

Phases and Interpretability

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1. Introduction

We adopt a theory of relativisation based on the idea that relatives, like *wh*-constructions in the analysis of Chomsky (1998), require two sorts of features to construct their LF-interpretation. We argue that it is the variable *interpretability* of these features that gives rise to different syntactic patterns. We use this theory to provide an explanation for some curious syntactic facts found in Celtic relative constructions, arguing that such a theory provides a unified explanation for a broad range of phenomena.

The two features which we claim are relevant to Relativisation are Λ and Var: Λ is interpreted at LF as something which creates a predicate from a proposition, so that a CP containing a Λ feature will be interpreted as a predicate which abstracts over some variable. The function of the Var feature is to identify this variable. This is the syntactic correlate of ‘lambda abstraction’. Var is one of a set of identifiability features, which appear on syntactic objects so that they can be semantically identified. The other prime case of identifiability features are ϕ features. In a sense, Var and ϕ are two complementary ways of identifying pronouns as variables at LF.

We adopt an approach to relativisation which eschews (necessary) movement of a relative operator. Within a system like that of Chomsky (1999), Chomsky (1998), the mechanisms which establish syntactic dependency (Agree) and give rise to syntactic dislocations (Move) are dissociated. We will assume that English relative clauses involve the establishment of an Agree relation between a higher C and a lower operator, possibly followed by movement of that operator¹. For us, this operator is just a *pro* with a Var feature in place of ϕ -features.

We can now contrast the classical view of Relative clauses with that adopted here. Standardly (Chomsky (1977)) relative clauses are assumed to involve movement of a null operator to the specifier of CP. The interpretation

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1. The question of whether operators move in relative constructions recalls the debate between Chomsky and Bresnan in the mid 70s (Chomsky (1977), Bresnan (1975), Bresnan (1977)). We argue here that they do not in Scottish Gaelic, and leave the question open for English.

of this operator is essentially that of a λ -abstractor, which binds the position of its trace, as in (1).

(1) Op that the giant saw t

Under the view we espouse here, the operator is a *pro* bearing a Var feature which is in its base position when the relative dependency is established. The relative complementizer bears a Λ feature and Agrees with the *pro*. Within the framework of Chomsky (1998), in order for a syntactic object to Agree, it must bear uninterpretable features, which serve to make it active. We will assume that *pro* bears an uninterpretable Λ feature (which we notate, following Pesetsky and Torrego (2000), [$u\Lambda$]), and that C bears an uninterpretable Var feature ([$u\text{Var}$]). This gives the following analysis:

(2) that[Λ , $u\text{Var}$] the giant saw *pro* [$u\Lambda$, Var]

The uninterpretable features are marked for deletion, which means that they can be erased during the Spellout process. In a language like English, where there is evidence that relativisation involves movement, we assume that an EPP feature on the complementizer drives movement of the *pro* operator to its specifier.

When the final syntactic object is interpreted, a semantic rule associates a Λ -feature with some identifiable variable. This operation is similar to the interpretative rules of Chomsky (1977). We will assume that the operation which does this appeals to any ‘identifiability’ feature: Var or ϕ . We will term it Λ -indexing, for convenience (see Heim and Kratzer (1998), chapter 5 for some indication of how to formalise this notion):

(3) **Λ -indexing:** Associate Λ with a pronoun bearing identifiability-features in Λ 's c-command domain.

This approach to relativisation raises a number of questions connected with movement. Part of Chomsky's (1977) argument is that there are cases of relativisation which involve movement, and are hence subject to general conditions on movement (subjacency etc.), and these are opposed to cases of relativisation which do not involve movement, and which are apparently unbounded (resumptive pronoun constructions in Hebrew). Since, under our approach, movement is driven by an independent EPP feature, one might expect to find languages where the relative C lacks such a feature and Agree takes place, but Move does not. We will argue that Celtic instantiates this option.

The argument we will make in this paper goes along the following lines: various empirical facts about Scottish Gaelic strongly suggest that there is no movement in relative clauses, and so we provide an analysis along the lines

sketched above; but there are locality effects in relatives, and we show that these fall out of the idea that chunks of the derivation (phases) are sent off to Spellout cyclically. This approach is an improvement over a movement approach to Celtic relatives in that it immediately explains the ‘anti-agreement’ effect found in these constructions; it also provides an explanation for the appearance of true resumptive constructions in these languages, and reduces the parametric variation found to the featural properties of functional heads.

