

# Partial Wh-movement in Kashmiri

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## Abstract

In this paper I investigate the structure of *wh*-questions in Kashmiri. I demonstrate two strategies used in Kashmiri: *what*-strategy, where the *wh*-phrase raises to the second position in the left periphery of the embedded clause, and the highest matrix clause has the question marker *kyaa* ‘what’ in its left periphery; and *copy*-strategy, where the scope-marking position is marked by the copy of the *wh*-phrase, and not by the most unmarked *wh*-word *kyaa* ‘what’. I argue for the “direct dependency” approach to partial *wh*-movement, and propose how the two strategies can be derived. In conclusion, I examine how my analysis can be extended to account for differences between German and Kashmiri patterns with respect to *wh*-movement.

## 1. Introduction

Partial *wh*-movement is a phenomena observed in a variety of languages. In this paper I will examine the previously unpublished data from Kashmiri. The instance of the partial *wh*-movement observed in this language differs from the other languages studied previously. The examples I use in the paper are from Wali and Koul 1997, or from my informants.

Kashmiri is an Indo-Aryan language spoken in the Jammu and Kashmir state in India and also in the parts of Pakistan. Other languages belonging to the same family are Hindi, Punjabi, Sindhi, and Marathi. Several unique features distinguish Kashmiri grammar from the grammars of the neighboring languages. The most striking difference between Kashmiri and other Indo-Aryan languages is that Kashmiri exhibit verb-second order, unlike other languages from the area, which are mostly verb-final.

This paper concentrates on the *wh*-questions in Kashmiri. In Section 2 I will present the basic facts about the left periphery of the Kashmiri root and subordinate clauses. Section 3 is dedicated to the strategies of the formation of *wh*-questions in Kashmiri. The direct questions are taken into account, and two possible constructions are presented. One of these constructions is unique to Kashmiri, and to my understanding is not attested for any other language. Also, I outline the previous approaches to the phenomena of the partial *wh*-movement, and argue, that the indirect dependency approach over lines of Mahajan (1996) is not applicable to the Kashmiri. In Section 4 I propose the analysis involving the featural movement, and generalized pied-piping. I claim that this analysis can account for the facts observed in Kashmiri, and is uniform in the sense that both strategies of the forming embedded questions can be accounted along the same lines. Section 5 deals with the residual issues, extending the analysis to the partial *wh*-movement in German. In the conclusion (Section 6) I briefly outline the proposed analysis and list some questions which need further investigation.

## 2. Verb-second order and obligatory topicalization

The root clauses of the Kashmiri sentence exhibit verb-second pattern, with the finite verb immediately following the subject, which occupies the first position of the clause. However, not only subjects can occur sentence-initially. Any constituent can be topicalized and take a preverbal position in the left periphery of the Kashmiri sentence. The example (1a) is a basic order with the subject preceding the verb, while in (1b) and (1c) the indirect object and direct object respectively underwent topicalization, and occupy the sentence-initial position. The example (1d) shows the availability of the adjuncts (adverbs) topicalization.

- (1) a. aslamān dits mohnas kitaab raamini khəətri raath gari  
Aslam.ERG gave Mohan.DAT book Ram.DAT for yesterday home.ABL  
‘Aslam gave Mohan a book for Ram yesterday at home’ (Wali and Koul, 1997)

- b. mohnas dits aslaman kitaab raamini khætri raath gari
- c. kitaab dits aslaman mohnas raamini khætri raath gari
- d. raath dits aslaman mohnas kitaab raamini khætri gari

The fact that examples (1b)-(1c) are indeed are instances of topicalization, i.e. dislocation of the constituent via A-bar movement to the higher projection in the left periphery can be shown using the binding theory facts.

