Wh-Movement, Licensing, and the Locality of Feature Checking

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Chomsky (1995) suggests that the phenomenon of movement in language is a direct result of the existence of strict locality conditions on the licensing of dependencies referred to as feature-checking relations. If feature checking may only be effected when elements co-occur locally in Spec–head or head-adjointed configurations, then raising of a feature-bearing X0/XP to a higher checking head will be necessary to establish such a relation. Where overt movement of an element with features to check is not attested, this Strict Locality Condition (SLC) forces one to assume that covert raising to a checking position must take place, resulting in a post-Spellout level of LF. The SLC thus in large part dictates the general architecture of the Minimalist model, with covert movement operations giving rise to a discrete syntactic level of LF and the further adoption of a global economy principle of Procrastinate, invoked to account for why covert/LF movement would always seem to be the preferred option for feature checking.

On the basis of evidence relating to wh-constructions in a range of languages, this chapter argues against assuming the SLC to be an invariant constraint on feature-checking relations, suggesting that feature checking is not in fact universally confined to any Spec–head/head-adjointed locality, that the checking domain relevant for the licensing of wh-features is actually subject to certain parametric variation, and that feature checking may often be effected without the need for any movement of an XP to the specifier position of its checking head. In the case of wh-phrases in particular, we argue that all such elements cross-linguistically carry (wh-)features in need of checking (contra the assumption in Chomsky (1995) that +interpretable features such as wh will only ever require checking when strong on a functional head); we then propose to account for the wh-paradigms observed in Iraqi Arabic/Hindi, English, and Romanian-type languages with the suggestion that the licensing/checking domains for wh-elements in these languages have different values, very much in the spirit of Manzini and Wexler's (1987) treatment of variation in the locality constraining the relation of (NP) anaphors to their antecedents.

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within an embedded *tensed* clause when relating to the +Q Comp of a higher CP:

(3) *Mona tsawwarat [CP Ali istara *sheno*]
    Mona thought Ali bought what

The relevant generalization appears to be that a *wh*-phrase must occur in the *tense domain* of a +Q Comp in order to be licensed, where a tense domain (TD) may be understood to consist of a tensed/+finite clause and any non-finite clauses dependent on the tensed clause. In (3) the bracketed CP constitutes the first TD including the *wh*-phrase *sheno*, but as this +finite CP does not contain a +Q Comp, the result is that the *wh*-element is not licensed. In (2), as the lower embedded clauses are all –finite, the first CP to count as a TD including the *wh*-phrase is actually the entire sentence, and as this may also potentially contain a +Q Comp the sentence is well formed.

Attempting to account for the ungrammaticality of (3) one might perhaps suggest it is ill formed because LF movement of the *wh*-phrase to the +Q Comp is blocked by the tensed CP, thus adopting the general line of approach to restrictions on the occurrence of *wh*-elements in situ put forward by Huang (1982) (and others). However, tensed CPs do not appear to constitute barriers to movement in Iraqi, and not only can the *wh*-phrase in (3) undergo raising to the matrix from the embedded tensed CP, but when it does do so overtly the result is a fully well-formed question:

(4) *Sheno* tsawwarat Mona [Ali isthara *t?]
    What thought Mona Ali bought
    ‘What did Mona think Ali bought?’

Given that overt pre-Spellout movement of the *wh*-phrase is licit in (4) and given the Minimalist assumption that computational principles and constraints upon them should be taken to apply in a uniform way throughout a derivation, a hypothetical LF movement of the *wh*-phrase in (3) should indeed be permitted, in the same way that pre-Spellout raising is licensed. A possibility more compatible with recent Minimalist developments may instead be to suggest that raising of the *wh*-phrase in (3) would not be blocked from occurring at LF but would then be occurring *too late* in derivational terms to save the structure from crashing; that some formal licensing property related to the *wh*-phrase critically requires satisfaction *prior* to Spellout and this may therefore not be achieved via post-Spellout raising (although such movement would not violate other syntactic principles). Following Chorinsky (1995), if all operations of movement are triggered by a need to check morphological features, it can be

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I. IRAQI ARABIC

In Iraqi Arabic' (henceforth simply Iraqi) all *wh*-phrases may occur fully well formed in situ at PF both in matrix and embedded clauses, there being no requirement that a +Q Comp be filled by a *wh*-element prior to Spellout:

(1) Mona shaafat *meno*?
    Mona saw whom
    ‘Who did Mona see?’