2. Relatives in Scottish Gaelic do not involve movement

We start by examining the morphology and distribution of prepositions. Prepositional elements in SGaelic appear in a range of morphological forms. Simple prepositions, such as *le*, ‘with’, *ri*, ‘to’, *fo*, ‘under’, *dha*, ‘towards’, appear in their base form when followed by a proper name, or an indefinite:

(4) *le* Màiri
with Mary-DAT
with Mary

(5) *fo* bhòrd
under table-DAT
under a table

When followed by a DP headed by the definite article, or by the quantifier *gach*, ‘every, each’, they take on a specialised form which we shall term the *definite* form:

(6) *leis* a’ pheann
with-DEF the-DAT pen-DAT
with the pen

(7) *fon* a’ bhòrd
under-DEF the-DAT table-DAT
under the table

Note that these prepositional forms do not agree in ϕ -feature specification with the following overt DP. This contrasts with a third sort of prepositional structure where the preposition fully agrees in ϕ -features with a non-overt pronominal (Hale and McCloskey (1984)):

(8) *leatha* *pro*
with-3FS *pro*
with her

- (9) fodha *pro*
 with-3MS *pro*
 under him

Interestingly, in SGaelic, unlike in Irish (McCloskey (1990)), there are no resumptive pronominal structures, so the *pro* found in these constructions cannot be \bar{A} -bound in a relative or wh-construction. Note the overt complementizer *a* which heads the relative and which we gloss as C-REL:

- (10) *Siud a' chaileag_i a dh'eisd thu rithe_i
 That the girl C-REL listen-PAST you to-3FS
 'That's the girl that you listened to.'

\bar{A} -binding constructions, however, provide us with the final form that prepositions may take. In place of the agreeing preposition seen in (10), we find a default masculine singular form when the complement of P is relativised on, even though the DP which is relativised on is grammatically feminine.

- (11) Siud a' chaileag_i a dh'eisd thu ris_i/*rithe_i
 That the girl-FS C-REL listen-PAST you to-3MS/*to-3FS
 'That's the girl that you listened to.'

We will term this form the *default* form. The base form of the preposition is equally excluded in these \bar{A} -binding contexts.

- (12) *Siud a' chaileag_i a dh'èisd thu ri_i
 that is the girl-FEM C-REL listen-PAST you to
 'that's the girl you listened to'

The appearance of this default form is restricted to cases where the complement of the preposition is \bar{A} -bound. If there is no \bar{A} -binder, then the preposition is interpreted as though it has a third masculine singular *pro* following:

- (13) Chuir thu am peann ann
 Put-PAST you the pen in-3MS
 'You put the pen in it.'

A plausible analysis of the default form is that these \bar{A} -binding constructions are derived via movement just as in the English cases discussed in section 1, and that the preposition is simply followed by a trace which triggers no agreement. However, it turns out that there is evidence that no movement takes place in these constructions.

2.1. Against trace

Recall that the stranded preposition appears in its default form, rather than any other form, but that a preposition with a following overt definite DP appears in its definite form. In multiple wh-questions, we can see that a wh-expression counts as definite for such purposes (14). Assuming that the definite preposition in (14) checks its [definite] feature with its complement at Merge, or soon after, it follows that a movement analysis would predict the occurrence of the definite form of the preposition when a definite wh-phrase complement of P is extracted, contrary to fact.

(14) Cò a chuir am peann anns dè am bocsa?
 Who C-REL Put-PAST the pen in-DEF which the box
 ‘Who put the pen in which box.’

(15) Dè am bocsa a chuir thu am peann ann/*anns?
 which the box C-REL put-PAST you the pen in-3SM/in-DEF
 “Which box did you put the pen in?”

We cannot appeal to the idea that the definiteness feature is only checked at Spellout, and that (15) is ruled out because the trace is, in some sense, indefinite. If traces are pure copies (the maximally simple assumption), then the trace should be just as definite as the moved element.

A similar argument can be made on the basis of non-definite DPs. Simple wh-words in SGaelic do not trigger definiteness marking on prepositions:

(16) Cò a dh’èisd ri cò?
 who C-REL listen-PAST to who
 “Who listened to whom”

When a simple wh-word is extracted, though, we do not find the unmarked form of the preposition, but rather the default form:

(17) Cò a dh’èisd thu ris/*ri?
 Who C-REL listen-PAST you to-3MS/to
 “Who did you listen to?”

