Q-Particle

In this paper, I will adopt Hagstrom (1998) to account for Turkish facts. Turkish is a wh-in-situ language where Q paticle does not appear in wh-questions except for echo questions. I will argue that a null-Q exists in cases where its overt counterpart does not appear . The distribution of the Q-Particle will be given in (I); the problem of analyzing embedded questions in Turkish will be presented in (II); similarities in the function of Japanese and Turkish Q-Particle and wh-words, and differences in Turkish and Japanese &Sinhala Q-Movement will be discussed in (III); evidence on Q-movement in Turkish based on intervention effects and availability of P(air) L(ist) Reading will be given in (IV); an observation on the dual position of the particle in Turkish which may shed light into the nature of Q-movement will be presented in (V); and the significance of study on echo questions in research on questions will be briefly discussed in (VI).

I.   Distribution of the Q-Particle

Turkish is one of the wh-in situ languages. Q-particle -*mI* appears in Yes/No questions either at the clause periphery or at a clause internal position with the constituent it focuses. A property of the Q-particle in Turkish is that it does not receive word final stress but rather causes the preceding syllable to be stressed; although it is written as a separate word in orthography, it undergoes vowel harmony, which indicates that it should be regarded as part of the word it follows. It does not appear in wh-questions unless the structure is an echo of a wh-question.

1.1. wh-word and Q in Japanese, Sinhala and Turkish

Japanese , Sinhala and Turkish are wh-in situ languages. In these three languages Wh-words remain in their non-interrogative positions. In Japanese wh-questions, a question particle occurs at the edge of the clause (1) [1];

> (1) John-ga **nani**-o kaimasita **ka**?
>   John-NOM **what**-ACC bought.polite **Q**
>   'What did John buy?'

In Sinhala it occurs in the clause internal position with the Wh-word, and the matrix verb has the Q-marking suffix "E"(2):

> (2) Siri **mokak de** keruw**e**?
>   Siri **what Q** did-**E**
>   'What did Siri do?'

 In Turkish, the cooccurrence of the Q particle and the Wh- word is restricted to echo questions (3)[2]. In echo questions, the Q particle remains clause internal, and can occur clause finally like Sinhala, but with a different interpretation. (3a) is an echo question of a wh-question, whereas, (3b) is an echo question of a Yes/No question:

> (3) a. Hasan **ne mi** yapti?
>   Hasan **what Q** did
>   'Hasan did what?'
>   b. Hasan **ne** yapti **mi**?
>   Hasan **what** did **Q**
>   'Did Hasan do what?'

---

[1] All Japanese and Sinhala data are taken from Hagstrom 1998.
[2] Actually, this is an echo question of a wh-question. (3a) would be a response to the question "Hasan ne yapti?/ What did Hasan do?'.

Clause final position seems to be the domain for Yes/No questions, be it simple Yes/No question or an echo question.

1.2. Yes/No Questions and Q

In Yes/No questions, an optional Q-particle occurs clause finally in Japanese (4):

(4) gakkoo-ni ik-imas-u (**ka**)?
school-to go-POL-PRES (**Q**)
'(Are you) going to school?'

Q particle is either a clause-final particle or attached to a focused constituent in Sinhala and in Turkish (5-6 a,b):

(5) a.Chitra ee pote kieuwa **de**?
'Did Chitra read that book?'
b. Hasan o kitab-i oku-du **mu**?
'Did Hasan read that book?'
(6) a.Chitra **de** ee pote kieuw**e**?
'Did **Chitra** read that book?'
b. Hasan **mi** o kitabi okudu?
'Did **Hasan** read that book?'
c. Hasan o kitab-i   **mi** oku-du?
Hasan that book-ACC **Q** read-PAST
'Did Hasan read **that book**?'

II. Embedded Questions

Embedded wh-Questions are marked by Q particle in Japanese, by E suffix in Sinhala, both of which are clause peripheral. "E" suffix on the embedded verb marks an embedded question reading, "E" suffix on the matrix verb yields a matrix question reading. In Turkish, however, there is no overt marking that distinguishes embedded questions from matrix questions- except for the difference in the focal stress and intonation:

(7) Ahmet [kim-in gel-dig-i]ni bil-iyor
Ahmet who-GEN come-NOM-POS know-PRES
'Ahmet knows who came'
(8) Ahmet [**kim-in** gel-dig-i]ni bil-iyor?
Ahmet **who-GEN** come-NOM-POS know-PRES
'Who does Ahmet know t came'

Question #1: What distinguishes these two structures?

