?
he was.fired reason what he bought
‘What was he fired because he bought what?’

c. * apa, (yang) dia dipecat [sebab dia beli \(t\)],?
what YANG he was.fired reason he bought
(‘What was he fired because he bought what?’)

(40) a. dia dipecat [sebab dia membeli apa]?
he was.fired reason he bought what
‘What was he fired because he bought what?’

b. * dia dipecat [sebab apa, dia beli \(t\)]?
he was.fired reason what he bought
‘What was he fired because he bought what?’

c. * apa, (yang) dia dipecat [sebab dia beli \(t\)],?
what YANG he was.fired reason he bought
(‘What was he fired because he bought what?’)

Questions remain: Why does Q seem to be overt in this case? (-kah)
Why does this seem to require oleh ‘by’?

8. Some unresolved issues about morphology

In Japanese and Sinhala, things were very pretty.

Sinhala: \(d\) is Q. Q forms yes-no questions.
Q forms wh-questions.
Q forms indefinites with wh-words.
Q forms disjunctions in alternative questions.

Japanese -\(ka\) is Q Q forms yes-no questions (suppose no=\no\ desu \(ka\)
Q forms wh-questions.
Q forms indefinites with wh-words.
Q forms disjunctions.

Obvious hypothesis: Q is a universal category that:
• forms yes-no questions
• forms wh-questions
• forms indefinites with wh-words
• forms disjunctions.

However, the crosslinguistic morphological evidence is not so clear.

Already, there’s a question in Sinhala:
Why is the disjunctive capacity of Q limited to alternative questions
In declaratives, you use -\(hari\), e.g., ‘\(A\)-\(hari\) \(B\)-\(hari\)’ either \(A\) or \(B\).

\(WH+\)= ‘someone or other (nonspecific)’

This probably means WH+ at least mean ‘someone (specific).’

Japanese dareka can mean ‘someone (specific)’
Maybe Q is specific, alternative questions use specific disjunction.

So, Japanese fails to make a distinction that Sinhala makes.
That is, the nonspecific indefinite (analog of -\(hari\)) accidentally happens to be ‘-\(ka\)’ too.

Quite a bit of variation… WH or WH+PRT as ‘anyone’: someone not morphologically related to who, etc., … Many questions here. E.g., does WH+ or WH+YR yield indefiniteness inherently, or did X (perhaps be or want) evolve separately to indefinites and to ‘or’? (Haspelmath 1997).

9. Korean—(surprisingly?) not a trivial extension from Japanese (speculations)

\(nwukwa\) ‘who’ \(nwukwu-na\) ‘anyone (free choice)’ \(A\)-(i)\(na\) \(B\)-(i)\(na\) ‘A or B’

\(nwukwu-\)\(nka\) ‘someone’ suggests that Q is -\(nka\).

Alternative questions seem not to exist in Korean—[according to a grammar]
(formed another way: i cha-nun mikwak cha ni, yengkwak cha ni? ‘this car America car Q England car Q? Is this car American or British?’)

[Note: we’d have expected -\(nka\) to do disjunction in alternative questions.]
[Note also: we’d expect \(nwukwu-\)\(nka\) to be able to mean ‘someone (specific)’]

Matrix Q (familiar): \(-\(na\), -(\(ti\))-\(nka\). [there are several others though…]
[I don’t know what conditions -\(na\) vs. -\(nanka\)—is this a problem?]

Common claim: \(nwukwanka\) ‘someone’ can be shortened to \(nwuk(wa)\), hence ambiguity:
(41) nwu-ka mues-ul kachewat ni?
who-NOM what-ACC brought Q
‘Who brought what?’
‘Did someone bring something?’
‘Who brought something?’
(not ‘What did someone bring?’) (Kim 1991:234)

My suspicion (with Aoun & Li 1993b) is that this is just a fact about pronunciation. Kim 1991 points out that disambiguating brings out the intervention effect
(cf. Japanese ?*dare-ka-ga nani-o katta no?)

(42) * nwukwu-nka-ka mues-ul kachewat ni?
who-Q-NOM what-ACC brought Q
(‘What did someone bring?’) (Kim 1991:288, fn. 18)