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Wh-Expletives in Hindi-Urdu: The vP Phase

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This article addresses *wh*-displacement and *wh*-expletive constructions in Hindi-Urdu, accounting for parametric variation in terms of the properties of the phase-defining heads C and v. This analysis provides an understanding of a systematic set of contrasts between Kashmiri and Hindi-Urdu that suggests that crosslinguistic variation may follow from properties of specifically the phase-defining functional heads. It is then possible to construct a unified account of the various strategies of forming long-distance *wh*-dependencies in the two languages.

Keywords: *wh*-movement, *wh*-expletive, Hindi-Urdu, Kashmiri, phase

1 Introduction

In this article, I address *wh*-displacement and *wh*-expletive constructions in the Indic language Hindi-Urdu. I will consider these constructions in Hindi-Urdu alongside those in the related language Kashmiri, and I will suggest that a unified account of the various strategies of forming long-distance *wh*-dependencies in the two languages can be constructed.

There are two ways to form a long-distance *wh*-dependency in Hindi-Urdu. In the first, depicted in (1), the full *wh*-phrase that originated in the subordinate clause has been displaced into the matrix clause and is found in the canonical preverbal *wh*-position. The semantic correlate of this configuration is interpretation as a root question.

(1) Sita-ne *kis-ko* soca: ki Ravi:-ne ____ dekha:? [Hindi-Urdu]
Sita-ERG who-ACC thought that Ravi-ERG saw
'Who did Sita think that Ravi saw?'

In the second way of forming a long-distance *wh*-dependency, depicted in (2), the full *wh*-phrase appears in the preverbal *wh*-position in the subordinate clause. In the matrix clause, the minimal *wh*-word *kya:* appears in the preverbal position. The result is also a matrix reading.

(2) Sita-ne *kya:* soca: ki Ravi:-ne *kis-ko* dekha:? [Hindi-Urdu]
Sita-ERG EXPL thought that Ravi-ERG who-ACC saw
'Who did Sita think that Ravi saw?'

Superficially, (1)–(2) might appear very similar to long-distance *wh*-dependencies in Kashmiri, illustrated in (3)–(4). However, keep in mind when considering these data that Hindi-Urdu is typically analyzed as a verb-final, *wh*-in-situ language, and Kashmiri as a verb-second language with full *wh*-movement.[1]

(3) Tse *kəm'* chu-y ba:sa:n ki Mohn-as dits kita:b? [Kashmiri]
you who AUX think that Mohan-DAT gave book
'Who do you think gave Mohan the book?'

(4) Tse *k'a:* chu-y ba:sa:n ki Mohn-as *kəm'* dits kita:b? [Kashmiri]
you EXPL AUX think that Mohan-DAT who gave book
'Who do you think gave Mohan the book?'

The earliest treatments of *wh*-movement assumed that such dependencies were of a potentially ''unbounded'' span. Later in the course of research on *wh*-movement, it was argued that constituents were required to move through a sequence of intermediate positions, specifically through the CP layer of each containing clause. Recent research has questioned whether CP is the only intermediate landing site. The concept of the phase (Chomsky 2000) affords equal status to CP and vP and therefore suggests that the edge of vP should be a forced stopping point for long-distance movement as well. An observation supporting the local view of *wh*-movement is that expletive elements in certain languages can be found in exactly those positions proposed as intermediate stopping-off points, specifically in Spec,CP. If this is an accurate understanding of *wh*-movement and its association with the appearance of expletives, then we should expect similar effects wherever intermediate stopping-off points are postulated—in particular, at the edge of vP.

To develop an understanding of constructions of the type (1)–(2) in Hindi-Urdu, I will bring together three current strands of work on *wh*-dependencies. In the first strand of work (Simpson 2000, Manetta 2005b, 2006), it is argued that *wh*-expletives, much like expletives in the A-movement system, are featurally deficient elements in that they possess only uninterpretable features, lacking an interpretation (Chomsky 2000). When these *wh*-expletives are merged into the specifier of a functional head, the *wh*-features on that head are then left free to enter into an Agree relation with (henceforth, Agree with) an unraised *wh*-phrase in its domain. I will claim here that Hindi-Urdu *wh*-expletives have precisely these properties and effects.

The second strand of research relevant here is a specific view of the vP phrase. This strand argues, as mentioned above, that insofar as vP is a phase and v a phase-defining head, Spec,vP may be as crucial an intermediate stopping-off point in the course of long-distance *wh*-movement as Spec,CP (Chomsky 2005, Rackowski and Richards 2005, Bruening 2007). That is, the v head has features relevant to *wh*-movement, and any *wh*-phrase occurring within the vP phase must move first to the phase edge (Spec,vP) before interacting with any higher head.

The third strand of research that will prove to be of interest also concerns the heads that are active in *wh*-movement. The account proposed here will lend support to the proposal that to some significant degree intralanguage variation can be attributed to the featural properties of the phase-defining heads (Chomsky 2005, Manetta 2005b). That is, it is the organization of *wh*-related features on specifically the phase-defining functional heads C and v that determines many of the characteristics of questions crosslinguistically.

The central claim of this article is that the sets of features driving *wh*-movement and *wh*-expletive constructions in the two languages are quite similar. The contrasts between the two will be accounted for as a difference in the properties of the phase-defining heads in each language. I will argue that while the proposals introduced here incorporate many aspects of previous approaches, they provide a better overall understanding of the facts internal to Hindi-Urdu, allow a better understanding of the contrasts with Kashmiri, and are better integrated theoretically. I will also emphasize that the present account offers a solution to the long-standing puzzle of *wh*-in-situ in Hindi-Urdu: why the *wh*-expletive construction exists at all.

2 *Wh*-Dependencies in Hindi-Urdu and Kashmiri

Unmarked word order in Hindi-Urdu is verb-final, and in a transitive sentence the subject typically precedes the object.

(5) Hamid-ne pani piya. [Hindi-Urdu]
Hamid-ERG water drank
'Hamid drank water.'

(6) Bacci-ne mehma:n-ko phul pesh kiye. [Hindi-Urdu]
child-ERG guest-ACC flowers present AUX
'The child presented flowers to the guest.'
(Schmidt 1999:188)

Kashmiri, on the other hand, is a verb-second language, with a variety of phrase types potentially appearing before the verb. (7a), for instance, is an unmarked word order, and (7b–d) are also grammatical.

(7) a. Aslam-an *dits* Mohn-as kita:b Ra:m-ini khətrı ra:th. [Kashmiri]
Aslam-ERG gave Mohan-DAT book Ram-DAT for yesterday
'Aslam gave Mohan a book for Ram yesterday.'

b. Mohnas *dits* Aslaman kita:b Ra:mini khətrı ra:th. [Kashmiri]

c. Kita:b *dits* Aslaman Mohnas Ra:mini khətrı ra:th. [Kashmiri]

d. Ra:th *dits* Aslaman Mohnas kita:b Ra:mini khətrı. [Kashmiri]
(Wali and Koul 1997:89)

Hindi-Urdu is often described as a *wh*-in-situ language. More accurately, in constituent questions, the unmarked position for the interrogative phrase is immediately before the sentence-final verb, regardless of the grammatical role that it bears (Schmidt 1999, Kidwai 2000, Bhatt 2003).

(8) Kita:b-ko kis-ne paṛha:? [Hindi-Urdu]
book-ACC who-ERG read
'Who read the book?'

(9) a. Hamid-ne kya: paṛha:? [Hindi-Urdu]
Hamid-ERG what read
'What did Hamid read?'

b. Abhi kis-ko dekhta: hai? [Hindi-Urdu]
now who-ACC look AUX
'Who are you looking at now?'
(3/31/06, Paklinks)[2]

Hindi-Urdu is a language that permits relatively free scrambling of constituents, so for examples like (5)–(6) and (8)–(9) a variety of other word orders are possible, bearing various interpretations. Though they have been extensively investigated (Mahajan 1990, 1994, Dayal 1994, Kidwai 2000), these alternatives will be of less interest here than the unmarked order. In section 4.2, I will address the role played by scrambling in the formation of *wh*-questions in Hindi-Urdu.[3]

A Kashmiri *wh*-phrase must immediately precede the second-position verb. A contrastive topic may also appear preverbally when a *wh*-phrase is present (Bhatt 1999).

(10) a. Kəm' he:v Shi:las nev kita:b ra:th? [Kashmiri]
who showed Sheila new book yesterday
'Who showed a new book to Sheila yesterday?'
(Wali and Koul 1997:12)

b. Rajan kəmis he:v nev kita:b? [Kashmiri]
Raj whom showed new book
'To whom did Raj show his new book?'
(Wali and Koul 1997:12)

Embedded clauses in Hindi-Urdu are optionally preceded by the subordinating particle *ki*. Finite embedded clauses appear obligatorily to the right of the verb, although all noun complements appear to the left (Dayal 1996).

(11) a. Vo ja:nti: hai [ki Anu a:yi:]. [Hindi-Urdu]
she know AUX that Anu came
'She knows that Anu came.'

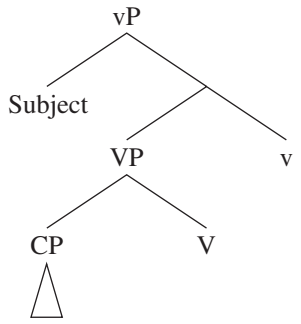
b. *Vo [ki Anu a:yi:] ja:nti: he. [Hindi-Urdu]
she that Anu came know AUX
Intended: 'She knows that Anu came.'

There has been much discussion of these clauses in the literature, particularly with respect

to their status as complements. It has often been argued that finite clauses appearing to the right of the selecting verb in Hindi-Urdu do not originate in that position, but have somehow been extraposed (Davison 1988) or otherwise adjoined to CP/IP (Dayal 1996, Lahiri 2002). These claims will be addressed in detail in section 5.3. It does seem, however, that these clauses behave as though they are c-commanded by material in the matrix clause. For instance, even when a *wh*-expletive is present in the matrix clause, a quantifier in the matrix clause can bind a pronoun in the embedded clause (Mahajan 2000). If the apparent CP complement were adjoined, this would not be expected since the *wh*-expletive *kya:* then would be occupying the sole complement position associated with the verb. Bayer (1996) discusses this fact for both Bangla and Hindi-Urdu, noting that while displacement of *wh*-phrases is possible from what he considers complement CPs, it is impossible for CPs that are clearly adjuncts. I will then maintain that finite clauses are complements in Hindi-Urdu, though they appear to the right of the verb. Additional arguments supporting the view that these finite clauses are in fact complements are presented in section 5.3.

Given the facts above, I will assume that the transitive light verb (v) and the VP projection are both head-final, with the verb taking nominal and CP complements to the left as in (12).

(12)



For sentences with finite-clause complements in Hindi-Urdu, I will assume that in the process of postsyntactic linearization, the CP complement must be aligned to the right edge of the clause (Bhatt 2003:16, Fox and Pesetsky 2005, Sabbagh 2007).[4]

When a verb does take a finite complement clause in Hindi-Urdu, it is possible for interrogative phrases originating in the embedded clause to take matrix scope using one of two strategies: the question phrase originating in the embedded clause can be displaced, appearing in the main clause, or it can remain in its usual position in the embedded clause while the apparently meaningless question word *kya:* appears in the main clause (as in (1) and (2)).

