Wh-Movement in Central Kurdish: A Cross-linguistic Study

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Abstract

This paper looks into wh-movement in Central Kurdish (henceforth CK) and its position with relation to the available parameters by comparing it with some other languages. The data of the study is collected based on the fact that the author is the native speaker of the language under study. The method of the data analysis is within the Generative Framework. A superficial look into the status of wh-phrases in CK did not render a decisive result. Since wh-phrases (both wh arguments and wh adjuncts) may sit in situ, i.e. having the same position as their corresponding arguments in the affirmative sentences. Wh-phrase fronting to Spec of Focus Phrase is allowed and in this case the phrase receives contrastive interpretation. The data demonstrates that Wh-phrases in a Wh-in-situ examples is not an instant of movement in Logical form after spell out. The evidence of non-occurrence of wh-movement in LF comes from violation of subjacency. The wh-operator aya is base generated in Specifier of Complementizer Phrase (CP) and the wh-feature moves up to Complementizer to be in agree relation with the operator.

Keywords: Central Kurdish, Wh-movement, Logical form, Complementizer.

1. Introduction

Whether wh-words move or not is subject to parametric variation across languages. While question formation involves fronting of the question element in Germanic, Romance and Slavic languages, in languages like Chinese, Japanese, Korean and Hindi, the wh-phrase occurs in the same position as its corresponding ordinary phrases (Cheng 1991). More variation can be observed among languages concerning the landing site of the moved wh-phrases. Further, some languages like German undergo partial wh-movement and seems as an intermediate level between the above types. Even these categories can be subdivided further. Recent works (since late 90s) start to take the direction that there are indeed different types of wh-in-situ and they involve different treatments (Cheng 2009).

Kurdish belongs to the Iranian Language Family, which itself is a branch of Indo-Iranian. Indo-Iranian is an Eastern branch of Indo European Language Family. Kurdish is a null-subject, SOV Language with a fairly free word order, and is severely an understudied language. This paper focuses on the Central Kurdish (henceforth CK) to the exclusion of the Northern and Southern dialects. Kurdish Syntax, in particular, has not been approached in terms of generative syntax. With the total absence of literature of wh-movement in CK, I am interested in giving a general description of Wh-movement. This paper tries to identify whether question words move or remain in-situ in CK. It will also make an attempt to explain what kind of movement is involved in CK question words. Is it overt movement, covert phrasal movement, LF movement or feature movement? If they move, to which land site must be moved. How can different movements of wh-phrases be accounted for?

Citing and contrasting data from CK with some other languages, following from section two, section three ponders wh-phrase movement in the Logical Form whereas section four investigates the nature of wh phrase in CK: is it wh-argument or wh-adjuncts? Section five examines and compares wh-features with wh-operator whilst section six concludes the paper.
and presents the findings of the paper. However, the paper starts with section two which looks into the contradictory nature of wh-phrase movement in CK.

1. **Wh-Phrases in CK: To move or not to move?**

To examine the behaviour of Wh-phrases in Kurdish whether they move or remain in situ, consider the following sentences in which the wh phrases (in **bold**) in (b) sentences replace an obligatory argument (italic words) in the (a) sentences:

1. a. Nama-ka-m bo John nard
   I sent the letter to John

   b. Chi-m nard bo John?
   What did I send to John

2. a. nama- ka- m nard bo John.
   I sent the letter to John

   b. nama-ka-m bo ke nard ?
   To whom did I send the letter? alternatively
   Who did I send the letter to?

3. nama-ka- m bo John nard.
   I sent the letter to John

4. bo ke nama- ka- m nard ?
   To whom did I send the letter? or
   Who did I sent the letter to?

As the above examples in (1 and 2) show, the wh-phrase is contained within its clause, rather than moving to the edge of the scope or somewhere else in the sentence and replaces exactly the corresponding arguments. However, wh-movement can be left dislocated parallel to their corresponding arguments in the declarative sentence (3 and 4). As observed by Karimi (1999), fronted wh-phrases receive contrastive interpretation in Persian while in situ wh-phrases receive information focus. As it can be seen from example (2 and 3) above, the same interpretation is true for Kurdish. The wh-phrase in (2 b) is something like *nama-ka-m nard bo ke?* ‘I sent the letter to whom.’ And it receives information focus in the sense it requires factual information. While (3) has moved to Spec of FocP (see section five) and received contrastive interpretation. Here, the speaker has a set of people in mind, and wonders which one was the receiver of the letter.