- (2) a. tim<sub>i</sub> cha akh ekyi-sinz<sub>i</sub> kath boozaan  
 they AUX-NEG each other-of story listen  
 ‘They<sub>i</sub> do not listen to each other<sub>i</sub>’s story’ (Bhatt, 1999)
- b. akh ekyi-sinz<sub>i</sub> kath chi-na tim<sub>i</sub> boozan  
 each other-of story AUX-NEG they listen  
 ‘They<sub>i</sub> do not listen to each other<sub>i</sub>’s story’

Example (2a) does not present any problems for the Binding Principle A: the reflexive is bound by its antecedent, and no violation of the Principle A occurs. In example (2b) reflexive precedes its antecedent. The apparent violation of the Binding Principle A can be explained under the assumption that the constituent, containing the reflexive, *akh ekyi-sinz kath* ‘each other’s story’ has undergone A-bar movement to the specifier of the higher functional category, say TopP, and undergoes reconstruction thereafter. Notice, that in Kashmiri the verb obligatorily moves to the head of TopP, and therefore occupies the second position within the clause.

The fact that topicalization in Kashmiri is obligatory will follow from the contrast between the following two examples:

- (3) a.\* kaN<sub>h</sub> oosuyi tse thsaanDaan  
 someone was you looking  
 ‘Someone was looking for you’ (Bhatt, 1999)
- b. tse oosuyi kaN<sub>h</sub> tshaanDaan  
 you was someone looking  
 ‘Someone was looking for you’

In Kashmiri the phrase *kaN<sub>h</sub>* ‘someone’ can not be topicalized (and therefore cannot raise to the Spec,TopP), and if the topicalization were not mandatory, it is unclear why in the example (3a) it cannot stay in Spec,TP position, rendering the sentence grammatical.

Only one topic is allowed in a sentence. Therefore, the following sentences are all ungrammatical:

- (4) a.\* aslaman mohnas dits kitaab  
 Aslam.ERG Mohan.DAT gave book  
 ‘Aslam gave Mohan a book’
- b.\* aslaman kitaab dits mohnas

The word order in Kashmiri subordinate clause is the same as in the root clause. The complementizer does not count as a first position with respect to the verb. Therefore, Kashmiri patterns in this respect with Yiddish:

- (5) a. tæmis chu pataa [(ki) aslam-an dits mohnas raath gær]  
 he.DAT AUX know that Aslam-ERG gave.FSG Mohan.DAT yesterday watch  
 ‘He knows that Aslam gave a watch to Mohan yesterday’ (Wali and Koul, 1997)
- b. Avrom gloybt [az Max shikt avek dos bukh]  
 Avrom believes that Max sends away the book

‘Avrom believes that Max sends the book away’

(Yiddish, Diesing, 1990)

In order to account for this fact, we must postulate existence of the projection, containing subordinators like *ki* ‘that’, which is located higher than the TopP:

(6) [CP *ki* [TopP *aslam-an dits* [TP ...

Therefore, under the split CP hypothesis (Rizzi, 1997), verb-third in the clauses with the overt complementizer like in Yiddish and Kashmiri can be explained.

### 3. Strategies of Forming *wh*-questions

In this section of the paper I will discuss the strategies of the *wh*-questions formation in Kashmiri.

#### 3.1. Simple Wh-questions

In *wh*-questions in Kashmiri the question word should immediately precede the verb, and in the preferred word order the question word follows the topic. Therefore, in Kashmiri *wh*-questions the verb occupies third position, and preferred order of the words is exemplified below:

(7) Topic Wh Verb

The verb cannot precede the *wh*-phrase, and only one element may precede the question word. The questions with the absent topicalized element, in which the *wh*-phrase occupies the first position are also acceptable, but are not preferred by the native speakers. The following examples show the discussed generalizations:

- (8) a. Sheilas kem heev raath panini gari akh nev kitaab?  
Sheila.DAT who showed.FSG yesterday own home.LOC a new book  
‘Who showed new book to Sheila at his home yesterday?’  
b. Akh nev kitaab kem heev raath shiilas panini gari?  
a new book who showed yesterday Sheila own home  
c. ?kem heev raath shiilas panini gari akh nev kitaab?  
who showed yesterday ...  
d.\* shiilas heev kem raath panini gari akh nev kitaab?  
sheila showed who yesterday own house a new book  
e.\* shiilas raath kem heev panini gari akh nev kitaab?  
sheila yesterday who showed ...

