

Phase Edges, Quantifier Float and the Nature of (Micro-) Variation

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Abstract: This paper considers quantifier float off *wh*-elements in varieties of West Ulster English. It establishes that there are several sub-dialects of West Ulster English and not just the single variety described by McCloskey (2000); these varieties differ in the positions in which floated quantifiers associated with *wh*-elements can appear. The full range of possible positions includes not only the highest CP, the first-merge position of the *wh*-element and the edge of intermediate CPs, as observed by McCloskey, but also the edge of intermediate *v*P s, providing evidence that *wh*-movement transits the edge of *v*P phases. Dialects vary in the range of positions in which a floated quantifier is possible, and in some a floated quantifier cannot occur in the first-merge position of the *wh*-elements, but only in intermediate positions. Comparing quantifier float off *wh*-elements with quantifier float off DPs, which is possible in a wider range of language varieties including standard English, the paper offers a possible solution to the puzzle of why quantifier float off DPs is not generally possible in the first-merge position of the DPs in passives and unaccusatives: UG prescribes the positions where elements appear or transit and thus where copies occur, but individual grammars select a subset of those positions as possible for pronunciation of a floated quantifier.

Keywords: *quantifier float, wh-movement, phases, microvariation, optionality.*

Resumen: Este artículo considera a los cuantificadores flotantes asociados a los elementos *qu*- utilizados en variedades distintas del inglés habladas en la parte occidental de Irlanda del Norte. El artículo establece que la variedad del inglés hablada en la parte occidental de Irlanda del Norte comprende varios sub-dialectos en lugar de uno solo, como se afirmó en McCloskey (2000); estas variedades difieren en base a las distintas posiciones en las que pueden aparecer los cuantificadores flotantes asociados con elementos *qu*-. El rango completo de posiciones posibles en las que pueden aparecer los cuantificadores incluye no solo el SC más alto, la posición de base (primer-merge) del elemento *qu*- y el filo del SC intermedio, todas observadas por McCloskey. También incluye el filo de Sv s intermedios, lo cual ofrece evidencia de que el movimiento *qu*- transita por el filo de las fases Sv. Los dialectos varían dependiendo de cuántas de estas posiciones puede ocupar





un cuantificador flotante. En algunos dialectos un cuantificador flotante no puede aparecer en la posición base de los elementos *qu-*, sino solo en posiciones intermedias. Al comparar los cuantificadores flotantes asociados a elementos *qu-* con cuantificadores flotantes asociados a SDs, lo cual es posible en una amplia gama de variedades lingüísticas en las que se incluye el inglés estándar, este artículo ofrece una posible solución al problema de por qué los cuantificadores flotantes asociados con SDs generalmente no son posibles en la posición base de los SDs en estructuras pasivas e inacusativas: La gramática universal (UG) prescribe las posiciones en las que aparecen o por las que transitan los elementos, así como donde aparecen las copias, pero las gramáticas individuales pueden seleccionar un subconjunto de esas posiciones como posibles para la pronunciación de un cuantificador flotante.

Palabras clave: cuantificadores flotantes, movimiento-Q, fases, microvariación opcionalidad.

Resumo: Este artigo considera a flutuação do quantificador fora de elementos-*wh* em variedades do inglês de Ulster ocidental. Estabelece que existem vários sub-dialetos do inglês de Ulster ocidental e não apenas a única variedade descrita por McCloskey (2000); estas variedades diferem quanto às posições em que os quantificadores flutuantes associados aos elementos-*wh* podem aparecer. A totalidade de posições possíveis inclui não só o CP mais elevado, a posição da primeira concatenação do elemento-*wh* e a periferia dos CPs intermédios, como observado por McCloskey, mas também a periferia dos *vP*s intermédios, demonstrando que o movimento-*wh* transpõe a periferia das fases de *vP*. Os dialetos variam quanto às diferentes posições possíveis para um quantificador flutuante, e, em algumas, um quantificador flutuante não pode ocorrer na primeira posição de concatenação dos elementos-*wh*, mas apenas em posições intermédias. Comparando a flutuação do quantificador fora de elementos-*wh* com a flutuação do quantificador fora de DPs, o que é possível num grande número de variedades linguísticas, incluindo o inglês padrão, o artigo apresenta uma possível solução para o enigma de por que razão a flutuação do quantificador fora de DPs não é geralmente possível na primeira posição de concatenação dos DPs em passivas e estruturas inacusativas: a GU prescreve as posições em que os elementos aparecem e que transitam e, como tal, em que as cópias ocorrem, mas as gramáticas individuais selecionam uma parte dessas posições como possíveis para a pronúncia de um quantificador flutuante.