Although both Hindi-Urdu and Kashmiri are underlying verb-final (Kashmiri, for instance, features verb-final order in nonfinite clauses; see Bhatt 1999), Kashmiri has verb-second word order on the surface. In fact, so far Kashmiri exhibits the typical profile of a verb-second language, familiar from the extensive literature on this language type among European languages. Adopting a common approach, I will assume here that the verb in Kashmiri is in the C head (Bhatt 1999, Manetta 2005a).[5] *Wh*-material (*wh*-expletives and *wh*-phrases) in both Kashmiri and Hindi-Urdu appears in the preverbal position. According to the assumed approach, in Kashmiri this position is an Ā-position above the C head, specifically Spec,CP (Bhatt 1999, Manetta 2005a). However, it is clear that the preverbal position of *wh*-material in Hindi-Urdu must be significantly lower than CP. If the verb itself is within vP in Hindi-Urdu, then *wh*-material is in an Ā-position relatively close to the verb.

At this point, I will introduce a hypothesis that will serve as a major theme for the remainder of this article. I will suggest that Hindi-Urdu *wh*-material is not in situ, as has usually been claimed, but instead in a distinguished position in the overt syntax that is lower than Spec,CP. I will propose that this position is Spec,vP. Among those who have argued that the vP phase is a possible stopping-off point for long-distance *wh*-movement are Rackowski and Richards (2005). I want to begin with this basic intuition: a wide range of facts about Hindi-Urdu and its *wh*-dependencies can be understood naturally if we take Spec,vP to be the position in which Hindi-Urdu *wh*-material appears.

3 The Position of *Wh*-Material in Hindi-Urdu

Preverbal position is the unmarked position for *wh*-material in Hindi-Urdu, irrespective of the grammatical role or argument status of the *wh*-phrase, as shown in (8)–(9) above (Schmidt 1999, Kidwai 2000, Bhatt 2003). Since this is not consistent with unmarked declarative word order, unmarked interrogative order is evidently the result of obligatory displacement. In this section, I will offer empirical evidence in support of the hypothesis that *wh*-material in Hindi-Urdu is displaced to a fixed position in the syntax, and this position is consistent with Spec,vP.

3.1 Focused Constituents

The grammaticalized focus position in Hindi-Urdu is the position immediately preceding the verb in linear word order.

(13) Maiṅ-ne kamre-meṅ [inhi: ti:n laṛkoṅ-ko] bhe:ja. [Hindi-Urdu]
I-ERG room-to [these.FOC three boys-ACC] sent
'I sent *these* three boys to the room.'
(Sharma 1999:10)

(14) Kitabeṅ kal maiṅ la:ya tha:. [Hindi-Urdu]
books yesterday I brought AUX
'*I* brought the books yesterday (It is *I* who brought the books yesterday).'
(Kidwai 2000:116)

There is thus a fixed syntactic position for focused constituents, whether interrogative or noninterrogative.[6] Previous work assumes a dedicated focus phrase dominating VP (Kidwai 1995). I suggest here that the word order pattern is consistent with that fixed position being Spec,vP in Hindi-Urdu.[7]

Analogously, in Kashmiri the position for both interrogative and noninterrogative focus is the same. Both types of constituents appear in preverbal position. The Kashmiri focus particle *-ti* can only appear suffixed to constituents in this immediately preverbal position.

(15) Hu:n-ti chu behna broṅh panin ja:y goḍ sa:f kara:n. [Kashmiri]
dog-FOC AUX seat before self's place first clean do
'Even the dog cleans his place before sitting.'
(Bhatt 1999)

(16) *?Panin ja:y chu hu:n-ti behna broṅh goḍ sa:f kara:n. [Kashmiri]
self's place AUX dog-FOC seat before first clean do
Intended: 'Even the dog cleans his place before sitting.'
(Bhatt 1999)

(17) *Gary-ti kus chu-na ka:m kara:n? [Kashmiri]
home-FOC who AUX-NEG work do
Intended: 'Who doesn't work even at home?'
(Bhatt 1999)

In Manetta 2006, I developed an account in which both interrogative and noninterrogative focused constituents appear in Spec,CP in Kashmiri.

It appears that focused constituents, whether interrogative or not, preferentially appear preverbally in Hindi-Urdu and Kashmiri. The account presented here attributes the position of focused material in each language to the properties of the phase-defining heads C and v, respectively. In effect, what we see is the same clausal topology in Kashmiri and Hindi-Urdu, lower in Hindi-Urdu (on the v head) and higher in Kashmiri (on the C head).

3.2 Adverbs

Adverbs that are typically analyzed as adjoining to vP, such as 'always', can appear before the

verb and the direct object or *wh*-phrase in an unmarked Hindi-Urdu sentence, as in (18)–(19) (Schmidt 1999:190). However, it is also possible for the adverb to follow the question word, as in (20).

(18) Vo mujhe hame:sha cai pil-a:ta hai. [Hindi-Urdu]
he me always tea drink-CAUSE AUX
'He always has me drink tea.'

(19) Vo a:p-ko hame:sha kya: pil-a:ta hai? [Hindi-Urdu]
he you-DAT always what drink-CAUSE AUX
'What does he always have you drink?'

(20) Vo a:p-ko kya: hame:sha pil-a:ta hai? [Hindi-Urdu]
he you-DAT what always drink-CAUSE AUX
'What does he always have you drink?'

One could argue that in (18) and (19), both the direct object and the interrogative pronoun could be in their base positions. However, in (20) it appears that the *wh*-word cannot be in situ.

These observations fall into place naturally on the proposal that in both (19) and (20), the *wh*-word has moved to Spec,vP. If the positioning requirement for this class of adverbs is that they attach to a complete vP, that requirement can be met at two derivational points on present assumptions: either (a) after both specifiers have been introduced, or (b) after the external argument has been introduced but before the second specifier (the *wh*-element) has been merged. The first alternative yields (19), the second (20).[8]

It is unclear how we might account for (20) on the assumption that the *wh*-phrase is in situ. However, some might object that (20) is simply evidence of scrambling of the *wh*-phrase out of its (in-situ) position as the complement to V and into some higher position. In essence, this is not substantively different from what I propose here: that the *wh*-phrase arrives at its surface position in (19) and (20) through movement out of the VP. However, there is another, related fact that indicates that the position to which *kya:* 'what' has moved in (20) has some special status.

Chandra (2005), citing Mahajan (1990), claims that when an adverb like *jaldise* 'quickly' appears following a nonagreeing direct object, the object requires focal stress.

(21) Sita *ka:m* jaldise karti: thi:. [Hindi-Urdu]
Sita work quickly did AUX
'Sita worked quickly.'

This is in contrast to (22), where *ka:m* 'work' need not receive focal stress (see also Schmidt 1999:190).

(22) Sita jaldise ka:m karti: thi:. [Hindi-Urdu]
Sita quickly work did AUX
'Sita worked quickly.'

Under the account proposed here, *ka:m* 'work' in (21) is a focused phrase appearing in Spec,vP. The adverb can be adjoined before the object has shifted here for the purposes of focus. This suggests that when a *wh*-phrase or direct object appears immediately to the left of the vP-adjoined adverb, it has been displaced to a specific Ā-position at which it checks focus-related features (interrogative or noninterrogative).[9] I will take this evidence to support the claim that interrogative and noninterrogative focused constituents share a fixed position and to indicate that that position is consistent with an Ā-position on the edge of vP (Spec,vP) in Hindi-Urdu (for similar argumentation concerning *wh*-expletives, see Malhotra and Chandra 2007).

These data contrast sharply with the facts in Kashmiri, where these adverbs follow the second-position verb.

(23) Akhəkis sɪ:t' chi hame:shɪ lada:n. [Kashmiri]
one.another with AUX always fight
'(They) always fight with each other.'
(Wali and Koul 1997:133)

(24) Təmis nishi əs hame:shɪ no:kar. [Kashmiri]
he near have always servants
'He always has servants.'
(Wali and Koul 1997:140)

In Kashmiri, the verb is clearly in a position higher than the edge of vP (analyzed here as C). Because *wh*-phrases and focused constituents always appear immediately before the second-position verb (in Spec,CP), they are never found immediately adjacent to vP-adjoined adverbs. No other permutations of these orders are possible in Kashmiri.

We have now seen a set of systematic contrasts between Hindi-Urdu and Kashmiri, which allow us to better understand the position of *wh*-material in Hindi-Urdu. The facts here and in section 3.1 would be surprising indeed if Hindi-Urdu were a true *wh*-in-situ language. Each data set suggests that there is a distinguished position for interrogative and noninterrogative focus in Hindi-Urdu and that this position is consistent with an Ā-position at the edge of vP (Spec,vP). The comparisons here highlight the difference in the relative positions of *wh*-material in Hindi-Urdu and Kashmiri and suggest that the same clausal topology exists in both languages, the difference being that Spec,CP in Kashmiri plays the role that is played by Spec,vP in Hindi-Urdu.

4 Ā-Movement in Hindi-Urdu: Extending an Account of Kashmiri

4.1 Kashmiri Wh-*Dependencies*

In previous work (Manetta 2006), I claimed that the distinction between full extraction from subordinate clauses and partial *wh*-movement in Kashmiri can be analyzed as the distinction between the operations Move and Agree to satisfy uninterpretable features, just as in the A-movement system. Heads and *wh*-phrases possess sets of interpretable and uninterpretable features. If a *wh*-expletive happens to be in the numeration, it can merge to satisfy the EPP property on a head. Much like a DP-expletive, the *wh*-expletive is defective in that it has no interpretable features of its own, so the head into whose specifier it has merged must value its uninterpretable features by interacting with an accessible *wh*-phrase via Agree over some distance.

According to this account, there are three features controlling movement and agreement in the interrogative Ā-movement system: the EPP property (common to the A- and Ā-movement systems), the [Q] feature, and the [wh] feature. Importantly, it is the interpretable [Q] feature that introduces an unselective binder of (choice) function variables (as in Reinhart 1998).

The operations Agree and Move are limited to the phase in the Ā-movement system, just as they are in the A-movement system. The two phases considered here are the CP phase and the vP phase. In the phase theory of movement (Chomsky 2000, building on Fox 2000 and Nissenbaum 2000), the v head defines a phase for the purposes of A-movement. That is, an argument within the vP may shift to the edge of the vP phase (Spec,vP) and may subsequently interact with higher heads, such as T. The role of the vP-phase in Ā-movement is currently being explored (Rackowski and Richards 2005), and this strand of research will ultimately help to provide an understanding of Hindi-Urdu. From a comparative perspective, we will see that certain properties of Kashmiri and Hindi-Urdu can be attributed specifically to the properties of these two phase-defining heads.