Examples (8a) and (8b) demonstrate the preferred word order for the question formation. Example (8c) is not a preferred order with no topicalized constituent preceding the *wh*-word. In (8d) the verb is located before the question word, which triggers the ungrammaticality of this sentence. Finally, in the sentence (8e) there are two elements preceding the *wh*-word, and therefore the corresponding example is ungrammatical.

In order to account for this pattern, I will postulate existence of the Focus projection FocP, located between TP and TopP, and assume that the *wh*-phrase must obligatorily move to the Spec,FocP (I follow standard assumption that *wh*-phrases are inherently focused):

(9) ... [CP (*ki*) [TopP topic [FocP (*wh*) verb [TP ... *t*<sub>verb</sub>

Furthermore, the account from the previous section in which I claim that the verb raises to the Top position must be revised. I argue, that the FocP projection is present even if nothing is focused. In order to account for the data presented above I need to assume that the verb obligatorily raises to Foc position, even in the

sentences without focused constituent. For example, the partial structure of the sentence in (1a) is

- (10) [<sub>TopP</sub> aslaman [<sub>FocP</sub> ∅ dits [<sub>TP</sub> .... mohnas ....  
 Aslam.ERG gave Mohan.DAT ....

This structure of the left periphery of the Kashmiri clause allows us to account for various facts observed before, such as

1. Complementizer always precedes other constituents;
2. In case of declarative sentences, the verb follows the topicalized constituent;
3. In case of interrogatives, the verb always occurs in the position immediately following *wh*-phrase; *wh*-phrase is preceded by the topicalized constituent;
4. Only one topicalized constituent may occur in the sentence.

### 3.2. Embedded Direct Questions

The way of forming embedded direct questions in Kashmiri is of particular interest, since one of the patterns exhibited in this language is unique and to my understanding was never discussed before. There are two possible ways of forming the direct *wh*-questions in Kashmiri.

In the first pattern (I will refer to this strategy as “*what*-strategy”) the *wh*-phrase must raise to the second position in the left periphery of the embedded clause, and the highest matrix clause must have the question marker *kyaa* ‘what’ in its left periphery before the verb. The strategy is exemplified in the following examples, when the subject (11a), object (11b), indirect object (11c) and adverbs (11d) are questioned:

- (11) a. tse KYAA chu-y baasaan (ki) mohn-as kem dits kitaab?  
 you what AUX believe that Mohan-DAT who gave book  
 ‘Who do you think gave a book to Mohan?’  
 b. tse KYAA chu-y baasaan (ki) raaj-an kyaa dyut mohn-as?  
 you what AUX believe that Raj-ERG what gave Mohan-DAT  
 ‘What do you think Raj gave to Mohan?’  
 c. tse KYAA chu-y baasaan (ki) raaj-an kemis dits kitaab?  
 you what AUX believe that Raj-ERG who.DAT gave book  
 ‘Whom do you think Raj gave a book?’  
 d. tse KYAA chu-y baasaan (ki) raaj-an kaazi dits mohn-as kitaab?  
 you what AUX believe that Raj-ERG why gave Mohan-DAT book  
 ‘Why do you think Raj gave a book to Mohan?’

Note however, that in the case of more than two embedded clauses, the *kyaa* question marker appears only in the highest clause, and not in the intermediate ones:

- (12) tse KYAA chu-y baasaan me chi soochaan raj-an kyaa dyut Mohn-as?  
 you what AUX believe I AUX think Raj-ERG what gave Mohan-DAT  
 ‘What do you believe I think Raj gave to Mohan?’

The other strategy possible in Kashmiri will be referred to as “*copy*-strategy”. In this strategy, the scope-marking position is marked by the copy of the *wh*-phrase, and not by the most unmarked *wh*-word *kyaa* ‘what’. This strategy is exemplified below in (13a). Notice, that “*copy*-strategy” is impossible with *why*-questions, and the only way to form a direct *why*-question is to use the “*what*-strategy” (13b):

- (13) a. tse kemis chu-y baasan me chu soochaan Raaj kemis dihey kitaab?  
 you who AUX believe I AUX think Raj who give book  
 ‘Whom do you believe I think Raj gave a book to?’