Palavras-chave: Flutuação de quantificador, movimento-*wh*, fases; microvariación, opcionalidade.

1. Introduction

‘Quantifier float’ off DPs, as in (1) and (2), is a well-known and well-studied phenomenon, although there is still debate as to whether the quantifiers involved have actually been left behind with traces of DP movement, or are adverbial elements (see for example Bobaljik, 2003; Koopman, 2009).





- (1) The children are all singing.
- (2) They have all read the book.

A much rarer phenomenon is apparent float off *wh*-elements. McCloskey (2000) was the first to discover the existence of 'quantifier float' off *wh*-phrases, in West Ulster English. McCloskey showed that, instead of appearing adjacent to the *wh*-element, as is possible in many colloquial varieties of English (as in (3) to (5) below), *all* can appear in the base position of the *wh*-phrase (as in (6) and (7)), or in an intermediate SpecCP position as in (8).

- (3) Where all did you go on holiday?
- (4) What all did you buy in town?
- (5) What all did she say that he bought in town?
- (6) Where did you go all on holiday?
- (7) What did you buy all in town?
- (8) What did she say all that he bought in town?

McCloskey presents the data from West Ulster English as if it were a unified dialect in relation to this phenomenon, although he does note a lack of unanimity among speakers about some aspects of the data. However, in fact there is a range of sub-dialects of West Ulster English in relation to quantifier float off *wh*-elements. Each of the sub-dialects allows a *wh*-associated *all* to appear in a range of positions in the sentence, positions which have at some stage in the derivation, according to standard assumptions such as successive cyclic *wh*-movement, been occupied by the *wh*-element. However, each sub-dialect restricts the possible positions to a subset of those in which the *wh*-element has occurred.

McCloskey's analyses *wh*-quantifier float as a form of stranding, but his analysis has been challenged by Koopman (2009), who suggests that West Ulster English 'floating' *all* resembles Dutch *allemaal* and is adverb-like. In this paper, it will be argued that the 'floating' analysis is correct; that stranding is possible not only at the edge of intermediate CPs but also at the edge of intermediate *v*Ps (something not observed by McCloskey 2000 in his data), providing concrete evidence for *wh*-movement through a position at the *v*P phase edge as proposed by Chomsky (1986), something for which the evidence has been largely theory internal, with some exceptions (see for example Barbiers 2002 on evidence for discontinuous constituents appearing at the *v*P phase edge





in Dutch). For many speakers *all* can strand at the edge of the *vP*, either in matrix *wh*-questions or in questions where movement takes place out of an embedded clause.

- (9) What did he all buy in town?
 (10) What did she say that he all bought in town?
 (11) What did she all say that he bought in town?

It will also be argued that the differences between sub-dialects, and the different stranding positions available to individual speakers, offer us a new perspective on microvariation in syntax: UG offers a range of possibilities (in this case, sites occupied by *wh*-elements during the derivation); each dialect or idiolectal grammar chooses a subset of these possible positions for floated quantifiers to surface, something fairly easily determinable on the basis of the input data.

We also throw light on an aspect of DP-associated quantifier float which has previously caused difficulty for the floating analysis; that DP associated quantifiers cannot strand in the base position of passive and unaccusative objects.

