

# WHEN WH- MOVEMENT ISN'T WH-MOVEMENT\*

Arsalan Kahnemuyipour  
Syracuse University

The goal of this paper is to explore some properties other than the position of the wh-element (which can often be obscured by further scrambling) distinguishing wh-movement from focus-fronting languages.

## 1. Introduction

There is a long-established distinction between wh-movement languages such as English or German in which the wh-element is proposed to move to the clause-initial position and wh-in-situ languages such as Japanese or Chinese in which the wh-element remains in its base position, as illustrated in (1) (e.g. Huang 1982, Lasnik and Saito 1984, among others).<sup>1</sup>

- (1) (from Watanabe 2001: 203)
- |    |          |              |                    |        |         |                   |         |      |        |      |         |
|----|----------|--------------|--------------------|--------|---------|-------------------|---------|------|--------|------|---------|
| a. | John     | wonders      | [what <sub>i</sub> | Mary   | bought  | t <sub>i</sub> ]. | English |      |        |      |         |
| b. | Zhangsan | xiang-zhidao | [Lisi              | mai-le | shenme] | Zhangsan          | wonder  | Lisi | bought | what | Chinese |

More recently, several linguists have proposed a third possibility, known as focus-fronting languages,<sup>2</sup> in which the wh-element is proposed to move to a position of (contrastive) focus distinct from the clause-initial SpecCP position (see, Horvath 1986 for Hungarian, Aghem, Basque; Tuller 1992 for Chadic; Bošković 1997 and Stjepanović 1999 for Serbo-Croatian; Ndayiragije 1999 for Kirundi and Kahnemuyipour 2001 for Persian, among others). Meanwhile, the position of the wh-element can be obscured by further scrambling (to a clause-initial position), which may make the focus-fronting movement resemble wh-movement to SpecCP. It is therefore advantageous to be able to find other properties that could distinguish the two types. Moreover, it helps us achieve a better understanding of the typology of wh-questions. In this context, this paper explores two properties: prosody and partial wh-movement (found in some wh-movement languages such as German). Before turning to these properties, it is worth noting that focus-fronting can also be confused with wh-in-situ, in particular in SOV languages such as Persian where the focus position is a (low) preverbal position. In such instances, one needs to look at the status of postverbal arguments and adjuncts involved in wh-questions (see

---

\* I would like to thank the audience at the CLA meeting for their comments and questions.

<sup>1</sup> Some scholars have suggested that Japanese and Chinese belong to two different types of wh-in-situ languages (see, for example, Aoun and Li 1993, Watanabe 2001). I am abstracting away from such details.

<sup>2</sup> Focus-fronting is sometimes called non-wh-movement. I use non-wh-movement, however, as a cover term to refer to both focus-fronting and wh-in-situ languages.

Kahnemuyipour 2001). It is important to note, however, that with respect to the two properties discussed in this paper, focus-fronting and wh-in-situ languages do not seem to differ.

## 2. Wh-questions and Prosody

This section deals with the prosody of wh-questions and in particular the puzzling behaviour of wh-questions with respect to stress in wh-movement languages such as English. To understand the question, we first need to have a brief look at the interaction between information structure and sentential stress/accent.

### 2.1 Sentential Stress and Information Structure

It is well known that the information structure of a sentence affects sentential stress/accent in many languages.<sup>3</sup> Thus, for instance, all variants of the sentence *John kissed Mary* given in (2) would be considered felicitous depending on the context of the utterance. (Underlining = Stress/Accent)

- (2) a. John kissed Mary.  
 b. John kissed Mary.  
 c. John kissed Mary.

This interaction is often captured by a relationship between focus and sentential stress/accent. Following Chomsky (1971, 1976) and Jackendoff (1972), let us take focus to be defined as the non-presupposed part of the sentence, and use the wh-question/answer test to determine the focus structure of a sentence (this test goes back at least to Paul 1888/1970). The wh-question is known as the context question. Some possible context questions for the string *John kissed Mary* are given in (3), with (3a) known as the out-of-the-blue context.

- (3) a. What happened?  
 b. What did John do?  
 c. Who did John kiss?  
 d. Who kissed Mary?  
 e. What did John do to Mary?

Based on the context questions in (3), we can now identify the focused part of the sentence as the part that is not shared with the context question. The focus structure for the string *John kissed Mary* corresponding to the context questions in (3) is shown in (4), where [<sub>F</sub>] marks the focused constituent. The relevant stress facts are also given.