- b. tse kyaa / \*kaazi chu-y baasan me chu soochan kaazi John'an heyut book?  
 you what/ why AUX believe I AUX think why John.ERG bought book  
 'Why do you think John bought book'

Both of the strategies described above are sensitive to the factive islands. They confined only to nonfactive verbs, like *baasan* 'to believe', *soochun* 'to think', *yatshun* 'to wish'. None of those strategies can be used with factive verbs like *zaanun* 'to know'. As Wali and Koul, 1997 notice, there is no way in Kashmiri to ask a question, corresponding to the English 'What do you know that Mary likes?'

The "what-strategy" of forming long direct question in Kashmiri is reminiscent of the partial *wh*-movement, the strategy of forming questions characterized by the following two properties by Cheng, 2000:

1. A *wh*-word is moved half-way to the specifier of the CP where *wh*-word does not take its scope;
2. At the CP where the *wh*-word takes its scope, the scope marker is inserted.

The partial *wh*-movement of this type exists in various languages, including but not limited to Hindi (14a), German (14b), Iraqi Arabic, Afrikaans. Several analyses have been proposed for partial *wh*-movement, which can be roughly divided into two families.

- (14) a. Raamne KYAA socaa ki ravine KYAA kahaa ki kOn sa aadmii aayaa thaa?  
 Raam.ERG what thinks that Ravi.ERG what said that which man came  
 'Which man does Ram think Ravi said came?' (Hindi, Mahajan, 2000)
- b. WAS meinst du WAS sie glaubt wen Fritz liebt?  
 what think you what she believes who F. loves  
 'Who do you think she believes Fritz loves?' (German, Fanselow and Mahajan, 2000)

The first family is called "direct dependency" approach (McDaniel, 1989), which assumes that the scope marker in the upper clause and the *wh*-phrase, present in the lower position, are members of the same chain.

The second family consists of analyses involving the "indirect dependency" approach. In the approach of Dayal, 1994, 2000, the *wh*-phrase appearing in the scope bearing position is argumental: it quantifies over the domain of propositions.

- (15) a. Was glaubst du?  
 what believe you  
 'What do you believe?'
- b.  $\lambda p (\exists q, q \text{ is a proposition} \ \& \ p = \hat{\text{think}}(\text{you}, q))$
- c. was glaubst du wer gekommen ist?  
 what believe you who come is  
 'Who do you believe has come?'
- d.  $\lambda p (\exists x (p = \hat{\text{has-come}}(x)))$

For example, assuming that for the sentence in (15a) its semantic representation is given in (15b), and the subordinate clause of (15c) has the representation in (15d), the interpretation of (15c) is as in (16):

- (16)  $\lambda p (\exists q \exists x (q = \hat{\text{has-come}}(x) \ \& \ p = \hat{\text{think}}(\text{you}, q)))$

It means, that the question in (15c) is equivalent to something like in (17):

- (17) What do you believe? Who came?

Another approach under the family of "indirect dependency" is a *wh*-expletive approach developed by Mahajan, 1996 and Fanselow and Mahajan, 2000. Under this theory, *what*-phrase appearing in the scope marking position is replaced by the *wh*-clause at LF. In this case, the LF of (15c) is given in (18):

- (18) [<sub>CP</sub> wer gekommen ist] glaubst du  
       who come        is    believe you

In the subsequent chapter I will argue that indirect dependency approach cannot account for Kashmiri *wh*-question formation.

### 3.3. Against Indirect Dependency Approach

Both strategies of forming the long-distance *wh*-questions in Kashmiri posit problems for the Indirect Dependency Approach.