(2) Mona raat [tijib Su'ad [tisr'ad *meno]*?]
    Mona wanted to-force Su'ad to-help who
    ‘Who did Mona want to force Su'ad to help?’

However, although example (2) is fine where the *wh*-phrase remains in situ in an embedded *non-finite* clause, a *wh*-phrase significantly may not occur in situ

1 All Iraqi Arabic data here is taken from Wahba (1991) and Ouahalla (1994).
suggested that while overt raising of the word phrase in (4) results in successful checking of certain word features prior to Spellout, the ungrammaticality of (3) is due to a failure to check word features by this derivational point.

Assuming such an approach, the paradigm in (1–4) leads to the further conclusion that it is word features carried by word phrases themselves which are here in need of licensing and not any assumed present on the +Q Complementizer. Were the latter to contain strong word-operator features, then overt word-raising should clearly always have to take place in the English, yet examples such as (1) and (2) are noted to be fully well formed without any pre-Spellout movement. Word movement in Arabic instead seems to relate directly to the word phrase itself and its position relative to the +Q Complementizer, being triggered only when the former occurs in a domain which is opaque for licensing. If movement may again be assumed to take place only for the satisfaction of feature-checking requirements, this clearly indicates that word features carried by the word phrase itself must be checked by the (obligatory) raising in (4). Such a conclusion would then seem to constitute strong evidence against the suggestion in Chomsky (1995) that interpretable features (such as wh) will only require checking when strong and present on a functional head—here it is seen that the relevant functional head Complementizer cannot be argued to carry any strong (operator) features and it is crucially for the licensing of a word phrase (and checking of word features carried by it) that movement is necessitated. Consequently word (and possibly other so-called +interpretable features) may be taken to be a feature specification just as much in need of checking on the XP’s which carry it as (for example) the –interpretable case features present on DPs.

A second conclusion to result from a consideration of examples (1–4) concerns the locality of feature checking. Chomsky (1995) suggests that feature checking is a relation which may only be effected within the ‘strict locality’ of Spec-Head and head-adjoined configurations (the SLC), this property always requiring movement of an element to its checking head. However, the patterning of word phrases and movement in Arabic as illustrated in sentences (1–4) provides evidence that such a claim cannot in fact be (universally) correct, and that feature checking must also be possible ‘long distance’ within wider domains.

To briefly recap what (1–4) have been taken to suggest: the movement of word phrases in IA as in (4) can only be assumed to take place for checking of word features, and will save illicit structures such as (3) from crashing. The relevant features which are checked by movement of a word phrase are word features on the word phrase itself and and not any strong operator features on Comp, otherwise word-raising to Comp would have to take place in all word questions (but this is not so—(1, 2)). Checking of word features on word phrases must furthermore take place prior to Spellout—hypothetical LF movement of word phrases in unacceptable examples like (3), though not blocked syntactically, would come too late in the derivation to satisfy licensing of the word phrase, and indeed is forced to occur overtly, as in (4). Now critically, although it is concluded that word features carried by word phrases must be checked prior to Spellout, raising to Comp is not forced to take place where a word phrase occurs base-generated in the tense domain of the +Q Complementizer (1, 2), and a word question is fully acceptable when the word phrase remains fully in situ. As such word elements must, however, be assumed to carry word features in need of pre-Spellout checking in the same way that word phrases base-generated in embedded tensed CPs do, it can only be concluded that these features are checked prior to Spellout on the word phrases in their in situ positions. Clearly not being in the specifier of the checking head Complementizer at the point at which word-checking must be effected, it therefore must be conceded that feature checking is not in fact always subject to the SLC and may at least in certain instances also take place within larger domains.