If Wh-constructions were generated via movement of the wh-word, then we would expect structures like (17) with a bare preposition to be grammatical, and we would need to have some extra mechanism to rule them out and to force the preposition to take its default form.

Further evidence that wh-constructions and relatives do not involve movement comes from reconstruction. A reflexive embedded in the wh-DP cannot be coreferential with the subject inside the remainder of the clause.

- (18) ??Dè am fear de na peannan *aige fhèin_i* a bha e_i a'sgrìobhadh leis
 Which one of the pens at himself C-REL was he writing with-3MS
 'Which one of his own pens was he writing with?'

This contrasts sharply with the corresponding example in English, where coreference between the reflexive and the subject is forced (cf. example (19)).

- (19) Which pictures of himself_i does John_i like?

Assuming with Chomsky (1993) that reconstruction is dependent on movement, the fact that the reflexive in (18) cannot be interpreted as being bound by the subject of the clause strongly argues for an analysis of wh-constructions which does not involve movement. Of course, if the complement of the preposition is not a trace but a *pro*, this follows immediately.

There is further independent evidence that we are dealing with an *in situ* little *pro* rather than a trace which comes from the behaviour of rightward-shifted pronominals. In Scottish Gaelic, non-subject pronominals regularly postpose, a phenomenon which appears to be prosodically motivated (Adger (1997), McCloskey (1999)). Compare the position of the proper name object in (20) with the postposed pronoun in (21):

- (20) Chunnaic mi Dàibhidh 'sa bhaile an dè
 see-PAST I David in the town yesterday
 'I saw David in the town yesterday'

- (21) Chunnaic mi 'sa bhaile an dè e
 see-PAST I in the town yesterday him
 'I saw him in the town yesterday'

The same possibility is open to prepositions which have little *pro* objects:

- (22) Dh'èisd mi 'sa bhaile an dè ris
 Prt+listen-PAST I in the town yesterday to-3MS
 'I listened to him in the town yesterday'

Interestingly, this is a phenomenon where the default preposition patterns with the agreeing preposition. In questions, it turns out to be possible to strand the preposition at the end of the sentence as in (23).

- (23) am program a bha thu ag èisdeachd an dè ris?
 the program C-REL were you listening yesterday with
 '??the programme you were listening yesterday to.'

Given that rightward movement of PPs gives rise to so called "freezing" effects (compare the oddness of the translation of (23)), the grammaticality of

such examples would be surprising if the default preposition had a trace as its complement. If the preposition takes a *pro* complement, then the behaviour of these rightwards shifted prepositional elements is a simple extension of the behaviour of pronouns in general.

All of the arguments brought to bear in this section point to an analysis where *wh*-constructions and relatives do not involve movement from the theta-position of the bound argument, but rather where the theta-position of the bound argument is occupied by a *pro*.

3. Anti-agreement

Our analysis of these SGaelic relative structures follows that outlined in section 1. A simple relative clause in SGaelic consists of a *pro* bearing an uninterpretable *Var* feature, and an uninterpretable Λ -feature. Once a *C* with *uVar* and interpretable Λ is Merged, Agree will take place, and the uninterpretable features will be marked for deletion. More concretely, consider the following example, where a relative clause is formed with the complementizer *a*.

(24) an duine a bhuaileas e *pro*
 the man C-REL will hit-REL he
 ‘the man that he will hit.’

- (i) Merge *pro*[*Var*, *u* Λ] with *V*
- (ii) Merge in remainder of clausal structure and perform any requisite movements.

(25) [*bu*aileas e *pro*[*Var*, *u* Λ]]

- (iii) Merge in *a* [*uVar*, Λ].

(26) [*a* [*uVar* Λ]] *bu*aileas e *pro*[*Var*, *u* Λ]]

- The *Var* and Λ features Agree and the uninterpretable ones are marked for deletion.
- At the end of the next strong phase all the uninterpretable features are deleted and only the interpretable ones remain: [Λ] on the *a* and [*Var*] on the *pro*. Λ -indexing provides the correct interpretation.²

2. Note that the verb in SGaelic occurs in a special ‘relative’ form in clauses headed by the *a* complementizer. We hypothesise that such verb forms also contain an uninterpretable Λ feature as part of their morphological specification. We are abstracting away from features on the verb here, although in a theory which recognises *vP* as a strong phase, the existence of this mediating feature is potentially significant.