Consider first the “what-strategy”, when the scope position of the *wh*-phrase is marked by the default *wh*-word *kyaa* ‘what’. As I showed before, only upper and lower clause have filled Specifiers of the Comp, i.e. we find the *kyaa* marker in the upper clause, and *wh*-phrase in the lower clause. The Spec,CP’s of the intermediate clauses are left empty. Under the indirect dependency analysis it would be problematic to explain how the intermediate clauses are interpreted as questions, asking for a propositional arguments, if no *wh*-phrase is present in their Spec,CP positions. This problem might possibly be solved by postulating the existence of the silent *wh*-operator in the intermediate specifiers, but I will not pursue this line of thinking here in the light of the second problem, which I mention below.

The second strategy, i.e. “copy-strategy,” except for the problem mentioned for “what-strategy”, presents another problem for the indirect dependency approach. Under assumption that all clauses except for the lowest one are questions, requiring CPs as answers, it would be impossible to explain why the copy of the *wh*-phrase appears in the Spec,CP position of the highest clause.

Based on the evidence given before and the problems, outlined in this section, I will argue that for both strategies, the *wh*-word occurring in the highest clause is in fact associated with the *wh*-phrase in the lowest clause.

## 4. Analysis

There are several questions we will concentrate on with regards to the data presented above.

1. What is the nature of the *wh*-phrase occurring in the scope bearing position? Is it an expletive, inserted to satisfy some kind of an EPP feature, which is subsequently replaced by the *wh*-phrase (at LF), or it is a spell-out of features, moved to the higher position from the lowest clause?
2. What allows a variation between the *copy*-strategy and *what*-strategy?
3. What forces the *wh*-phrase in the lower clause to move to its left periphery (of the clause, whose CP does not bear any [+wh] features)?
4. Why the intermediate Spec,CPs are all empty, and the lowest one is not?
5. Why the *copy*-strategy is confined only to the argumental *wh*-phrases (*kyaa* ‘what’, *kem* ‘who’), and impossible with adjunct *wh*-phrases (like *kaazi* ‘why’)?

My analysis will take a uniform approach to all strategies of the *wh*-question formation. I will follow Chomsky, 1995 and assume that the *wh*-movement happens in two steps:

1. First, the *wh*-features are moved to the appropriate projection and
2. Second, the phonological material follows the formal features (generalized pied-piping).

The feature movement is done through the Agree operation, when the higher head (goal) probes the lower (probe). The *wh*-feature moves to C to check its uninterpretable feature. Following that operation, the *wh*-phrase is raised to the Spec,CP. This type of the generalized pied-piping is necessary to avoid crash of the derivation at PF.

#### 4.1. Derivation of *what*-Strategy

In this section I will outline the derivation of the *what*-strategy of the formation of direct *wh*-questions in Kashmiri.

- (19) tse kyaa chu-y baasaan raaj-an kemis dits kitaab?  
 you what AUX believe Raj-ERG who gave book  
 ‘Who do you believe Raj gave a book to?’

Under this approach the derivation of the simple sentence as in (19) will proceed as follows:

1. The *wh*-features of the indirect object move to the Spec,CP of the embedded clause (successive cyclic movement to the scope bearing position), followed by
2. the generalized pied-piping of the phonological material and other features, “left behind”, creating a copy of the *wh*-word in the Spec,CP position of the lower clause.
3. Raising of the *wh*-features to the CP of the matrix clause, where they are spelled-out as the most unmarked *wh*-phrase *kyaa*.
4. Chain reduction, which deletes the lower copy of the *wh*-phrase left *in situ* in the embedded clause.

Several questions arise with respect to this derivation. First of all, why the generalized pied-piping occurs only after the first instance of the *wh*-feature movement? Second, why does it need to happen at all in the embedded clause? I will follow the proposal by Cheng, 2000 based on the idea of Chomsky that the generalized pied-piping in the repair strategy preventing the features to be scattered. Cheng following Chomsky assumes that the repair strategy is a mechanism, putting features back into the same category. Therefore, the instance of the generalized pied-piping in the step 2 of the derivation above is the application of the repair strategy in the sense described previously. This argument gives an answer to the question why the *wh*-phrase does not stay *in situ*, i.e. why the generalized pied-piping, i.e. movement of PF-features, happens in the embedded clause.

