An in-situ analysis of reduced embedded questions with multiple *wh*-phrases in Uyghur

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Synopsis: In this abstract, I propose to analyze reduced embedded questions with multiple *wh*-phrases (henceforth, RQMW) in Uyghur in terms of an in-situ analysis. I argue that RQMW in the language can be derived from in-situ focus sentences. This proposal is supported by the fact that the in-situ analysis can account for the observed properties of RQMW, including the presence of a copula, the case-matching effect, the absence of the clause-mate effect, and island-insensitivity.

Phenomena: RQMW in Uyghur have not been subject to close examination. Based on my fieldwork data, I argue that RQMW are observed in Uyghur, an SOV language with rich case morphology. See (1) for an illustration.

(1) a. Biz-niŋ   matematika muällim-imiz   bir oquǧuči-ni bir sinip-qa   kir-güz-di-Ø,
       1PL-GEN math   teacher-1PL.POSS one student-ACC one classroom-DAT enter-CAUS-PST-3SG
       'The math teacher of our class let a student enter a classroom,'
   b. ?lekin män-Ø [kim-ni qaysi   sinip-qa   ikän   lik]-i-ni
       but   1SG-NOM who-ACC which   classroom-DAT   COP   COMP-3SG.POSS-ACC
       bil-mä-y-män.
       know-NEG-NPST-1SG
       'lit. but I don't know whom which classroom.'

RQMW in Uyghur exhibit the following properties. Firstly, the remnants must be accompanied by case markers. The reduced question in (1b), which is anteceded by (1a), contains two remnants, which are case-marked in the same way as their correlates in (1a). That is, the case-matching effect is observed (Merchant 2001). Secondly, as indicated by the question mark, RQMW in Uyghur are not perfectly acceptable, a phenomenon not uncommon in multiple sluicing. Previous literature (Cortés Rodríguez 2023, a.o.) discusses multiple sluicing as a marked construction, often judged as marginally acceptable in various languages. Thirdly, RQMW in Uyghur must contain the copula *ikän*. Otherwise, the relevant sentences become degraded.

Fourthly, the clause-mate effect, which is a property of multiple sluicing cross-linguistically (Abels and Dayal 2017), is not observed in RQMW in Uyghur, as shown in (2).

(2) a. Güli-Ø   **biraw-ǧa**   [Murat-niŋ   **bir   sinip-ta**   Aygül bilän
       Güli-NOM   someone-DAT   Murat-GEN   one   classroom-LOC   Aygül POSTP
       paranglaš-qan-liq]-i-ni   eyt-ip   bär-di-Ø,
       chat-PERF.NOML-COMP-3SG.POSS-ACC   say-ADVL   AUX-PST-3SG
       'Güli told someone that Murat chatted with Aygül in a classroom,'
   b. ?män-Ø   [kim-gä qaysi   sinip-ta   ikän lik]-i-gä   qiziq-ip   qal-di-m.
       1SG-NOM   who-DAT which   classroom-LOC   COP COMP-3SG.POSS-DAT excite-ADVL AUX-PST-1SG
       'lit. I wonder whom in which classroom.'

The sentence in (2a) antecedes the reduced question in (2b). The correlates, i.e., *biraw-ǧa* 'someone-DAT' and *bir sinip-ta* 'one classroom-LOC,' do not belong to the same clause. The reduced question is acceptable, indicating that the clause-mate effect is not observed.

Analysis: Three major lines of analysis have been advanced to account for multiple sluicing in many languages: a reduced cleft analysis, a pseudo-sluicing analysis, and a movement-and-deletion analysis. I argue that RQMW in Uyghur cannot be adequately explained by these analyses. The first analysis is not viable because the cleft construction in Uyghur does not allow case-marked pivots or multiple pivots. The second analysis is not feasible because *wh*-phrases in pseudo-sluiced clauses cannot be case-marked. The third analysis faces challenges as multiple *wh*-fronting in Uyghur's multiple *wh*-questions leads to degraded sentences, and the presence of the copula in RQMW cannot be easily explained.

Instead, I propose that RQMW in Uyghur can be analyzed in terms of an in-situ analysis, which has been employed to explain reduced questions in Japanese, Indonesian, and Turkish (Kimura 2010; Kimura and Takahashi 2011; Abe 2015; Sato 2016; Palaz 2018). An in-situ analysis can account for all the observed properties of RQMW in Uyghur. The reduced question in (1) can be derived from an in-situ focus sentence in Uyghur, as in (3).

(3) lekin män-Ø [ForceP [FocP [FinP u-niŋ   kim-ni   qaysi   sinip-qa
      but   1SG-NOM   3SG-GEN   who-ACC   which   classroom-DAT
      kir-güz-gän]   ikän_Foc] lik_Force]-i-ni   bil-mä-y-män.
      enter-CAUS-PERF.NOML   COP   COMP-3SG.POSS-ACC know-NEG-NPST-1SG
      'lit. but I don't know it was that he let whom enter which classroom.'