No intermediate probes in Kashmiri, whether they are subordinate C heads, or v heads, will bear an interpretable [Q] feature, which appears only at the point referred to as the ''scope position.'' Instead, intermediate probes will have an uninterpretable [wh] feature and the EPP property. This will cause them to be active probes that require a goal to appear in their respective specifiers. As in any account of *wh*-movement, we must encode the observation that the EPP property on C and v in Kashmiri *wh*-questions must be satisfied by *wh*-material. One way of doing this is to assume that the EPP property is the requirement that a head have an additional

specifier beyond its selectional requirements (Chomsky 2000, 2001, Hiraiwa 2001), and that the EPP property is designated such that it can only be satisfied by certain kinds of moved goals. The EPP in this case is $EPP_{[Q]}$, meaning that it can only be satisfied by *wh*-material, since all *wh*-elements bear an interrogative [Q] feature (see Ura 2000 for the analogous EPP property for DP arguments). I will refer to it simply as the EPP property throughout.[10]

In a clause that is embedded, the *wh*-phrase may raise into the root clause, as in (3), repeated here.[11]

(3) Tse kəm' chu-y ba:sa:n ki Mohn-as dits kita:b? [Kashmiri]
you who AUX think that Mohan-DAT gave book
'Who do you think gave Mohan the book?'

In a sentence like (3), the subordinate C and v heads will lack an interpretable [Q] feature. A *wh*-phrase that has raised to the specifier of the subordinate CP will still have uninterpretable features that require valuing. The matrix v will be much like the subordinate C and will cause the *wh*-phrase to undergo Move into its specifier in the matrix clause. The matrix C will have an uninterpretable [wh] feature [*u*wh], the EPP property, and the interpretable [Q] feature [*i*Q]. As a probe, it will find the *wh*-phrase in the specifier of the matrix v and will enter into an Agree relation with this *wh*-phrase and attract it to its specifier. The *wh*-phrase will raise to the specifier of the matrix CP, and all features will be valued on the *wh*-phrase and all heads. The result will be full extraction. This process and the features involved are depicted in (25). Beneath each head are the features present on that head.

(25) $[_{CP}$ *wh*-XP [C . . .] $[_{vP}$ —— [v . . .] $[_{CP}$ —— [C . . .] $[_{vP}$ —— [v . . .]]]]

*u*Q	*u*wh	*u*wh	*u*wh	*u*wh
*i*wh	*i*Q	EPP	EPP	EPP
	EPP			

(25) represents the extraction of the *wh*-XP and its passage through the specifier positions of each phase-defining head until reaching the matrix CP.

The derivation will not be licit if the uninterpretable feature of the *wh*-phrase is simply valued by the matrix C head via Agree while the full *wh*-phrase remains in the specifier of the subordinate CP. This is because, in the absence of a *wh*-expletive in the numeration, the EPP property of higher probes (v and C) will not be satisfied.

Let us now turn to a grammatical instance of partial *wh*-movement in Kashmiri, such as (4), repeated here.

(4) Tse k'a: chu-y ba:sa:n ki Mohn-as kəm' dits kita:b? [Kashmiri]
you EXPL AUX think that Mohan-DAT who gave book
'Who do you think gave Mohan the book?'

In a partial movement construction, the subordinate C head will have only uninterpretable features: an uninterpretable [wh] feature, an uninterpretable [Q] feature, and the EPP property. In the case of (4), the numeration happens to contain the *wh*-expletive *k'a:*. This expletive differs from a full *wh*-phrase in that it consists entirely of uninterpretable features and contributes to the syntactic computation only an (uninterpretable) interrogative feature, [*u*Q] (thus limiting the *wh*-expletive to constructions that will be interpreted as questions). Importantly, this understanding of *wh*-expletives takes seriously the notion that they are the Ā-movement counterparts to expletives of the A-movement system. That is, they do not contribute any interpretable features to the derivation. As a result of the uninterpretable [Q] feature present on the *wh*-expletive, it will move through the specifiers of the phase-defining heads until its feature is valued. Of course, though the EPP property is satisfied on both the matrix v and C heads by the *wh*-expletive in the derivation schematized in (26), their [wh] features (uninterpretable) must still be valued via Agree. In this case, the uninterpretable [wh] feature on v interacts with the interpretable [wh] feature on the full *wh*-phrase at the edge of the embedded CP. In turn, the uninterpretable [wh] feature on the matrix C is valued by interacting with the (now valued) [wh] feature on v, which is available because it has not yet transitioned to the interface for deletion.[12] In this way, all uninterpretable

features are valued, and *wh*-expletives in the Ā-movement system serve the same purpose as expletives in the A-movement system: to satisfy the EPP property and permit the head's features to be valued by some other accessible element (Simpson 2000).

(26) [$_{CP}$ *wh*-expl [C . . .] [$_{vP}$ —— [v . . . ——] [$_{CP}$ *wh*-XP [C . . .] [$_{vP}$ —— [v . . .]]]]]

*u*Q	*u*wh	*u*wh	*u*Q	*u*wh	*u*wh
	*i*Q	EPP	*i*wh	*u*Q	EPP
	EPP			EPP	

It may seem, in (25) and (26), that the vP phases play little role in long-distance Ā-movement in Kashmiri. For instance, *wh*-material never remains in Spec,vP. This is attributed to two factors. First, the C head in Kashmiri always has the EPP property (reflected in the fact that *wh*-material always precedes the second-position verb). In a construction with no *wh*-expletive, the *wh*-phrase that has moved into the matrix Spec,vP must then interact with the matrix C head to have its uninterpretable [Q] feature valued. This interaction will trigger an application of Move, since C always has the EPP property in Kashmiri.

The second factor that prevents *wh*-material from appearing in Spec,vP in Kashmiri, as I argue in detail in Manetta 2006, is that the *wh*-expletive originates in a position below v where it can be assigned case. This analysis follows Simpson's (2000) claim that *wh*-expletives are base-generated in the specifier of the agreement projection Agr_O, and when other DPs are present that need to check case in this position, it will not be possible to generate the *wh*-expletive. In Manetta 2006, I therefore assume that the *wh*-expletive is base-generated in a position where it can have accusative case valued—that is, within the c-command domain of the accusative case licenser transitive v. Since the *wh*-expletive cannot be introduced by semantic selection, we know that it must be merged into the specifier of a head that has the EPP property. Aspect is a functional head in the c-command domain of v on which it would be reasonable to posit the EPP property.[13] The *wh*-expletive introduced into Spec,AspP has three features: an uninterpretable [D] feature, an uninterpretable case feature (accusative), and the uninterpretable [Q] feature. Note that it has no interpretable features at all. When the transitive v is introduced, it will interact with the *wh*-expletive, and the expletive's uninterpretable accusative case feature and [D] feature will be valued. In this view, if there is more than one potential goal, such as an additional object *wh*-phrase or a noninterrogative clausal expletive, the uninterpretable case feature on one or the other will go unvalued because only one goal can interact with the v head, and the derivation will fail to converge. In section 5.2, I will suggest that the *wh*-expletive *kya:* in Hindi-Urdu is base-generated in a similar way.

In the matrix clause of a two-clause *wh*-expletive construction in Kashmiri, the *wh*-expletive firsts move into Spec,vP to value the EPP property on v, and it must then move to Spec,CP for the reasons discussed above. If this is so, the partially moved full *wh*-phrase on the edge of the embedded clause will never have the opportunity to move into Spec,vP (the *wh*-expletive has already valued the EPP property on v). This derives the so-called antilocality property of *wh*-expletives: a *wh*-expletive cannot appear in the same clause as the full *wh*-phrase whose position of interpretation it indicates (McDaniel 1989, Simpson 2000).[14] Interestingly, the primary thrust of the analysis to follow is that in Hindi-Urdu it is in the intermediate vPs where partially moved *wh*-phrases are found.

4.2 Extending the Proposed Account to Hindi-Urdu

Hindi-Urdu has traditionally been viewed as a *wh*-in-situ language. That is, *wh*-material was not understood to occupy a distinguished position in the overt syntax. Previous approaches to Hindi-Urdu and similar languages (Mahajan 1990) proposed that *wh*-material be licensed and raise to a position of interpretation at the level of Logical Form (LF), via movement to Spec,CP. This movement occurs covertly, following the operations in the syntax, and is therefore never visible in the surface representation.

An alternative to this view presents itself in more recent work in the form of the operation Agree (Chomsky 2000; see also Bhatt 2005), permitting the features of a *wh*-phrase to be valued

under local command in the narrow syntax, instead of forcing movement to Spec,CP. We can assume that C bears the interpretable [Q] feature in a main-clause question, but that this head need not necessarily possess the EPP property, so that the *wh*-word need not move to a C-peripheral position. Further, if *wh*-phrases have the semantics of indefinites unselectively bound by interrogative operators, there is no reason to think that they must raise, for interpretive reasons, to a ''scope position.'' I will continue to use that term here (since it is convenient and well established), but this is purely for exposition.

Let us proceed stepwise through the derivation of a simple monoclausal *wh*-question, (27), before turning to the long-distance *wh*-dependencies at hand. The v head probes its domain and interacts with the *wh*-phrase through the operation Move, simultaneously valuing its uninterpretable [wh] feature and the EPP property.[15] The C head then probes its domain and values its uninterpretable [wh] feature in the local command configuration through the operation Agree. The uninterpretable [Q] feature on the *wh*-phrase is simultaneously valued by its interpretable counterpart on C. This operation is represented by the diagram in (28).

(27) Hamid-ko kis-ne ma:ra:? [Hindi-Urdu]
Hamid-ACC who-ERG hit
'Who hit Hamid?'

(28) $[_{CP}$ C . . . Hamid-ko $[_{vP}$ kis-ne $[_{vP}$ v —— —— ma:ra:]]]
*i*Q *u*Q *u*wh
*u*wh *i*wh EPP

Note that in the derivation of simple, monoclausal *wh*-questions like (27) (and like (29) and (31), discussed below), the preferred word order is the result of subsequent movement of the DP arguments that are not *wh*-phrases out of the vP, to a position that I have not strictly identified in (28). I assume here that this evacuation is the result of scrambling, extensively discussed elsewhere (Mahajan 1990, 1994, Dayal 1994, Kidwai 2000). The precise characteristics of this intermediate scrambling operation (i.e., scrambling beyond the subject position) are somewhat mysterious and have resisted straightforward analysis. Investigations of this type of scrambling have demonstrated that it may exhibit characteristics of both A- and Ā-movement, and researchers have suggested that it is movement to a ''mixed'' position (Webelhuth 1989) or movement involving multiple steps (Mahajan 1990, 1994). However, what is clear is that this scrambling out of the vP is a necessary part of the formation of an unmarked *wh*-question. Kidwai (2000) introduces a specific account that attempts to directly link *wh*-displacement with evacuation of the vP, claiming that scrambling is nonoptional Ā-movement that serves to license or ''activate'' the preverbal focus position. Whatever the specific mechanisms are that link scrambling and *wh*-questions, any complete account of Hindi-Urdu word order requires a coherent theory of scrambling. Even a *wh*-in-situ approach to (27) would need an account of how scrambling derives the unmarked order.