---

<sup>3</sup> This is not necessarily true of all languages. In some languages focus structure may not be marked or marked in ways other than sentential stress. I am abstracting away from this issue here.

- (4) a. [F John kissed Mary] → John kissed Mary  
 b. John [F kissed Mary] → John kissed Mary  
 c. John kissed [F Mary] → John kissed Mary  
 d. [F John] kissed Mary → John kissed Mary  
 e. John [F kissed] Mary → John kissed Mary

To account for the correspondence between focus and stress, we need a rule such as the Focus Prosody Correspondence Principle in (5) (adapted from Zubizarreta 1998: 38, originally due to Chomsky 1971 and Jackendoff 1972).<sup>4</sup>

- (5) Focus Prosody Correspondence Principle (FPCP)  
 The F-marked constituent of a sentence must contain the most prominent word in that sentence.

With this background, let us turn to the puzzling stress behaviour of wh-elements in wh-movement languages.

## 2.2 The Wh- Puzzle

In the previous section, we considered the relation between sentential stress and focus, defined as the non-presupposed part of the sentence. If focus is defined as the non-presupposed part of the sentence, then, by definition, the focus of a wh-question is the wh-phrase. It is, therefore, surprising that the wh-phrase in English, a language which typically marks focus prosodically, does not receive sentential stress, as shown in (6). (see Rochemont 1986 and Zubizarreta 1998).

- (6) a. What did Helen review?  
 b. \* What did Helen review?

One may attempt to explain the facts in (6) by suggesting that it is a lexical property of wh-words in English that they cannot receive stress, thus classifying them with other lexical items such as anaphoric pronouns which do not attract stress (e.g. He reviewed it.). Counterevidence for this idea comes from the prosodic behaviour of wh-in-situ elements in English. Unlike its moved counterpart, wh-in-situ in English bears sentential stress, as shown in (7).

- (7) a. Who reviewed what?  
 b. Who reviewed the book? (with echo reading)

We are, therefore, confronted with the following question: How is it that a moved wh-phrase in English does not receive primary stress, while its in-situ counterpart does? To complete and further complicate the picture, let us look at the prosodic behaviour of wh-elements in non-wh-movement languages.

---

<sup>4</sup> For a critical review of previous accounts of this correspondence and a new formulation, see Kahnemuyipour (2004).

### 2.3 Non-wh-movement Languages and Prosody

In this section we consider the prosodic behaviour of wh-elements in wh-in-situ and focus-fronting languages. Wh-in-situ languages which mark focus prosodically have the wh-phrase stressed, as seen in the examples in (8).

- (8) a. Halil'e NE verdiniz? Turkish: Ladd 1996: 171  
 Halil-to what gave-2sg  
 'What did you give to Halil?'  
 b. Ram KAKE dekhlo? Bengali: Ladd 1996: 171  
 Ram whom saw  
 'Who did Ram see?'

Moreover, in languages in which wh-phrases have been argued to undergo focus fronting (but crucially not wh-movement to SpecCP), wh-phrases also receive the main prominence of the sentence. Some examples are given in (9).

- (9) a. Ali KOJAA raft Persian  
 Ali where went  
 'Where did Ali go?'  
 b. MIT vettel Hungarian: Ladd 1996: 172  
 what bought-2sg.  
 'What did you buy?'

Based on the facts discussed so far, we can define a typology of wh-questions based on whether wh-phrases are stressed and/or whether they involve movement, as illustrated in the table in (10) and summarized below. (Recall that this typology only applies to languages which mark focus prosodically at all.)

(10) Typology of wh-questions based on stress and movement

Move \ Stress	+	-
	+	focus-fronting
-	wh-movement	*

To summarize, in focus-fronting languages, wh-phrases undergo movement and receive stress. In wh-movement languages, wh-questions involve movement of the wh-phrase, but the wh-phrase is not stressed. Wh-in-situ

phrases, on the other hand, do not undergo movement and receive stress in their base-generated position. Using this classification, I provide a solution for the wh-puzzle in the following subsection.