There is no overt indication of what "types" (in the sense of Chang 1991) the clause as a declarative (7) or as an interrogative (8) except for the position of the focal stress and intonation in (8). In (8) the wh word has the focal stress. In fact, the overt Q particle *mi* in Turkish has the property of focusing the constituent under its immediate scope. An echo question of (8) as given in (9) has the focal stress on the wh-element with the same focus pattern as in (8):

(9) Ahmet [**kim-in mi** gel-dig-i]ni bil-iyor?
Ahmet **who-GEN Q** come-NOM-POS know-PRES
'Ahmet knows *who* came?'

A possible answer to Question#1 above is that the focal stress in (8) is an indication of the presence of a null Q particle at a position where its overt counterpart would surface in an echo question. The wh-words

are always focused in questions; therefore, we need to see whether there is any other evidence for the occurrence of a "null"Q-particle.

Before we proceed with this inquiry into a possible "null" Q in Turkish, let's see the differences and similarities in the function of Q in closely related wh-in situ languages.

III. Similarities in the function of Japanese, and Turkish Q-Particle and wh-words and Differences in Turkish and Japanese&Sinhala Q-Movement

3.1. Similarities in the function of Q-particle
In Japanese, Sinhala (Hagstrom 1998) and Turkish,
(i)   Q appears in Yes/No questions;
(ii) " "   as half of an indefinite formed on a wh-word meaning "one or other"
      (10) Kedi mi ne almis.
          Cat   Q what took.
        'He took a cat or something'
      (11) Yemekte nane mi ne vardi.
          food-LOC mint Q what there-PAST
        'There was mint or something in the food'
(iii) used in disjunctive capacity:
      (12) Cay mi kahve mi iste-r-sin?
          Tea Q coffee Q   want-AOR-2 Pr Sg
        'Would you like tea or coffee?'
(iv) has a quantificational force:
      (13) Hasan gel-di mi, herkes-i gul-dur-ur.
          Hasan come-PAST Q everybody-ACC laugh-CAUS-IMP-Ø 3 Pr Sg Agr
        'Whenever Hasan comes, he makes everybody laugh'
But Q-particle behaves as a universal quantifier in this structure, unlike its Japanese counterpart (Hagstrom 1998).

3.2. Similarities in the function of wh-word

Japanese wh-words like *nani* "what", *dare* "who" have a wider distribution than English wh-words (Hagstrom 1998). For example, they can appear as part of indefinites like *dare-ka* "someone". In Turkish, too, *kim* "who" appears part of an indefinite/specific kimi(leri) "someone(plural):

      (14)Kimi(leri) kitap aldi.
          Who-ACC(PLU) book bought
        ' Someone/Some of them bought a book'

Like its Japanese counterpart *Daremo*/noone, anyone, *Kim* "who" appears as part of the negative polarity item *kimse* (who-COND) "noone" and is interpreted as a universal quantifier :

      (15) Kimse gel-me-di.
      Who-COND come-NEG-PAST
      'Noone came'

3.3. Differences $ Similarities in Japanese, Sinhala and Turkish and Q Movement
      In Japanese, wh-words are allowed inside CNP islands and adjunct clauses, but the Q-particle occurs at the clause periphery. In a Sinhala wh-question, the wh-word and Q particle cannot appear inside a CNP island (16a); Q particle moves just out of the island to yield a grammatical structure (1b)(English glosses of the original Sinhala sentence):

      (16) a. *you [**who Q** wrote book] read -**E**?
            b.   you[**who** wrote book] **Q** read-**E**?

In a Turkish echo question, wh-word and Q particle occur in a CNP island and the occurrence of the Q particle outside the island is ungrammatical except when the wh-word is the complement of the CNP(18). In (17), wh-word is the subject of the CNP.