I will subscribe to no specific account of the broader phenomenon of leftward scrambling here, though if we treat scrambling as feature-driven displacement, I assume there is a formal way of associating a C head bearing interrogative features with heads that might be responsible for scrambling. With that in mind, let us now briefly walk through the derivation of monoclausal *wh*-questions in which the questioned element is an object (in (29)) or adjunct (in (31)), in order to set the stage for the analysis of long-distance *wh*-dependencies below.

(29) Hamid-ne kya: ci:z dekhi:? [Hindi-Urdu]
Hamid-ERG what thing saw
'What thing did Hamid see?'

(30) $[_{CP}$ C . . . Hamid-ne $[_{vP}$ kya: ci:z $[_{vP}$ v —— —— dekhi:]]]
*i*Q *u*Q *u*wh
*u*wh *i*wh EPP

In the case of (30), the features on the v and C probes, as well as on the *wh*-phrase goal, are valued in precisely the same way as they are in (28). The primary difference here is that it is the

subject *Hamid-ne* ‘Hamid’, originally merged into Spec,vP, that must scramble outside the vP. Next, consider (31).

(31) Hamid-ne Aziz-ko kab dekha: tha:? [Hindi-Urdu]
Hamid-ERG Aziz-ACC when saw AUX
‘When did Hamid see Aziz?’

(32) [$_{CP}$ C . . . Hamid-ne Aziz-ko [$_{vP}$ kab [$_{vP}$ v —— —— —— dekha: tha:]]]
*i*Q *u*Q *u*wh
*u*wh *i*wh EPP

Again, in (32) the valuing of features on interrogative probes and goals takes place in the same manner described for (28).[16] However, in this case both the subject and the object must scramble out of the vP in order to derive the unmarked order.

The above approach highlights a primary source of variation that distinguishes Hindi-Urdu and Kashmiri. Interrogative C lacks the EPP property in Hindi-Urdu but bears the EPP property in Kashmiri. Therefore, Kashmiri exhibits *wh*-movement to the left edge of the clause but Hindi-Urdu does not. However, this apparent advance immediately creates a puzzle for the case of *wh*-phrases taking scope over more than one clause. Consider again the Hindi-Urdu *wh*-expletive construction in (2), repeated here.

(2) Sita-ne kya: soca: ki Ravi:-ne kis-ko dekha:? [Hindi-Urdu]
Sita-ERG EXPL thought that Ravi-ERG who-ACC saw
‘Who did Sita think that Ravi saw?’

In the case of (2), how do the features on the matrix C get valued? It is clear that the *wh*-phrase in the lower clause remains clause-internal, just as the *wh*-phrase does in (9), and does not move to a left-peripheral position in the clause. If this is the case, the features of the *wh*-phrase *kis-ko* are inaccessible to the matrix C probe, because they are not contained within its phase, or even on the edge of the immediately preceding phase. Recall the Kashmiri example (26) in which it is the interpretable [wh] feature on the *wh*-phrase in the embedded Spec,CP that values the uninterpretable [wh] features in the matrix clause. The full *wh*-phrase in (2) is too deeply embedded for this to be possible, because two phase boundaries intervene (the ones defined by the matrix v head and the subordinate C head). The account of *wh*-in-situ as Agree immediately encounters a challenge here.

If the *wh*-expletive *kya:* found in Hindi-Urdu is assumed to have the same characteristics as the *wh*-expletive found in Kashmiri, it also cannot be the *wh*-expletive in the matrix clause in (2) that values the features on the matrix C. The *wh*-expletive has only a single, uninterpretable [Q] feature, and no [wh] feature at all. It can only function to satisfy the EPP property on a head. So the question remains: how do the features on the full *wh*-phrase and the features on the matrix C head get valued?

There is a deeper question here as well, which concerns the very nature of the *wh*-expletive. In Kashmiri, the *wh*-expletive serves the role of satisfying the EPP property on the phase-defining, [Q]-bearing head. However, it can hardly be the case that the *wh*-expletive in (2) satisfies the EPP property on the matrix C head—it seems instead to be occupying the same preverbal position that full *wh*-phrases in Hindi-Urdu occupy. If the *wh*-expletive can neither value the features on the C head, nor satisfy the EPP property on that head, then it seems to have no purpose whatsoever.

Finally, the Kashmiri *wh*-expletive construction has also been termed ‘‘partial movement,’’ because the full *wh*-phrase in the lower clause has clearly moved from its base position to the left periphery of that clause. However, it is unclear in what sense (2) is a case of partial movement in Hindi-Urdu. Certainly the *wh*-phrase in the embedded clause has not moved to the clause edge. These questions suggest that the analysis reviewed in section 4.1 will require adjustment to be extended to Hindi-Urdu. In what follows, I will combine the observations from this section with the evidence examined in section 3, which indicated that Hindi-Urdu *wh*-material can be understood as being located in Spec,vP.

5 *Wh*-Dependencies in Hindi-Urdu: The vP Phase

5.1 Wh-Movement in Tagalog: A Case for [Q]-Bearing v

Among those who have argued that the vP phase is a possible stopping-off point for long-distance *wh*-movement are Rackowski and Richards (2005). They offer supporting evidence for the phase theory of movement by claiming that vP is actually the only phase relevant to successive-cyclic *wh*-movement crosslinguistically.

Rackowski and Richards show that specific arguments in Tagalog must move to Spec,vP to receive the appropriate semantic interpretation. Evidence for this claim includes overt morphology on the verb indicating agreement in case with the shifted argument. Arguments that must shift include *wh*-phrases. Rackowski and Richards compare this shift to object shift in Germanic languages. On this interpretation, in the Tagalog sentence in (33) the verb shows agreement in case (*cs*) with the shifted *wh*-word.

(33) Sino [ang binigy-*an* ng lalaki ng bulaklak ____]?
who ANG give-*DAT* CS man CS flower
'Who did the man give the flower to?'
(Rackowski and Richards 2005:566)

The verb can also agree with a CP complement.

(34) Sa-sabih-*in* ng kalabaw na masarap ang bulaklak.
ASP-say-*ACC* CS water.buffalo that delicious ANG flower
'A/The water buffalo will say that the flower is delicious.'
(Rackowski and Richards 2005:586)

In the case of long-distance *wh*-dependencies, in order for extraction to be possible from the embedded clause, the verb must agree with that clause.

(35) Kailan [sa-sabih-*in* ng sundalo [na Ø-u-uwi ang pangulo e]]?
when ASP-say-*ACC* CS soldier that NOM-ASP-go.home ANG president
'When will the soldier say that the president will go home?'
(Rackowski and Richards 2005:586)

(36) *Kailan [*m*-agsa-sabi ang sundalo [na Ø-u-uwi ang pangulo e]]?
when *NOM*-ASP-say ANG soldier that NOM-ASP-go.home ANG president
'When will the soldier say that the president will go home?'
(Rackowski and Richards 2005:586)

This fact leads Rackowski and Richards to propose that both v and interrogative C have features that must be valued in the process of *wh*-movement, and that they may also possess the EPP property, causing goals to appear in their specifiers. We have seen this account at work in the analysis of Kashmiri *wh*-movement and *wh*-expletive constructions in section 4.1. However, in a significant break with previous approaches, Rackowski and Richards claim that it is unnecessary for noninterrogative C to Agree with any *wh*-material at all. For example, for a long-distance *wh*-extraction in English like that in (37), Rackowski and Richards propose the derivation in (38).[17]

(37) Who did you say Obama appointed ____?

(38) [$C_{[Q]}$ [who v [C [~~who~~ v ~~who~~]]]]

In (38), *who* moves first to the specifier of the lower v. After the matrix v has Agreed with the embedded C, the embedded C phase is transparent to the matrix v probe (we will consider this in more detail below). This probe can then find and interact with *who*, which moves into the matrix clause. In the final step of the derivation, *who* moves into the specifier of the interrogative matrix C. It is crucial for Rackowski and Richards to assume that once a probe P has Agreed with a clausal goal G, P can ignore G for the rest of the derivation. I will not examine this

''transparent goal'' claim in more detail at this juncture, though see Richards 1998, Hiraiwa 2001.

Rackowski and Richards acknowledge that languages that show evidence for *wh*-related morphology on intermediate C, or *wh*-expletives in the specifier of intermediate C, will prove challenging for this view. If noninterrogative CPs are not phases that force movement through their specifiers, we require alternative explanations of these facts. For instance, the morphology of Irish complementizers has been analyzed as indicative of successive-cyclic *wh*-movement through Spec,CP (McCloskey 1990, 2001). Complementizers exhibit a distinguished form if an Ā-binding relation (actually a movement relation) holds between a position within the CP they head and a position external to that CP. Rackowski and Richards claim that this morphology simply indicates that the C in question has Agreed with a [Q]-bearing v, which has in turn Agreed with a *wh*-phrase.

An approach that depends solely on Spec,vP as a stopping-off point for long-distance *wh*-movement will also face difficulty in accounting for *wh*-expletives and instances of partial movement such as those found in languages like German and Kashmiri. Rackowski and Richards acknowledge that in order to understand why *wh*-material would seem to appear overtly in the specifier of a noninterrogative CP in these languages, they would need to assume a version of the indirect dependency approach. That is, they would need to claim that any CP in which a full *wh*-phrase or *wh*-expletive appears is in fact an interrogative CP, and that the scope properties of that *wh*-phrase are the result of a complex process of coindexation and/or covert clausal pied-piping. Of course, in the case where the indirect dependency approach is not found to be tenable for reasons discussed above (Bayer 1996, Beck and Berman 2000), Fanselow and Mahajan 2000), Rackowski and Richards's approach becomes problematic for languages like Kashmiri.

In what follows, I will propose an alternative position that could admit Rackowski and Richards's approach without sacrificing our current understanding of Kashmiri: for some languages, the specifiers of noninterrogative CPs are *wh*-positions and are stopping-off points for *wh*-phrases and *wh*-expletives; for other languages, Spec,vP is the only stopping-off point for long-distance *wh*-movement. If this is the case, we might expect to see some languages in which *wh*-phrases and *wh*-expletives can remain in Spec,vP.[18] I will claim here that Hindi-Urdu is just such a language. Insofar as this line of reasoning is correct, we should be able to understand the contrasts between Hindi-Urdu and Kashmiri.

5.2 An Account of Hindi-Urdu Wh-*Dependencies*

At this point, I will bring together two strands of research. The first is the account of partial movement described above, built on the intuition that the Ā-movement system is shaped by the same mechanisms that shape the A-movement system. The second is Rackowski and Richards's account of Tagalog, built on the intuition that Spec,vP may play the role traditionally ascribed to Spec,CP. Let us now pursue a detailed analysis of the Hindi-Urdu *wh*-expletive construction in (2) combining these two approaches.

The first step is to assume that a full *wh*-phrase and a *wh*-expletive in Hindi-Urdu will possess exactly the same features as they do in Kashmiri. Specifically, as before, we assume that a *wh*-phrase will have an uninterpretable [Q] feature and an interpretable [wh] feature (which provides its interpretation as a choice function variable). A *wh*-expletive will have an uninterpretable [Q] feature, but no interpretable features at all.