## 2.4 Solving the Puzzle

Given the discussions in the previous sections with respect to the interaction between sentential stress and focus, the stress behaviour of wh-questions in wh-in-situ and focus-fronting languages is expected. In both cases, a wh-element, which is by definition focused, receives the main prominence of the sentence.<sup>5</sup>

To account for the prosodic behaviour of wh-elements in wh-movement languages such as English, I propose that what leads to the wh-phrase not receiving stress is the fact that, as standardly assumed, the wh-phrase moves to the SpecCP position to satisfy the wh-feature in C. The movement of the wh-phrase out of the focused position leads to the wh-phrase escaping focus stress. As a result of the movement to SpecCP, the focused position marked for focus stress is deemed phonologically null, and stress assignment is determined solely by the default sentential/nuclear stress rule. (For a discussion of the interaction between focus stress and the default sentential stress, see Kahnemuyipour 2004.) Thus, the stress on the verb in (11) is determined by the default sentential/nuclear stress rule.

(11) What did Helen review?

When, on the other hand, the wh-phrase is left in-situ in these languages, either in multiple wh-questions or in echo questions, the in-situ wh-phrase receives sentential stress. This is shown in the examples in (12).

(12) a. Who reviewed what?  
b. (I didn't quite catch you!) Who reviewed the book?

If the above analysis is on the right track, in languages which mark focus prosodically, sentential stress emerges as a property distinguishing a wh-movement from a focus-fronting language. In a language which marks focus prosodically and fronts the wh-word, this fronted position has to be a focus position if the wh-word is stressed, and it has to be a special wh-position (like SpecCP) if it is not stressed.<sup>6</sup> A question remains as to whether wh-movement

<sup>5</sup> The difference between wh-in-situ and focus-fronting languages with respect to movement and stress can be compared to the case of information and contrastive focus, where both types of elements receive prominence, but according to Kiss (1998), only contrastive focus involves movement. Extending this to the wh-questions debate, one can say that in both types of languages, wh-phrases are focused and stressed, with their only difference being that in one type, wh-in-situ languages, the information focus strategy is used, while in the other, focus-fronting languages, the contrastive focus strategy is used.

<sup>6</sup> This idea is challenged by proposals which take the movement of the first wh-phrase in a multiple wh-fronting language to be wh-movement and the rest focus fronting (e.g. Bošković 1997) or those who take all the movements to be wh-movement (Alboiu 2002). One would expect all but the first wh-phrase to be stressed under the former view and none to be stressed under the latter view. This prediction does not seem to be borne out.

languages such as English involve a focus-feature in addition to a *wh*-feature. I take the answer to this question to be affirmative (see also Sabel 2000 and den Dikken 2003). There is suggestive evidence from stress discussed in the next subsection supporting this position.

## 2.5. Intermediate Focus Position

We ended the previous subsection with a question on whether an English *wh*-phrase moves directly from its merge position to SpecCP or whether it moves through an intermediate focus position. It has been proposed on syntactic grounds that *wh*-movement in English occurs via an intermediary focus position (see, for instance, den Dikken 2003). In what follows, I use some stress facts about D-linked *wh*-questions, due to Bresnan (1971), to support this claim. The D-linked *wh*-question stress facts are illustrated in the contrast in (13). In the non-D-linked *wh*-question in (13a), the verb receives sentential stress in a manner discussed above. In the D-linked *wh*-question in (13b), however, the stress on *book* is a surprise.

- (13) a. What did Helen review?  
 b. Which book did Helen review?

If we take the whole *wh*-phrase in (13b) to have moved to the SpecCP position, we would expect it to evade sentential stress similarly to its non-D-linked counterpart. If, on the other hand, we separate the movement of the *wh*-word *which* from the head noun *book*, we may pave the way for an explanation of these facts.<sup>7</sup> Let us see how we can implement this notion to account for our contrast in (13).

The simplest implementation of this idea may be to take *book* to receive stress in its merge object position based on the default Sentential/Nuclear Stress Rule and its final surface position to be due to PF movement. This analysis, however, appears to face a problem on the LF side. Under this view, the head noun is in the low object position throughout syntax. Certain binding facts, however, indicate that the object noun has to be syntactically at least higher than the subject. Let us consider the binding facts exemplified in (14). In (14a), we are dealing with a Condition A violation, where the reciprocal *each other* is simply ‘too far’ from *Kate and Tom* to be bound by it. (14b) shows that the *wh*-counterpart is grammatical, indicating that the whole object is higher than the subject of the embedded clause.

<sup>7</sup> The idea that in a *wh*-DP, it is the *wh*-determiner that satisfies the *wh*-feature and the noun simply pied-pipes with it is fairly standard (see, for example, Sportiche 2003). Empirical support for the separation of the *wh*-determiner and the head noun comes from languages in which these elements can surface in non-adjacent positions (see, for example, Corver 1990 for Polish and Russian, Baker 1996 for Mohawk and Androutsopoulou 1997 for Greek). An example from Polish is given in (i).