- (12) *The books were bought all.
 (13) The books were all bought.
 (14) *The children have arrived all.
 (15) The children have all arrived

There are some sub-dialects of West Ulster English which do not allow a *wh*-associated quantifier to occur in the first-merge position of the *wh*-element, but only in intermediate positions. We argue that the range of stranding positions available for DP-associated quantifier float exhibits similar characteristics – it may or may not include the first-merge position – and that this explains why in English (but arguably not in some languages such as Japanese), the setting for the possible positions for ‘quantifier float’ off DPs excludes the first-merge position.

2. Quantifier float in sub-dialects of West Ulster English

This paper undertakes a study of several varieties of West Ulster English spoken in different areas of West Ulster and shows that, while they vary in where floating *all* is licensed, *all* always appears in a position which would





contain a copy of the *wh*-element, assuming successive cyclic *wh*-movement. McCloskey (2000) presents West Ulster as a unitary dialect in respect of possible positions for *all* in *wh*-quantifier float. On further investigation, it turns out that there are in fact several sub-dialects in relation to the phenomenon, all of them allowing the appearance of *all* separated from a *wh*-element, but varying in exactly what positions the stranded *all* may appear in. Some of these are varieties which occur within different sub-areas of West Ulster, but others seem to be matters of individual variation. McCloskey himself noted that there was some disagreement among speakers about some of the positions available for *all* stranded by *wh*-movement, and it is possible that these reflect some variation in the grammars of speakers who allow some type of *all*-stranding from *wh*-movement.

2.1 West Derry City English

West Derry City speakers (from the area generally known as the ‘Cityside’ and surrounding areas) show for the most part the classic pattern described in McCloskey (2000). They allow *all* to strand either in its first-merge position (as in (16) and (17)) or in an intermediate Spec/CP position (as in (18) and (19)). With *wh*-movement of the subject, they allow stranding in the base position in passives and unaccusatives (as in (20) and (21)).

- (16) What did you do all in Derry?
- (17) Where did you go all on your holidays?
- (18) What did he say all that he did in Derry?
- (19) Where do you think all that she went on her holidays?
- (20) Who went all to the party?
- (21) What was announced all at the meeting?

There is one aspect of the structure where West Derry speakers differ from those described in McCloskey (2000). Like the other speakers considered here, West Derry speakers were reluctant to accept two locations for floated *all* that McCloskey considered to be marginally acceptable; these are the positions where *all* is associated with a *wh*-object, and is found, not in the usual object position, but after other selected elements in VP. McCloskey designates these as ‘?’ rather than fully grammatical, and West Derry speakers seem not to find them grammatical.

- (22) *What did you put in the drawer all (yesterday)?





(23) *What did you bring to school all (yesterday)?

2.2 South Derry English

South Derry English speakers do not allow a floated quantifier in an intermediate SpecCP position. Rather, it occurs either in the base position of the *wh*-element, or in a pre-VP position; the latter may be either in an embedded clause or in a higher clause.

(24) What did he do all on holiday?

(25) What did he all *vP*[do on holiday]?

(26) What did he all *vP*[say that he did on holiday?]

(27) *What did he *vP*[say all CP[that he did on holiday]]?

Note that (25) and (26) show *all* in a position at the left edge of *vP*. It might be thought that, at least in (25), this could arise because a *wh*-object needs to move to this position in order to value objective Case. However, in (27), where it appears at the edge of the matrix *vP*, it clearly has not moved there to value Case which would already have taken place in the embedded clause. Moreover, stranding at the edge of *vP* is available not only for objects, but also for *wh*-PPs which do not need to move to this position to value Case.

(28) Where did he all find the books?

(29) When does she all see her students?

Like quantifiers associated with *wh*-objects, these can also strand at the left edge of a higher *vP*.

(30) Where does he all think he found the books?

(31) When does she all say she sees her students?