The groups of features motivating a long-distance *wh*-dependency in Hindi-Urdu will be more or less identical to those in Kashmiri. The primary difference is that the features are located not on C heads but on v heads. This causes *wh*-material to appear not in the specifier positions of CP but in the specifier positions of vP. In the matrix clause, the interrogative C head will bear an interpretable [Q] feature and an uninterpretable [wh] feature, just as it does in single-clause Hindi-Urdu sentences and in Kashmiri. In this way, the interpretable [Q] feature will be interpreted by the semantics as an unselective binder of choice functions. This matrix C head, however, will not have the EPP property. This means that the features on the C head will then be valued by virtue of the C head's relation with a *wh*-phrase in some accessible position within its domain (its own phase or at the edge of the immediately lower phase). In this case, this phase will be

the vP phase in the matrix clause. The schema in (39) illustrates the featural content of each of the relevant heads in the *wh*-expletive construction in (2), as well as the features of the *wh*-material. An explanation of the derivation follows.

(39) [$_{CP}$ C . . . [$_{vP}$ *wh*-expl [v . . . ——] [$_{CP}$ C . . . [$_{vP}$ *wh*-XP [v . . . ——]]]]]

*u*wh	*u*Q	*u*wh			*u*Q	*u*wh
*i*Q		EPP			*i*wh	*u*Q
						EPP

There are two different types of heads that bear features relevant to *wh*-movement in (39). The first is v, which bears [wh] features in both the subordinate and matrix clauses.[19] The second is C, which only bears features relevant to *wh*-movement in the main clause. Noninterrogative C heads do not bear a [wh] feature in Hindi-Urdu under this analysis, and neither interrogative nor noninterrogative C heads bear the EPP property. As a consequence, this approach correctly predicts that no *wh*-material is ever found in the specifier of interrogative or noninterrogative CP in Hindi-Urdu. Such elements are found, rather, in lower positions.

Beginning in the lower clause in (39), the *wh*-phrase *kis-ko* originates in object position. The v head in the lower clause is a probe possessing the EPP property, and it interacts with and raises *kis-ko* into its second specifier position. In this interaction, the uninterpretable [wh] feature on v is valued, as is the EPP property. The uninterpretable [Q] feature of the *wh*-XP is also valued, and it will move no further. Note, however, that this v head has no relevant interpretable features—the *wh*-phrase in its specifier will not be interpreted in this position.

If this account of Hindi-Urdu were precisely like the account of Kashmiri, we would expect the subordinate C head to have an uninterpretable [wh] feature and the EPP property. That is, it would be one in the sequence of C and v probes interacting with the full *wh*-phrase. However, under Rackowski and Richards's (2005) approach noninterrogative C heads have no *wh*-related features at all and they do not participate in *wh*-movement. In the hybrid view adopted here, though Kashmiri is a language in which noninterrogative C heads do have [wh] features (as is evidenced by the presence of *wh*-material in the specifier of noninterrogative CPs), Hindi-Urdu is a language in which they do not.

Moving up in the structure, the next head with relevant features is the v head in the matrix clause. As discussed above for Kashmiri, the *wh*-expletive *kya:* originates within the domain of v. The matrix v first interacts with the *wh*-expletive. This interaction values the EPP property on v. However, the uninterpretable [wh] feature on the v head remains unvalued and so the head continues to act as a probe.

Following Rackowski and Richards's (2005) approach, the matrix v head must have some feature that requires it to Agree with the embedded C, just as it might interact and agree with a direct object. In Tagalog, the presence of this feature has overt morphophonological consequences; in Hindi-Urdu, it does not. A consequence of this relation is that the phase boundary of the embedded C becomes transparent to v, and v can continue probing down to the next phase edge. The matrix v must then probe to the edge of the lower v phase, finding the *wh*-phrase *kis-ko* in its specifier.[20] In interacting with the *wh*-phrase, the v head values its uninterpretable [wh] feature.[21] At this point, all of the features on the matrix v have been valued.

The only remaining head with unvalued features is the matrix C, which probes its domain up to the edge of the lower phase, the matrix v. Note that this is as far as the matrix C can probe; the v head possesses interrogative features and is not ''transparent'' in the sense of Rackowski and Richards. The matrix C head values the uninterpretable [Q] feature of the *wh*-expletive, and subsequently its own uninterpretable [wh] feature with the [wh] feature on the matrix v. Now the derivation is complete and licit, with all features valued and no unvalued features remaining on any *wh*-material or in any head. In the interpretive component, as before, the C bearing interpretable [Q] triggers the introduction of the unselective binding operator that binds the choice-function variable of the *wh*-phrase.

Let us take a moment here to recall the basic intuition that this account is attempting to capture. We have seen a body of empirical evidence that suggests that the surface position for *wh*-material

in Kashmiri is Spec,CP, but that in Hindi-Urdu such material occupies Spec,vP. We have also seen that in Hindi-Urdu, unlike in Kashmiri, *wh*-material can never appear in the specifier position of any intermediate CP, and we have no specific morphological evidence that it has ever appeared in this position. Fundamentally, what we wish to claim is that the same clausal topology surfaces in both Kashmiri and Hindi-Urdu, but at the CP layer in Kashmiri and the vP layer in Hindi-Urdu.

As I see it, there are a number of ways to capture this intuition in this framework. One possible view is that in Hindi-Urdu, CP is not a phase at all. This view would claim that phases are parameterized across languages and defined in some language-specific manner. Of course, this approach would require a major rethinking of our understanding of phases. To this point, phases (CP, vP, DP) have been identified as universal processing units of the derivation. It is unclear what it would mean to say that in a certain language, a certain projection does not constitute a phase, or possibly only constitutes a phase for one type of movement but not another.

A second possible way to capture the basic intuition described above is to assume that *wh*-material moves through the specifier of every phase-defining head (C and v on its way to its ultimate position, regardless of language. In this view, the fundamental distinction between Hindi-Urdu and Kashmiri is that the surface position of *wh*-material in Hindi-Urdu is Spec,vP, and in Kashmiri is Spec,CP. Regardless of whether there is any overt evidence that *wh*-material moves through the specifier of a head, we would assume that it must do so as part of the fundamental design of phases. The disadvantage of this approach is that, for those languages like Hindi-Urdu for which we have no evidence that *wh*-material ever appears in Spec,CP, we must posit that it does pass through this position. On the other hand, the advantage of this view is a certain uniformity in the understanding of Ā-movement across different language types. Every C and v head in every language possesses features relevant to *wh*-movement. What primarily varies by language is which of these heads possess the EPP property.

A third possible way to capture the v/C distinction between Hindi-Urdu and Kashmiri is to adopt the view advocated by Rackowski and Richards (2005). Specifically, when a v probe Agrees with a clausal phase head, it can probe beyond that phase boundary to the edge of the next lower phase. This approach requires us to assume that completed phases are not immediately exported to the interfaces (Chomsky 2004) but instead remain in the workspace throughout the derivation.

At this point, I see no clear empirical test for distinguishing among these proposals. For the sake of familiarity, I will adopt Rackowski and Richards's view. In addition, the basic claim Rackowski and Richards make (that the vP phase can play a crucial role in *wh*-processes) correlates well with our empirical observations about Hindi-Urdu.[22] The analysis proposed here could be expressed under any of the sets of assumptions above (and possibly others). What is crucial is that the basic intuition about the relative clausal organization of Ā-movement in Hindi-Urdu and Kashmiri is captured.

Returning to the diagram in (39), if the *wh*-phrase in the lower clause was not frozen in place, but instead was forced to continue raising, and if no *wh*-expletive was available in the numeration to satisfy the EPP property on the higher v, the result would be displacement, an additional strategy for forming a long-distance *wh*-dependency in Hindi-Urdu.

Let us reconsider (1), repeated here.

(1) Sita-ne kis-ko soca: ki Ravi:-ne ____ dekha:? [Hindi-Urdu]
Sita-ERG who-ACC thought that Ravi-ERG saw
'Who did Sita think that Ravi saw?'

Recall that (1) is nearly identical to the *wh*-expletive construction in (2), except that the *wh*-word that originates in the lower clause appears in the matrix clause. There is significant debate in the literature about the nature of (and even the grammaticality of U) the displacement in (1). Some researchers contend that this is just another example of *wh*-movement (Simpson 2000, Simpson and Bhattacharya 2003), familiar from a wide range of languages. Others (Dayal 1996) contend that this is a form of scrambling, entirely unrelated to either the *wh*-expletive construction in (2) or the usual form of *wh*-movement visible in other languages.

Given the current theoretical framework, there is a way of viewing (1) in which it is less relevant what name is given to the movement. If, as Chomsky (2004) claims, all movement is driven by the interaction of features and/or by the EPP property, then movement in both a full *wh*-movement language like Kashmiri and a so-called *wh*-scrambling language like Hindi-Urdu must be driven by the same basic mechanisms. The upshot of this notion is that the same features that induce *wh*-expletive constructions might also induce displacement of the *wh*-word in (1). Whether this displacement is in fact termed scrambling or movement becomes less important.

The diagram in (40) depicts the feature bundles that would appear on each head in the long-distance *wh*-displacement in (1). Of course, the *wh*-phrase *kis-ko* has the same features it has in a sentence like (2)/(39). An explanation of the derivation follows.

(40) $[_{CP}$ C . . . $[_{vP}$ *wh*-XP [v . . .] $[_{CP}$ C . . . $[_{vP}$ —— [v . . . ——]]]]]

	*u*wh	*u*Q	*u*wh	*u*wh
	*i*Q	*i*wh	EPP	EPP

Just as in (39), in (40) the full *wh*-phrase *kis-ko* has an uninterpretable [Q] feature and an interpretable [wh] feature. The probe v in the lower clause interacts with *kis-ko* and raises it to an outer specifier position. This interaction values the uninterpretable [wh] feature on v as well as the EPP property. At this point, *kis-ko* is at a phase edge. The embedded C head has no features relevant to *wh*-movement and therefore does not interact with it.

According to Rackowski and Richards's (2005) approach, the v in the matrix clause must probe and Agree with the C head. When this occurs, the embedded CP phase becomes transparent to the v head, and it can probe for material beneath it. If there is no *wh*-expletive in the numeration, the matrix v head must probe to the edge of the embedded vP phase, and it will find and interact with the *wh*-phrase *kis-ko*. The *wh*-phrase will raise into an outer specifier of the matrix vP, valuing the uninterpretable [wh] feature on the matrix v and satisfying the EPP property on that head. Note that the *wh*-phrase does not yet have all of its features valued (namely, the uninterpretable [Q] feature).

