"Dual Selections" and Relabeling in Japanese and Korean
Category: Formal Syntax

1. Complementizer Stacking: Predicates like *tazuneru* 'ask' *semantically* select a clause headed by the interrogative C *ka* 'Q'; they cannot take a clause headed by *to* 'that' (1). These predicates, however, can take a clause where the two C's *ka* 'Q' and *to* 'that' are stacked (2). I assume with Saito (2010) that *to* 'that' is not a declarative [-Q] C but a 'report' C (Lahiri 1991); no semantic conflict over [+/-Q] arises in (2):

(1) John-wa Bill-ni [Mary-ga   kita **ka/*to**] tazuneta/kiita/situmonsita
      John-TOP Bill-DAT Mary-NOM came   **Q/*that** asked/asked/questioned
      Lit. 'John asked/questioned Bill whether/*that Mary came.'
(2) John-wa Bill-ni [Mary-ga   kita **ka to**] tazuneta/kiita/situmonsita
      John-TOP Bill-DAT Mary-NOM came **Q that** asked/asked/questioned
      Lit. 'John asked/questioned Bill *that* whether Mary came.'   (Fukui 1986, Saito 2010)

Given that selection is 'local' in that an element can only select its sister, a question arises how the matrix predicate can *semantically* select *ka* 'Q' skipping *to* 'that' in (2). We cannot simply assume that *to* 'that' is transparent for selection in (2). Predicates like *siritagaru* 'want-to-know', which also *semantically* select an interrogative clause (3), cannot take the *ka-to* 'Q-that' stacking as in (4) (Saito 2010):

(3) John-wa [Mary-ga   kita **ka/*to**] siritagatteiru/tyoosasiteiru
      John-TOP Mary-NOM came **Q/*that** want-to-know/be-investigating
      Lit. 'John wants to know/is investigating whether/*that Mary came.'
(4) * John-wa [Mary-ga   kita **ka to**] siritagatteiru/tyoosasiteiru
      John-TOP Mary-NOM came **Q that** want-to-know/be-investigating
      Lit. 'John wants to know/is investigating *that* whether Mary came.'

The contrast (2 vs. 4) shows that predicates like *tazuneru* 'ask' in (2) can *syntactically* select a clause headed by *to* 'that' whereas those like *siritagaru* 'want-to-know' in (4) cannot. Hence, the following two selections are involved in (2); (i) the *semantic* selection between *tazuneru* 'ask' and *ka* 'Q' at LF, (ii) the *syntactic* selection between *tazuneru* 'ask' and *to* 'that' in overt syntax as a driving force of Merge. Given the sisterhood requirement on selection, this "dual selection" cannot be captured by either head-complement structure (5a) or adjunction structure (5b):

(5)   a. [**TO (THAT)** [KA (Q) TP ka (Q)] to (that)] tazuneru (ask)
       b. [**KA (Q)** [KA (Q) TP ka (Q)] to (that)] tazuneru (ask)

(5a), where *to* 'that' is the label (head) of the clause, cannot capture the *semantic* selection of *tazuneru* 'ask'. (5b), where *ka* 'Q' is the label of the clause, cannot capture its *syntactic* selection.

I argue that the complement clause in (2) has a "dual structure" in that it is assigned different labels in overt syntax and at LF in terms of "relabeling" (cf. Hornstein &Uriagereka 2002). I propose that "relabeling" *may* occur as part of LF-Transfer only when a labeling conflict arises, arguing that labeling conflicts yield not only "ambiguous structures" (Chomsky 2008; Cecchetto & Donati 2010) but also "dual structures"; our analysis can capture the "dual selection." This presents further evidence for the symmetric Merge + labeling algorithm approach (Chomsky 2004, 2008), where labeling is not part of Merge.

2. Against a Direct Quotation Analysis: The following diagnostic tests show that *to* 'that' (2) is not a quotation marker but a complementizer. First, direct *wh*-questions with *ka* 'Q' are deviant if the verb is in the plain form without the polite suffix *-masu*, as shown by (6a) vs. (6b) (Miyagawa 1987):

(6) a.*Dare-ga kita ka (plain form)   b. Dare-ga kimasita ka   (polite form)
        who-NOM came Q   who-NOM came   Q
        'Who came?'   'Who came?