(i) **Jaki**<sub>1</sub> wykreçiles [e<sub>1</sub> **numer**]                      Polish: Corver 1990: 330  
 which you-dialed                      number  
 ‘Which number did you dial?’

- (14) a. \*Kate and Tom thought Helen reviewed books about each other.  
 b. Kate and Tom wonder which books about each other Helen reviewed.

We are thus facing a dilemma. From a prosodic perspective, the object head noun has to be in a stress position. Meanwhile, given the syntactic binding facts, this position cannot be the internal argument merge position, but rather a position at least higher than the subject. To solve this problem, I suggest that in English the *wh*-phrase as a whole moves to a focus position higher than the subject to satisfy the formal focus requirement. This movement is followed by the movement of the *wh*-word to SpecCP to satisfy the *wh*-requirement.<sup>8</sup>

## 2.6 Wh-questions: A Unified Picture

The difference between *wh*-movement and *wh*-in-situ is typically captured by feature strength in the minimalist literature, where it is suggested that the *wh*-feature is strong in *wh*-movement languages and weak in *wh*-in-situ languages with the checking of strong features requiring overt movement. It was suggested above that *wh*-elements involve focus-features as well. I suggest the feature specification in (15) for the different types of languages, with boldface marking strong features.<sup>9</sup>

- (15) Feature specification of *wh*-questions

<i>wh</i> -in-situ:	<i>wh</i> -feature	focus-feature
focus-fronting:	<i>wh</i> -feature	<b>focus-feature</b>
<i>wh</i> -movement:	<b><i>wh</i>-feature</b>	<b>focus-feature</b>

The result of the feature specification in (15) would be such that in *wh*-in-situ languages, both *wh*- and focus-features are checked covertly. In focus-fronting languages, the focus-feature is checked overtly, while the *wh*-feature is checked covertly, which leads to the surface realization of the *wh*-phrase in the focus position. In a *wh*-movement language, both focus- and *wh*-features are checked overtly, leading to the surface realization of the *wh*-element in the SpecCP position.

In the following section we turn to the issue of partial *wh*-movement, encountered in some *wh*-movement languages such as German.

<sup>8</sup> A question may arise as to why, in cases of auxiliary inversion, the auxiliary cannot intervene between the head noun, which is in the focus position, and the *wh*-word, which is in SpecCP (e.g. \*Which is book Kate reading? vs. Which book is Kate reading?). One way to handle this problem is to assume a refined CP structure à la Rizzi (1997) and suggest that, in English auxiliary inversion, the auxiliary moves to a head lower than the Focus position, for instance to Fin. Alternatively, one can attribute the obligatory adjacency of the head noun and the *wh*-determiner to some English-specific PF requirement. Under this view, the head noun is in an intermediate focus position at the point of stress assignment but joins the *wh*-determiner due to a late PF rule.

<sup>9</sup> Sabel (2000) proposes a similar featural breakdown, but the values he attributes to these features are different from the above proposal in important ways.

### 3. Long-distance Wh-questions and Partial Wh-movement

In this section, we will consider the behaviour of long-distance wh-questions across languages focusing on a comparison between German and Persian with respect to partial wh-movement.

#### 3.1 German

A phenomenon observed in some wh-movement languages when forming long-distance wh-dependencies is partial wh-movement (or scope-marking), shown for German in (16a), where the wh-scope marker *was* ‘what’ is in the matrix SpecCP, and the wh-phrase *wen* ‘whom’ is in the embedded SpecCP (see, e.g. McDaniel 1989, all the papers in Lutz, Müller, and von Stechow 2000a, for different proposals to account for the phenomenon).<sup>10</sup> Meanwhile, in (most varieties of) German the successive-cyclic movement of the wh-phrase to the matrix SpecCP, the only possible strategy in English, is also allowed, as shown in (16b). Crucially, partial wh-movement is impossible if there is no *was* in the matrix SpecCP, as shown in (16c).