As in (39), the C head in (40) has an uninterpretable [wh] feature and an interpretable [Q] feature. The *wh*-phrase is on the edge of the immediately lower phase (the matrix vP), and so the C probe can interact with it, and all features are mutually valued—that is, the uninterpretable [wh] feature on the C head and the uninterpretable [Q] feature on the *wh*-phrase. At this point, all features in the derivation have been valued, and the derivation is licit. Whether the *wh*-displacement in (40) is termed *wh*-movement or scrambling, the *wh*-phrase raises into a higher clause, attracted by features of a higher, phase-defining head.[23]

Let us now address at what point the *wh*-expletive is first introduced into the clause. As discussed above, I argue in Manetta 2006 that in Kashmiri the *wh*-expletive is base-generated in a position where it can be assigned case by transitive v, in Spec,AspP. Here I will suggest that the same holds true for Hindi-Urdu. As in Kashmiri, this correctly predicts that sentences in which another *wh*-DP or the expletive object *yeh* cooccurs in a single clause with the *wh*-expletive are ungrammatical in Hindi-Urdu.

(41) *Sita-ne yeh kya: so:ca: ki Ravi:-ne kis-ko dekha:? [Hindi-Urdu]
Sita-ERG this EXPL thought that Ravi-ERG who-ACC saw
Intended: 'Who did Sita think that Ravi saw?'
(Mahajan 2000:319)

(42) *Sita-ne kis-ko kya: dekha:? [Hindi-Urdu]
Sita-ERG who-ACC EXPL saw
Intended: 'Who did Sita see?'
(Simpson 2000)

In this view, Hindi-Urdu sentences like (41) and (42) are impossible because only one goal can interact with the v head and have its uninterpretable case feature valued. If there is more than one potential goal, such as an additional *wh*-phrase or a clausal expletive, the uninterpretable case feature on one or the other will go unvalued, and the derivation will fail to converge.

Wh-dependencies mediated by *wh*-expletives that extend across three or more clauses have been widely discussed in the literature (e.g., McDaniel 1989 for German and Romani; Dayal 1994 for Hindi-Urdu; Horvath 1997 for Hungarian). In Hindi-Urdu, a *wh*-expletive must appear in the preverbal position in every clause intervening between the clause containing the full *wh*-phrase and the clause at which the *wh*-phrase is interpreted (Dayal 1994, Mahajan 2000). This is illustrated in (43).

(43) a. Ra:m-ne *kya:* soca: ki Ravi:-ne *kya:* kaha: ki *kon sa* [Hindi-Urdu]
Ram-ERG EXPL thought that Ravi-ERG EXPL said that which
a:dmi: a:ya:?
man came
'Which man did Ram think that Ravi said came?'

b. *Ram-ne *kya:* soca: ki Ravi:-ne kaha: ki *kon sa a:dmi:* a:ya:?

Accounting for *wh*-expletive constructions spanning three or more clauses in Hindi-Urdu is a simple extension of the account for two-clause structures ((44) is abridged for clarity).

(44) $[_{CP}$ C $[_{vP}$ *wh*-expl [v] $[_{CP}$ C $[_{vP}$ *wh*-expl [v] $[_{CP}$ C $[_{vP}$ *wh*-XP [v . . . ——]]]]]]]

*u*wh	*u*Q	*u*wh	*u*Q	*u*wh	*u*Q	*u*wh
*i*Q		EPP		*u*Q	*i*wh	*u*Q
				EPP		EPP

This extension is relatively trivial because it is not the embedded full *wh*-phrase that values the features of the interrogative C head in the *wh*-expletive analysis of sentences like (49a) (see (39)), but instead a local interaction with the closest v head. In fact, for each intermediate v head with *wh*-features (as well as the interrogative C head), uninterpretable *wh*-features are always valued by features at the edge of the next lower vP. Importantly, this means that the interrogative C head can be an unlimited distance from the full *wh*-phrase provided that the EPP property on each intervening v head is valued by a *wh*-expletive. If the necessary *wh*-expletives are not present in the numeration, the derivation will crash, accounting for the ungrammaticality of (43b).[24]

This account of *wh*-expletive constructions in Hindi-Urdu offers answers to a number of questions that so far have remained mysterious. First and foremost, the combined strands of research have suggested that the syntactic position of *wh*-phrases and *wh*-expletives that preferentially appear is consistent with the specifier of vP. In section 3, I presented empirical support for this claim, and we have seen here that the claim is well integrated into an account of long-distance *wh*-dependencies in the language.[25]

Second, this analysis correctly predicts that no *wh*-phrases or *wh*-expletives are ever found in Spec,CP in Hindi-Urdu. In contrast with Kashmiri, interrogative CPs interact with *wh*-material via Agree at a distance and do not require that *wh*-material move to Spec,CP. Further, under the view adopted here from Rackowski and Richards (2005), this is due to the fact that noninterrogative CPs in Hindi-Urdu do not participate in *wh*-movement. Noninterrogative C heads possess no *wh*-related features and therefore do not interact with *wh*-material at all (though see above for other ways to implement this view).

Third, and perhaps most importantly, this account provides a way of understanding the role of the *wh*-expletive in Hindi-Urdu. The *wh*-expletive serves to value the EPP property on the attracting head for long *wh*-movement, and in Hindi-Urdu this happens to be the v head. The features on that head may then be valued via Agree with some other goal in its domain. Thus, *wh*-expletives in Hindi-Urdu and Kashmiri can be viewed as being governed by exactly the same set of mechanisms.

Finally, Hindi-Urdu can now be considered a language that exhibits a true case of ''partial'' *wh*-movement, in that the full *wh*-phrase in the lower clause moves from its base position into the specifier of the embedded vP. This resolves a puzzling mismatch, in that other languages with *wh*-expletive constructions also tend to exhibit ''partial'' *wh*-movement constructions. Now Hindi-Urdu can also be understood to fall under both of these categories.

5.3 Comparison with Other Accounts

There are previous approaches to questions in Hindi-Urdu (Dayal 1994, 1996, Lahiri 2002) and related languages such as Bangla (Simpson and Bhattacharya 2003) that are worth addressing in the context of the current effort.

Simpson and Bhattacharya's (2003) analysis of *wh*-expletive constructions in Bangla assumes that Bangla, though typically analyzed as SOV and *wh*-in-situ just like Hindi-Urdu, is in fact SVO and has obligatory overt *wh*-movement. According to Simpson and Bhattacharya, this word order, as well as overt *wh*-movement, is typically disguised by a number of factors, but is manifest in certain contexts. Although the account I have proposed here stops short of assuming underlying SVO word order for Hindi-Urdu, I do claim that finite CPs are complements in the language and that the displacement of *wh*-phrases that we see in Hindi-Urdu is in fact *wh*-movement. In this way, the data presented for Bangla by Simpson and Bhattacharya, as well as the account they give for those data, inform the analysis I ultimately adopt.

The most recent alternative account for some of the phenomena addressed here is found in the indirect dependency approach of Lahiri (2002). In what follows, I will briefly summarize this analysis and show that one of its core assumptions is unworkable. I claim that the account presented here provides greater empirical coverage at less theoretical cost.

Lahiri (2002) proposes a variation of the indirect dependency (ID) approach for *wh*-expletive structures in Hindi-Urdu. His analysis consists of a semantic elaboration on and revision of Dayal's (1994, 1996) approach. It shares with this (and all other ID accounts) two core assumptions: (a) the *wh*-word *kya:* that I have called a *wh*-expletive is not an expletive at all, but instead the full Hindi-Urdu *wh*-word *kya:* meaning 'what', and is base-generated in an argument position in the matrix clause; and (b) the apparently subordinate clause is not an argument of the verb but instead has some other syntactic status as an adjoined element.

Lahiri provides several empirical arguments against various versions of the direct dependency (DD) approach, or any account that requires that the embedded full *wh*-phrase move to the position of the *wh*-expletive at LF. He successfully shows that presuppositions of *wh*-expletive constructions, *wh*-expletive constructions with embedded yes/no questions, and the ''scope freezing'' of *wh*-expletive structures with amount questions cannot be easily understood in a DD account in which the full *wh*-phrase must move into the matrix clause at LF, to be interpreted separately from the remainder of the embedded CP. It is unsurprising that these arguments do not extend to the *wh*-expletive account presented here, since it does not depend on LF movement of the embedded *wh*-phrase.

For instance, Lahiri (2002) shows that Hindi-Urdu *wh*-expletive structures with embedded 'how many' phrases exhibit scope freezing, in that they permit only narrow scope of the embedded 'how many' phrase (not the ambiguity available in English). Accounting for this under the ID approach is quite natural, since the question 'How many books did Ram read?' remains intact at LF and does not permit wide scope of the quantifier. However, a DD account would require a mechanism by which only the *wh*-word would move to the matrix clause at LF, somehow leaving the quantifier to be interpreted in situ. Under the *wh*-expletive account presented here, on the other hand, the *wh*-indefinite in the embedded clause is unselectively bound at a distance and the quantifier 'many' remains in the embedded clause. Lahiri himself mentions (footnote 2) that the unselective binding of choice functions would be one way of interpreting structures in which the *wh*-phrase remains embedded, but he does not evaluate this type of analysis.

I now turn to the ID claim that apparently subordinate CPs in Hindi-Urdu are not arguments of the matrix verb, but are in some manner adjoined to the matrix clause. I will show here that given this assumption, it is impossible to actually generate the LF structure required in the ID approach.

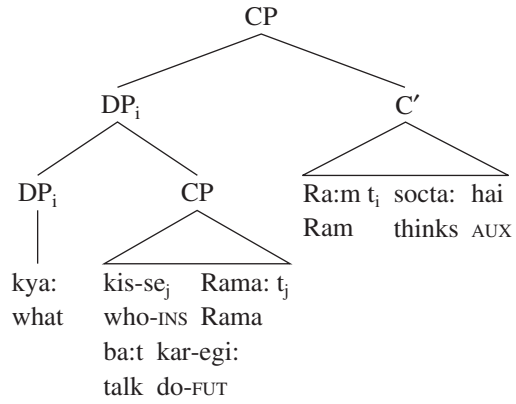
An often-repeated fact arguing against this basic assumption is that quantifiers in the matrix clause of a *wh*-expletive structure (or any noninterrogative embedded-clause structure) in Hindi-Urdu appear to be able to bind pronouns in the embedded clause in the normal way. In (45a–b), the quantifier *har a:dmi:* 'each man' in the matrix clause can bind the pronoun *us-ne* 'he-ERG' or *wo* 'he' in the second CP (Mahajan 2000).

(45) a. Har a:dmi:-ne$_i$ kya: soca: ki us-ne$_i$ kis-ko dekha:? [Hindi-Urdu]
each man-ERG EXPL thought that he-ERG who saw
'Who did every man$_i$ think that he$_i$ saw?'
(Mahajan 2000:324)

b. A:p-ne$_i$ har a:dmi:-ko kya: kaha ki wo$_i$ kis-ko dekh-ega? [Hindi-Urdu]
you-ERG each man-ACC what said that he who-ACC see-FUT
'Who did you tell every man that he would see?'

The bound interpretation of these pronouns would be unexpected under any version of the ID approach because the pronoun would not be in the scope of the quantifier at LF. Take for instance the LF structure for a *wh*-expletive construction proposed by Lahiri (2002), shown in (46).