Under certain circumstances, wh-phrases in CK can be left-dislocated. This displacement of the wh-phrase parallels with the corresponding arguments in the declarative sentences. Although CK is an SOV language (Fattah 1997), but its word order is not rigid and it exhibits signs of scrambling.

5. a. John nama-ka-i nusi.
John letter- the 3rd person elitic wrote
John wrote the letter.

b. 

chi nusi John?
What wrote John
What did John write?

This movement could not be V(erb) to C(omplementiser) movement as wh-phrases follow the complementiser ka ‘that.’ Usually answers to such questions preserve the constituent order of the question when the answer is intended as an exhaustive answer to the question as shown in (6) below:

6.

nama- ka-i nusi John?
Letter- the wrote John.
John wrote the letter.

Different word orders are also possible as CK shows signs of scrambling (see 3 and 4 above). However, to what extent scrambling of obligatory arguments are allowed in Kurdish is not within the scope of this paper.

How can the movement of the wh-arguments in (5 b.), then, be explained? The left constituent in these sentences are focused more than the other elements of the sentence. In this sense, it is similar to Hungarian that moves wh-phrases to FocP, the subject occupies clause-initial position and precedes the verb (Santorini and Kroch 2007). By contrast, in wh-questions like (5 b.), the clause-initial position is occupied by the wh-phrase, and the subject follows the finite verb.

- Ki -t látott John tegna peste? (Hungarian)
- Ke-i bin-I John dwene ewara? (CK)
- who acc saw John yesterday evening
- 'Who(m) did John see yesterday evening?'

CK and Hungarian are similar in movement to spec of Focus phrase. This scrambling is allowed as both languages allow relative freedom of word order and this freedom is enabled through the use of clitics as the movement of clitics make the movement of other phrases possible. It may be proposed that fronted wh-phrases are moving to Specifier of Complementiser Phrase (Spec CP), but contrary to what that proposal predicts, the complementisers ka ‘that’ preceded the wh-phrase in focus position in subordinate clauses.

The fact that ka ‘that is complementiser in Kurdish can be supported by these two evidences:

(i) It always occurs to the left of other elements in a sentence.
(ii) It can only be found in subordinate clauses and it never occurs in matrix clauses.

An evidence to our argument that wh-phrases do not move to the Spec CP is the fact that wh-phrase follows the complementizer ka ‘that’ as in (7a.). (7b.) is ungrammatical as the wh-phrase precedes the complementisers. Another evidence for the movement of wh-phrase to Spec of CP when it receives contrastive interpretation is the fact that CK allows doubly marked relative clauses (7a.). This is in contrast to English which does not allow doubly marked relative clauses as in (7c.).

7.

a. kho-t amadakrdwa [ka chi walam bdaитawa]?
Self you prepare did that what answer give
Have you prepared yourself what to say?
b. *kho-t amadakrdwa chi ka walam bdait-awa?
   Self you prepare did what that answer give

c. *The people that who(m) you saw.

How can this behaviour of wh-phrases be accounted for? Linguists give two different accounts for languages that undergo similar wh-movement. For Persian, Raghibdost (1994) suggests that wh-phrases undergo topicalisation. Cheng (1991) holds a similar view for Egyptian Arabic. While (Rochmont 1978, 1986; Horvath 1986; Bresnan and Mchombo 1987; Kiss 1998, among others cited in Karimi and Taleghani 2007) attribute this kind of movement to an instance of focus movement.

Karimi and Taleghani (2007) observe that focal reading of wh-elements for Persian poses problems for the analysis that considers wh-movement as an instance of topicalisation for the following reasons:

(i) Topic implies familiarity/old information, while focus represents new information.
(ii) Topic lacks quantificational reading, and thus can optionally appear in Clitic Left Dislocation (CLLD) construction; focus cannot appear in this position. The same explanation is true for Kurdish language as shown in (8 a. and b.):

8.
   a. qalam-aka-n John kri-(ni).
      Pen-the- pl John buy past 2sg him
      The pens, John bought them.

   b. ke to dwene binit *n?
      Who you yesterday saw 2 sg them
      Who you saw them yesterday?

