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THE ROLE OF FUNCTIONAL FEATURES IN THE DERIVATIONAL PROCEDURE: A NEW ACCOUNT OF THE EPP-EFFECTS, CASE AND AGREEMENT

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ABSTRACT

In this paper, I propose an alternative account of feature checking/valuation based solely on categorial features. The main assumption is that lexical heads have an exclusively lexical feature matrix, whereas functional heads have an exclusively functional feature matrix. The next assumption is that only lexical features allow strictly local feature checking/valuation (i.e. under Agree); functional features, on the other hand, require a syntactic operation (Merge or Move) to check/value their functional features. Interaction between functional heads (Probes) and lexical ones (Goals) is made possible only via the mediating functional heads c-selecting the lexical ones (e.g. D selects N/NP, *v* selects V/VP). The mediating functional heads provide lexical heads/categories with a functional layer indispensable for "communication" with the functional Probes (as in Chomsky 1999: 9). The analysis proposed here accounts for the facts traditionally ascribed to the Extended Projection Principle (EPP). I show on the basis of English and Icelandic data that the EPP-effects result from categorial functional feature checking and cannot be reduced to either Case or agreement; rather, Case and agreement are intertwined in the processes of categorial feature checking/valuation and constitute their output, but crucially not their goal.

KEYWORDS: feature checking/valuation; EPP-effects; feature matrix; expletive constructions.

1. The Proposal: What drives the syntactic derivation?

In the analysis to be presented here, the driving force behind syntactic derivations is the need of functional probes to check/value their categorial functional features. Functional heads exist solely for their function, to ensure they perform it, syntax employs the strategy of feature checking/valuation. The lexical features of lexical heads, on the other

hand, constitute their intrinsic features, and thus need not be checked.[1] Lexical heads/categories are c-selected by functional heads. This provides them with a functional feature layer thanks to which they may take part in syntactic operations instigated by functional heads. This does not mean that lexical features cannot enter into any checking procedures alone: they can, they just do not require syntactic operations such as Move or Merge to do so and can be fully satisfied in situ, under Agree. It follows, then, that these are functional features, not the lexical ones, that push the derivation forwards.

1.1. Categorial feature matrices of lexical and functional heads/categories

This framework is based on the fundamental distinction between lexical and functional heads, i.e. that lexical heads are equipped with lexical features only ([N,V]), whereas functional heads bear an exclusively functional feature matrix ([D,T]). Below I present an account of the categorial feature matrices of the relevant heads.

1.1.1. Lexical heads

The categorial feature matrix of N [+N,−V] is rather uncontroversial (see Chomsky (1982)). I believe that the [+N] part is the residue of the noun's agreement (φ-) features. The NP projected from N can be c-selected by a functional head D and the agreement features borne by N can be accessed by functional probes via the functional feature layer that the DP provides. The verbal feature matrix V [−N,+V] stands in a clear opposition to the nominal one. The lexical verb is also a Θ-role assigner and to fulfil that role it subcategorizes for lexical (or functional) categories. Bearing the feature matrix [−N, +V], it can also establish an Agree relation if it finds a matching [+N,−V] feature matrix in its complement. Another lexical category that shares the feature matrix with the lexical verb is the preposition (P), which is predicative and has the ability to value lexical Case. The difference between V and P boils down to the fact that P is not selected by any functional category (though see Pesetsky and Torrego 2000 for a different approach). Unaccusative verbs are assumed to be [+N,+V] categories, just like adjectives, and, similarly to adjectives, they cannot establish Agree with a nominal complement.[2]

[1] There is no correlation between interpretable/uninterpretable features on the one hand, and lexical/functional categorial matrix features on the other; for instance, the T feature of T is interpretable, but it is unvalued and thus must enter into a relation in which it will gain its value. Because it looks like it is being checked, it may be mistaken for being uninterpretable, however, since it is a label feature of T, it must be its interpretable feature, i.e. a feature that makes it what it is: a functional head responsible for the tense dependency, which is external to the head introducing the event head and its participants (*v*P).