(46)



'Who does Ram think Rama will talk to?'
(Lahiri 2002:(42))

To solve this problem, Lahiri develops a semantic workaround that mimics the effect of variable binding through keeping the pronoun in the restriction of the *wh*-quantifier and allowing it to be closed off by a universal closure operation. The bound reading of (45a) under this view would then be as follows:

(47) $\lambda p \exists f [\forall x [Q_x(f(x))] \& p = \hat{} \forall x (man'(x) \rightarrow think' (x, f(x))]$
(Lahiri 2002:(114))

Applied to (45a), the restriction in (47) says that for every x, f(x) (the proposition x thinks) is of the type *x saw person y* for some y. Lahiri uses the availability of this mechanism to argue for his version of the ID approach, in which the second *wh*-clause is in the restriction of *kya:* at LF. This seems to address the apparent problem of variable binding in *wh*-expletive structures.

Of course, the fact that quantifiers in a matrix clause of the *wh*-expletive structure can bind pronouns in the lower clause is expected under the *wh*-expletive account presented here, as they c-command the variable in the familiar way. For this reason, under my account no special work-around is required. However, there are other facts that pattern with the binding data, suggesting that material in the subordinate clause truly is in the c-command domain of material in the matrix clause at the level of interpretation.

Negative polarity items (NPIs) in Hindi-Urdu have been carefully investigated (Mahajan 1990, Lahiri 1998, Kumar 2006). It is well known that the class of weak NPIs, when embedded, can be licensed by negation in a higher clause.

(48) Sari:ta:-ne nahi:ṅ kaha: ki koi bhi: a:ya:. [Hindi-Urdu]
Sarita-ERG not said that someone even came
'Sarita did not say that anybody came.'
(Kumar 2006:144)

(49) *Sari:ta:-ne kaha: ki koi bhi: a:aya:.

It is not possible to demonstrate the same effects in a *wh*-expletive structure, because *wh*-expletives are incompatible with sentential negation (Mahajan 2000, Lahiri 2002, Malhotra and Chandra

2007). However, because both Dayal (1994, 1996) and Lahiri (2002) propose that no subordinate clause in Hindi-Urdu (whether in a *wh*-expletive structure or not) is ever a complement to the verb, (48)–(49) are crucial to our understanding of the relationship between matrix and subordinate clauses in Hindi-Urdu.

Dayal (2000) suggests that apparent embedded clauses are in fact base-generated as adjuncts to IP (discontinuous from any scope marker or expletive), since nominal complements appear to the left while alleged sentential complements appear to the right. Under the view, as Lahiri (1998: 80) expresses it, that ''the conditions on NPI licensing be statable as LF conditions, involving c-command of the NPI by the negative element at LF,'' it would be impossible to explain the facts in (48)–(49) given the structure Dayal proposes. The NPI in (48) would never be in the c-command domain of the negative element at LF, and so the contrast between (48) and (49) would remain mysterious.

Following Herburger (1994), Lahiri (2002) proposes another possible structure (though he does not choose between this one and Dayal's alternative, in which *kya:* and the interrogative CP form a DP at D-Structure before the CP is extraposed and right-adjoined to IP (to arrive at the appropriate surface word order). To create Lahiri's version of the LF structure under the ID approach (see (46)), it seems that the CP must then be reconstructed back into the restriction of *kya:* and then the entire DP must move to Spec,CP at LF for scope reasons. So for noninterrogative sentences such as (48), the second CP would in principle be reconstructed back into the DP containing the overt or covert demonstrative pronoun, and in this way the NPI could be reconstructed back into the c-command domain of the negation.[26]

However, there is a challenge for this approach that ultimately prevents us from being able to construct the LF structure in (46). Bhatt and Dayal (2007) argue for independent reasons that the only type of constituent that can scramble to the right in Hindi-Urdu is a VP remnant. For instance, their account derives a sentence with a rightward-scrambled indirect object as in [S DO V Aux IO] through having the verb undergo head movement into a higher aspectual projection, and the direct object scramble leftward out of the VP. Then the VP projection containing only the indirect object (as well as a trace of the direct object) can be moved rightward. Bhatt and Dayal speculate (see their section 3.3) that apparently right-adjoined CPs are actually part of a rightward-scrambled VP remnant. However, in order to arrive at a VP projection that exhaustively contains the second CP from a syntactic structure like the one Lahiri proposes, the direct object DP *kya:* would first need to be scrambled leftward out of the VP. Since reconstruction would recreate the post-leftward-scrambling but pre-rightward-scrambling order (Bhatt and Dayal 2007), we could never arrive at the LF structure Lahiri proposes in (46). The CP will never be able to be recombined with the DP *kya:*, since *kya:* has scrambled leftward outside the VP. Moreover, the VP remnant is a scope island, so covert movement of the CP after reconstruction of the VP containing it is not possible (Bhatt and Dayal 2007). This means that we cannot actually construct an LF structure like (46) in which the apparently embedded CP is in the restriction of *kya:* at the appropriate scope position.

We have arrived at something of a catch-22 with respect to deriving the ID LF structure in (46). Recall that the syntactic approach under the first version of the ID approach (Dayal 2000) did not explain the licensing of NPIs in Hindi-Urdu as in (48)–(49). However, the syntax proposed under the second version of the ID approach (Lahiri 2002) requires a rightward-scrambling operation restricted to an otherwise voided VP remnant. This seems to force a series of operations that precludes the creation of the very LF structure this analysis proposes. On the other hand, under the *wh*-expletive account presented here, none of these issues arise. Because the second CP is in fact the complement of the main clause verb, NPI licensing proceeds as expected (via c-command). Since no scrambling in any direction is required, we need not be concerned with reconstruction possibilities.

Lahiri's (2002) version of the ID approach has clear empirical advantages over DD approaches, as he demonstrates in detail. However, these criticisms of DD accounts do not extend to the *wh*-expletive account presented here, which in fact predicts the very facts Lahiri discusses. Further, given a set of independently justified assumptions about Hindi-Urdu syntax, it is unclear

that the LF structure proposed in the ID approach can even be constructed. On the other hand, the *wh*-expletive account effortlessly accommodates phenomena such as variable binding and NPI licensing that must be treated exceptionally under any ID approach.

In this section, I have argued that any account requiring the complement clause to be generated adjoined to the matrix clause, or to be extraposed to this position, is ultimately untenable. As a reviewer points out, we could attempt to rescue the ID account by claiming that the CP sister of *kya:* is not extraposed, but postsyntactically aligned to the right edge of the matrix clause, as I propose in section 2. This version would avoid the problems of LF formation associated with extraposition.

However, this presents us with an empirical puzzle. If the apparent finite-clause complement to the verb were actually the sister of the DP *kya:* in Hindi-Urdu and were obligatorily linearized to the right edge of the matrix clause at PF, we would expect that all finite clauses that are DP complements should behave similarly. However, finite-clause complements of DPs in Hindi-Urdu can optionally remain in situ.

(50) a. Mujhe [yah khabar [ki ve log nahĩ: a: pa:ẽge]] [Hindi-Urdu]
me.DAT this news that these people not come able
kal mili:.
yesterday find
'I got the news that those people won't be able to come yesterday.'

b. Mujhe [yah khabar] kal mili: [ki ve log nahĩ: a: pa:ẽge].
(Bhatt 2003:3)

(51) a. Mona ja:nti: hai [ki Rohit chanṭ hai]. [Hindi-Urdu]
Mona know AUX that Rohit cunning is
'Mona knows that Rohit is cunning.'

b. *Mona [ki Rohit chanṭ hai] ja:nti: hai.
(Bhatt 2003:2)

(52) *Sita-ne *kya:* [ki Ravi:-ne *kis-ko* dekha:] soca:? (cf. (2)) [Hindi-Urdu]
Sita-ERG EXPL that Ravi-ERG who-ACC saw thought
'Who did Sita think that Ravi saw?'

The sentences in (50)–(52) illustrate that CP complements of DPs can optionally appear in situ, but apparent CP complements of verbs cannot. It would then seem that the second CP in *wh*-expletive constructions in Hindi-Urdu (see (52)) does not pattern with CP complements of DP, posing a problem for this patch of the ID approach. The solution is to assume that the second CP in these structures *is* in fact what it appears to be: a clausal complement to the verb.

This brings us to the core issue: expletives are not necessarily theoretically desirable objects. However, in this case we are forced to accept that *kya:* is best understood as an Ā-movement system expletive, akin to the well-attested A-movement system expletives. Mahajan (2000) claims that the *wh*-expletive *kya:* seems to have prosodic properties that differ from those of the *wh*-XP *kya:*—unsurprising if it is in fact a *wh*-expletive. Overall, the *wh*-expletive account presented here best captures both the nature of *kya:* in long-distance *wh*-dependencies and the complement status of embedded finite clauses in Hindi-Urdu.

6 Conclusion

Despite important differences between Hindi-Urdu and Kashmiri, the preferred position in both languages for interrogative and noninterrogative focus is immediately preverbal. The proposal in this article suggests that if *wh*-material (*wh*-phrases and *wh*-expletives) is found at the edge of the CP phase in some languages (like Kashmiri), we should also expect to find it at the edge of the vP phase in others. I claim that Hindi-Urdu is such a language and that we can understand the systematic set of contrasts between Kashmiri and Hindi-Urdu as evidence for the same clausal topology in both languages, lower in Hindi-Urdu (on the v head) and higher in Kashmiri (on the C head). I have made use of this notion to construct a new, unified account of the various strategies

of forming long-distance *wh*-dependencies in the two languages.

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KEYSER/Linguistic Inquiry—Volume 41, No. 1
— **POSTSCRIPT VISION**
MT-JPLI-19059 — operator ASI, (1), Tape 1F1

Thanks are due to my Kashmiri informants PK, VC, and Jaya Chowdhury, to my Hindi-Urdu informants Uzma Rizvi and Saleem Ali, and to two anonymous *LI* reviewers. Also, for their attention and advice through many versions of this article I thank Jim McCloskey, Judith Aissen, Sandy Chung, Anoop Mahajan, Rakesh Bhatt, Rajesh Bhatt, and audiences at the University of California at Santa Cruz and at the Linguistic Society of America meeting in Albuquerque. Any remaining errors are my own.

[1] Note that the exception to verb-second order in Kashmiri arises when a *wh*-word appears immediately before the second-position verb. In this case, a DP interpreted as a contrastive topic may also appear preceding the *wh*-word, literally creating verb-third order (Wali and Koul 1997). For further analysis of verb-second in Kashmiri, see Bhatt 1999.

[2] http://www.paklinks.com/gs/archive/index.php/t-25313.html

[3] Under the analysis of *wh*-movement presented in this article, the subject *wh*-phrase is located in Spec,vP in (8). In addition, the preferred word order in (8) is the result of subsequent movement of the object DP out of the vP. I assume here that this evacuation is the result of scrambling; see section 4.2 for further discussion.

[4] A reviewer asks how the locality of this kind of linearization can be constrained. Tentatively, we could wonder whether the restrictions that Fox and Pesetsky (2005) and Sabbagh (2007) place on rightward movement might be adequate (Order Preservation, Landing Sites). Though space constraints preclude exploring this further here, were these to apply to postsyntactic linearization, we could account for all of the grammatical positions of the complement, and we could prevent the ungrammatical orders (summary: the complement clause must be right-peripheral in its clause, and it cannot appear on the right edge of a finite clause that is higher than the finite clause in which it is embedded). I leave this effort to future research.