This analysis predicts the appearance of default agreement morphology under relativisation, since the *pro* in its base position bears Var identifiability features, rather than ϕ :

- (27) Cò a'chaileag a bha thu a'bruidhinn *rithe/ris?
 Which girl C-REL be-PAST you at speaking with-3SF/with-3MS
 'Which girl were you talking to?'

Interestingly, we also find default agreement in Modern Irish, and Literary Welsh in certain relativisation contexts which are analogous to those discussed above. In Irish a subject which is relativised on, even if it is plural, occurs with default singular agreement (Hale and McCloskey (1984)):

- (28) na daoine a chuirfeadh/*chuirfidis isteach ar an phost sin
 the men C-REL put-COND-DEF/*put-COND-3PL in for the job that
 'The men that would apply for that job'

A similar observation can be made for Welsh:

- (29) *y dynion a ddarllenodd/*ddarllenasant y llyfr
 the men C-REL read-PAST-DEF/*read-PAST-3PL the book
 'the men that read the book'

- (30) y dynion a y llyfr
 the men C-REL read-PAST-DEFAULT the book
 'the men that read the book'

These examples show that when a plural subject is relativised on in Welsh, the agreement marked on the verb is default singular, rather than plural. In all of these cases we analyse the default agreement as arising from the Var specification of a *pro*.

4. Long Distance relativisation

As is well known, the Celtic languages display an interesting effect when a clause boundary is relativised over. In Scottish Gaelic, the subordinating complementizer is *gu(n)* (31) and the relative or extracting complementizer is the *a* that we met above (32). There is no resumptive pronoun strategy, or a distinct complementizer that goes with it (33). Long distance dependencies are constructed with the *a* complementizer in each C position (34).

- (31) Thuit e gun do bhuail e e
 Said he that prt struck he it
 'He said that he hit it'

- (32) an duine a bhuaileas e
 the man C-REL hit-REL he
 ‘the man that he hit.’
- (33) * an duine a thuir e a bhuaileas e e
 the man C-REL said he C-REL strike-REL he it
 ‘*the man that he said that he will hit him’
- (34) An duine a thuir e a/*gun bhuaileas e
 The man C-REL said he C-REL/*that strike-REL he
 ‘The man that he said he will hit?’

Modern Irish also displays this complementizer alternation, but, in addition, displays a further strategy with resumptive pronouns (that is, overt or null pronouns bearing a full set of ϕ -features). The resumptive strategy involves the use of a different complementizer (McCloskey (1990)). Following McCloskey (1979) we notate the latter as *aN* and the complementizer parallel to Gaelic *a* as *aL*. C-RES in the gloss abbreviates the idea that this complementizer occurs with resumptives.

- (35) An scríbhneoir aL mholann na mic léinn
 the writer C-REL praised the students
 ‘The writer that the students praised.’
- (36) An scríbhneoir aN molann na mic léinn é
 the writer C-RES praised the students him
 ‘The writer that the students praised.’
- (37) Tigh beag caol ar mhaireamar ann
 house little narrow C-RES-PAST live-PAST-1PL in-3MS
 ‘The little narrow house that we lived in (it)’

Long distance dependencies can be constructed via the *aL* strategy, or by the resumptive pronoun strategy. In the case of the *aL* strategy, the intermediate complementizers are all obligatorily *aL*. In the case of the resumptive strategy, only the top complementizer of the dependency is in the *aN* form, all the other complementizers are the ordinary subordinating complementizer *go*³.

- (38) an t-ainm a hinnseadh dúinn a bhí ar an áit
 the name aL was-told to-us aL was on the place
 ‘the name that we were told was on the place.’

3. There are other possibilities noted in the literature. See, especially, McCloskey (2000). We leave these aside here, but see Adger and Ramchand (2001).

- (39) fir ar shíl Aturnae an Stáit go raibh siad díleas
 men aN thought Attorney the state that were they loyal
 ‘men that the Attorney General thought were loyal.’

When the foot of the dependency is separated from the top of the dependency by an island, only the resumptive strategy is available.

In Literary Welsh, there are also two distinct complementizers. The *a* complementizer is the one found in relativisation on matrix subjects and objects (40) and is incompatible with an overt pronoun (41). The *y* complementizer is found when a resumptive pronoun is used (42).