[2] An anonymous reviewer for *PSiCL* posed the question of how the system proposed here accounts for agreement between the moved underlying OBJ of the unaccusative verb and the verb itself, as in the following Polish example: *Szklanka się rozbiła.* It is not V but *v* that is responsible for the presence of agreement.

Lexical verbs are c-selected by a functional "light" verb *v*, which provides the functional feature layer. I believe that the lexical adjective is also c-selected by a functional head *a* similar to the light *v*.

1.1.2. Functional heads

The determiner D [+D,−T] performs a vital function in a syntactic derivation: it c-selects nominal categories (NPs). Functional probes seeking a goal are blind to the lexical feature matrices, thus, were it not for the DP layer encompassing the NP, the NPs would never take part in syntactic operations.[3] If an NP [+N,−V] c-selected by D enters into an Agree relation with a purely lexical head (e.g. a verb [−N,+V]) it will end up with a changed feature matrix: [+D,−T,+N,−V]. The D head will no longer be able to transmit the specific values (φ-features) of the affected NP to the Probe, even though its own (D's) functional features are unaffected by that operation (due to this it is still eligible to movement).

The "light" verb *v* [−D,+T_{val}] c-selects a lexical VP and also mediates in the external Θ-role assignment. The "light" verb's feature matrix includes an uninterpretable D-feature and an interpretable valued T-feature. I believe that it is *v*, and not T, that introduces the tense content into the derivation, and it may be lexically represented by auxiliaries/modals. The uninterpretable D-feature must be satisfied via either Merge or Move, i.e. if *v* has a Θ-role to transmit for V (Spec,*v*P is a Θ-position), it will be satisfied via Merge (movement to Θ-positions is banned), on the other hand, if there is no external Θ-role, *v* will employ Move and attract an element from within its c-command domain.[4] T's feature matrix [−D,+T_{uv}] is similar to the one of the "light" verb, but its T-feature, though interpretable, is devoid of content; to satisfy its requirements T will need to attract either *v* itself or a DP entering a feature checking/valuation relation with *v* (e.g. SUBJ). Alternatively, it may attract both of them, since they bear an identical functional feature matrix (this is what I believe takes place in English). The question arises why T exists at all? I believe that it has an interpretational function to perform,

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The underlying OBJ is the sole argument of the verb and there is no EXPL, hence the Spec*v*P is not a theta-position and is thus available for movement, which we witness. This is where the attracted element enters an agreement relation with *v* and shares its features with it (not having been affected by the unaccusative lexical V previously).

[3] This seems to be generally the case: a bare nominal (BN) must usually stay in a postverbal position. The ones that look like bare nominals but appear to move are assumed to contain a (silent) DP layer (see also Landau (2005) and Vangsnes (2002)).

[4] Even if this may result only in checking, but not valuation. This is exactly what seems to take place in the so-called Accusative Unaccusatives (Lavine and Freidin 2003; Bailyn's 2004 Adversity Impersonals), where a structurally ACC Case-marked object surfaces in the matrix subject position and the observed agreement is default. These constructions are easily accommodated in the present framework and furthermore show that despite what Lavine and Freidin (2003) and Bailyn (2004) claim, we do not need an independent EPP to account for these facts.

i.e. it hosts elements moved out of focus (Miyagawa 2005: 14, see also fn. 1), makes room for a DP to be interpreted as specific (the DPs left in VP-internal positions are known to have a non-specific interpretation – see Diesing 1990, Vangsnes 2002); however, it has nothing to do with Case or agreement as is traditionally assumed.