Also, I would argue that the phonological pied-piping is impossible across the clause boundary in Kashmiri, and therefore, that will account for the impossibility of the copies in the Spec,CP positions of intermediate clauses. In order to support this claim further, more data is needed, but this seems plausible, since Kashmiri does not allow long distance scrambling, and no constituents can usually leave the clause where they were base-generated.

The last step of the derivation involves a chain reduction. Why only *in situ wh*-phrase is reduced in this process? I will claim that only identical links of the chains are reduced in Kashmiri. The only two identical chain links involved in the derivation above are the *wh*-phrase *in situ* position, and a *wh*-phrase moved to the Spec,CP of the embedded clause, since the movement to the Spec,CP of the matrix clause is the movement of only features. Therefore, there are only two identical links, the lowest of which (*wh in situ*) gets eliminated. Now, we will look at the interrogative sentences with more than two clauses, like the one given below:

- (20) [ tse KYAA chu-y baasaan [ me chi soochaan [ mohn-as kem dits kitaab?  
 you what AUX believe I AUX think Mohan-DAT who gave book  
 ‘Who do you believe I think gave a book to Mohan?’

The situation with this example is similar to the situation described above: the *wh*-feature is raised to the C of the lowest clause, and it is followed by the generalized pied-piping, i.e. movement of the *wh*-phrase to the Spec,CP. After that, *wh*-features undergo successive cyclic movement to the C of the matrix clause through the C of the intermediate clause:

- (21) [CP ... wh<sub>4</sub> ... [CP ... wh<sub>3</sub> ... [CP wh<sub>2</sub>+PF<sub>2</sub> ... wh<sub>1</sub>+PF<sub>1</sub> ...

There are two pairs of identical links in the chain: { wh<sub>4</sub>, wh<sub>3</sub> } and { wh<sub>2</sub>+PF<sub>2</sub>, wh<sub>1</sub>+PF<sub>1</sub> }. The lowest link in

each set gets reduced, and the  $wh_4$  in the matrix clause is pronounced as the unmarked *kyaa*.

#### 4.2 Derivation of Copy-Strategy

Now I will draw my attention to the possibility of the copy strategy in Kashmiri. As I mentioned earlier, the copy-strategy is impossible with adjuncts, like *kaazi* ‘why’. Moreover, it is impossible to distinguish the copy-strategy and the what-strategy in the questions with the question word *kyaa* ‘what’. Therefore, I will claim that this strategy is possible only with the who-questions.

In order to provide the analysis, I will take a closer look at the animate interrogatives in Kashmiri. The animate interrogative *kus* ‘who’ inflects for case and number, and also (unlike the inanimate interrogative) shows the gender distinction. The paradigm is given in the following table:

**Table 1. Inflectional paradigm of *kus* ‘who’**

Case	MASCULINE		FEMININE	
	SINGULAR	PLURAL	SINGULAR	PLURAL
NOM	kus	kam	kos	kami
DAT	kemis/kas	kiman	kemis/kas	kiman
ABL	kami	kimav	kami	kimav
ERG	kem'	kimav	kami	kimav

Therefore, I will assume that except for *wh*-feature and phonological features, the animate interrogative has also a set of  $\phi$ -features. I will also assume that when the bundle of *wh*-features and  $\phi$ -features is spelled out, the result is no longer the default *wh*-word, but already an animate interrogative pronoun *kus* ‘who’.

Based on this I will argue, that Kashmiri exhibit optionality whether to raise only *wh*-features, or raise the bundle of *wh*- and  $\phi$ -features. In the case when only *wh*-features are raising, we will get the “*what*-strategy” to arise in the similar manner as the derivations described in the previous section.

However, if the *wh*-features cannot be split from  $\phi$ -features, the chain, arising in the computation will be as follows:

$$(22) \quad [_{CP} \dots wh_4+\phi \dots [_{CP} \dots wh_3+\phi \dots [_{CP} wh_2+PF_2+\phi \dots wh_1+PF_1+\phi \dots$$

After deletion of the copies from the chain, we will end up with  $wh_4+\phi$  in the Spec,CP of the matrix clause, which will be spelled out as *kem* ‘who’, and therefore the copy-construction will surface.