- (16) a.  $[_{CP} \text{Was}_{WH} \text{ glaubst du } [_{CP} \text{wen}_1 \text{ Johan } t_1 \text{ gesehen hat}]]$   
           believe you   whom Johan   seen   has
- b.  $[_{CP} \text{Wen}_1 \text{ glaubst du } [_{CP} t'_1 \text{ Johan } t_1 \text{ gesehen hat}]]$   
           whom   believe you   Johan   t\_1   seen   has
- c. \* $[_{CP} \text{Du}_{WH} \text{ glaubst du } [_{CP} \text{wen}_1 \text{ Johan } t_1 \text{ gesehen hat}]]$   
           you believe   whom   Johan   seen   has  
           ‘Who do you believe that Johan saw?’

A question arises as to why German and English, both wh-movement languages, behave differently with respect to partial wh-movement. This could be attributed to a morphological/lexical difference between the two languages where only German allows movement of a subset of the features which make up a wh-element to satisfy the strong wh-feature (see Cheng 2000 for a proposal along these lines, but see Sabel 2000 for a different proposal). This question is not of central interest to us in this paper. Rather, we are interested in the properties that differentiate wh-movement and non-wh-movement languages. With this in mind, let us turn to long-distance wh-questions in a non-wh-movement language, namely Persian.

#### 3.2 Persian

Long-distance wh-questions in Persian exhibit a pattern shown in (17) which at first glance resembles partial wh-movement.

<sup>10</sup> Another phenomenon (possibly) related to the partial wh-movement is the wh-copy construction, where a copy of the wh-phrase is found in the SpecCP of the embedded clause and another in the SpecCP of the matrix clause. For a discussion of this construction, see Felser (2004), Nunes (2004), Bruening (2006), among others.

- (17) Hasan fekr mi-kon-e (ke) Ali kojaa raft  
 Hasan think DUR-do-3SG that Ali where went  
 ‘Where does Hasan think Ali went?’

A closer look at (17) reveals an obvious difference with the German partial wh-movement in (16a). While in (16a), there is still a wh-element in SpecCP of the main clause, such an element is missing in (17). The difference between Persian and German is totally expected, given the feature specification in (15). In Persian, where only the focus feature is strong, the sentence is grammatical as long as the wh-element has moved overtly to a focused position (in the embedded or in the matrix clause). In German, the strong wh-feature in C needs to be satisfied overtly, resulting in (16a) (or 16b). In other words, given the feature specification in (15), one would expect all non-wh-movement languages to behave like Persian in not exhibiting partial wh-movement of the kind found in German and only wh-movement languages such as German allowing such a construction. Under this view, partial wh-movement with scope-marking in the matrix clause can only occur in wh-movement languages and one lacking a scope-marking in the matrix clause can never occur in a wh-movement language.

In the above discussion, after a comparison between long distance wh-questions in German and Persian, we concluded that partial wh-movement can only occur in wh-movement languages. The problem with this claim is that there appear to be non-wh-movement languages with partial wh-movement. In the next subsection, we will look at Hindi which is the best studied case of such languages (see, for example, Mahajan 1990, 2000, Dayal 1994).

### 3.3 Hindi

Hindi, a known wh-in-situ language<sup>11</sup>, has a construction which is very much similar to the German partial wh-movement construction. This is illustrated in (18a) (data from Mahajan 2000). Note the existence of *kyaa* ‘what’ which looks like a scope marker in the matrix clause. Also, note the ungrammaticality of (18b), which stands in sharp contrast to the Persian example in (17). Finally, (18c) shows that the wh-element can be moved to the matrix clause as well. (The equivalent of (18c) is fine in Persian too).

- (18) a. [<sub>CP</sub>Siitaa-ne kyaa socaa [<sub>CP</sub>ki ravii-ne kis-ko dekhaa]] ?  
           S-erg. WH thought that R-erg. who saw
- b. \* [<sub>CP</sub>Siitaa-ne socaa [<sub>CP</sub>ki ravii-ne kis-ko dekhaa ]] ?  
           S-erg. thought that R-erg. who saw
- c. [<sub>CP</sub>Siitaa-ne kis-ko<sub>1</sub> socaa [<sub>CP</sub>ki ravii-ne t<sub>1</sub> dekhaa ]] ?  
           S-erg. who thought that R-erg. saw  
           ‘Who did Sita think that Ravi saw?’

<sup>11</sup> This may be a mischaracterization. According to Brandner (2000; 47: footnote 2), Hindi wh-phrases, just like Persian, have to appear in a preverbal position. What is crucial here is that Hindi is not a wh-movement language.

The question we are dealing with is whether Hindi should be considered a counterexample to the claim made in the previous subsection about the impossibility of partial wh-movement in non-wh-movement languages. To answer this question we need to have a closer look at the analyses proposed for partial wh-movement. In the following section, we briefly review the two major types of analyses provided for this phenomenon.