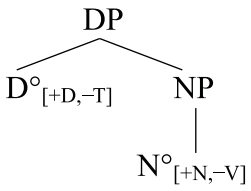
C may have varying feature matrices, depending on what is merged in its head position and what its role is meant to be. The feature matrix [+D, $+T_{uv}$] is assumed to represent an empty C°. The important thing about C° is that it is usually endowed with other features alongside its categorial ones (e.g. [+wh], [top], etc.), whose checking may also result in a free-ride categorial feature checking. Elements merged in C include *that* [+D,$+T_{val}$], and *for* [−N,+V] (also *if*, however this complementizer is also specified for other features, like [+question], as it introduces an embedded question[5]). I believe *that* to be an instantiation of valued tense features in C (see also Pesetsky and Torrego 2000), which can be merged in C only if it c-selects a TP with valued tense features (nothing need to merge in Spec,CP, as C is a [+D] category); I believe that there is also a silent counterpart of *that* with the same feature matrix. *For* is often referred to as a prepositional complementizer and thus the prepositional feature matrix; it is merged in C when it selects an infinitival TP (with unvalued T already in *v* [−D,$+T_{uv}$]); this C bearing a full categorial feature matrix [+D,$+T_{uv}$,−N,+V] enters an Agree relation with the subject of the infinitival clause (during which lexical Case is licensed), but being a functional/lexical category it probes through the functional feature layer – an operation which inactivates the functional feature layer of the probed DP (which then is literally frozen in place).

Finally, the functional head c-selecting a predicative AP: *a* [−D,−T] can attract a DP occupying its complement domain and move it to Spec,*a*P, where they enter feature checking/valuation, hence the observed concord between the adjective and its nominal argument.

1.1.3. DP, NP and EXPL

A DP category with a c-selected NP occupying its complement position has the following feature matrix [+D,+N,−V,−T] and the following form:

(1)



[5] I will concentrate on the first two here, for *if* requires a more detailed discussion, which is not necessary to the explanation and understanding of the issues at hand, namely the issues concerning clause-finiteness can be handled just on the basis of *for* and *that* without complicating the discussion any further.

A DP category that does not have an NP in its complement will bear the following feature matrix: [+D,−N,−T,−V]; I believe that this feature matrix represents an EXPL(etive) category, which will have to satisfy its features derivationally (i.e. via an Agree relation with a matching goal[6]). In the analysis proposed here, it is [N] that constitutes the residue of agreement features, whereas [D] is responsible for their transmission. When an EXPL seeks a matching goal and probes it, being a lexical/functional head itself, it will have to access the N-feature of the associate through the functional feature layer, the D head if the goal is a DP/NP; it can access the N-feature directly, if the associate is a bare NP.[7] The EXPL that chooses to select a DP-associate will inactivate the D-feature of the associate, i.e. it will freeze the associate in place (this is also the source of the so-called Definiteness Effect[8]). Via the Agree relation with the associate, the EXPL accesses and assumes the N-feature values of the associate, i.e. its φ-features. What then looks like verb-associate agreement is actually EXPL-verb agreement (see also fn. 28).

Another interesting case is represented by lexically and inherently Case-marked DP/NPs. The lexically Case-marked DP/NPs are the ones that have been affected in

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[6] Being a category, the EXPL cannot induce movement.

[7] Vangsnes (2002: 50–51) gives the following examples of bare nominals, which are not felicitous if moved from their postverbal position.

(i(a)) Það er eldaður fiskur í eldhúsinu.
there is cooked fish in kitchen.the

(i(b)) ?Það er fiskur eldaður í eldhúsinu.
there is fish cooked inkitchen.the

(ii(a)) Það hefur hellst bjór á gólfið.
there has been.poured beer on floor.the

(ii(b)) ?Það hefur bjór hellst á gólfið.
there has beer been.poured on floor.the

(iii(a)) Það hafa verið mýs í baðkerinu.
there have been mice in bathtub.the

(iii(b)) ?Það hafa mýs verið í baðkerinu.
there have mice been in bathtub.the

He claims that "[a]gain, judgments vary, and it should be noted that many speakers find the (b) examples considerably more awkward than is indicated by the question mark. There do, however, seem to be at lest two ways in which the associates in [(i)–(iii)] may be more felicitous in the intermediate position, either by being interpreted contrastively or when they contain some descriptive attribute (...). If the bare indefinites in [(i)–(iii)] are stressed, the sentences are more acceptable". In my analysis the elements which are moving would be seen as DPs. Importantly, Vangsnes points out that the ones that move, always have some interpretive feature to satisfy, and these kinds of features are handled by functional heads in the system I propose. This gives us grounds to postulating that they are DPs when they are moving (if only to satisfy the interpretive feature), and bare NPs when they remain post-verbally and receive a neutral interpretation.