   The difference between (8 a. and b.) is due to the fact that the topicalised element qalamakan ‘the pens’ in (8 a.) is not quantificational, while the focal element in (8 b.) is. The example in (9) further explains the idea that quantificational elements are not compatible with CLLD constructions.

9. har flim-ek yakjar pro bini-m *t
   Each film-a once saw-1 sg it
   I saw each film once.

   The quantified element har flimek ‘each film’ cannot bind the clitic pronoun (t) in (9). Thus, the wh-phrase in (8 b.) patterns with the focused element in (9) but not with the topicalised element in (8 a.).

   Wahba (1984), on the other hand, argues that fronted wh-phrases in Egyptian to be a type of cleft sentence. As far as CK is concerned, these sentences with fronted wh-phrases are not cleft sentences in contrast to what Wahba argues for Egyptian Arabic. Cleft sentence is a complex sentence with a clause of their own followed by another dependent clause. Cleft sentences have the following two properties. The first clause is put into focus and accompanied by a special intonation. The second property is that the clauses of a cleft sentence can have reverse orders as shown in (10 and 11), while the CK fronted wh-phrases are kept within the scope of a single clause and do not show the properties of special intonation and reverse word order (see examples 1-3).

10. What he wanted to buy was a car.
11. A car is what he wanted to buy.
It can be said, from the examples shown above, that Wh-phrases in Kurdish do not move the way Wh-phrases move in English and other Germanic languages. So if Wh-movement is a universal principle, Kurdish Wh-phrases should move in LF or what?

2. LF Wh Movement

The assumption that wh-movement is a universal feature of all languages has led linguists to look for explanation of wh-in situ languages. There is a debate as to what mechanism is responsible for the interpretation of wh-elements in situ. Huang (1982) approaches the enigma of wh-in-situ languages by extending the domain of inquiry in terms of LF wh-movement. He assumes that Wh-phrases in a Wh-in-situ language like Chinese can move in Logical form after spell out. This movement approach makes it possible to directly compare Wh-in-situ languages with English-type languages where Wh-phrases are overtly moved. Huang’s proposal is mainly based on selectional requirements. The verbs (xiang-zhiado ‘wonder’ and yiwei ‘think’), for example, in Chinese are parallel to their English counterparts in terms of taking the kind of clause that follows them. ‘Wonder’ selects indirect question while ‘think’ selects direct question.

However, this proposal soon faced many challenges and the fatal one was that it could not answer Subjacency. Hence, an alternative approach is to explain wh-in-situ without LF movement. Watanabe (1992) assumes that wh-question in Japanese, which is a wh-in-situ language, involves movement in overt syntax, not LF movement. Watanabe (2001:205) argues that LF Wh-movement in Japanese is subject to Subjacency. Consider the following Japanese sentence:

12. a. ??[nani-o do ko –dekattaka] oboete-iru no?  
   what-Acc where-At bought Q remember-Pro Q
   What do you remember where we bought?

   In (12.a), the reading in which *nani-o “what-Acc” takes the matrix scope is an unacceptable Japanese sentence. The reason for that, according to Nishigauchi( 1990), Choe (1987), and Pesetsky (1987), LF movement is entirely parallel to overt movement, obeying the same constraint taking (12.a.) as manifesting a Subjacency violation. (12.b) is the LF representation for (12.a.)

b. ??[CP nannii-o [IPproyou [CPdoko-dej [IPprowetitjkatta] ka]oboete-iru]no] what-Acc
   where-at bought Qremember-ProgQ
   The embedded object *nani-o “what-Acc” is extracted out of a Wh-island violating Subjacency.
   CK can also provide evidence that LF Wh- movement is subject to Subjacency when a wh-phrase is extracted out of a wh-island.

13. a. Mary pirs?: [ke chi kre]  
   Mary asked who what bought.

   The LF representation of the above sentence is ruled out in CK as it violates Subjacency when the wh-direct object *chi “what” takes the matrix clause as its scope.