It thus appears that a quantifier can strand at the left edge of *vP*, which indicates, if the stranding analysis is correct, that *wh*-movement takes place through not only the edge of intermediate CPs, but also the edge of intermediate *vPs*. Assuming, as seems reasonable, that speakers of South Derry English do not differ from other speakers of English in implementing *wh*-movement successive-cyclically through intermediate landing sites, then in the grammar of these speakers, one of the positions that the *wh*-element has passed through during the course of the derivation, the edge of an intermediate CP, is not a possible position for quantifier float. On the other hand, a position where McCloskey did not observe quantifier float, the pre-VP position, is a possible





(and for some speakers preferred) position for a floating quantifier to appear. There are two important points to note here. First, if the movement analysis is correct, then not every position through which the *wh*-element has passed is a possible position for an overt quantifier in any given dialect. The grammar of speakers of West Ulster English thus must include not only the specification that float is possible, but also a specification of which intermediate sites of *wh*-movement allow floated quantifiers to surface. It seems unlikely that dialects differ in what intermediate positions a *wh*-element transits through, and in particular what constitutes a phase; in terms of restrictions on extraction, this variety does not differ from other West Ulster English varieties or indeed standard English. Moreover, there is evidence for movement through intermediate CPs in this variety. As in Belfast English (Henry 1995: Ch3) and other Irish English varieties, T-to-C movement can occur in an embedded CP, arguably showing that a *wh*-element transits through that CP and triggers movement.

- (32) What do you think did he see?
(Standard English: What do you think he saw?)
- (33) What did she say could they do?
(Standard English: What did she say they could do?)

Note that the preverbal positioning of the floated quantifier sometimes gives rise to potentially ambiguous sentences where the subject is plural and there is no auxiliary.

- (34) What did you all do on holiday?
(can mean 'What did all of you do on holiday?' or 'What all did you do on holiday?')
- (35) What did they all see in Belfast?
(can mean 'What did all of them see in Belfast?' or 'What all did they see in Belfast?')

Where there is an auxiliary present, *all* as a floated quantifier occurs after the auxiliary, as would be expected if it is in the pre-VP position (Note that the example has float in a subordinate clause, as of course in a matrix clause, the auxiliary is obligatorily moved to C):

- (36) What were you saying he was all doing in Derry?

Interestingly, where there is more than one auxiliary, the floated *all* can appear after any auxiliary, not only the first. Assuming that it is correct that the floated position is at the beginning of the VP, then second and successive auxiliaries ,





whose position in the tree has always been somewhat problematic in English, may or may not be part of *vP*.

- (37) What do you think he has been doing all in Derry?
- (38) What do you think he has all been doing in Derry?
- (39) What do you think he has been all doing in Derry?
- (40) What do you think he might all have been doing in Derry?
- (41) What do you think he might have all been doing in Derry?
- (42) What do you think he might have been all doing in Derry?

Note that this is the same range of positions in which (in all varieties of English so far documented) we find *all* that is associated with a DP subject rather than a *wh*-element. We will return to consider the significance of this important similarity below.

- (43) They have all been singing.
- (44) They have been all singing.
- (45) They might all have been singing.
- (46) They might have all been singing.
- (47) They might have been all singing.

To summarise, South Derry English allows a floated quantifier to occur either in its first-merge position or at the edge of a *vP* phase; it does not allow stranding in intermediate CP positions.

2.3 East Derry English

Speakers from the east and southeast of County Derry appear to allow the widest range of positions for stranded *all*. They accept stranding in the *SpecvP* position and the *SpecCP* position, as well as (for many speakers) in the first-merge position of the *wh*-element. For East Derry English speakers, all of the following are possible. (48)-(50) show *all* in the first-merge position of the *wh*-element:

- (48) What did he do all in Derry
- (49) Where did you go all in Derry?
- (50) Who was elected all in the council elections?
- (51) Who was all elected in the council elections?





(52)-(56) show *all* at the edge of *vP/VP*:¹

- (52) What did he all do in Derry?
- (53) Where did he all go in Derry?
- (54) What did he all say that he did in Derry
- (55) Where did he all think that you went in Derry?
- (56) Who did he all say was elected in the council elections?