[8] The associate will show the behaviour of an NP and will not leave the postverbal position. Because its D-feature is inactive, it becomes truly invisible to functional probes and thus will never be displaced.

syntax via an Agree relation with a lexical head (V/P). Agree changes their lexical feature matrix into [+N,+V] and thus their functional feature layer can no longer access the lexical (φ-) feature values.[9] This does not mean, however, that they will be ineligible for Move. When a DP/NP enters into Agree with a purely lexical probe (one that does not have any functional features, such as V or P), its functional feature layer remains active, it just cannot transmit the specific values buried in the NP. The inherently Case-marked DP/NPs enter the derivation with the following feature matrix [+D,+N_{Person},−V,−T]. Crucially, I want to propose following Boeckx (2000: 366–367) that inherently Case-marked DPs induce agreement, but have an incomplete φ-feature set (a result of inherent Case-assignment), to be precise they just have a [Person] feature.[10] Having not entered any Agree relations in the course of the derivation, the inherently Case-marked DP/NPs can check/value the functional features of functional probes, i.e. share with them their [+Person] feature.[11]

1.2. Feature checking/valuation, Case and agreement

Feature checking and feature valuation, though ideally occur simultaneously, can occur separately. The difference between the two processes is as follows: feature checking involves switching features from negative to positive, provided they find themselves in an appropriate configuration (Agree is enough for lexical features, Merge/Move will have to apply in the case of functional features). Feature valuation involves mutual sharing of specific values carried by the heads engaged in the process (such as φ-features or specific tense features, e.g. [±Past]).[12]

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[9] From the computational point of view, the category is no longer nominal as the same feature matrix is characteristic of adjectives and unaccusative verbs. At the interface levels, however, in particular Morphological Form (Halle and Marantz 1993), information about the categorial status must be available in some form which is simply not visible to syntax.

[10] Boeckx claims that Datives are generally [+human] and thus must at least bear a [+Person] feature.

[11] The probe is allowed to complete its D(N)-feature valuation (it has been already checked, but not fully valued) by searching for another goal. The secondary goal will be shown to be capable of moving overtly in Icelandic.

[12] An anonymous reviewer raises a question of whether the system presented here does not overcomplicate the system of grammar. Personally, I do not see why a clear distinction between lexical heads and functional heads in the ways they operate is a complication, as these same operations have been available to them in the sources cited by the reviewer (Chomsky 1998/2000), naturally in a constantly changing fashion, suggesting that possibly the solutions proposed did not fully grasp the distinctions that my system exploits. As the reviewer rightly points out, it is true that valuation was to supersede checking, but then we are still left with movements for which we have no valuation/Agree-based explanation (D/NP-movement, wh-movement, topicalization, OS), and if we assume that they are feature-driven, this again leaves us with checking. Also the availability of both the Spec-head and c-command are exploited just as much by Chomsky (2001). My idea of the Spec-head relation is actually just like his (Chomsky 2001: 13), i.e. the properties of the head and the category that are in a Spec-head relation are not a result of the positioning itself (Spec-head), but result from the way the features of the head are satisfied, namely via e-Merge or i-Merge. I-Merge often has been

As already mentioned, I believe that syntax does not operate on such notions as Case or agreement;[13] hence, neither Case, nor agreement, is responsible for driving the derivation. Accordingly, derivations will not crash because such and such DP/NP has no Case, but they will crash when faced with an unrecognizable (illicit) feature matrix. This does not mean that the interface levels must only be faced with positive feature values (if it were so, we would end up with no differences between the lexically and inherently Case-marked DP/NPs and the ones bearing no Case; we would also completely lose the distinction between all the lexical categories). Thus, it appears that (at least) lexical categories are welcome at the interface even with some of their categorial features negative,[14] importantly though, these are features intrinsic to them; for instance, a DP with the following feature matrix [+D,+N,+V,−T] has the history of its relations established in the course of the derivation engraved in the feature matrix (it has entered into an Agree relation with a lexical head, bears lexical Case, and will be interpreted accordingly), a DP bearing a slightly different feature matrix [+D,+N,−V,+T] must have entered into a relation with a functional head bearing a T-feature (*v* or T) with which it shared its lexical feature values (agreement). Functional heads (probes such as *v*, T and C) are a different story: their existence reduces to their function and the need to check their features is what truly drives the derivation. Lexical categories seem to be mere participants in the actions initiated by the functional probes. So, for instance, if we find an underlying OBJ(ect) in the SUBJ(ect) position, it is not because it moved there, but because it *was* moved there. To exemplify the mechanics of derivation I present the following two English unaccusative constructions.