- (40) yr olygfa a welai o ben y mynydd
 the view C-REL saw-IMPF from top the mountain
 ‘the view that he had from the top of the mountain’
- (41) *yr car a werthodd Gareth ef
 the car C-REL saw-IMPF Gareth it
 ‘the car that Gareth saw (it)’
- (42) Y dyn y siaradasoch chwi ag *(ef)
 the man C-RES talked you with him
 ‘the man that you talked with.’

In long distance relatives, only the *y* strategy is possible (43).

- (43) Y llyfr y dywedodd John y gwerthodd Mary ef
 The book C-RES said John RES read-3SG Mary it
 ‘the book that John said that Mary read it.’
- (44) *Y llyfr a ddywedodd John a werthodd Mary
 The book C-REL said John C-REL read-3SG Mary
 ‘the book that John said that Mary read.’

We take the case of SGaelic first. We have seen that SGaelic relatives involve the special complementizer $a[uVar, \Lambda]$. Our proposal is that there is a general correlation between whether a clause is selected and the interpretability of its Λ -feature. Let us assume that selected clauses check Case, and that the following correlation holds:

- (45) case $\Leftrightarrow u\Lambda$

This is to be understood as specifying that, when a C head bears a Case feature, then its Λ -feature is uninterpretable.⁴

4. Intuitively, the interpretability of the Λ feature is correlated with the semantic type of the clause in question: clauses with an interpretable Λ feature are predicates,

- (46) an duine a thuir e a bhuaileas e *pro*
 the man C said he C will hit-REL he
 ‘the man that he said that he will hit.’

The derivation proceeds exactly as for (24), except that crucially, when the first *a* is Merged in, it must be with a [case, *u*Λ] feature specification.

- (iii') Merge in *a* [case, *u*Var, *u*Λ]

- (47) [a [case,*u*Var,*u*Λ]] buaileas e *pro*[Var, *u*Λ]]

- (iv) The features Agree and the uninterpretable ones are marked for deletion.
- Merge in higher V/*v*, deleting the case on *a*, and continue derivation until the next C. At this point, the lower TP is sent off to Spellout. This is possible, since all its uninterpretable features have been marked for deletion.

- (48) thuir e [a [case,*u*Var,*u*Λ]] [_{TP} buaileas e *pro*[Var, *u*Λ]]]

- Merge in *a* [*u*Var, Λ], which does not have a case specification. This is the *a* that ‘heads’ the relative clause, which is adjoined to NP and does not require case checking.

- (49) [a [*u*Var, Λ] thuir e [a [case,*u*Var,*u*Λ]] [_{TP} buaileas e *pro*[Var, *u*Λ]]]

- (vi) Since the features at the edge of the phase are still accessible to the higher phase at this point (even though they have been marked for deletion), Agree is able to operate between the higher and lower complementizer positions, marking the uninterpretable features for deletion. Once again leaving only the interpretable Λ at the top of the dependency and the interpretable Var at the foot.

At LF, the interpretation of the structure is given by the interpretation of the features we have defined. The Λ feature indicates that the CP is a predicate, doing the equivalent of abstracting over it. The Λ-indexing procedure links a λ-operator with some syntactic object bearing identifiability features, in this case *pro*[Var]. Note that this indexing applies irrespective of the syntactic distance between Λ and Var. However, locality is ensured by the phasal

whereas Case marked CPs are semantically arguments, selected by a higher predicative head. In a long-distance relative from a complement clause, the C head of that complement clause bears a Case feature which is checked by the higher little *v* or by V, depending on the approach taken to Case checking. Here we assume simply that an interpretable Case feature and an interpretable Λ feature are incompatible, a simple extension of the idea that the interpretability of features is dependent on the category of the head it appears on.

nature of the derivation.⁵ Consider (50), where the normal embedding complementizer *gu(m)* appears, heading the lower clause:

- (50) *an duine a thuir e gum [buaileadh e *pro*]
 the man C-REL said he that would hit he
 ‘the man that he said he would hit.’

The sentence in (50) is ruled out because the $u\Lambda$ feature on *pro* has been sent to spell-out by the time the higher *a* is Merged. The intermediate complementizer *gum* cannot check the $u\Lambda$ -feature on *pro*, and *pro* is inaccessible to syntactic operations from *a*. In a sense, what we have here is analogous to a subjacency violation. On the assumption that islands provide no Λ feature, this system correctly predicts that these dependencies cannot reach into islands.