(57)-(59) have stranding at the edge of an intermediate CP (as found by McCloskey for West Ulster English in general):

- (57) What did he say all that he did in Derry?
- (58) Where did he think all that you went in Derry?
- (59) Who did he say all was elected in the council elections?

2.4 Strabane English

In direct contrast to East Derry English speakers, who seem to allow a floated quantifier to occur in any site through which a *wh*-element has transited, speakers from Strabane, a town in the southwest of the West Ulster English area, have a much more restricted grammar: they only allow stranding in the base position of the *wh*-element. They reject stranding in *SpecCP* or *SpecvP*.

- (60) What did he do all in Derry
- (61) Where did you go all in Derry?
- (62) Who was elected all in the council elections?
- (63) *Who was all elected in the council elections?
- (64) *What did he all do in Derry?
- (65) *Where did he all go in Derry?
- (66) *What did he all say that he did in Derry
- (67) *Where did he all think that you went in Derry?
- (68) *Who did he all say was elected in the council elections?
- (69) What did he say all that he did in Derry?
- (70) Where did he think all that you went in Derry?
- (71) Who did he say all was elected in the council elections?

¹ *All* appears to be able to strand at the edge of an intransitive VP as well as a *vP*, suggesting that both of these are phases





2.5 Individual variation

Some speakers of West Derry English, South Derry English and East Derry English, who, as we noted above, allow stranding in various intermediate positions, simultaneously disallow stranding in the first-merge position of the *wh*-element. This seems to be a matter of individual variation rather than a particularly location-related dialect factor.

It might be thought that this is an unlikely grammar, given that the positions in which *wh*-elements occur in languages are overwhelmingly either their base position (as in colloquial French and Chinese for example) or the highest position (as in English, for example).

(72) Il voit qui? (French)
He sees who
'Who does he see?'

(73) Ta kan shei (Mandarin Chinese)
He see who
'Who does he see?'

(74) *Shei ta kan
Who he see?
'Who does he see?'

(75) *He sees who? (ungrammatical except as an echo question)

To see that stranding of *all* in intermediate positions, but not in most base positions, is a plausible grammar, we only need to look at a characteristic of quantifier float off DPs which has hitherto provided some problems for those who propose a stranding analysis of this phenomenon, as distinct from the competing adverbial analysis. Consideration of this will not only show the plausibility of such an analysis for varieties of West Ulster English, but will also permit us to throw some light on this otherwise puzzling characteristic of floating DP-quantifiers in English.

As is well known, quantifiers associated with subject DPs can strand in the *vP*-initial position, as in (76), and it is generally argued that this is stranding in the base position of the subject. But note that it is also a phase edge. There are some puzzling lacunae in the positions available for stranded *all* under an analysis where it can strand in its base position. Thus, it cannot strand in the postverbal object position where the subject is assumed to originate in passives or unaccusatives (see Bobaljik, 2003 for discussion of the 'passive and





unaccusative problem' and many other aspects of floating quantifiers associated with DPs).

- (76) The children are all singing.
- (77) The books have all been read.
- (78) *The books have been read all.
- (79) The students are all going to class.
- (80) *The students are going all to class.

The explanation for the unavailability of stranding in the base position in passives and unaccusatives has led to some fairly ad hoc stipulations, such as Bošković's (2004) proposal that floated quantifiers cannot ever surface in theta positions.

Taken together with our analysis of floated *all* in *wh*-movement, which has shown that grammars differ in relation to which positions *all*-stranding is possible in, this suggests a plausible explanation for why stranding in the first-merge position in passives and unaccusatives is not possible for DP-associated floating quantifiers; that is, that the position in which *all*-stranding is possible off DPs in English is not every position in which the DP has occurred, but rather the edge of the VP – where the subject originates in simple structures, and through which an element in the VP must transit in order to escape the VP. That stranding of a *wh*-associated *all* is possible in these positions for those West Ulster English speakers who allow the pronunciation of *all* in the base position of the *wh*-element, shows that there is not intrinsically a problem with stranding in this position in itself. Rather, the possible places for the pronunciation of a copy or its associated quantifier are a subset of the positions through which the element has transited, and in which copies therefore occur, and that subset differs for DP movement and *wh*-movement in the languages in which quantifier float off both of these is possible. It seems that speakers of all varieties of English only allow DP-associated quantifier float in intermediate positions, not the first-merge position. Yet, on the contrary, most varieties except some West Ulster English ones only allow *wh*-associated *all* to occur in the highest position, directly after the *wh*-element; it cannot strand in the first-merge or intermediate positions. Since, as McCloskey (2000) notes, the grammar of West Ulster English speakers appears to be identical to that of other speakers of English in relation to DP-associated quantifier float, it seems clear that