(2a) Three men have arrived.
(2b) There have arrived three men.

In (2a) the internal argument surfaces in Spec,TP; in (2b) this very same argument stays in the postverbal position and Spec,TP is occupied by an EXPL. To this day, some claim that the movement taking place in (2a) is Case-driven, but where does this leave (2b)? (2b) exemplifies the so-called EXPL-construction and the Case situation in such examples has been a subject matter of many discussions. The analyses range from the Case-

shown to yield richer morphological effects (Hungarian ad- vs. post-positions, Arabic SVO vs. VSO orders), whereas e-Merge, especially if we look at EXPL-constructions, are shown to exhibit impoverished [Person] agreement. This is the only extent to which the Spec-head relation has a right to exist in my system.

[13] This is not controversial and is generally in sync with Chomsky's minimalist system developed in his 1998–2001 works.

[14] These negatively specified features are not to be understood as uninterpretable in the sense that their presence at the interface should crash the derivation. Such features might be checked if they enter into a relation with a relevant head, however, there will always be left markings of such an operation in the form of agreement on the functional head and/or case on the lexical element. The feature specifications on syntactic items help the interface(s) decide what element to insert – they constitute crucial information, a kind of "derivational DNA", and as long as a fitting element can be found for insertion, the interface recognizes the item as bearing a licit feature matrix.

transmission from the EXPL to the associate (the associate moves to the EXPL) (Chomsky 1986), formal feature movement of the associate to the EXPL at LF (Chomsky 1995), to Lasnik's (1999, inspired by Belletti 1988) treatment of the EXPL as an LF-affix requiring an associate/host bearing Partitive Case. Here, I propose yet a different approach. First, I deny the existence of both the Case Filter and the Inverse Case Filter, i.e. I do not believe that the movement in (2a) is triggered by Case or in any way connected to it;[15] second, the Case that supposedly triggers the movement in (2a) does not exist in my approach: I propose that NOM(inative) Case is NO CASE, a form displayed by nouns with unaffected lexical features (thus showing no morphology usually associated with Cases).[16] Because the lexical features of a noun bearing NO Case are unaffected, it is free to share them with any probing head.[17] Let us picture the derivations of the examples in (2).

In (3=2a) the underlying OBJ (*three men*) does not undergo any feature checking/valuation with the unaccusative lexical verb. The newly introduced *v* probe has no external Θ-role to assign, and thus no Merge into its specifier will take place. To satisfy its functional features it attracts the OBJ and they enter into a feature checking/valuation relation in which *v* checks/values its D-feature ($v \rightarrow [+D,+T_{val}]$) and the OBJ checks/values its T-feature (OBJ $\rightarrow [+D,+T_{val}]$). When T $[-D,+T_{uv}]$ is merged, it will find two matching goals in its c-command domain (OBJ and *v*). In the derivation depicted above both of them are attracted to TP.[18, 19] Once the required goal(s) find

[15] This does not mean that nominals do not receive Case at all; they may receive lexical Case under Agree or bear inherent Case, crucially, they do not receive NOM(inative) Case.