(17) a.   Ben [**kim-in   mi** yaz-dig-i   kitab-i]   oku-du-m?
          I   **who-GEN Q** write-NOM-POS book-ACC read-PAST-1 Pr Sg
          'I read the book that who wrote?'
     b.   *Ben [kim-in   yaz-dig-i   kitab-i] **mi**   oku-du-m?
          I   **who-GEN** write-NOM-POS book-ACC **Q** read-PAST-1 Pr Sg

In (18), the wh-word is the complement of the embedded clause:

(18)a. Ayse [Hasan-in **ne mi** al-dig-i dedikodu-su]nu duydu?   (Echo question of a wh-question)
       Ayse Hasan-GEN **what Q** buy-NOM-POS rumour-ACC hear-PAST
       'Ayse heard the rumor that Hasan bought what?'
     b.   Ayse [Hasan-in **ne** al-dig-i dedikodu-su]nu **mu** duydu?   (Ambigious)
       Ayse Hasan-GEN **what** buy-NOM-POS rumour-ACC **Q** hear-PAST
       (i) Is it the rumor that Hasan bought what that Ayse heard?   (Echo)
       (ii) Is it the rumor (about) what Hasan bought that Ayse heard ?   (Yes/No)

(18b), where the Q-Particle appears outside the island is ambiguous. It is either a Yes/No question or it is an echo question where the Q has scope over the island. In (19), the wh-word is the indirect object:

(19) a. Ben [Hasan-in kim-e mi ver-dig-i kitab-]i oku-du-m?   (Echo of a wh-question)
     b.   *Ben [Hasan-in kim-e ver-dig-i kitab]-i mi okudum?

Data (17-19) indicates that overt movement of Q-particle is subject to Island conditions in echo questions, Q particle occurs with the wh-word it focuses. It cannot move overtly out of a CNP island *unless* the wh-word it focuses is the complement of the CNP. In the grammatical (18b) the Q-particle appears outside the embedded clause and the sentence is ambiguous: it is either a Yes/No question which has the complement of the matrix clause under its scope, that is the CNP under its scope.; or it is an echo question focusing the complement of the matrix verb. In this second interpretation, it must have undergone overt movement from an island to its surface position, which Hagstrom calls "the launching site". Hagstrom notes that this movement of the Q-particle is not feature driven (possibly, focus driven in Turkish).
       In (20), the wh-word particle remains in the adjunct island; Q-particle can occur within or at the edge of the embedded clause or at the matrix periphery:

(20)a. Ayse [Hasan **ne mi** ye-dig-i zaman] sasir-di?   (*echo of an embedded wh-question*)
       Ayse Hasan **what Q** eat-NOM-POS time surprise-PAST
      Ayse was surprised when Hasan ate what?

     b. Ayse [Hasan **ne** ye-dig-i zaman]**mi** sasir-di?   (*echo of an embedded wh-question*)
        Ayse Hasan **what** eat-NOM-POS time V **Q** surprise-PAST
        'Ayse was surprised when Hasan ate what?'

     c. Ayse [Hasan **ne** ye-dig-i zaman] sasir-di **mi**?   (*echo of a Yes/No question*)
        Ayse Hasan **what** eat-NOM-POS time V surprise-PAST **Q**
        'Ayse was surprised when Hasan ate what?'

(20a,b&c) are echo questions, but of different questions. (20a&b) are echo questions of a wh-question, whereas, (20c) is the echo question of a Yes/No question and they are echoes of the following questions (i) and get the following answers (ii):

 (20a') i. Ayse [Hasan **ne**   ye-dig-i zaman] sasir-di?

Ayse Hasan **what** eat-NOM-POS time surprise-PAST
'Ayse was surprised when Hasan ate **what**?

    ii. Domuz eti.
       Pig meat
       'Pork'

(20b') i. Ayse [Hasan **ne** ye-dig-i zaman] sasir-di?
          Ayse Hasan **what** eat-NOM-POS time V surprise-PAST
          'Ayse was surprised when Hasan ate **what**?'

    ii. Domuz eti ye-dig-i   zaman.
       pork meat eat-NOM-GEN time
       'when (he) ate pork'

(20c') i. Ayse [Hasan **domuz eti** ye-dig-i zaman] sasir-di **mi**?
          Ayse Hasan **pork meat** eat-NOM-POS time V surprise-PAST **Q**
          'Was Ayse surprised when Hasan ate pork?'
    ii. Domuz eti.
       pig meat
       'Pork'

Basically, these are the three positions Q can appear in Turkish. The same distribution holds for Yes/No questions. The difference between (20a) and (20b) is that Q focuses the question word in the adjunct in (20a), whereas it focuses the adjunct clause in (20b). Note that the wh-word in the adjunct is the complement of the embedded verb. Both (20a) and (20b) are echo questions (of a question) . Q must have moved overtly to its "launching site". Another indication of such a movement in (18b) and (20b) is that the focal stress on the embedded wh-word is retained in these structures. In (20c) , which is an echo question of a Yes/No question, focus is still on the question word, which might arguably an indication of its base position. We have already noted that this is not a sufficient evidence for claiming a "null" Q.