In the embedded clause in (2), *ka* 'Q' is used with the plain verb form *kita* 'came'; this shows that (2) does not involve a quoted direct *wh*-question but a complementation. Second, quotations are opaque to binding (7). Note that since *no* 'Q' can only be used in a direct question, (7) involves a quotation. In the *ka-to* 'Q-that' stacking (8), *kare* 'he' can be coreferential with the matrix subject *John*; (8) is not a quotation:

(7) **John$_1$**-wa Mary-ni, "Dare-ga **kare$_{*1/2}$**-o damasita no," to tazuneta
      John-TOP Mary-DAT who-NOM he-ACC   cheated Q   that asked
      '**John$_1$** asked Mary, "Who cheated **him$_{*1/2}$**?"
(8) **John$_1$**-wa Mary-ni [dare-ga   **kare$_{1/2}$**-o damasita **ka to**] tazuneta
      John-TOP Mary-DAT   who-NOM he-ACC   cheated **Q that** asked
      'It seems that **John$_1$** asked Mary who cheated **him$_{1/2}$**.'

Third, quotations are also opaque to movement (9). Movement out of a clause with the *ka-to* 'Q-that' stacking, however, is allowed as in (10); the *ka-to* 'Q-that' stacking is not a quotation:

(9)?***Sono situmon-ni** John-ga, "Dare-ga   *t* tadasiku   kotaeta   no" to   tazuneta rasii
      that question-DAT John-NOM   who-NOM   correctly answered Q   that asked   seem
      Lit. '**That question**, it seems that John asked, "Who answered *t* correctly?"
(10) **Sono situmon-ni** John-ga [dare-ga   *t* tadasiku   kotaeta   **ka to**] tazuneta rasii

that question-DAT John-NOM who-NOM   correctly answered **Q that** asked seem
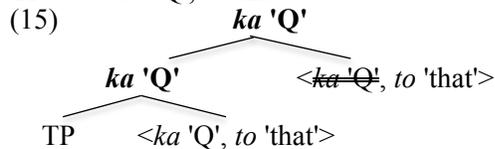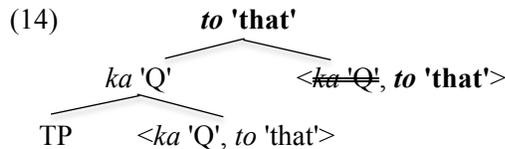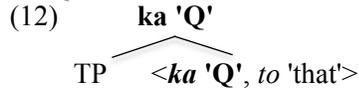Lit. '**That question**, it seems that John asked who answered *t* correctly.'

3. A Proposal: I assume with Shlonsky (2006) that the "cartographic structure" is built by self-attachment of C as follows: (a) The initially merged C is associated with an ordered set of lexical items (LIs) (or bundles of features if C is null) <C₁, ... Cn>, which corresponds to Rizz's (1997) Fin, Foc, Top, Force, etc.; (b) The computation accesses or activates these LIs one by one from left to right in the ordered set in terms of External or Internal Merge (EM or IM); (c) Once an LI is activated, it is no longer visible to the computation. I also assume Chomsky's (2008) labeling algorithm (11):

(11) Labeling Algorithm (Chomsky 2008: 145)
    a.   In {H, α}, H an LI, H is the label.
    b.   If α is internally merged to β, forming {α, β}, then the label of β is the label of {α, β}.