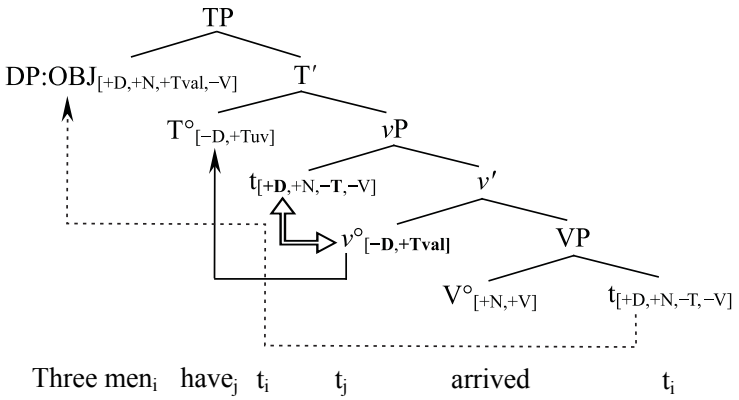
[16] An anonymous reviewer is concerned how the proposal offered here would exclude the following example: **there to be a book on the table.* The ungrammaticality of this example has nothing to do with Case or agreement, but results from the unavailability of the tense value for T. Infinitival clauses are good only if further selected by a tensed matrix clause on whose tense then they are dependent, i.e. the [T] feature of T in the infinitival clause is valued by the external matrix T forming a dependency. This is obviously not an option in the example given by the reviewer.

[17] There are two possible instances of D/NPs bearing NO Case, both with unaffected lexical features, but differing in their specification of the [T]-feature. The one bearing a feature matrix [+D,+T,+N,−V] is an agreeing element, i.e. it exhibits agreement with the head against which it checked and valued is [T]-feature; the other one, bearing a feature matrix [+D,-T,+N,−V] is an instance of a pure NO Case nominal that has not entered into any checking relations. Sigurðsson (1991) refers to such nominals as Default Nominative, i.e. they bear Nominative morphology, but there is absolutely no functional head available for checking it; in his later paper (Sigurðsson 2000), he suggests an analysis in which the light verb is able to assign both NOM and ACC to account for exactly these cases. In my analysis there is a clear difference between Sigurðsson's two Nominatives, and it boils down to the relation (or lack thereof), with a functional head bearing a valued [T] – similarly to his view, however mine was attained in a simpler way, reaching deeper into the properties of the categories themselves.

[18] Possibly, the probe can attract both goals since they have an identical functional feature matrix (T is blind to the lexical features of OBJ).

[19] I assume that English always makes use of auxiliaries which are merged in *v*. The auxiliaries are usually overt, however in the Past and Present Simple Tenses they are silent in indicative sentences. A silent auxiliary cannot host a tense morpheme, which will thus be spelled-out on the lexical verb. In sentences requiring

(3)=(2a)



themselves in TP, T checks/values its uninterpretable D-feature and values its T-feature (T → [+D,+T_{val}]). What we see on the surface is a classical instance of subject-(aux)verb agreement, but NO Case has been assigned or checked in this derivation. More evidence to support this claim can be found in the derivation of (2b) depicted under (4).

In (4=2b) (the EXPL-construction) I have added a special property to *v*: [+exist], which I believe to be a Θ-role assigned to the EXPL merged in Spec,vP.[20] This special semantic property of *v* will stop it from satisfying its features via Move and will force it to employ Merge instead.[21] The EXPL is a defective lexical/functional category with a

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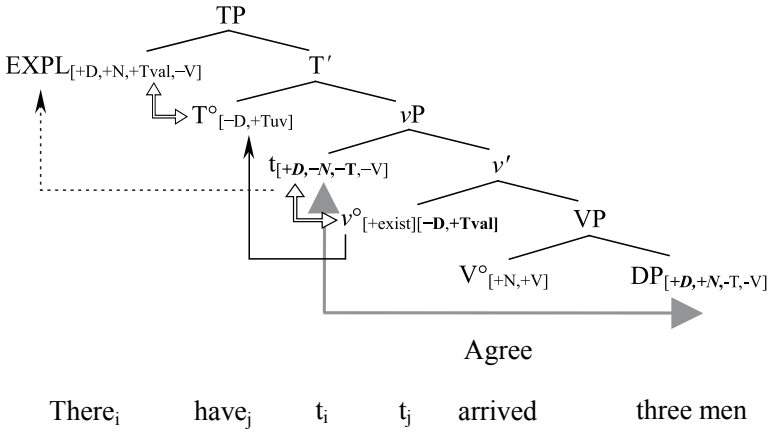
the presence of an overt auxiliary (questions, negations), a "dummy" overt auxiliary is inserted to host the tense morpheme. We believe that the silent auxiliary is not able to move, and the insertion of "dummy" *do* enables it to do so (it is a Last Resort sort of operation). In indicative sentences, we would expect then that it is only the moved subject that satisfies all the requirements of T. For an interesting analysis of the English auxiliary/participle system see Solà (1996: 217–251).