14. *??[Chij Mary pirs?: kej kre?  
   Whatj Mary asked whoj bought
This means that the ungrammaticality of Kurdish and Japanese sentences is due to an overt movement which is subject to Subjacency. It is therefore not surprising that wh-questions behave in the same way as overt movement in languages like English, obeying subjacency, in contrast to LF movement involved in wh-in-situ languages like English. In other words, LF movement is immune to Subjacency if we continue to assume that LF movement applies to wh-in-situ in multiple questions.

However, it is well known that wh-in-situ in languages like English does not display island effect in multiple questions. English maintains wh-in-situ while using echo question in multiple questions. Consider this sentence:

15. a. Who remembers where we bought what?

(15.a.) is a direct question asking for a person who remembers the thing bought. The wh-direct object can take the matrix clause as its scope. The LF representation for the above sentence is (15.b.):

b. [CP whatj whoi [IPti remembe

Another reason to rule out LF wh-movement in CK is that selectional requirement does not work for CK. The equivalents of the verbs (wonder and remember) in CK do not require clause structures similar to English. As shown in these sentences:

16. a. John sari swrdamene lawai Mary chi kriwa.
John wonders from Mary what bought
John wonders what Mary bought.

b. John labiry det Mary chi kriwa.
John remembers Mary what bought
John remembers what Mary bought.

The verb wonder takes an indirect question in both languages, but the verb remember only takes an indirect question in CK while it is ambiguous in English; it can take either an indirect or direct question.

17. John remembers what Mary bought.
18. What does John remember Mary bought?

Thus, selectional restriction cannot be used as an evidence for wh-movements in LF. to conclude this section, CK wh-phrases do not show wh-phrase movement in LF

3. Wh- Arguments vs. Wh- Adjuncts

Wh- adjuncts, similar to wh-arguments, appear in different positions.

19. a. pro petwaya bochi yary-aka-ibrdawa?
Pro think-you why game-the he won
Do you know how he won the game?

b. Bochi pro pet waya yary-aka-i brdawa?
Why pro think-you game-the he won

In (19 a.) the wh-adjunct takes scope over the clause it appears in. Here, it has scope over the embedded clause. While in (19b.) it is ambiguous between two different reading:
either why he wins the game or why do you think he wins the game. The wh-adjunct *bochi‘why’ seems to be subject to obligatory movement from its base position in single clause sentences.

20. Bochi Mary shwi kird ba John?
   Why Mary marry did to John
Why did Mary marry to John?

b. *Mary shwi kird ba John Bochi?
   Mary marry did to John why
   In (20 a.), the wh-adjuncts originates in the post verbal position and obligatorily moves to matrix position in order to take scope over the sentence, while (20 b.) is ungrammatical when the wh-adjuncts remain in situ. The adjunct *bochi, ‘why’ seems to behave differently from other wh –phrases in that it is the only wh-phrase that obligatorily moves to the matrix clause though other wh-adjuncts like *chon ‘how’ and ba chi ‘ with what’ can move to matrix clause optionally. Identical behaviours of why can be found in other languages as is shown in this example from English:

21. a. what did you buy where?
   b. *what did you buy why?

   When the wh-phrase is a prepositional phrase, CK obligatorily pied-pipes the prepositional phrase as shown in (22 a.) but preposition stranding is never allowed as the example in (8 b. ) shows.

22. a. ba chi nama- ka-t nusi?
   With what letter the 2 sg wrote
What did you write the letter with?

b. *chi nama-ka-t nusi ba?
   what letter the 2 sg wrote with
   However, It is equally grammatical for (22 a.) to leave the wh-word in situ with the preposition rendering: nama-ka-t nusi ba chi?

   If, some and not all, wh-elements move to focus and not to the spec of CP, how can a sentence be understood as a question? Another option is to look into wh-features that move in overt syntax in some languages like Persian and Japanese.

4. Wh features and Wh operator

   The Minimalist Program, which develops simple parsimonious grammars that exploit natural thematically unified principles, can account for diverse behaviours of individual languages. By reducing linguistic computation to a very limited set of operations, we are able to reduce the derivation of syntactic structures into a coherent and structured series of operations which can be defined and constrained. For example, by the introduction of agree and EPP features, we can constraint movement of a Goal moving into the specifier position of a structurally higher Probe (Yeo 2010). When it comes to wh-movement, The Extended projection Principle (EPP) feature carried by the functional head (C) is uninterpretable and thus serves as the Probe searching for a Goal that carries an interpretable wh-feature to check it. In consequence, the goal moves from its position to get into a checking relation with the probe.