Question #2: Is the clause-edge position reserved for an overt Q to mark simple & echo Yes/No questions and the domain of wh-echo question restricted to the domain lower than "CP"?
        Scopal elements in Turkish seem to have scope with respect to their surface syntactic positions (Tosun 1999& work in progress). Since Q is a scope bearing element, the distribution of Q is to be expected. In simple Yes/No questions , it occurs next to the constituent it focuses:

    (21) Hasan yarin Ankara-ya gid-ecek **mi**?
    Hasan tomorrow Ankara-DAT go-FUT Q
    'Will Hasan go to Ankara tomorrow?
    (22) Hasan yarin **Ankara-ya mi** gid-ecek
       Hasan tomorrow Ankara-DAT Q go-FUT
       'Will Hasan go to **Ankara** tomorrow?'
    (23) Hasan **yarin mi** Ankara-ya gid-ecek?
       Hasan tomorrow Q Ankara-DAT go-FUT
      'Will Hasan go to Ankara **tomorrow**?
    (24) **Hasan mi** yarin Ankara-ya gid-ecek?
       Hasan Q tomorrow Ankara-DAT go-FUT
      'Will **Hasan** go to Ankara tomorrow?

Sentences in (22-24) show the relevant positions of Q depending on the constituent it focuses. In (21), on the other hand, it does not focus on any constituent. Clause-edge seems to be its default position for clause-typing unless there is some constituent it focuses. In the latter case, clause typing is done via covert movement to the edge of the clause. Since echo questions require a certain focusing on the constituent asked about, it is plausible to find Q overtly located within the domain under CP. Only when it is an echo of a Yes/No question, it has to appear at the clause -edge.

Let's see the distribution of Q in Sinhala. In Sinhala (Hagstrom 1998), Q must be as close to the wh-word as it can be without being separated from the interrogative clause periphery by an island boundary:

(25) a. * ... [$_{island}$ ... wh-word   Q   ...]   ....V-E?
     b.   ... [$_{island}$ ... wh-word   ...] Q   ...V-E?
     c. * ... [$_{island}$ ... wh-word   ...] ... Q   ... V-E?

In Turkish, however, Q can occur overtly in an island, just out of an island or at the periphery. Turkish has no special verbal suffix to mark question at the edge of a clause (like the "E" morpheme in Sinhala), only Q-particle can appear there.

(26) a.   ... [$_{island}$ ... wh-word   Q   ...]   ...V?
     b.   ... [$_{island}$ ... wh-word   ...] Q   ...V?
     c.   ... [$_{island}$ ... wh-word   ...]...   V-Q?

(26a&b) give the possible distance of the Q-particle from the wh-word in wh-echo questions and (26c) gives the position of the Q-particle in Yes/No echo questions. Clause-peripheral position is where Q-particle moves covertly in cases where it does not move there overtly; such cases are wh-echo questions or Yes/No questions where it focuses a certain constituent in the structure as well as clause typing the clause and/or checking Q-features on C. We can argue that the overt position of the Q-particle is determined by the focusing properties of Q, and the covert position by the latter, i.e. clause-typing. Overt movement conforms to island conditions but covert movement does not. Complements of the embedded clauses escape island boundaries in overt movement as well, which is a commonly observed phenomenon.

Question #3: Does null Q move in Turkish?

If we compare Sinhala, Japanese and Turkish Q- movement **:**

(i)   Q moves to the clause periphery covertly in Sinhala. Its overt position is the bottom of the movement path.
(ii) Q moves to the clause periphery overtly in Japanese.

We can now hypothesize that
(iii) Q undergoes focus driven overt movement as far as necessary; it undergoes feature driven covert movement to the clause periphery in Turkish.

Let us see if anything blocks the movement of Q hypothesized in this section.