[20] For a similar idea of base-generating the EXPL in Spec,vP see also Bowers (2002: 196): "Following Chomsky (1982), we might speculate that even though expletives are not referential expressions, they are nevertheless 'quasi arguments' and are therefore excluded from direct Merge in a pure non-Θ-position." In Bowers's analysis this position is a specifier of the predication phrase (Spec,PrP). Also, the very presence of *v* in EXPL-constructions might raise questions, nevertheless it is a logical possibility available in Chomsky's minimalist system (Chomsky 1999:11), where he makes a crucial distinction between a transitive *v**P (strong phase) and an intransitive *v*P (weak phase). Chomsky makes also further assumptions that I am not going to discuss here, nonetheless, for the sake of the present discussion, I think it is enough to assume that unnaccusatives are also represented by their own light *v*P, which is possibly specified in some way to make it distinct from the other two (see also Woolford 2006; and Miechowicz-Mathiasen and Scheffler 2008).

[21] The [+exist] theta role is an intrinsic property of V, which must be a verb stating existence or presence. The light *v* is only a transmitter of that theta role (much the same as it happens in regular subject theta role assignment). The theta role can be assigned to a quasi argument such as *there* (as in *There is a cat in the room*), or to a full DP, which is an argument in a copular construction (as in *John is a teacher*). An anonymous reviewer asks whether the role would be present in the following sentence: *Three men have arrived.* The answer is "no": *arrive* assigns a Theme/Patient role to its object. As opposed to *There have arrived three men* – where the Theme/Patient role is assigned to the object and [+exist] to the expletive, there is

(4)=(2b)



feature matrix [+D,−N,−V,−T]. It is only able to check, but not value the features of *v*, however being both functional and lexical it can establish Agree with a matching goal – the associate ([+D,+N,−V,−T]).[22] Through that Agree relation, the EXPL gains specific values for its N-feature and is thus able to share them with *v*, and later on with T. The observed agreement is thus established directly between the EXPL and the *v* head, and later passed on to T. The associate DP will be subject to the Definiteness Effect, as the EXPL inactivated its D-feature.[23] As proposed earlier, Case per se plays no part in the depicted derivations, and agreement is an output, rather than a target. I also have not made a single reference to the EPP, whose effects are derived from categorial feature checking.

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nothing it could be assigned to in the non-EXPL-construction. Just like in the case of a verb like *sink*, which alternates between its transitive and intransitive version, i.e. having one or two thematic roles, we have a verb *arrive* which alternates between its two versions, one of which gives rise to an existential construction.

[22] The EXPL will not probe the lexical verb even though it contains a positive N-feature. Being both lexical and functional, the EXPL seeks a goal with the same categorial feature matrix, in this case it means a full matrix containing D, N, T and V, the verb does not have the matching categorial feature matrix.

[23] The EXPL can only inactivate a [−specific] D. A [+specific] D on the associate would clash with the EXPL's [+specific] D, i.e. they do not match and cannot establish Agree. In a situation like this the EXPL would not value its N-feature, and subsequently would have nothing to share with *v* and T, whose D-features would remain unvalued (though checked) throughout the derivation. This, essentially, should be all right for syntax; however this derivation would crash at the interface because the EXPL's feature matrix is unrecognizable as a DP category: DPs must contain an interpretable N-feature and since the EXPL has not found an associate and has not entered into any Agree, its N-feature remained unchecked/unvalued throughout the derivation. An anonymous reviewer points out that this generalization is too strong, as it would predict the following example impossible: *We have a couple of important figures here: there's the mayor, the bishop…* Though my judgment may be wrong, this use does not strike me as existential, and if it truly is not, then the restriction holds; naturally, if it is existential, then the restriction would simply be rendered superfluous, however we would have to explain why the following is unacceptable: **There is the book on the table.* This definitely requires further investigation and I would not want to make any ad hoc proposals at the moment. Nevertheless, I thank the reviewer for pointing out this issue to me.