   It is supposed that various positions of wh-phrases are mostly phonological. A language like English, where the wh-phrase of matrix wh-questions is obligatorily moved from its thematic role position to the left-most peripheral position (Spec CP_ is similar to
Mandarin Chinese where the phonology of the wh-phrase stays in situ. In other words, wh-features of in situ languages move to (C) as not moving would fail to eliminate uninterpretable features at the interface, causing the derivation to crash. On the other hand, different interpretations have been proposed to account for in situ and optional wh-movement languages such as: the selection of different complementisers, extra movement operations, and an operator-binding approach mostly used to account for wh-in situ languages like Mandarin Chinese and Japanese. Nevertheless, these accounts are not appealing as they all go against economising the computational system of language.

As discussed in section three, Kurdish and English-type languages are maximally similar in requiring movement of wh elements in overt syntax. Overt syntax, here is used to contrast with LF. In Japanese, this feature moves to Spec of CP while in Kurdish and Persian to C. English too, Chomsky (1995) suggests, seeks to raise (F)eature and “whatever extra baggage is required for convergence involves a kind of generalised pied-piping.” Chomsky argues it is the properties of the phonological component that require such pied-piping. That is, what should be moved universally is the wh-features, but whether to spell-out the phonological word is subject to variations amongst languages.

Cheng (1991), on the other hand, observes that wh-in-situ languages tend to have overt question particles as complementisers (ne in Mandarin Chinese wh-questions and no/ka in Japanese questions in general). Taleghani (2003) has made similar claims for the existence of an operator in Spec CP in Persian. The presence of this particle is true for Kurdish too which is phonologically realised as *aya*. It is in Spec of CP like Persian and it can also be used in yes no questions as in (23 a.b.) .

23.  
a. Aya cha axoi-tawa?  
Operator tea drink 2 sg  
Do you drink tea?  
b. Aya azani-t John sbaine dagaretawa?  
Operator know 2sg John tomorrow return 3 sg  
Do you know John will return tomorrow?

This wh-operator may surface overtly as a scope marker as in (24 a. and b.). The overt wh-phrase in the matrix clause marks the scope of the wh-phrase in the embedded clause.

24.  
a. Aya ba rai to [aw key bini]?  
Operator with pinion you he whom saw  
Who do you think he saw?  
b. Aya ba rai to [aw bochi roysht]?  
Operator with opinion you [he why went]?  
Why do you think he left?

Similar cases have been observed in other languages. While the wh-operator is phonologically invisible in Persian, it is realised as lexical element in Albanian and Dari, a variation of Persian spoken in Afghanistan. (see Karimi and Taleghani 2007). German and Romani can provide further evidence for the presence of a scope marker. McDaniel (1989) argues that the wh-phrase moves in these two languages but not necessarily to the Spec of CP. However, the Spec/CP must be filled by the scope marker *was* in German and *so* in Romani when there is partial wh-movement. In (25) German and (26) Romani examples, the ‘a’ sentences represent full wh-movement while those in ‘b’ exemplify partial wh-movement with a visible scope marker (Mc Daniel 1989: 569).

25.  
a. [Mitwem]iglaubt [IP Hans [cptidass [wpJakobjetzt t spricht]]]?
With whom does Hans think that Jakob is now talking?

b. Wasiglaubt [Ip Hans [cp [mitwem]i [IP Jakobjetzt t spricht]]]?  
   What does Hans believe with whom Jakob is now talking?

26.
   a. Kasi [Ip o Demirimislinol [cp to so [p iArifadikhlatij]]]?  
      Whom does Demir think that Arifa saw?
   b. Soi [IP o Demirimislinol [cpkasi [IpiArifadikhlat,j]]]?  
      What does Demir think whom Arifa saw?

   CK shows similarities to partial wh-movement in German but they are not identical.  
   CK and German are similar in that Spec CP must be filled by a scope marker, aya in CK and  
   was in German. However, they are different in the way that in German full wh-phrases can  
   function as scope markers replacing was, while in CK full wh-phrases can never function as  
   scope markers and can never replace aya.