Although word-feature checking in Arabic is thus (by hypothesis) not bound to be strictly Spec-Head local, it nevertheless is still constrained by some notion of locality defined in terms of a ‘word phrase will be licensed in the immediate TD of the +Q Complementizer. In addition to this finiteness restriction, there are in fact also certain other locality restrictions which appear to correspond more closely to familiar constraints on applications of movement. As illustrated in examples (5) and (6), word phrases may not occur in situ either in relative clauses or in word phrases with scope higher than the +Q Complementizer of the word island itself.

(5) *Mona ‘urfin [il-bint, [illi, ti, ishtar t sheno]]
Mona knew the girl who bought what

(6) Mona nasat [li-meno tini sheno]
Mona forgot to whom to give what

Note: ‘What did Mona forget whom to give to?’
Only: ‘Mona forgot what she should give to whom.’

3 Noting it is not possible to suggest that any ‘empty word operator’ raises to Comp from the in situ word phrases, as Watanabe (1991) proposes the case in Japanese; if this were to be so, then it should also be possible for such an empty operator to raise to the +Q Complementizer from word phrases occurring in embedded tensed CPs and examples like (3) would incorrectly be predicted to be well formed. Furthermore, such empty operator analyses have been basically proposed and seem appropriate for languages in which the phonetically overt core of elements functioning as word question words is quantificationally underspecified and may be interpreted in various ways depending on the type of operator present (see e.g. Nishiguchi 1990 on Japanese; Cheng 1991 on Chinese). As word elements in Arabic (and Hindi) are unambiguously word question words, they would not seem obvious candidates for any similar null operator proposal. Finally, where it is indeed possible to compare movement of null operators and phonetically overt elements containing (or equivalent to) such operators within a single construction type—as in Japanese word questions where a null operator or the phonetically overt core operator or operator may move (see Simpson 1995), or relative clauses in English where the relative pronoun may be either phonetically null or overt—there would not seem to be any difference in the locality constraints on such movement, i.e. movement of the null operator is not more restricted than that of the overt element. Consequently there is no reason to expect that raising of any null operator from a tensed CP in Arabic should be more constrained than movement of an overt XP.
As such constituents are indeed islands for syntactic extraction, it might then be suggested that an LF movement analysis of in situ wh-phrases should in fact be pursued, despite the above-given argumentation to the contrary. In what follows, however, it will be argued that the observed island-sensitivity ultimately does not constitute evidence in favor of an LF movement approach and instead may actually be shown to support the alternative suggestions put forward here.

Ouhalla (1994) has noted that if the wh-elements in (5) and (6) are overtly extracted from their containing island environments, the resulting questions are markedly less unacceptably than when the wh-phrases remain in situ inside the islands:

\begin{align*}
(7) & \text{??Sheno, nasat Mona \{ili-meno tini t\};} \\
& \text{what forgot Mona to-whom to-give} \\
& \text{‘What did Mona forget to whom to give?’}
\end{align*}

\begin{align*}
(8) & \text{??Sheno, urfut Mona \{ibint illi istarat t\};} \\
& \text{what knew Mona the-girl who bought} \\
& \text{‘What did Mona know the girl who bought?’}
\end{align*}

Whereas (5) and (6) are both completely unacceptable and unintelligible as questions, Ouhalla suggests the improved acceptability of (7) and (8) is typically that of regular subadjacency violations, resulting (simply) from the illicit extraction of an element from within an island configuration. Given that (5) and (6) are significantly worse, it must therefore be concluded they are violating some constraint other than subadjacency.\(^4\) If one accepts that the licensing of wh-phrases (checking of wh-features) is in some way critical for their interpretation, and further adopts suggestions made above as to how and at what derivational point such licensing/checking must occur, the difference in acceptability between (5, 6) and (7, 8) may actually be predicted—in the latter the wh-phrases move to a +Q Comp by Spellout and so are successfully checked by this point, their interpretation as interrogative wh-phrases being licensed; in achieving this, however, a pure constraint on movement is violated (subadjacency), resulting in the reduced acceptability judgements. In (5) and (6) by way of contrast, the wh-phrases do not appear in a domain where their wh-features can be checked by Spellout and so the structures will automatically crash, the wh-elements not being licensed as wh-phrases and hence not allowing for any coherent interpretation. In this sense it can be suggested that sentences such as (5) and (6) are like other instances where morphological features fail to be checked by a certain derivational point and this results in unintelligibility, as for example in (9) and (10), where D-features in T\(^0\) remain unchecked at Spellout. Although no locality conditions would block the subject DPs from raising at LF, this would simply come too late to check the strong features in T\(^0\).