possible stranding positions differ in speakers' grammars for DP-movement and wh-movement, not perhaps surprising since they are often considered to be different grammatical processes.

If this analysis is correct, it makes a prediction about possible grammars in relation to DP-associated quantifier float: we would expect languages to exist which choose the option of DP-associated quantifiers stranding in their first-merge position, thus in the object position in passives and unaccusatives. And, in fact, this seems to be the case for Japanese (a verb final language). Miyagawa (1989) shows that numeral quantifiers (which in Japanese can strand like *all*-type quantifiers) can appear to the right of intervening material (thus in their first-merge position) when the subject originates as a passive or unaccusative object, but not when the verb is transitive.

- (81) Yuube, kuruma ga doroboo ni 2-dai nusum-are-ta.
 last night cars NOM thief by 2-CL steal-PASS-PAST
 'Last night, two cars were stolen by a thief.'
- (82) Gakusei ga kyoo 3-nin kita.
 students NOM today 3-CL came .
 'Three students came today.'
- (83) ?*Gakusei ga hon o 4-nin katta.
 students NOM book ACC 4-CL bought
 (note that the choice of classifier indicates that the numeral quantifier must be interpreted with *students* rather than *books*)
 'Four students bought books.'

Thus, the grammar that our analysis of quantifier float suggested should be possible in some natural languages – all stranding off DPs in the first-merge position of the DP in passives and unaccusatives – appears to be instantiated in Japanese.

Where does this leave Dutch *allemaal*, discussed in Koopman (2009), where she equates it to West Ulster English *all*? Note that Koopman shows that *allemaal* occurs only in *vP*-initial position. She argues that it is an adverbial-like element which adjoins to the left of VP, rather than a floated element, because it does not occur in SpecCP. Our account here offers a possible alternative explanation: Dutch has a grammar where stranding of *allemaal* is not possible in the first-merge position of the associated wh-element, nor in SpecCP but only at the VP phase edge.



Koopman points out that in Dutch, unlike West Ulster English as described in McCloskey (2000), a floating quantifier cannot occur between a finite verb and a complementizer in sentences with embedding; in other words it cannot occur in the SpecCP position.

(84) What did he say (that) he wanted all?

(85) Wat heft hij gezegd dat hij allemaal wilde hebben?
what has he said that he all wanted have
'What all has he said that he wanted to have'

(86) What did he say all that he wanted?

(87) Wat heft hij (allemaal) gezegd (*allemaal) dat hij wilde hebben?
what has he all said (*all) that he wanted have

Koopman uses this data to argue that *allemaal* cannot be analysed as a floated quantifier because it only occurs at the left edge of *vP*, and not at the left edge of CP. Our account here offers a possible alternative explanation: Dutch has a grammar where stranding of *allemaal* is not possible in the first-merge position of the associated *wh*-element, nor in SpecCP but only at the VP phase edge. In other words, the grammar of Dutch in relation to *wh*-associated quantifier float is just like that of those South Derry English speakers who do not allow stranding in the first-merge position, but only at the edge of *vP*.

Koopman seeks to extend the non-stranding analysis to West Ulster English by deriving the surface order where *all* apparently occurs at the left edge of CP by a complicated series of roll-up movements. This involves the merging of *all* at the left edge of *vP*, and a series of otherwise unnecessary movements to produce the order where *all* surfaces at the edge of an intermediate CP. But our analysis of varieties of West Ulster English has shown another possibility: Dutch is simply a variety (like South Derry English) where the intermediate SpecVP position is a position where a floated quantifier may surface; rather Dutch allows stranding only in the (base or intermediate) *vP* position.