Let us consider (2) again. The initially merged C consists of the ordered set <*ka* 'Q', *to* 'that'>. By initial merger of C (EM), the leftmost LI *ka* "Q" is accessed and activated. The labeling algorithm (11a) requires that *ka* 'Q' should become the label as in (12). By self-attachment of C (IM), *to* 'that' is accessed and activated. *Ka* 'Q', which had been activated before, is not visible to the computation as in (13). A labeling conflict arises here; (11a) requires that *to* 'that', which is a head, should become the label whereas (11b) requires that *ka* 'Q', the target of IM, should become the label. I argue that this labeling conflict yields a "dual structure." In overt syntax, *to* 'that' becomes the label in accordance with (11a) as in (14). This labeling drives Merge with the matrix predicate *tazuneru* 'ask', satisfying its *syntactic* selection. Given that LF-Transfer applies to the whole phase ("CP"), "relabeling" applies as part of LF-Transfer. By (11b), *ka* 'Q' becomes the label as in (15); this satisfies the *semantic* selection of *tazuneru* 'ask' at LF:

(12)   **ka 'Q'**
      TP   <***ka* 'Q'**, *to* 'that'>

(13)
     ka 'Q'   <~~*ka* 'Q'~~, ***to* 'that'**>
    TP   <*ka* 'Q', *to* 'that'>

(14)   ***to* 'that'**
  ka 'Q'   <~~*ka* 'Q'~~, ***to* 'that'**>
  TP   <*ka* 'Q', *to* 'that'>

(15)   **ka 'Q'**
  ka 'Q'   <~~*ka* 'Q'~~, *to* 'that'>
  TP   <*ka* 'Q', *to* 'that'>

Predicates like *omou* 'think', which *syntactically* and *semantically* select *to* 'that', can also take the *ka-to* stacking (16); *to* 'that' becomes the label by (11a), and "relabeling," being optional, does not occur in (16):

(16) John-wa [dare-ga   kita   **ka to**] omotta/itta
     John-TOP   who-NOM came **Q that** thought/said   Lit. 'John thought/ said *that* who came.

4. Korean: In Korean, there are complement clauses which contain not only a subordinator (Sub) and but also a mood marker (Mood). Matrix predicates, whether they are verbs (17) or nouns (18), *semantically* select Mood skipping Sub. Verbs and nouns, however, *syntactically* select different Sub's; verbs select *ko* 'that' (17) while nouns select *nun* 'that' (18). Hence, "dual selections" are also involved in (17, 18):

(17) a. John-nun [Mary-ka   ku mwuncey-lul phwul-ess **ta**/*nya/*la   **ko**/*nun] cwucangha-ess-ta
      John-TOP Mary-NOM that problem-ACC solved   **DECL**/*Q/*IMP **that**/*that claimed
      'John claimed that Mary solved the problem.'
    b. John-nun Mary-eykey [*pro* ku   mwuncey-lul phwul-ess {*ta/**nya**/*la   **ko**/*nun] mul-ess-ta,
      John-TOP Mary-DAT   that problem-ACC solved   {*DECL/**Q**/*IMP **that**/*that   asked,
      *ta/*nya/**la**   **ko**/*nun] myengryengha-ess-ta}
      *DECL/*Q/**IMP that**/*that ordered}
      Lit. 'John {asked Mary *that* whether she solved the problem/ordered Mary to solve the problem}.'

(18) a. [John-i   ku mwuncey-lul phwul-ess **ta**/*nya/*la   **nun**/*ko] cwucang
      John-NOM that problem-ACC solved   **DECL**/*Q/*IMP **that**/*that claim
      'the claim that John solved the problem'
    b. [John-i   ku mwuncey-lul phwul-ess {*ta/**nya**/*la   **nun**/*ko]   cilmwun,
      John-NOM that problem-ACC solved   {*DECL/**Q**/*IMP **that**/*that question,
      *ta/*nya/**la**   **nun**/*ko] myenglyeng}
      *DECL/*Q/**IMP that**/*that order}
      Lit. 'the question *that* whether John solved the problem/the order to solve the problem'

Given that Sub and Mood belong to the cartographic structure, a labeling conflict arises due to self-attachment (IM) of Sub *ko/nun* 'that' (= <~~Mood~~, ***ko/nun***>) in (17, 18). In overt syntax, Sub *ko/nun* 'that' becomes the label by (11a), which satisfies the *syntactic* selection of the matrix predicate. "Relabeling" applies as part of LF-Transfer; Mood becomes the label, satisfying its *semantic* selection at LF.