[5] In Kashmiri, finite clause surface as verb-second, including embedded clauses preceded by a complementizer. Kashmiri verb-second is similar in this respect to Germanic verb-second found in Yiddish and Icelandic (Diesing 1990, Bhatt 1999).

[6] As Simpson and Bhattacharya (2003: fn. 3) point out, Mahajan's (1997:209n9) suggestion that the lack of normal question interpretation for *wh*-phrases in postverbal position in monoclausal sentences supports the view that these elements have moved to a fixed position in overt syntax.

(i) Savita-ne kitaab dii kis-ko? [Hindi-Urdu]
Savita-ERG book gave who-DAT
'Savita gave a book to WHO?'

The absence of matrix question interpretation follows from the account presented in section 5.2, since the *wh*-phrase in (i) is too distant to interact with the matrix C head (and, for that matter, will not satisfy the EPP property on the v head).

[7] A reviewer suggests that perhaps the most deeply embedded XP in VP bears focus (similar to the Nuclear Stress Rule for Romance languages, though this precise requirement cannot hold in syllable-timed Hindi-Urdu; Kidwai 1999: 240). However, preverbal constituents in sentences with canonical linear order need not be focused, and focused phrases can appear outside the preverbal focus position provided they are marked with heavy (contrastive) stress and/or the suffix *-hi:*. I assume here that after a focused constituent has valued its features in Spec,vP, it may subsequently scramble (also see Bhatt 2003). While there are alternative approaches to focus not making use of the specifier of a fixed functional projection in the syntax, the account presented here overcomes one of the primary objections to the syntactic view (Kidwai 1999). It provides a systematic understanding of the way in which languages exhibit similar positional requirements for focus at different projections (i.e., CP in Kashmiri and vP in Hindi-Urdu). Further, the proposed analysis of *wh*-in-situ as an instance of the operation Agree could potentially be expanded to account for focus in languages without a positional focus requirement.

[8] A comparison of (19) and (20) might be taken to suggest that *wh*-movement to Spec,vP is optional in Hindi-Urdu. However, recall that unmarked interrogative word order is not consistent with declarative word order except in the case of the direct object (which is preverbal in declarative structures). Since it would be both stipulative and undesirable to encode such a distinction for *wh*-movement, we can safely assume that all basic *wh*-questions in Hindi-Urdu are derived via displacement, and the overlap between interrogative and declarative word order in the case of (19) is incidental.

[9] A reviewer points out (as does Chandra) that this is not necessarily the case for agreeing or case-marked (hence specific) objects. In Chandra's account, these objects shift for purposes of agreement/case and not focus. This does not affect the argument here since we are assessing only whether the position for interrogative focus and noninterrogative grammatical focus is the same and whether it is plausibly Spec,vP.

[10] An alternative view of the EPP is that it is not a property of a head, but instead a property of a feature of a head, or a ''subfeature'' (Pesetsky and Torrego 2001). In the account presented here, it would not be possible to claim that the EPP property is a subfeature of a single specific feature in the *wh*-system since multiple features drive *wh*-dependencies. However, Pesetsky and Torrego (2007) propose a radically revised system of feature sharing in which valuation and interpretability of features are independent, meaning that each feature has four guises (combinations of valued/unvalued and interpretable/uninterpretable). The increase in complexity of the feature itself might permit a single-featured account of *wh*-dependencies, which in turn would allow us to assume the EPP property to be a subfeature of a single feature. As it is unclear whether this alternative is empirically distinguishable from the view of the EPP property adopted here, I leave this question to future research.

[11] Wali and Koul (1997) note that many speakers prefer the *wh*-expletive construction over long extraction; however, the long extractions are accepted, being marked by Wali and Koul from marginal (??) to grammatical (no marking) (pp. 19–20). The native-speaker informants I consulted judged (3) and sentences like it to be grammatical.

[12] Permitting a probe to interact with a goal whose features have already been valued requires that we assume that Agree can take place when the goal is inactive (though Move cannot). For further perspectives on this, see Pesetsky and Torrego 2007 and Bhatt 2005.

[13] For discussion of the Aspect phrase below vP in Hindi-Urdu, see Davison 2003.

[14] As a reviewer points out, this analysis predicts that it is possible to derive the crosslinguistically familiar pattern

in which an interrogative sentence made up of three or more clauses features a *wh*-expletive in every clause between the clause hosting the *wh*-phrase and the clause in which the *wh*-phrase is interpreted. Precisely this configuration is found in Kashmiri (Manetta 2006:109) and Hindi-Urdu (discussed further in section 5.2).

[15] The domain of a probe includes its specifier (see Chomsky 2000:123, Richards 2004).

[16] A reviewer points out that the account in (32) assumes that *wh*-adjuncts are first merged in a position low enough to be in the domain of the v probe.

[17] Rackowski and Richards (2005) use different names for the features involved in *wh*-movement. I will instead use the feature names presented in Manetta 2006. The outcomes are equivalent.

[18] Bruening (2007) argues for an account of Passamaquoddy relative root *wh*-dependencies in which it is not the scope marker (his term) that remains in Spec,vP but instead a relative root that attaches to the verb phrase. In this approach, the entire *wh*-element + relative root complex passes through Spec,vP in the matrix clause on its way to the matrix CP. The *wh*-expletive is spelled out in Spec,CP; however, the relative root is spelled out in the lower Spec,vP. We could view this as the intermediate result, in some sense, in which some evidence of the presence of the *wh*-element remains in Spec,vP, though not the *wh*-element itself (Bruening's account relies on multiple spell-out, an idea not addressed here).

[19] Note the symmetry between the derivation of partial *wh*-movement in Kashmiri in (26) and partial *wh*-movement in Hindi-Urdu in (39), in that there is an uninterpretable [Q] feature on the head that hosts the full *wh*-phrase in its specifier (the embedded C in Kashmiri and the embedded v in Hindi-Urdu). The presence of this uninterpretable [Q] feature arrests the movement of the full *wh*-XP. If the *wh*-XP's uninterpretable features are not fully valued at these points respectively, the derivation will crash, because it is the *wh*-expletive that is encountered by and interacts with any higher probes.

[20] A reviewer asks, if this type of cross-clausal probing is generally available, why do we not see long-distance agreement across finite clause boundaries in Hindi-Urdu? Bhatt (2005:777) suggests that, assuming that embedded subjects are lower than Spec,TP (as I have assumed here), a Minimality-based explanation that does not reference phase boundaries can prohibit long-distance agreement. He suggests that a matrix finite T^0 cannot ''look past'' another finite T^0 (the embedded one) while looking for an argument with which to value features. Therefore, adopting Rackowski and Richards's (2005) approach here does not pose a problem for our understanding of limits on long-distance agreement in Hindi-Urdu.

[21] There is evidence that intermediate heads in a *wh*-movement sequence should have interrogative features of some kind. In particular, Henry (1995) observes that in Belfast English subject-auxiliary inversion takes place not only in the highest C head in a *wh*-movement sequence, but in intermediate heads as well. She takes this as an indication that at least in this context these intermediate heads share the interrogative status of the matrix C head. In the present account, this notion is reflected in the [wh] that appears on intermediate C and v heads in Kashmiri and on v heads in Hindi-Urdu.

[22] Given the assumptions Rackowski and Richards (2005) make about ''transparency,'' it may seem that the v in Kashmiri need not have any features associated with *wh*-movement (these features could be on the C head alone). However, Rackowski and Richards's account is concerned with the way in which verbs agree with clauses, not the way in which probing heads agree with one another. In Rackowski and Richards's view, it is the agreement of verbs with their complement clauses (which has a morphological reflex in Tagalog) that permits transparency. It would be an unmotivated extension of this account to assume that clauses also agree with their verbs and that v is then transparent to a probing C. For this reason, we would need to maintain that v heads have *wh*-features in Kashmiri. On the other hand, an account that privileges a ''mirror-image'' view of Hindi-Urdu and Kashmiri *wh*-features would need to take the form of the alternative suggested in the text, in which every C and v head in both languages has features associated with *wh*-movement.

[23] Note that if the matrix v in either (39) or (40) happened to have an uninterpretable [a] feature, it would have no discernable effect on the derivation. In either case, the feature would be valued by the uninterpretable [Q] feature on the *wh*-XP. It is whether or not an uninterpretable [Q] feature appears on the embedded v that distinguishes a *wh*-expletive construction from a *wh*-displacement construction. Once the *wh*-XP has been frozen in place (all features have been valued) in the lower clause, if no *wh*-expletive happens to be in the numeration to be merged into the matrix clause, the EPP in the matrix clause cannot be satisfied and the derivation will crash. Note that this represents the solution to a long-standing puzzle: although *wh*-in-situ phrases in a single clause appear to take scope over the clause as a whole, *wh*-in-situ phrases in subordinate clauses in Hindi-Urdu do not. The indirect dependency approach has been to force adjunction of the subordinate clause to the matrix CP/IP to create islandhood. However, in the *wh*-expletive account presented here, there is a purely syntactic requirement that sentences with a *wh*-phrase from the subordinate clause taking matrix scope be those with overt *wh*-movement/scrambling or with a *wh*-expletive in the matrix clause.

[24] In (44), the v head in the intermediate clause has the same feature specification as the lowest v head, as opposed to the features of the matrix v. An expletive is required in the intermediate clause to satisfy the EPP property on v. The uninterpretable [Q] feature on the intermediate v head values the uninterpretable [a] feature on the *wh*-expletive merged in its specifier. Of the two interrogative v heads available in the lexicon of Hindi-Urdu (both of which bear the EPP property), the head with the uninterpretable [Q] feature must appear in the numeration of the intermediate clause, or the resulting derivation will not converge. This is analogous to the situation in two-clause *wh*-expletive structures. For a more detailed discussion of *wh*-expletive constructions of three clauses or more, see Manetta 2006:chap. 3.

[25] A reviewer asks how this approach might account for the matrix scope of *wh*-phrases inside temporal adjuncts as in (i).

(i) Ram [*kyaa* khaa-te hue] ghar ga-yaa?
Ram what eating-while home go-PFV.MSG
'What did Ram go home while eating?'
(Dayal 1996:33)

Dayal (1996) suggests that these infinitival phrases are nominal IPs. We could maintain that the full *wh*-phrase inside the nonfinite clause would move to the edge of the internal verbal domain, whatever form that functional v head may take (see, e.g., Pylkkänen 2002, Moulton 2004). It is therefore accessible to higher probes (namely, the matrix C head), just as the arguments of nonfinite clauses are accessible to processes like long-distance agreement (Bhatt 2005). As we might expect under the present account, overt movement of argument *wh*-phrases from within infinitival adjuncts into the matrix clause is also possible (Bhatt 2003).

[26] Although NPIs aren't always licensed under reconstruction (**Any professors weren't available*), this possibility is attested (see, e.g., Aoun and Benmamoun 1998).

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