### 3.4 Direct versus Indirect Dependency<sup>12</sup>

There are two main approaches to partial wh-movement: the direct dependency and the indirect dependency approach.<sup>13</sup> Consider the abstract representation of partial wh-movement in (19).

(19) [CP<sub>1</sub> WH ... V [CP<sub>2</sub> ... XP<sub>wh</sub> ...]]

In the direct dependency approach, wh-scope marking is understood literally; WH is an expletive that marks the scope position of the wh-phrase and a chain is formed between the scope position and XP<sub>wh</sub> (e.g. Riemsdijk 1982, McDaniel 1989, Brody 1995, and many others.) More recently, WH has been suggested to be the PF realization of a feature that has been extracted from XP<sub>wh</sub> (see Cheng 2000).

According to the indirect dependency approach, WH is an ordinary wh-argument that quantifies over propositions (i.e. the kind you need in ‘What<sub>i</sub> do you think t<sub>i</sub>?’) rather than over individuals and that is moved to the matrix SpecCP overtly or covertly. Under this view, CP<sub>2</sub> is syntactically an appositive clause and semantically interpreted as a restriction to the wh-object WH. Thus, according to the latter view, the German sentence in (16a) is interpreted as (based on the interpretation provided in Bruening 2006 for a similar sentence): What proposition [in the form of an answer to the question ‘Who did Johan see?’] do you believe?

Several differences between German and Hindi partial wh-movement have led many scholars to suggest that we are dealing with two distinct phenomena in the two languages. In other words, the two approaches to ‘partial wh-movement’ can be seen as two different strategies. While in German, the direct strategy is used, in Hindi, we are dealing with the indirect strategy. (See, for example, Beck and Berman 2000, Brandner 2000, Cheng 2000; but for a different view, see Dayal 2000, Felser 2004, Bruening 2006). Below, we will briefly consider some of these differences. For a detailed discussion of these and other differences, see the above references.

The examples in (17) reveal a difference between Hindi and German with respect to sensitivity to factive islands. While factive islands are allowed in Hindi (17a), they are not allowed in German (17b). The examples in (18) show that embedded yes-no questions are allowed in Hindi (18a), but not in German

<sup>12</sup> This section is largely based on Lutz, Müller and von Stechow (2000b).

<sup>13</sup> There is a third mixed approach (see, e.g. Fanselow and Mahajan 2000, Horvath 2000) which more or less adopts the syntax of the indirect approach but the semantics of the direct approach. I am abstracting away from this third possibility.

(18b). (These examples are from Cheng 2000, but some missing glosses have been filled in ).<sup>14,15</sup>

(17) Factive islands: allowed in Hindi, not in German

- a. Jaun kyaa jaantaa hai meri kis-se baat karegii  
 J. WH know is M. who-with talk do-FUT  
 ‘Who does John know Mary will talk to?’
- b. \*Was weißt du [CP wen<sub>1</sub> (daß) sie wirklich t<sub>1</sub> liebt]  
 WH know you who that she really loves  
 ‘Who do you know that she really loves?’

(18) Embedded yes-no questions: allowed in Hindi, not in German

- a. tum kyaa socte ho ki meri-ne haans-se baat  
 you WH think are that M.-erg. H.-with talk  
 kiyaa yaa nahiiN  
 do-PAST or not  
 ‘Do you think Maria talked with Hans?’
- b. \*Was glaubst du ob die Maria mit dem Hans  
 WH believe you whether the M. with Art. H.  
 gesprochen hat?  
 spoken has  
 ‘Do you think Maria talked with Hans?’

Given the differences between Hindi and German, I conclude that Hindi should not be taken as a counterexample to the claim that partial wh-movement does not occur in non-wh-movement languages. Under this view, what is found in Hindi should be seen as a different type of phenomenon altogether. This raises the obvious question of why such a phenomenon exists in Hindi, but not in Persian. Put differently, why does Hindi not allow the question marker to remain in the embedded clause, with no overt wh-element appearing in the main clause? Why is the wh-element in the main clause needed in Hindi? A tentative answer may lie in Dayal’s (1996) proposal (cited in Watanabe 2001) which takes wh-phrases in Hindi (and similar languages) to be strongly clause-bound to the extent that they do not allow covert (or LF) movement of the wh-phrase

<sup>14</sup> Another piece of evidence against treating the scope marker (as is suggested by the proponents of the Indirect approach) as a wh-argument in German comes from the fact that it cannot remain in-situ in multiple wh-questions or echo questions, constructions which otherwise allow a wh-element to remain in-situ (see Brandner 2000).