   Thus far, it has been claimed that a wh-operator is base generated in Spec CP and the  
   wh-feature moves up to C to be in agree relation with the operator. According to this  
   suggestion, the sentence becomes ungrammatical if the feature movement is blocked. But  
   evidence is needed to prove the claim that wh-feature moves to C. In Persian, too, Wh-feature  
   moves to C. Karimi and Taleghani (2007) give three pieces of evidence to support this  
   proposal. All the three arguments used as evidence for wh-feature movement to C in Persian  
   can also be used to support the proposal that wh-features also move to C in CK.

   First, in a multiple wh-construction, a pair-list answer is obligatory in(27a. and b.):

27.
   a. Ke chi kri?  
      Who what bought-3sg  
      'Who bought what?'
   b. Ke lagal ke yari kird  
      who with whom play did-3sg  
      'Who played with whom?'

      (27 a. and b.) cannot be felicitously asked in a situation where they receive answers like  
      John bought a book for (27 a.) and John played with Mary for (27 b.). Rather, at least a pair or  
      even more than a pair is needed to answer these questions.

      The second piece of evidence is provided by extraction out of adjuncts. In the following  
      example, the movement of the wh-feature is blocked in the embedded C, and cannot move  
      out of the adjunct CP.

28.
   a. *John twra bu chunka ke bezari kird?  
      John angry become because who annoy did 3sg  
      (28 b.) shows how and where the movement of the wh-feature is blocked resulting in the  
      ungrammaticality of (28 a.)
   b. *[CP Op [ C [John twrabu [CP [ chunke [ke bezari kird]]]]]

      This movement is ruled out by the Relativized Minimality of Rizzi (1990) or by the  
      Minimal Link Condition of Chomsky and Lasnik (1993). In the framework of Chomsky  
      (1995), Watanabe (2001) simplifies MLC as (29):

29.
   K attracts F if F is the closest feature that can enter into a checking relation with K.
   Hence, the structure in (28 b.) violates the MLC stated in (29).
Finally, and again similar to Persian, as indicated by Karimi and Taleghani, the wh-phrase in CK cannot stay in the domain of certain scope bearing elements, including Negative Polarity Items (NPI) which intervenes between the wh-operator and the wh-phrase in (30 a.) blocking the interrogative interpretation. However, when the wh-argument has moved into the Spec of FocP in (30b.), the sentence is grammatical and has interrogative interpretation.

30.

a. *[CP OP [ hichkas chi na-kri ]
Nobody what neg-bought

b. [CP OP [FocPchi j hichkastjna-i-kri]
‘What was it that no one bought?’

Here, CK shows a striking similarity to Hungarian. Toth (1999:128) suggests that wh-phrases are incompatible with NPI assuming that wh-phrases in Hungarian in LF (and also in S-structure in overt wh-movement) occupy the same position with other operators. He also assumes that wh-questions are rhetorical when they contain NPIs.

In Santorini and Kroch’s sense (2007), it can be said that wh-phrases undergo partial wh-movement in CK as they claim that partial wh-movement is partial in two distinct, though related, senses. First, the true wh-phrase moves only part of the way to its scope position. Second, the wh-phrase in the scope position contains only part of the features of the true wh-phrase.

5. Conclusions

Wh-phrases in CK stay in situ in the sense that they have the same distribution of their corresponding arguments in the affirmative sentence. The data demonstrates that Wh-phrases in Wh–in-situ examples are not an instance of movement in Logical form after spell out. The evidence of wh-movement in LF comes from violation of Subjacency. However, under certain circumstances, wh-phrase fronting to Spec of Focus P is allowed and in this case the phrase receives contrastive interpretation. The complementizer ka ‘that’ precedes fronted wh-phrases and this distribution is used as evidence that fronted wh-phrases are not moving to Spec of CP.

The analysis also shows that wh-feature must be in a local agreement relation with the wh operator aya in Spec of Focus Phrase. This happens while the wh-feature obligatorily moves to C. According to this proposal, the intervening elements may be an adjunct or Negative Polarity Item NPI. The fronting of wh-phrases to Spec Focus Phrase can be regarded partial wh-movement as the wh-phrase moves to a position lower than its scope position. However, a caveat is in order. The partiality of CK wh-movement is not identical to partial wh-movement in languages such as German and Romanian.

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