IV.   Intervention effects, Availability of P(air) L(ist) Reading and Q-Movement in Turkish Miyagawa 1997, 1998, Hagstrom 1998)

To recapitulate, In Japanese Q appears clause peripherally in both Yes/No and wh questions;
In Sinhala wh-questions, Q can appear next to the wh-word, remaining clause internal.
In Turkish, echo questions, Q can appear next to the wh-word, remaining clause internal like Sinhala. In Yes/No questions Q can appear clause internal or peripheral like Sinhala. It cannot occur in wh-questions unlike Japanese and Sinhala.
According to Hagstrom (1998) ,Q moves to the clause periphery from a clause internal position. In Japanese, it moves overtly; in Sinhala, it moves covertly; in Okinawan, it moves overtly in matrix questions, and covertly in embedded questions. Evidence for Q-movement in Japanese comes from intervention effects and availability of PL reading in Japanese (Hagstrom 1988). Let's consider the Turkish facts on this issue.

4.1. Intervention effects in Turkish:

The path of Q from its launching site to its clause peripheral position is forbidden to cross a certain class of elements. This kind of intervention effect is expected if the class of intervenors share with Q the feature that is being attracted.

Is *yalnizca* "only" such an intervenor? Yes.

(27)*Yalnizca Hasan ne-yi oku-mus?   Vs Yalnizca Hasan kitabi okumus grammatical
  Only   Hasan what-ACC read-Reportive
(28) Ne-yi yalnizca Hasan oku-mus?
      What-ACC only Hasan read-Reportive
      'What did only Hasan read?'

In (27) the quantifier "only" seems to block a possible covert wh or a null Q movement to the clause periphery, hence the ungrammaticality. In (28) however, scrambling the wh-word along with the null Q saves the structure since the null Q can launch from the scrambled position to the clause periphery. **Where is yalniz???? Where does neyi move? See Besler 1999**

Question #4: How do we know that it is the movement of a null Q that is blocked in (27) and not the covert movement of wh-phrase or wh-feature?
        Same judgements hold for overt occurrence of the Q-particle in echo questions:

 (27') *Yalnizca Hasan ne-yi   **mi** oku-mus?
       Only   Hasan what-ACC **Q** read-Reportive
 (28') Ne-yi **mi**   yalnizca Hasan oku-mus?
      What-ACC **Q** only Hasan read-Reportive
      'Only Hasan read what?'

Certain quantificational elements cannot intervene between the in situ material and the clause at which the wh-word takes scope Beck effect (1996). Is *kimse* "noone" such an intervenor? Yes. In (29&30) below, we have a Yes/No question where the NPI *kimse* "noone" - which is morphologically made up of the question word "who" and the conditional morpheme"-(I)se- blocks the movement of Q.

(29)*Kimse pizza-yi **mi** ye-me-di?
      Nobody pizza-ACC **Q** eat-NEG-PAST
      'Did nobody eat pizza?'
(30) Pizza-yi **mi** kimse ye-me-di?
      Pizza-ACC noone eat-NEG-PAST
      'Did nobody eat the pizza?'

Intervenor "nobody" seems to block Q movement of **-mi**. Let's see whether a long distance movement is blocked similarly:

(31) *Kimse [Ayse-nin **mi** gel-eceg-i]ni   dusun-me-di?
      Noone Ayse-Gen Q   come-NOM-POS-ACC think-NEG-PAST
      'Did nobody think that Ayse would come?'

NPI blocks the covert movement of Q in long distance movement as well.
        Consider the multiple wh-echo questions below:

(32) *Kimse **kim-i mi** gor-me-mis?
      Noone who-ACC **Q** see-NEG-Reportive
(33) **Kim-i mi** kimse gormemis?
      Who-ACC **Q** noone see-NEG-Reportive
        ' Nobody saw whom?

Q cannot be attracted over NPI "nobody" as may be observed in (29, 31 & 32) above. To sum up, evidence from intervenors blocking the movement of overt Q-mi (27', 29, 31) and a possible null Q (29) supports Hagstrom (1998).