<sup>15</sup> One piece of evidence that is taken as argument for the Indirect approach for both German and Hindi is that partial wh-movement exhibits sensitivity to negative islands in both languages. Proponents of the Direct approach posit independent reasons for negative islands (see, for example, Beck and Berman 2000).

outside the clause they are contained in.<sup>16</sup> As a result, Hindi has to resort to a different strategy to make long-distance wh-questions. Dayal (1996) claims that the clause-boundedness in Hindi wh-questions comes from the islandhood of the complement clause, arguing that finite complement clauses are extraposed in Hindi. I leave a closer look at the difference between Hindi and Persian with respect to ‘partial wh-movement’ for future research.

#### 4. Conclusion

I have argued in this paper that in a language which marks focus prosodically, the prosodic behaviour of a moved wh-phrase can be taken as an indication of whether the language is a focus-fronting language or a wh-movement language. I have also proposed that partial wh-movement with scope-marking in the matrix clause cannot occur in a non-wh-movement language and one lacking a scope-marking in the matrix clause cannot occur in a wh-movement language. It was argued that the “partial wh-movement” found in Hindi should be treated as a separate phenomenon. To further evaluate these claims, one needs to look at the prosodic behaviour of wh-questions in a wider range of languages and other claimed cases of partial wh-movement in non-wh-movement languages. Finally, it would be interesting to put together the two ideas and study the prosodic behaviour of ‘partial’ wh-movement constructions in search for a clue to their syntax.

#### References

- Alboiu, Gabriela. 2002. *The features of movement in Romanian*. Bucharest University Press.
- Androutsopoulou, Antonia. 1997. Split-DPs, focus and scrambling in Modern Greek. *Proceedings of WCCFL 16*: 1-16.
- Aoun, Joseph, and Yen-hui Audrey Li. 1993. On some differences between Chinese and Japanese wh-elements. *Linguistic Inquiry* 24, 365-72.
- Baker, Mark C. 1996. *The polysynthesis parameter*. Oxford: Oxford University Press.
- Beck, Sigrid, and Stephen Berman. 2000. Wh-scope marking: Direct vs. indirect dependency. In *Wh-scope Marking*, eds. Uli Lutz, Gereon Müller and Arnim von Stechow, 17-44. Amsterdam: John Benjamins.
- Bošković, Željko. 1997. Superiority effects with multiple wh-fronting in Serbo-Croatian. *Lingua* 102: 1-20.
- Brandner, Ellen. 2000. Scope marking and clausal typing. In *Wh-scope Marking*, eds. Uli Lutz, Gereon Müller and Arnim von Stechow, 45-75. Amsterdam: John Benjamins.
- Bresnan, Joan. 1971. Sentence stress and syntactic transformations. *Language* 47(2), 257-281.
- Brody, Michael. 1995. *Lexico-Logical Form*. Cambridge: MIT Press.
- Bruening, Benjamin. 2006. Differences between the wh-scope-marking and wh-copy constructions in Passamaquoddy. *Linguistic Inquiry* 37(1), 25-49.

---

<sup>16</sup> Recall that according to the feature specification in (15), even in non-wh-movement languages such as Persian, the wh-element has to move to the SpecCP of the main clause. This movement, however, is taken to be covert.