Our analysis also allows us to provide a simpler account of why West Ulster English varieties differ in their grammars between DP-associated quantifier float and *wh*-associated float. McCloskey (2000) resorts to having *wh*-elements associated with a postverbal DP (as in passives and unaccusatives) being able to move directly to SpecCP, without transiting through a subject position, whereas DP-associated quantifiers in this position do not have this





option. This works, but complicates the grammar, and may have difficulty in ensuring the appropriate Case is valued on the *wh*-element if it does not transit through a subject position. The analysis we present here, however, needs neither complex movement and roll-up, nor complex constraints on the movement of objects of passives and unaccusatives. Rather, we allow the grammar to independently provide a number of positions where *wh*-elements or DPs, and their copies, appear in the derivation. Which of these positions a floated quantifier can surface in is obvious from the surface data, and this is all that needs to be learned from the data by native speakers.

3 The locus of grammatical (micro-) variation

We have seen that grammars differ from one another in the position in which *all* can occur. It is, as we noted, unlikely that this is because grammars differ in which positions *wh*-movement passes through. However, that it offers a degree of optionality might be considered a problem, something which has often been seen as problematic in minimalist studies. Moreover, the raising of *all* higher than its first-merge position might be considered to go against principles of economy (though these might differ for stranding rather than simple movement).

Rather what this suggests is that a range of options is made available by UG, and varieties can select among these. In relation to *wh*-movement, UG specifies the position in which an element is first-merged and the steps it must take in order to reach the highest appropriate SpecCP. Each of those positions contains a copy of the *wh*-element. Which of the positions is pronounced and which deleted is learnable from the primary data. It seems that there is a preference for a single position for any given language variety and for positions at the head and foot of the chain – *wh*-questions with or without apparent *wh*-movement are much more commonly found in languages than those with a *wh*-element pronounced at an intermediate place of *wh*-movement, for example. A quantifier such as *all* may strand in – and be pronounced at – any of the positions in which (a copy of) the *wh*-element occurs, and again the available positions where the quantifier may surface are an easily learnable subset of the positions in which (a copy of) the *wh*-element appears.





Finally, note that *all* can strand in West Ulster English in structures where there is not an overt *wh*-element, but which might be argued to involve *wh*-movement, such as in the following recorded example:

(88) Your wee ways are difficult to keep up with all

It has long concerned generative linguists that speakers' grammars can contain variability; thus for example Tortora & den Dikken (2010) consider that Appalachian English speakers who show variable subject-verb agreement must have two separate, competing grammars. We would argue that such a view sees UG as more prescriptive than it in fact is. UG is in some senses highly prescriptive – for example in relation to the positions in which (copies of) *wh*-elements occur: they only occur in the first-merge position, the edge of CPs and the edge of *v*Ps. This leaves open a range of options, and a language variety is not constrained to select only one.

In general, then, we should not only be unconcerned by optionality, we should expect to find it. UG constrains where copies can appear, but it still makes available a range of positions for copies. Which of these is pronounced is a relatively low-level phenomenon learnable from the input data, given that only a small range of possible positions is available. Nothing forces a single choice, or a single position for pronunciation. The varieties of West Ulster English make a range of different selections of possible positions for stranded *all*, but always within the positions made available by UG. It is possible that in focusing for the most part on data from standard languages, which in their very standardization have proclaimed that certain options are grammatical and some are not (see for example Cheshire & Stein 1997), we have underestimated the level of (constrained) variability offered by UG. Learning a grammar, then, is in large part discovering in which of the possible positions offered by UG an element can, and cannot, be pronounced.