\begin{align*}
(9) & \text{*Not John come} \\
(10) & \text{*Did not John come} \quad \text{(intended to be a statement)}
\end{align*}

Thus although the unacceptability of wh-phrases in situ in certain extraction islands might initially prompt one to an LF movement approach, there are good reasons for assuming that LF wh-movement does not in fact take place—both the contrasts between (5, 6) and (7, 8) and the unacceptability of wh-phrases in situ in non-island embedded tensed CPs. If this is the case, then the ungrammaticality of (5, 6), with wh-elements in situ in wh- and complex NP islands, cannot be accounted for in terms of constraints on movement, and it must be conceded that there may also exist island-like locality constraints on purely non-movement (licensing) relations—a claim which has, however, previously been argued for by Cinque (1991) (relative to the island-sensitivity of Clitic Left Dislocation structures in Italian) and Bresnan (1976) (on comparative deletion), and hence one that is not without independent support.

Finally a brief consideration of multiple wh-questions can be shown to offer additional and fairly conclusive evidence that it is indeed (wh-features on) wh-phrases themselves which are critically in need of checking in Iraqi and that all wh-elements may be assumed to carry such a feature-checking requirement. As (11) and (12) show, although multiple wh-questions are permitted in Iraqi, the distribution of ‘secondary’ wh-phrases is not free and may directly result in a wh-question being unacceptable.

\begin{align*}
(11) & \text{Sheno, istara Ali t \{minshaan yenti li-meno \};} \\
& \text{what bought Ali in-order-to give to-whom} \\
& \text{‘What did Ali buy to give to whom?’}
\end{align*}

\begin{align*}
(12) & \text{*Meno tsawwar \{Ali xarax weyya meno \};} \\
& \text{who thought Ali left with whom} \\
& \text{‘Who thought Ali left with whom?’}
\end{align*}

In (11) both wh-phrases are straightforwardly licensed by occurring in the same TD as the +Q Comp (the lower CP being –finite). As the higher wh-phrase in (12) will also be checked quite regularly in virtue of its position in the TD of the +Q Comp, the unacceptability of the sentence can only be ascribed to the presence of the second wh-phrase meno (whom) in the embedded +finite CP, indicating that secondary wh-phrases are constrained by precisely the same factors as ‘primary’ wh-phrases and may not occur in embedded tensed CPs where the licensing +Q Comp is in a higher TD. Consequently it must be

\(^4\) Indeed, if the well-formedness requirement on wh-phrases were just to be that they occur raised in a +Q Comp by LF, one might expect that (5, 6) should perhaps be less unacceptable than (7, 8), or even fully grammatical, given that LF movement of the wh-phrase might be able to proceed in a way different from that in (7, 8), where straight and direct extraction from an island environment has occurred. For example, LF raising might be able to make use of island-pied-piping operations, as suggested by Nishigauchi (1990), or of the QR-dependent extraction mechanism outlined by Fiengo et al. (1988). That (5) and (6) are actually worse than (7) and (8), then, strongly indicates that some property of the sentences must crucially be satisfied before Spellout.
assumed both that every \(wh\)-phrase present in a \(wh\)-question carries (\(wh\)-) features in need of licensing, and furthermore that all such \(wh\)-features must be checked by the same derivational point, namely Spellout; if this were not the case, then the lower \(wh\)-phrase in (12) should indeed be able to raise up to the \(+Q\) Comp and check its features at LF (there being no barrier to such movement), yet the sentence is fully ungrammatical.

