Q-particles and the nature of Covert movement: evidence from Bùli

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Introduction: It is a well known fact that wh-questions in many languages may contain an in-situ wh-phrase. The nature of this wh-phrase, however, has been a contentious issue in the literature. While some have argued that the in-situ wh-phrase undergoes covert movement at LF (Aoun, Hornstein, and Sportiche, 1981; Huang, 1982; Nishigauchi, 1990; Pesetsky, 2000, Richards, 1997; 2000; Nissenbaum, 2000; Cable, 2007; 2010; Kotek, 2014; 2016), others have argued against this view (Watanabe 1992; Chomsky 1995; Reinhart 1998). A well known puzzle for proponents of covert movement are the apparent differences in island-sensitivity between overt and covert movement — leading Huang (1982), for example, to propose that island-sensitivity is a property of S-structure or PF but not LF. The goal of this paper is to show that wh-questions in Bùli provide strong arguments for covert movement of wh-in situ that eliminate the need to posit any overt/covert differences in island-sensitivity cross-linguistically. The key to this demonstration is the distribution of an overt Q-marker in Bùli, and Bùli’s status as an in-situ language.

Data and Analysis: In Bùli, wh-questions obligatorily include a Q-particle ká that obligatorily attaches to the wh-containing phrase (1a). In-situ wh-phrases are not clause bound, and may take matrix scope from an embedded clause (1b).

(1) a. Bí:ká  dig *(ká) b̂’aː? child.DEF  cook.PST  Q  what ‘What did the child cook?’

b. Fì  wèini  āyín bì:ká  dig *(ká) b̂’aː? 2SG  say.PST  C  child.DEF  cook.PST  Q  what ‘What did you say the child cooked?’

In analyzing this data, I adopt Cable’s (2007;2010) theory of Q-particles in which overt "wh-movement" is actually overt QP-movement. I argue that ká is the Bùli counterpart of Q-morpheme identified for languages such as Tlingit (Cable, 2007;2010), Sinhala and Japanese (Hagstrom, 1998; Kishimoto, 2005). In this analysis, ká (which subcategorizes for only DPs) merges with a wh-containing phrase and projects. I argue that the phrases head by ká, after agreeing with the complementizer, is interpreted by covertly moving to the Spec of C at LF as shown in (2).

(2) \[ \text{CP} \left[ \text{QP } ká \rightarrow b^w a \right] \text{ C } \left[ \text{TP } \text{Bí:ká T } \left[ \text{VP dig } \left[ \text{QP } ká \rightarrow b^w a \right] \right] \right] \]

This analysis of the ká-phrase as involving covert movement correctly accounts for the data in (3) and (4) below. Although a wh-phrase may appear inside an island, attaching the Q-particle to the wh-phrase inside the island renders the construction ungrammatical (3a). The Q-particle must appear at the edge of the island (3b).

(3a) *Fi  á-yä:lì  [núrpōk wāi  āli  dā  kā  b̂’a laː?] 2SG IMPF-love woman  REL.PRO INFL buy.PST  Q  what  DET ‘You love the woman who bought what?’

(3b) Fì  á-yä:lì  kā  [núrpōk wāi  āli  dā  b̂’a laː?] 2SG IMPF-love Q  woman  REL.PRO INFL buy.PST  what  DET ‘You love the woman who bought what?’
Movement vs. non-movement in multiple questions: The absence of intervention effects can also diagnose covert movement of a ká-phrase (Beck, 2006; Cable, 2007; 2010; Kotek 2014;2016). Intervention occurs in a configuration where an in-situ wh-phrase is c-commanded by a focus sensitive element at LF. In-situ wh-phrases immediately preceded by ká are not subject to Intervention effects: wh-phrases are permitted under the c-command domain of focus-related elements like only and negation (4).

(4a) Bí:ká  an dig *(ká) bʷa?: (4b) Bí:ká nǐ:ní dig *(ká) bʷa?:
  child.DEF NEG cook.PST Q what  child.DEF only cook.PST Q what
  ‘What did the childe not cook?’  ‘What did only the childe cook?’

Since, the sentences in (4) are grammatical, we conclude that the ká-phrase has covertly moved above the intervener, thus obviating intervention effects — just as overt movement obviates intervention effects in languages like Korean and German.

The behavior of wh-phrases without ká in a multiple question supports this line of reasoning. A question may contain at most one instance of ká (5a). In a multiple question, ká appears to the left of the highest wh-containing phrase (5b-c). This in our analysis means that there can be at most one instance of covert movement, the wh-phrase merged with ká. Other wh-phrase must be interpreted via focus alternatives (Beck 2006; Kotek 2014, 2016). We therefore predict intervention effects in a structure like (5b) when an intervener c-commands a wh-phrase without ká. This is indeed the case as shown in (5d). Although the ká-phrase can move covertly above the intervener in (5d) the second wh-phrase cannot, resulting in an intervention effect.

(5a) *John tè * (ká) wānà *(ká) bʷa: b. John tè *(ká) wānà bʷa:
  John give.PST Q who  Q what  John give.PST Q who  Q what
  ‘Who did John give what’  ‘Who did John give what’
  c. *John tè wānà *(ká) bʷa:  d. *John ān tè *(ká) wānà bʷa:
    John give.PST who  Q what  John NEG give.PST Q who  Q what

Interactions with Binding Theory: Evidence from Binding Theory provides additional support for this analysis. An anaphor in an embedded in-situ wh-phrase may take as its antecedent a matrix DP (6a). In the absence of the wh-phrase (6b), the anaphor is not licensed. In example (6c), the non-initial wh-element that lacks ká fails to show long-distance binding, as predicted by the conclusions of the previous section.

(6a) Maryi wèini  āyín mi  á-yā: ká wā-dēk; fōtō kūnā?:
  Mary say.PST C 1SG IMPF-like Q 3SG-self picture which
  ‘Which picture of herself did Mary say that I like?’

(6b) *Mary wèini  āyín mi  á-yā: wā-dēk fōtō wā-dē
  Mary say.PST C 1SG IMPF-like 3SG-self picture DET-DEM

(6c)*Maryi wèini āyín ká nūr bānmā ālī  á-yā: wā-dēk, fōtō kūnā?:
  Mary say.PST C Q person which INFL IMPF-like 3SG-self picture which

Overt movement? At first glance, Bùlì looks like it also permits overt wh-movement (7) — but this question-asking strategy, limited to root environments, strikingly fails to show reconstruction effects for principles A and C. I argue that this is in fact not overt wh-movement but another in-situ strategy available in root environments.
(7) (ká) b’ńa āiti bi:ká digi:
Q what C child.DEF cook
‘what is that the child cooked?’
I argue that constructions like (7) involve late merger of an NP complement to an operator which has moved from the gap position (Lebeaux 1988; Takahashi and Hulsey 2009; Stanton 2015).