In an in-situ focus sentence, which resembles the 'no da' in-situ focus construction in Japanese (Kimura and Takahashi 2011), multiple elements can receive focus interpretation in-situ, and the copula *ikän* functions as the focus head. Now let us apply nonconstituent deletion (van Craenenbroeck and den Dikken 2006) to (3), indicated with gray shading in (4).

(4) lekin män-Ø [ForceP [FocP [FinP u-niŋ   kim-ni   qaysi   sinip-qa
      but   1SG-NOM   3SG-GEN   who-ACC   which   classroom-DAT
      kir-güz-gän]   ikän_Foc] lik_Force]-i-ni   bil-mä-y-män
      enter-CAUS-PERF.NOML   COP   COMP-3SG.POSS-ACC know-NEG-NPST-1SG

Nonconstituent deletion is applied to all the elements in the FinP except the *wh*-remnants. That is, this operation deletes all presupposed information, based on the antecedent clause, leaving behind the focused information, i.e., the *wh*-phrases. The resulting structure is identical to the reduced question in (1b). Since this analysis does not involve movement, it is called an in-situ analysis. This analysis explains the obligatory presence of the copula *ikän*, which is not affected by the deletion as it functions as the Foc head. Moreover, this analysis straightforwardly accounts for the case-matching effect observed in RQMW since the *wh*-phrases in the in-situ focus sentences are case-marked.

Importantly, the in-situ analysis captures the observation that RQMW in Uyghur do not adhere to the clause-mate condition (e.g., Sato 2016), as illustrated in (5).

(5) män-Ø   [ForceP [FocP [FinP Güli-niŋ   kim-gä   [ForceP Murat-niŋ   qaysi sinip-ta
      1SG-NOM   Güli-GEN   who-DAT   Murat-GEN   which classroom-LOC
      Aygül bilän   paraŋlaš-qan-liq]-i-ni   eyt-ip   bär-gän]
      Aygül POSTP   chat-PERF.NOML-COMP-3SG.POSS-ACC say-ADVL   AUX-PERF.NOML
      ikän_Foc]   lik_Force]-i-gä   qiziq-ip   qal-di-m
      COP   COMP-3SG.POSS-DAT   excite-ADVL AUX-PST-1SG
      'lit. I wonder it was that Güli told whom that Murat chatted with Aygül in which classroom.'

The in-situ focus sentence in (5) is the full-fledged counterpart of (2b). When nonconstituent deletion is applied to (5), indicated with gray shading, the reduced question in (2b) is derived. In addition, RQMW in Uyghur are not sensitive to island effects, an observation that can be straightforwardly explicated by the in-situ analysis. In-situ focus sentences, which do not involve movement of *wh*-phrases out of islands such as complex NP islands and adjunct islands, are not sensitive to island effects.

Lastly, the presence of agreement markers following reduced questions provides further support for the in-situ analysis. Consider (6):

(6) a. Män-Ø tünügün   mälum sinip-ta   bir qiz bilän   paraŋlaš-ti-m,
        1SG-NOM yesterday some classroom-LOC   one girl POSTP   chat-PST-1SG
        'I chatted with a girl in a classroom yesterday,'
    b.?meniŋ aka-lar-im-niŋ   [qaysi sinip-ta   kim   bilän   ikän
        1SG.GEN elder.brother-PL-1SG.POSS-GEN which   classroom-LOC who   POSTP   COP
        lik]-**im**-ni   bil-gü-si   bar.
        COMP-1SG.POSS-ACC   know-DES.NOML-3PL   have

'my elder brothers want to know with whom in which classroom.'

c. meniŋ   aka-lar-im-niŋ   [ForceP [FocP [FinP meniŋ   tünügün   qaysi sinip-
   1SG.GEN elder.brother-PL-1SG.POSS-GEN   1SG.GEN yesterday which classroom-
   ta   kim bilän paraŋlaš-qan]   ikänFoc] likForce]-**im**-ni   bil-gü-si   bar
   LOC who POSTP   chat-PERF.NOML COP   COMP-1SG.POSS-ACC know-DES.NOML-3PL have

In the examples (1-2), reduced questions are followed by the third-person possessive agreement marker *i*. In contrast, the reduced question in (6b) is followed by the first-person marker *im*. The presence of *im* can be explained by the in-situ analysis because the in-situ focus sentence in (6c) is also followed by *im*. **Conclusion:** The in-situ analysis is a viable analysis, which can explain all the observed properties of RQMW in Uyghur. Importantly, this research contributes to the cross-linguistic study on multiple sluicing, suggesting that a focus construction—be it a cleft construction, a pseudo-cleft construction, or an in-situ focus construction—is involved in the derivation of multiple sluicing constructions. Future comparative research between multiple sluicing in Uyghur and other Turkic languages may provide additional support for the in-situ analysis and offer further insights into the study of multiple sluicing.
Selected reference: Merchant, Jason. 2001. *The syntax of silence: Sluicing, islands, and the theory of ellipsis*. New York: Oxford University Press.