Having thus argued here that strict specifier–head locality would not appear to constitute a universal constraint on feature-checking relations on the basis of data in Iraqi (and that \(wh\) is a feature in need of checking on \(wh\)-phrases rather than just on a \(+Q\) Comp), we now turn to Hindi and show that evidence of a parallel kind may also be found in other languages, strengthening and supporting this conclusion.

2. HINDI

In Hindi,\(^5\) just as in Iraqi Arabic, all \(wh\)-phrases may occur in situ at PF and there is no requirement that a \(+wh+Q\) Comp be filled by any \(wh\)-item prior to Spellout:

\(13\) Raam-ne [Mohan-ko kise dekhne ke liye] kahaa?
   Ram-\(\text{ERG}\) Mohan-\(\text{ERG}\) whom to see for told
   ‘Who did Ram tell Mohan to look at?’

However, whereas \(wh\)-phrases may occur in situ in embedded non-finite CPs, as per \(13\) above, they may not do so in equivalent tensed clauses.\(^6\)

\(14\) *Raam-ne kahaa [ki Kon aayaa he]?  
   Ram-\(\text{ERG}\) said who has come

Such tensed CPs nevertheless are not islands for extraction, and as with Iraqi, not only may a \(wh\)-phrase undergo overt raising from a tensed clause, but when this occurs in examples like \(14\) the result is a perfectly acceptable question form:

\(15\) Kon Raam-ne kahaa ki ti aayaa he?  
   Ram-\(\text{ERG}\) who said that has come
   ‘Who did Ram say has come?’

Therefore, as with Iraqi, one is forced to assume that although LF raising to the \(+Q\) Comp should be possible, such hypothetical raising would simply occur too late in \(14\) to satisfy certain properties of the \(wh\)-question. As per Spellout movement of the \(wh\)-phrase will save \(14\) from otherwise being unacceptable, and as a \(+Q C\) in Hindi does not always require a \(wh\)-element in its specifier position (and hence cannot be taken to be generated with strong \(wh\)-operator features), it can again only be concluded that \(wh\)-raising in \(15\) takes place to check \(wh\)-features carried by the \(wh\)-phrase itself prior to Spellout. If \(wh\)-phrases in Hindi must therefore be feature-checked by Spellout, where other \(wh\)-phrases are seen to occur licitly in situ (as in \(13\)), these \(wh\)-phrases must be assumed to be licensed and feature-checked in their in situ positions and consequently not in any strict Spec–head relation with the checking head \(C\). Feature checking is then once more attested to be possible ‘long distance’, though again constrained by tense factors and blocked where a \(wh\)-phrase occurs in situ in a TD which does not contain the \(+Q\) Comp \(14\).

We also find evidence in Hindi similar to that presented in Iraqi Arabic that all \(wh\)-elements require licensing by Spellout:

\(16\) *Kon Raam-ne kahaa ki ti kis-ko maareegaa  
   who Ram-\(\text{ERG}\) say that ti who will hit

In \(16\) raising to the matrix will effectively license the first \(wh\)-phrase \(kon\) (who), but the second \(wh\)-phrase \(kis-ko\) (whom) also apparently requires licensing by Spellout, which is not possible here as it remains inside a non-interrogative tensed clause at Spellout. Movement of this \(wh\)-phrase out of the tensed CP results in a well-formed question if it takes place overtly, as illustrated in \(17\) below.

\(17\) Kon kis-ko Raam-ne kahaa ki ti ti maareegaa  
   who whom Ram-\(\text{ERG}\) say that will hit
   ‘Who did Ram say will hit who?’

Finally it can also be shown that the raising of a \(wh\)-phrase from an embedded tensed CP to the clause containing the licensing \(+Q C\) need not necessarily target the specifier of the \(+Q\) Comp, but significantly may land the \(wh\)-phrase in other positions too—in \(18\) the \(wh\)-phrase has been raised from the lower clause to a position following the subject in [Spec, TP].