4.2. S(ingle) P(air) versus P(air) L(ist) reading

Pair-List Antisuperiority Generalization (Hagstrom 1998): A multiple wh-question gets a pair-list reading when not all questions are in the scope of Q. Consider the multiple wh-questions in Turkish below:

> (34)**Kim ne**   aldi?   SP, PL
>   **Who what** bought
>   'Who bought what?'
> (35)**Kim mi** ne   aldi?   SP, *PL
>   **Who Q** what bought
>   'Who bought what?' ECHO
> (36)**Kim ne   mi** aldi?   SP ,PL
>   **Who what Q** bought?
>   'Who bought what?' ECHO

A PL reading is available in (34) where there is no overt Q-Particle. If Hagstrom's generalization is correct, we predict a single pair reading when Q launches from above both wh-words; if it launches from below one of the wh-words we expect a pair list reading (Hagstrom 1998). It follows that null Q must be launching from below "what" in (34). In (35), the Q particle is above both wh-words, hence the impossibility of PL reading; both "who" and "what" are in its scope and it fails to satisfy Hagstrom's Pair-List Antisuperiority Generalization The Q-Particle in (36) occurs with the lowest wh-word and has only "what" in its domain, hence the availability of PL reading. Hagstrom's generalization holds in Turkish with respect to the availability of PL readings.

> Let's check questions with two non-subject wh-words:

> (37) Hasan kim-e   ne (mi)   ver-di?   SP,??PL
> Hasan who-DAT what (Q) give-PAST
> 'What did Hasan give to whom'
> (38) Kim-e   Hasan   ne (mi)   ver-di?   SP,*PL
> who-DAT Hasan what (Q) give-PAST
> 'What did Hasan give to whom'
> (39) Ne-yi   (mi) Hasan kim-e   ver-di?   SP,*PL
> What-ACC (Q) Hasan who-DAT give-PAST
> 'What did Hasan give to whom'
> (40) Kim-e   ne-yi (mi)   Hasan ver-di? SP,*PL
> who-DAT what-ACC (Q) Hasan give-PAST
> 'What did Hasan give to whom'
> (41) Ne-yi   (mi) kim-e   Hasan ver-di?   SP,*PL
>   What-ACC (Q) who-DAT Hasan give-PAST
>   'What did Hasan give to whom'

      The unmarked order of an indirect and direct object in Turkish is the one in (37) above. If we follow Hagstrom (1998), in this basic order PL reading is possible (if we disregard the ?? on the judgement), since Q moves from "what" and has only "what" under its scope. In (38), the same interpretation is expected since scrambling indirect object "who-DAT" does not change the scope of Q, but we don't! In (39) "what" is scrambled and Q which accompanies it has both wh-words under its scope. In (40),both objects are scrambled and we get the PL reading because the Q starts off from "what' and does not have "who" in its scope, similar to (37). (41) is similar to (39) and Q which has scrambled with "what" has scope over both wh-words; hence the unavailability of PL reading.

      Note that scrambled direct object wh- words have accusative case in (39-41), which is obligatory for scrambled objects driven out of their VP-internal position. Accusative-case marked objects are specific

and this specificity accounts for the unavailability of PL readings rather than Hagstrom's account of Q having scope over both wh-words under its scope. Remember that we had disregarded the (??) judgement on (37) when we followed Hagstrom's generalization. In fact, I'd like to argue that this grammaticality judgement is due to an independent fact about Turkish. In Turkish, not only the accusative case marked objects but objects with any overt case behave as specifics and have wide scope, even over quantified or specific subjects which are higher than the objects in the structure (Tosun 1999& work in progress). Therefore, I'd like to argue that PL reading is unavailable in questions with two non-subject wh-words for independent case reasons and PL availability test are not applicable in these structures. PL is available and and can be tested in structures like (34-36) where one of the wh-words is a subject and the other one is an indefinite.

Let's check embedded structures where the subject is marked with "Genitive" case:

(42) Ahmet [kim-in ne aldigi]ni bilmek istiyor   (PL OK in declarative. *PL in echo)
      Ahmet who-GEN what buy-NOM-POS-ACC know want-PROG
      'Ahmet wants to know who bought what?'

Question #5: How is PL available in declarative (i.e. indirect question) and not in an interrogative?
In declarative default focus which is always preverbal, is on the object wh-word ; therefore, null Q would be lower than the higher wh-word. This is what allows PL in Hagstrom's analysis. In an interrogative, we should be able to get PL , if Q started off from "what", but we do not!

Note that the answer to the interrogative (42) would be the answer to "who", not "what", which indicates that the null Q occurs with the subject wh-word, and launches from above *both* wh-words.