5. Resumption is semantic binding

Consider now the resumptive strategy found in Irish and Literary Welsh, repeated here in (51) and (52).

- (51) fir ar shíl Aturnae an Stáit go raibh siad díleas
 men aN thought Attorney the state go were they loyal
 ‘men that the Attorney General thought were loyal.’

- (52) Y llyfr y dywedodd John y gwerthodd Mary ef
 The book Y said John Y read-3SG Mary it
 ‘the book that John said that Mary read it.’

- (i) Merge object pronoun with verb. This is just a simple pronoun with interpretable ϕ -features (person, number and gender). It also does not contain a [$u\Lambda$] feature.
- (ii) Continue with derivation. Normal embedding complementizer is Merged, and has its case-feature checked by the higher V/v.
- (iii) Eventually, a complementizer is Merged bearing interpretable [Λ] and the result can be interpreted as a predicate and adjoin to NP.

At LF, Λ -indexing applies and Λ picks out as its variable a pronoun with identifiability-features, in this case ϕ -features. Note that here there is no syntactic locality required, and since Λ -indexing requires only c-command, we expect to find this resumptive strategy not only long-distance across clauses, but also across islands. This is a correct prediction (McCloskey (1990)).

5. Once again, depending on the view of Spell-Out and phases one adopts, the Λ feature on the verbal head may or may not be significant here.

6. Lexical parametric variation

Looking at the different types of complementizer across the Celtic languages we have considered, we find the following pattern: Scottish Gaelic and Irish have a complementizer that is [$u\text{Var}, (u)\Lambda$], where the interpretability of the Λ feature is dependent on whether the clause is [case] or not. This means that we get chained *a* complementizers with a default *pro* at the foot of the dependency. The Welsh *a* is essentially the same except it is specified as not ever having [case], so the Λ feature will always be interpretable on it and it can never be used to head an embedded clause. This is why Welsh shows no long-distance *a* dependencies.

Turning to the resumptive complementizers, Welsh has *y* [$(u)\Lambda$] where the interpretability of the Λ depends on whether *y* has [case] or not. Irish on the other hand, has a complementizer *aN*, also [$(u)\Lambda$], but specified as never allowing [case]. Both these complementizers simply allow semantic binding of a fully specified pronoun in their c-command domain, with no locality condition on the dependency. The lack of [case] on Irish *aN* means that chained *aN* complementizers are not generally found in Irish, while they are in Welsh.⁶ In Irish the ordinary [case] complementizer is found instead:

- (53) SG/Irish *a*: [$(\text{case}) u\text{Var}, (u)\Lambda$]
 Welsh *a*: [$u\text{Var}, \Lambda$]
 Irish *aN*: [Λ]
 Welsh *Y*: [$(\text{case}) (u)\Lambda$]
 SG/Irish *gun*: [case]

Apart from the (plausible) restriction that *Var* features must cooccur with a paired $u\Lambda$ ⁷, we find all the possible subsets of the features [case, $u\text{Var}, u\Lambda$], with the interpretability of Λ depending on the presence of case.

Scottish Gaelic and Irish also differ in whether they allow a *Var* dependency into a PP, a difference analogous to P-stranding. We can implement this difference by restricting the ability of *Var* to cooccur with dative case in Irish but not in Scottish Gaelic, although, of course, this is not an explanation.

7. Conclusion

The system we have briefly outlined here adopts a classical Chomsky (1977) approach to the construction of the semantics of relatives on the basis of a syntax using two features (Λ and identifiability-features). We have shown that paying attention to the interpretability of these features allows us to elegantly capture a rich and complex system across three languages. We

6. But see references in footnote 3.

7. See Adger and Ramchand (2001) for detailed discussion

have made a distinction between syntactic dependencies which are triggered by the requirements of uninterpretable features, and which therefore obey locality (here, phasal) conditions, and a semantic binding dependency which is sensitive merely to c-command. The operation mediating the syntactic dependency is that of Agree, and not Move and we have argued that an analysis in non-movement terms is both more conceptually parsimonious and empirically motivated. In formulating the account, we made use of the idea that the interpretability of a feature is dependent not only on the particular head that it occurs on, but also potentially on the other formal features of that head (see (45)). It remains to be seen whether this claim can be independently supported by other phenomena and other languages. We leave this as an interesting open problem.

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