4. Conclusion

Note that the analysis presented here is simple and straightforward. It makes use only of features which are independently necessary in UG: *wh*-movement, DP-movement, phases, and the concept of movement via intermediate phase edges. Unlike McCloskey's and Koopman's analyses, there is no need for short (often vacuous) verb movement in English, remnant





movement or roll-up, all of which must be much more problematic for the first language learner to figure out and which considerably complicate the grammar. The sites available to West Ulster English *all* are exactly those which UG would lead us to expect, and the fact that different varieties allow the pronunciation of *all* in a subset of these positions is not surprising; one of the major areas of difference between grammars is considered to be which elements of chains are pronounced. While quantifier float under *wh*-movement may still seem somewhat exotic, in that, at least in those languages for which information is available, the majority do not have quantifier float from *wh*-elements, the constraints on it and variation in it across sub-dialects are exactly what we would expect, assuming that UG leaves open the choice as to which elements of a chain can be pronounced.

While investigating variation in West Ulster English varieties, we have also made some discoveries in relation to other elements of grammar. First of all, our study confirms that the edge of *vP* is a site of successive cyclic movement of *wh*-elements, as it is a possible stranding site in some West Ulster English dialects. Secondly, we have provided an explanation for why DP-associated *all* cannot strand in the first-merge position of the DP in English passives and unaccusatives; the possible stranding locations licensed by UG are not uniformly available in all language varieties, and English happens to be a variety in which stranding off DPs in the first-merge position is not allowed, as distinct from Japanese which allows stranding in that position. There is no need to adopt a new principle specific to quantifiers (for example, that they cannot strand in theta-positions). Rather, a simple and easily learnable choice of stranding positions can account for both *wh*-associated quantifier float in varieties of West Ulster English and the unavailability of stranding in the base positions of passive and unaccusative subjects in quantifier float off DPs in most varieties of English. This also removes one of the major counter-arguments against a 'float' as distinct from an adverbial analysis of 'floating' quantifiers: the fact that a floating analysis predicts that the base position of the DP in passives and unaccusatives should be a possible site for DP-associated quantifier float, which it is not. All it requires is that we abandon the idea that variation in grammars is excluded, and consider the (restricted) range of positions made available by UG as potential sites for the pronunciation of





copies or stranded elements, with grammars differing in the range of positions in which pronunciation is permitted.

REFERENCES

- Barbiers, Sjef. 2002. Remnant stranding and the theory of movement. In Artemis Alexiadou, Elena Anagnostopoulou, Sjef Barbiers & Hans-Martin Gaertner (eds.), *Dimensions of Movement: From Features to Remnants* [Linguistik Aktuell/Linguistics Today 48], 47–69. Amsterdam: John Benjamins.
- Bobaljik, Jonathan. 2003. Floating quantifiers: handle with care. Ms., University of Connecticut. Revised version of 1998. *Glott International State of the Article*.
- Bošković, Zeljko. 2004. Be careful where you float your quantifiers, *Natural Language and Linguistic Theory* 22, 681-742.
- Cheshire, Jenny & Dieter Stein. 1997. Nonstandard and standard syntax. In Jenny Cheshire and Dieter Stein (eds.), *Taming the Vernacular: From Dialect to Written Standard Language*. 1-12. Harlow: Longman.
- Chomsky, Noam. 1986. *Barriers*. Cambridge, Mass: MIT Press
- Henry, Alison. 1995. *Belfast English and Standard English: Dialect Variation and Parameter Setting*. New York: Oxford University Press.
- Koopman, Hilda. 2009. On Dutch *allemaal* and West Ulster English *all*. In Jan Wouter Zwart & Jan de Vries (eds.), *Structure Preserved*. Amsterdam: John Benjamins
- Miyagawa, Shigeru. 1989. *Structure and Case Marking in Japanese*. (Syntax and Semantics 22) New York: Academic Press.
- McCloskey, James. 2000. Quantifier float and wh-movement in an Irish English, *Linguistic Inquiry* 31, 57–84.
- Tortora, Christina & Marcel den Dikken. 2010. Subject agreement variation: support for the configurational approach, *Lingua* 120, 1089-1108.

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