#### 4.3 Islands

Under the approach taken above, the island effects are easy to explain. If we take an assumption that feature movement is sensitive to islands in the same way the adjuncts are, the data accounting for the ungrammaticality of the examples like (23) involving factive islands can be explained.

- (23) \* [ tse KYAA/kem chu-y baasaan [ me chi zaanan [ mohn-as kem dits kitaab?  
 you what/who AUX believe I AUX know Mohan-DAT who gave book  
 ‘Who do you believe I think gave a book to Mohan?’

#### 4.4 Triggers for Partial Movement

What triggers partial *wh*-movement in the case of Kashmiri and what allows the features of the *wh*-phrase to be split up? I will follow the analysis of Cheng, 1991 and claim that in Kashmiri, like in German and Japanese, the *wh*-words have two parts: question part and a personal part, which is used just as personal pronoun. The table below compares the forms of the masculine 3rd-person pronoun and the forms of the *wh*-



question *who*:

**Table 2. Comparison of inflectional paradigms of ‘he’ and ‘who’**

Case	'who'		'he'	
	SINGULAR	PLURAL	SINGULAR	PLURAL
NOM	kus	kam	yi	yim
DAT	kemis	kiman	yemis	yiman
ABL	kami	kimav	yemi	yimav
ERG	kem'	kimav	yem'	yimav

Therefore, we can assume that the *wh*-words in Kashmiri, like in German or Japanese have two parts: *wh*-part and a pronominal part. That allows the split between the *wh*-features and phonological features. *wh*-features are not phonologically realized by itself and are pronounced as a default word if appear by alone in the Spec,CP position of [+wh] CP. However, if the *wh*-features are bundled with  $\phi$ -features, the phonological realization will be the question word *who*.

## 5. Residual issues

### 5.1. Cross-linguistic Variation

In this section I'll account for difference in the partial *wh*-movement constructions observed in Hindi and German as opposed to Kashmiri.

In standard German, the *what*-phrase *was* occurs in all the intermediate CP specifiers, as exemplified below in (24), unlike in Kashmiri, where the *what*-phrase *kyaa* occurs only in the Spec,CP of the highest clause (in the scope marking position).

- (24) WAS meinst du WAS sie glaubt wen Fritz liebt?  
 what think you what she believes who F. loves  
 ‘Who do you think she believes Fritz loves?’ (German, Fanselow and Mahajan, 2000)

How to account for the difference between the two languages within the proposed analysis? I argue that the same analysis, as I provided for Kashmiri can be fully relayed to the German case, with a difference pointed out in (25):

- (25) a. *Chain reduction (Kashmiri)*: phonologically reduce all full copies within a chain.  
 b. *Chain reduction (German)*: phonologically reduce all the LOWEST full copies within a chain.

The difference in the setting of the chain-reduction parameter allows us to account for the difference between German and Kashmiri. This parameter allows for intermediate chain links to be phonologically reduced in Kashmiri under the condition that they are full copies of the material higher in the same chain. In German, the full copies of the material higher in chain are allowed to be reduced only if they are located in the tail of the chain. We already saw how the chain reduction works in Kashmiri. Now I'll demonstrate the reduction process in German based on the example (24). Following the analysis proposed above, the partial structure of the German sentence is given in (26):

- (26) [<sub>CP</sub> ... wh<sub>4</sub> ... [<sub>CP</sub> ... wh<sub>3</sub> ... [<sub>CP</sub> wh<sub>2</sub>+PF<sub>2</sub> ... wh<sub>1</sub>+PF<sub>1</sub> ...