4.3. Quantifier and wh syntax (Miyagawa 1998)
The scopal interaction of wh-words and quantifiers allows us to detect covert movement of Q-particle. Consider the data below:

(43) **Kim** herseyi gordu   Single answer
      Who everything-ACC saw
      'Who saw everything?'
(44) Herkes **ne** gordu?   ambigious
      Everybody **what** saw
      'What did everybody see?'
(45)Herkes **ne mi** gordu?   Single answer
      Everybody **what Q** saw
      'Everybody saw what?'

The ambiguity of (44) is due to two possible LF structures given in (44') below:

(44') a.   Q...herkes.....ne....   .single answer
        b. herkes...Q......ne ....   list answer

The fact that (45) has only a single answer such as "Everybody saw a cat" indicates that Q undergoes covert movement to clause periphery as given in (44a').

V. The nature of Q-movement
Hagstrom notes that the Q-movement is in direct conflict with Head Movement Constraint (Travis 1984) in that it seems to move over intervening Tense. Q-Particle in Turkish has to follow Tense/Aspect suffixes and precede Agreement suffix when attached to complex predicates; it follows Tense/Aspect and Agreement suffixes when attached to simplex forms (Kornfilt 1996). The simple forms refer what Kornfilt calls the "genuine" verbal forms, namely Past and Conditional. The Tense/Aspect suffixes in the complex forms are "fake" in that they are in fact participles and the Tense and Agreement morphemes following them are clitics attached to a null copula.

(45) Simple forms:

a. git-ti-k **mi**?
   go-PAST-1 Pl **Q**
   'Did you go'
b. git-se-k **mi**?
   go-COND-1 Pl **Q**
   'Shall we go?'

(46) Complex forms:
a. git-mis mi-y-iz?
   go-PERF Q-COP-PAST-1 Pl
   'Had we gone?'
b. gid-ecek **mi**-yiz?
   go-FUT **Q**-1 Pl
   'Will we go?'

Interestingly, the Agreement paradigm of suffixes attached to the genuine verbal forms and the one attached to the copula are different:

(47) Agreement I- attached to finite verbal stems
1. sg   -m   1. pl   -k
2. sg   -n   2. pl   -niz
3. sg   -Ø   3. pl   -ler

(48) Agreement II- clitics ("nominal agreement")
1. sg   -im   1. pl   -iz
2. sg   -sin   2. pl   -siniz
3. sg   -Ø   3. pl   -ler

We can observe in data (45) and (46) that when Q-particle moves to the clause-periphery overtly, it crosses over Tense (and possibly Agreement) (45) but with participles, its attaches to the participle and the Tense and Agreement clitics appear attached to a null copula. Since there is an overt V-to-C movement in Turkish (Kural 1993, Tosun 1999), Q moves to C with the verbal complex in both cases.
        The contrast in (45&46) is schematized below:

(49) a. V+TENSE+AGR +**Q**
     b. V+TENSE +**Q**+ COP+AGR

Kornfilt argues that the V+TENSE complex in (49b) is a participle.

Question #6: Why would the distribution of Q be as given? In (49a) it is clearly at the clause-edge. In (49b), why can it not follow agreement? Could that have something to do with the claim that AGR is not a functional category but simply the subject in Turkish? (Ozturk 1999).
I'm leaving this issue for further investigation.

VI. Implications of Echo Questions on the nature of wh/Q movement

Echo questions are wh-in-situ questions in English, which is a typical wh-movement language. Consider (50) below which is ambigious:

(50) Who brought the letter?
     a.   wh-question
     b.   echo question of a declarative.
Turkish is a typical wh-in-situ language and (51) below is ambigious, too:

(51) Kim mektub-u getir-di?

Who letter-ACC bring-PAST
"Who brought the letter?'
    a.   wh-question
    b.   echo question of a declarative.

This overlapping in ambiguity is apparently a consequent of the wh-word being the subject, therefore, the highest argument in the structure. (50) is disambiguated by an overt movement of "who".

    Note that when the object is scrambled in Turkish, ambiguity persists:

    (52) Mektub-u kim getir-di?
        Letter-ACC who bring-PAST
        'Who brought the letter?'

Whereas in (53) the question is diambiguated in favor of a wh-question:

    (53) Kim getir-di mektub-u?
        Who bring-PAST letter-ACC
        'Who brought the letter?'