\(18\) Raam-ne kon kahaa ki ti aayaa he?  
   Ram-\(\text{ERG}\) who said that has come
   ‘Who did Ram say has come?’

It has been suggested above that \(wh\)-phrases in Iraqi and Hindi must simply occur in some position in the TD of a \(+Q\) Comp in order to be licensed, hence that the \(wh\)-checking domain of a \(+Q\) Comp in these languages effectively is its containing TD. Where a \(wh\)-phrase is base-generated in such a domain, no movement will be necessary as the \(wh\)-phrase may have its \(wh\)-features checked in its in situ position; however, when such an element originates in a lower tensed CP, it will be forced to undergo raising to the TD of the \(+Q\) Comp in order to check its \(wh\)-features prior to Spellout. Given the contention that these \(wh\)-features may be checked in any position within the TD of the \(+Q C\), one

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\(^5\) The Hindi data here is taken from Mahajan (1990).

\(^6\) Unless there is a ‘\(\text{kyaa}\)’ question-particle in the superordinate clause—such an alternate question-formation strategy occurring in Iraqi too (see Mahajan 1990; Wahba 1991; Simpson 1995 for some discussion).
In certain respects, the approach put forward here is unique because checking requirements may trigger movement of an element to its Licensing domain. Evidence that checking requirements may trigger movement of an element to its Licensing domain is derived from the fact that feature checking requirements in multiple-argument Q Comp are verified. This is not the case with NPIs or reflexive checking. For instance, one can check that for the licensing of a domain, a Licensing domain for a Licensing domain must be licensed in a domain, whereas a Licensing domain for a Licensing domain must be licensed to a Licensing domain.

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4. MOTIVATION FOR WH-MOVEMENT

Such a conclusion now raises a problem of a different sort. If (secondary) wh-phrases in multiple wh-questions in English may be feature-checked in their in situ positions, one seems to be left without an explanation for why overt raising of a single primary wh-phrase must take place in English. That is, if licensing in situ is potentially available, then why should any wh-phrase have to raise to Comp? One might perhaps attempt to suggest that overt raising of a primary wh-phrase does not in fact take place to check wh-features on the wh-phrase, but to check strong operator features on the +Q Comp, much as Chomsky (1995) proposes. However, if it is possible for a wh-checking relation to be established between a +Q Comp and a wh-phrase fully in situ to check wh-features on the latter (as argued here), there might not be any obvious reason why such a ‘long-distance’ relation should not also allow reciprocal checking of wh-operator features on the former, so some other kind of explanation would seem to be required.

A relevant description of the patterning observed may be said to be that once a single wh-phrase has been raised to a +Q Comp then all wh-phrases are licensed, viz.:

(22) *Did John give what to who?
(23) What did John give to who?

I would like to suggest that this movement is necessary in order to ‘trigger’ C^o as an appropriate licenser for (all) wh-elements present, that C^o is critically ambiguous prior to wh-movement in ranging over a variety of potential values—focus, +wh+Q, yes/no+Q, etc.—and that wh-movement into Spec of C^o will function to disambiguate C^0, activating it as a licenser for (specifically) wh-type elements.

The specifier position raised to by the wh-phrase is thus posited to be that of a general polarity-oriented head, much as suggested by Culicover (1992), hosting a variety of elements other than wh-phrases; for example:

(24) That film I really didn’t like
(25) Not only Hastings will I banish, I shall also exile Lord Smythe
(26) So upset was she that she broke down and cried

Prior to any raising, C^o may be taken to be crucially underdetermined with respect to its precise ‘polarity’ setting, so that movement of an element of a certain type into [Spec, CP] will be necessary to disambiguate its licensing value. Once disambiguated and triggered in a particular way, the C^o will then be able to function as a licenser for all elements of the relevant type, whether such an element has been raised to its Spec or occurs in situ in its licensing domain.