Therefore, the created chain is <wh<sub>4</sub>, wh<sub>3</sub>, wh<sub>2</sub>+PF<sub>2</sub>, wh<sub>1</sub>+PF<sub>1</sub>>. The reduction proceeds from the tail of the chain. The link wh<sub>1</sub>+PF<sub>1</sub> (corresponding to the *wh*-phrase in situ) can be reduced since its full copy (wh<sub>2</sub>+PF<sub>2</sub>) is present in the chain. Furthermore, no other chain links can be reduced based on the parameter in (25).

wh<sub>2</sub>+PF<sub>2</sub> can not be reduced since no other full copies of it appear in this chain, and wh<sub>3</sub> is not phonologically reduced, since it is not at the tail of chain. Therefore, the result of application of the chain reduction process to German will yield the partial *wh*-movement construction when the original *wh*-phrase is moved to the Spec,CP of the lowest clause, and every other higher clause Spec,CP contains *was*-expression.

The situation in Hindi is completely different from the situation in German and Kashmiri. The *wh*-phrase in the embedded clause does not raise to the Spec,CP position at all staying in situ. Therefore, I will argue that Hindi does not exhibit the partial *wh*-movement at all, since for partial *wh*-movement it is necessary that *wh*-phrase moves “half-way,” and not be left in situ. Therefore, for Hindi, I would adopt the indirect dependency approach over the lines proposed by Mahajan, 1996. In his analysis, the *kyaa*-phrase is an expletive inserted to the Spec,CP positions, and it is replaced at LF by the *wh*-clause.

## 5.2 Full Wh-movement in Kashmiri

Wali and Koul, 1997 report that some speakers marginally accept the full *wh*-movement for forming the direct questions, as exemplified in (27):

- (27) a.??raaman kemis vuch ki mohani oos kitaav divaan?  
 Ram.ERG who see that Mohan AUX.PAST book giving  
 ‘Who did Ram see that Mohan was giving a book to?’  
 b.??tse kaazi chu-y baasaan ki raajan aasi ditsmits mohnas kitaab?  
 you why AUX believe that Raj.ERG AUX gave.PERF Mohan.DAT book  
 ‘Why do you believe Raj would have given the book to Mohan?’

Here, the *wh*-phrase *kemis* ‘who’ moved from the embedded clause to its scope marking position in the upper clause. In order to account for this paradigm, I will need to loosen the ban on the movement of the phonological material out of clause, which as I postulate usually applies to Kashmiri. Therefore, I argue that some speakers allow the generalized pied-piping of the phonological features across the clause boundary (even though it is marginal). The chain involved in the derivation of the sentence in (27) consists of three copies of *wh*+PF (in situ, Spec,CP of embedded clause, Spec,CP of the matrix clause):

- (28) [<sub>CP</sub> ... wh<sub>3</sub>+PF<sub>3</sub> ... [<sub>CP</sub> wh<sub>2</sub>+PF<sub>2</sub> ... wh<sub>1</sub>+PF<sub>1</sub> ...

and can be phonologically reduced leaving only the head of the chain (*wh*-phrase in the scope-marking position) pronounced as a full *wh*-phrase. This strategy yields the sentences in (27).

## 6 Conclusion

In this paper I presented the data from Kashmiri exhibiting the strategy (*copy*-strategy) of the partial *wh*-movement, which was not previously attested in the literature:

1. The *wh*-phrase moves to Spec,CP of the embedded lowest clause; and
2. The copy of it appears in the highest clause in the scope marking position.

I proposed the analysis based on the direct dependency approach which accounts for the *copy*-strategy and for the *what*-strategy under the assumption that features of the *wh*-phrase in Kashmiri can split and undergo movement, which is not followed by the generalized pied-piping of the phonological material. Also, in order to account for the difference between *what*-strategy and *copy*-strategy, I proposed that  $\phi$ -features can also be split from the phonological material and can pied-pipe with the moved *wh*-features, giving raise to the *copy*-construction. I accounted for the difference between the embedded questions structure in Kashmiri and German, providing the different chain-reduction processes.

In conclusion, a few words needs to be said about the questions which remain unanswered in this paper. The further work needs to be done about the fact that the generalized pied-piping out of the clause seems to

be banned in Kashmiri. Also, data from the multiple *wh*-questions can provide us with further support for this analysis, however, this data is not yet available. Deeper investigation of islands (including CNPC, subject, and negative) is required to check whether there are more subtle differences between the strategies involved in question formation.

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