Question #7: What is it that disambiguates the question? The answer to this question might help us distinguish the mechanisms of questions and echo questions.

    In (53) either the object is right-dislocated or the verbal complex and/or both wh subject and the verbal complex are proposed, which is not a likely option. The ambiguity of (51&52) might be accounted for by the base position of a null Q. When it is at the edge, the interpretation is a wh question; when it starts off from wh-word, it is an echo question. It follows that in (53), movement of a null Q from beside wh-word is somehow blocked and only the wh-question reading is available, where null Q is at the clause-edge. Could the trace of the dislocated object NP be blocking such a movement? If it is the correct analysis, then the ambigious structures in English and Turkish (50&51) are disambiguated by the same phenomenon, namely, movement: wh-movement in English and by blocking a null Q movement in Turkish.

Consider the English data below where wh-word is the object:

    (54) What did John bring?   wh-question
    (55) John brought what?   echo question

The overt movement in (54) is detectable because wh-word is an object and inversion is triggered by a feature on C (Pesetsky &Torrego 1999). The wh-word is in situ in (55) but the clause is still a wh-question (though an echo one). Whatever the nature of movement in (55) could be identical to that of wh-in situ languages.

    Let's consider structures where the wh-word is an object in Turkish.

    In a wh-in-situ language like Turkish, the ambiguity between a wh-question and an echo question is observed when the wh-word is an object, as would be expected.

    (56) Hasan ne kir-di?   (ambigious)
       Hasan what break-PAST
     'What did Hasan break?'
    (57) Ne-yi Hasan kir-di?   (ambigious)
       What-ACC Hasan break-PAST
       'What did Hasan break?'

As we have seen in (53), scrambling the object disambiguated the structure; yet, a right-dislocation renders the structure ungrammatical in (58) simply because the dislocated object is a wh-word:

    (58) *Hasan kir-di ne-yi?
        Hasan break-PAST what-ACC

A null Q occurring with the wh-object, would have moved to the -possibly- adjoined position to CP. From a higher adjoined position Q and wh-features seem incapable of checking relevant features on C.

When the wh is the subject, this is a possible structure and it is a wh-question. But when we have two wh-words, it is not grammatical to right-dislocate a wh-object:

(59)a. Kim kir-di vazo-yu?
  Who break-PAST vase-ACC
  'Who broke the vase?'

 b. * Kim kir-di ne-yi?
  Who break-PAST what-ACC

I cannot account for all the facts in the given data but I think working on echo questions is a promising approach to the topic "Question" in general.

VII. Conclusion

The basic proposal of Hagstrom (1998) is that in wh-questions of wh-in situ languages, there is a morpheme Q which is base generated as a sister to a wh- word and moves to clause periphery by feature attraction.

Evidence for the covert movement of the question particle *-mi* in Yes/no questions and echo questions and a similar movement of a null counterpart in Turkish comes from the following facts in Turkish:

1. Intervenors: The movement of -mi or its null counterpart is blocked by intervenors such as quantifiers (i.e *only*) and NPIs (*nobody*).
2. Availability of PL: in cases without case marking, evidence from the availability of PL when Q launches from below one of the wh-words indicates the launching site and covert movement of Q-particle.
3. Quantifiers & Wh-words: Ambiguity of structures with a quantifier and Wh-word indicates the covert movement of a null Q to the clause-periphery.

Among the numerous issues to be further investigated , two seem prominent. One of them is the nature of Q-movement. Further study on the two possible positions of the Q-particle in the Turkish verbal complex may shed light on this issue. The second and a more general question is the topic of echo questions. Study on the fact that wh-movement languages have wh-in situ echo questions might enlighten a common strategy between such languages and wh-in situ languages. A wh-in situ language, namely Turkish, makes use of an in-situ wh-word in echo questions of declaratives, the same strategy as English. In echo questions of wh-questions, the question particle accompanies the wh-word. Since Turkish does not have an overt Q-particle in normal wh-questions, this use of Q-particle is available. What about languages like Japanese and Sinhala which already has Q-particles in wh-questions? A study on echo questions in wh-in-situ and wh-movement languages might bring about a similar mechanism by which the syntax of questions in both wh-movement and wh-in situ languages can be accounted for.

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