In a certain way the above proposal may reflect a general idea put forward by Cheng (1991) that wh-movement occurs to ‘type’ a clause as +wh, though here the ultimate motivation for such movement is seen to be a formal morphological requirement on wh-phrases themselves that they be licensed by Spellout, rather than movement satisfying a constraint on CPs that they be identified as (+wh) interrogative. Following on from this, adapting and making use of another suggestion in Cheng, it can be argued that in some languages C^o is not ambiguous in nature, or rather that there exists an alternative way to disambiguate it, via the direct insertion of question particles, such as ne in Mandarin Chinese. If C^o can be disambiguated and triggered in this way, then no raising of wh-elements need take place and all wh-phrases may remain and be licensed in situ, providing they occur within the licensing domain of the C^o.  

Given this analysis of wh-raising in English, further explanation is now required of languages such as Romanian and Bulgarian where all wh-phrases in multiple wh-questions undergo raising to Comp. Clearly as only one of these should need to appear in the +Q Comp for triggering purposes if C is ambiguous, raising of the others would seem redundant, and therefore should not take place. Here I would like to propose that movement is actually forced to take place as a direct result of the locality of the wh-checking domain being more restricted in these languages. In Sections 1–3 of this chapter the essential thrust of argumentation has been an attempt to establish that feature-checking relations are ultimately not subject to any universal Spec–head/head-adjoined locality condition and to suggest that the checking domain of a functional head may in fact be subject to certain parametric variation across languages. This approach towards the locality of feature checking is in essence similar to Manzini and Waxler’s (1987) treatment of Binding Theory locality, where it is suggested that the local domain relevant for the licensing of anaphors may be subject to different parametric settings across languages, and that an anaphor must simply occur c-commanded by its licenser somewhere within the relevant local domain in order to be successfully licensed. Here the proposal is that a wh-element must similarly occur in some parameterized local domain c-commanded by a potential licenser (a +wh Comp) in order for its (wh-)features to be checked. In one respect such suggestions are simply an extension of the general idea formalized by Chomsky (1995) that elements with features to be matched and checked against each other must co-occur locally; however, whereas Chomsky assumes a critical and invariant notion of locality constraining all feature-checking relations, the present account suggests that the notion of locality may be subject to variation and hence in certain instances correspond to broader domains than Chomsky’s strict checking domain. In the case of English, the wh-checking domain is suggested to be equivalent to

9 This I assume is the case in Iraqi and Hindi, i.e. that there is a (phonetically null) +wh+Q morpheme inserted into C^o, and so raising to trigger C^o need not occur.
the sentence as a unit, in Iraqi/Hindi it is the first TD immediately containing a +wh Comp.

Returning to Romanian and Bulgarian, it can now be suggested that the obligatory raising of all wh-phrases to Comp is simply a reflection of a narrower parametric setting of the wh-checking domain, in fact corresponding to Chomsky’s strict checking domain, including [Spec, CP] and C-adjoined positions. Consequently all wh-phrases will be forced to raise to the +Q Comp, either targeting multiple specifier positions (as for example may be projected for multiple nominative subjects in Japanese; see Doron and Heycock, Chapter 4, this volume) or possibly via some kind of ‘wh-cluster’ movement to a single Spec of C (as suggested by Grewendorf, Chapter 8, this volume). Multiple wh-raising in Romanian and Bulgarian is then basically suggested to be entirely parallel to instances in Iraqi and Hindi where a wh-phrase is forced to raise from a lower tensed clause to the TD of a +Q Comp—in both cases wh-movement must bring a wh-phrase into the relevant parameterized wh-checking domain of Comp.

5. FURTHER ISSUES

If the idea of a parametrically set (wh-)checking domain is indeed adopted, further questions immediately arise concerning feature-checking relations in non-wh dependencies. Essentially one needs to ask how the suggestion that wh-features need not necessarily be checked within strictly local Spec-head configurations may be squared with the common assumption that the checking of case, agreement, and other features is in fact always subject to the strict locality proposed in Chomsky (1995). Here I suggest that two basic positions may be adopted, outlined in brief below.