- Cheng, Lisa. 2000. Moving just the feature. In *Wh-scope Marking*, eds. Uli Lutz, Gereon Müller and Arnim von Stechow, 77-99. Amsterdam: John Benjamins.
- Chomsky, Noam. 1971. Deep structure, surface structure and semantic interpretation. In *Semantics: An interdisciplinary reader in philosophy, linguistics and psychology*, eds. Danny Steinberg and Leon Jakobovits, 183-216. Cambridge: Cambridge University Press.
- Chomsky, Noam. 1976. Conditions on rules of grammar. *Linguistic Analysis* 2, 303-351.
- Corver, Norbert. 1990. *The syntax of left branch extraction*. Doctoral Dissertation. University of Tilburg.
- Dayal, Veneeta. 1994. Scope marking as indirect WH dependency. *Natural Language Semantics* 2:137-170.
- Dayal, Veneeta. 1996. *Locality in wh-quantification*. Dordrecht: Kluwer.
- Dayal, Veneeta. 2000. Scope marking: Cross-linguistic variation in indirect dependency. In *Wh-scope Marking*, eds. Uli Lutz, Gereon Müller and Arnim von Stechow, 157-193. Amsterdam: John Benjamins.
- Fanselow, Gisbert and Anoop Mahajan. 2000. Towards a minimalist theory of wh-expletives, wh-copying and successive cyclicity. In *Wh-scope Marking*, eds. Uli Lutz, Gereon Müller and Arnim von Stechow, 195-230. Amsterdam: John Benjamins.
- Felser, Claudia. 2004. Wh-copying, phases and successive cyclicity. *Lingua* 114:543-574.
- Horvath, Julia. 1986. *Focus in the theory of grammar and the syntax of Hungarian*. Dordrecht: Foris.
- Horvath, Julia. 2000. On the syntax of “wh-scope marker” constructions: Some comparative evidence. In *Wh-scope Marking*, eds. Uli Lutz, Gereon Müller and Arnim von Stechow, 271-316. Amsterdam: John Benjamins.
- Huang, C.-T. James. 1982. *Logical relations in Chinese and the theory of grammar*. Doctoral dissertation, MIT.
- Jackendoff, Ray. 1972. *Semantic interpretation in Generative Grammar*. Cambridge: MIT Press.
- Kahnemuyipour, Arsalan. 2001. On wh-questions in Persian. *Canadian Journal of Linguistics* 46(1/2), 41-61.
- Kahnemuyipour, Arsalan. 2004. *The Syntax of Sentential Stress*. Doctoral dissertation, University of Toronto.
- Kiss, Katalin. E. 1998. Identificational focus and information focus. *Language* 74: 245-273.
- Ladd, D. Robert. 1996. *Intonational Phonology*. New York: Cambridge University Press.
- Lasnik, Howard, and Mamoru Saito. 1984. On the nature of proper government. *Linguistic Inquiry* 5, 535-71.
- Lutz, Uli, Gereon Müller, and Arnim von Stechow. 2000a. *Wh-scope marking*. Amsterdam: John Benjamins.
- Lutz, Uli, Gereon Müller, and Arnim von Stechow. 2000b. Introduction. In *Wh-scope Marking*, eds. Uli Lutz, Gereon Müller and Arnim von Stechow, 195-230. Amsterdam: John Benjamins.
- Mahajan, Anoop. 1990. *The A/A-bar distinction and movement theory*. Doctoral dissertation. MIT.
- Mahajan, Anoop. 2000. Towards a unified treatment of wh-expletives in Hindi and German. In *Wh-scope Marking*, eds. Uli Lutz, Gereon Müller and Arnim von Stechow, 317-332. Amsterdam: John Benjamins.
- McDaniel, Dana. 1989. Partial and multiple wh-movement. *Natural Language and Linguistic Theory* 7, 565-604.
- Ndayiragije, Juvénal. 1999. Checking economy. *Linguistic Inquiry* 30: 399-444.

- Nunes, Jairo. 2004. *Linearization of chains and sideward movement*. Cambridge: MIT Press.
- Paul, Hermann. 1888/1970. *Principien der Sprachgeschichte / Principles of the history of language*. College Park: McGrath Publishing Co. Originally published in 1888, translated from the original by H. A. Strong.
- Riemsdijk, Henk. van. 1982. Correspondence effects and the Empty Category Principle. *Tilburg Papers in Language and Literature 12*. University of Tilburg.
- Rizzi, Luigi. 1997. The fine structure of the left periphery. In *Elements of grammar: Handbook in generative syntax*, ed. Liliane Haegeman, 281-337. Dordrecht: Kluwer.
- Rochemont, Michael. 1986. *Focus in Generative Grammar*. Amsterdam: John Benjamins.
- Sabel, Joachim. 2000. Partial wh-movement and the typology of wh-questions. In *Wh-scope Marking*, eds. Uli Lutz, Gereon Müller and Arnim von Stechow, 409-446. Amsterdam: John Benjamins.
- Sportiche, Dominique. 2003. Reconstruction, binding and scope. Ms., UCLA.
- Watanabe, Akira. 2001. Wh-in-situ languages. In *The Handbook of Contemporary Syntactic Theory*, eds. Mark Baltin and Chris Collins, 203-225. Oxford: Blackwell.
- Zubizarreta, Maria L. 1998. *Prosody, focus, and word order*. Cambridge: MIT Press.