The first and perhaps stronger position, explored in greater detail in Simpson (1995), is to argue that ‘non-local’ (i.e. non-Spec–head/head-adjoined) feature checking may indeed occur in other non-wh relations. If data and argumentation relating to one dependency type lead one to assume that certain elements may be feature-checked in their base-generated positions without any raising to a functional head, it may be suggested that in other instances too where no overt movement is observed to take place—as for example with argument DPs and inflected verbs in various languages—these elements are similarly feature-checked ‘non-locally’ in their PF in situ positions and without LF raising. Such a hypothesis would then allow one further to suggest that there may actually be no movement of any elements after the point of Spellout, and hence that Spellout might be taken to be fully isomorphic with LF, the structures created by such a point being the essential syntactic input forms to interpretation (the effects of QR might then be ascribed to purely semantic operations, e.g. Cooper Storage). An additional consequence of such a proposal would be that the economy principle of Procrastinate would no longer need to be assumed

as a constraint on derivations (as there would in fact be no ‘preference’ for LF movement to account for). Although clear evidence indicating that DPs/verbs do not raise further from their PF positions is perhaps not so easy to find, certain scopal interactions between subject DPs and modals in expletive structures commented on by Brody (1995) do seem to indicate that the former are not subject to LF raising:

(27) Many people must have arrived
(28) There must have arrived many people

The fact that must obligatorily has higher scope than many people in (28) while in (27) either element may have scope over the other suggests that the subject in (28) does not raise to the expletive at LF, as otherwise the scopal ambiguity present in (28) would be expected. Consequently one might assume that the subject’s DP features are checked in situ and that ‘non-local’ feature checking is attested in other non-wh constructions.

A second general possibility, potentially more easy to accommodate in the current Minimalist model, may be to posit that locality constraints on the licensing of features on XPs may be different from those constraining the checking of X0 features, and so admit a certain asymmetry in the set of feature-licensing relations previously considered to be fully uniform in nature. Although we have argued here that the checking of wh-features carried by wh-phrases need not always require the wh-phrase to occur in the specifier of the checking head C0, we nevertheless have still tacitly acknowledged a role for the Spec–head relation within checking theory; namely where a functional head X0 requires what we have described as ‘triggering’ before it may check features of a particular type, this has been taken to require raising of a relevant element to Spec of X0 to determine it as a legitimate licensing head. If such movement were now in fact to be interpreted back along the lines of Chomsky (1995) as triggered by a need to check features on a functional head, and given that the core cases taken to motivate ‘non-local’ checking have been instances where features on XPs but not on the checking head required licensing (i.e. Iraqi and Hindi, where wh-phrases but not the +Q C0 were argued to have checking requirements), then it may be possible to suggest the following: where X0 features on a functional head require checking, this will indeed require strict Spec–head/head-adjoined locality, but where a feature-checking requirement relates to features on an XP, such features may be checked within a locality permitting certain variation across languages (and the SLC will not automatically apply). Earlier, in our discussion of English, the possibility of entertaining a difference in the localities constraining checking of XP and X0 features was essentially discounted and an alternative explanation in terms of ‘activation’ of a licensing head was explored; however, if such an asymmetry is in fact conceded, then it may be possible to maintain intact previous assumptions that checking of case, agreement, and verb-inflectonal features is subject to ‘strict
locality’ with the suggestion that this checking is in all cases directly triggered by requirements of the functional heads. Whichever approach is ultimately pursued, the underlying claim of this chapter remains, namely that despite attempts in the Minimalist Programme to identify a unique type of licensing relation (feature checking) as being necessarily restricted by a universal notion of locality defined over specifier–head and head-joined configurations—this being the reflection of a wider drive to reduce all linguistic relations to a highly local nature—there are in fact dependencies of this general type which do not conform to such strict locality, prompting one to conclude both that non-local structural relations are fully present in natural language and that the specifier–head configuration is perhaps not as critical in the licensing of maximal projections as has often been suggested in recent research.

REFERENCES