2. The Analysis: English vs. Icelandic EXPL-constructions

In this section, I present English and Icelandic data and show how the system proposed here handles them. I concentrate on three types of EXPL-constructions: (i) the simple existential EXPL-construction; (ii) the raising EXPL-construction (also with the optional Experiencer argument of the raising verb); and (iii) the transitive EXPL-construction (TEC). Before we proceed, I devote a section to a comparison of the English and Icelandic EXPL pronouns.

2.1. English and Icelandic EXPL pronouns

Firstly, a word or two needs to be said about the nature of EXPL pronouns in the two languages under discussion. The English EXPL *there* is restricted to unaccusative constructions. As proposed earlier, I believe that the special semantics of these constructions is responsible for the earlier than generally assumed Merge of the EXPL, i.e. into Spec,*v*P, where it receives the relevant Θ-role. The EXPL satisfies the requirements of *v* (and its own, thanks to the Agree relation established with the associate) and moves on to T. The English EXPL shows behavior of a syntactic SUBJ: it occupies the subject position, raises and inverts with the verb:

(5a) There is a book on the table.
(5b) Is there a book on the table?
(5c) There seems to be a book on the table.

The Icelandic EXPL *það* seems to pose more problems for the subject-analysis, i.e. its syntactic subjecthood is not so straightforward, for instance it does not invert with the verb and must always be sentence-initial (Holmberg 2002: 90–91):

(6a) Það hafa komið nokkrir stúdentar.
expl has come some students
'There came some students.'

(6b) Hafa (*það) komið nokkrir stúdentar?
has expl come some students
'Have there come any students?'

(6c) Í dag hafa (*það) ekki komið neinir stúdentar
today have expl not come any students
'There haven't come any students today.'

Some earlier analyses, concerning Transitive Expletive Constructions in particular, proposed that the EXPL is introduced in Spec,AgrSP (above TP, which would host the indefinite subject) (Jonas 1996: 181); Chomsky (1995: 360, 368) assumed that the EXPL must be in Spec,TP and proposed a multiple specifier construction to accommodate both the subject and the EXPL in TP (the main problem of his analysis was that it predicted the wrong surface word order leaving no room for the verb which happens to occupy a position between the EXPL and the subject; Chomsky assumes verb movement to take place post-syntactically, at PF). This has led some linguists to believe that the EXPL is actually introduced into the derivation as late as Spec,CP (Bowers 2002: 196, Holmberg 2002: 91). Attractive though this idea may seem, it is not unproblematic because the EXPL follows the complementizer in embedded clauses (Platzack 1987: 390, fn. 7; originally from Röngvaldsson 1984):

(7) Ég veit að *(það) var dansað á skipinu í gær.
'I know that it was danced on the ship yesterday.'

In the analysis proposed here, I partly agree with Holmberg (2002) and Bowers (2002) in that I believe that the EXPL surfaces in Spec,CP, but as opposed to them, I propose that it is base-generated in Spec,TP (and sometimes even in Spec,*v*P) and moves to Spec,CP; this would explain both why it does not co-occur with topicalizations and does not invert with the finite verb, and why it can follow a complementizer in embedded clauses. Now the only question that remains is: why is the EXPL attracted to Spec,CP? I propose that the C selecting a [+exist] T (in Icelandic, this special semantic property – carried by *v* in English – must be carried by T), will have a categorial feature matrix identical to T, i.e. [−D, $+T_{uv}$]. In English the [+exist] *v*P is selected by T [−D, $+T_{uv}$], in Icelandic the same situation takes place one projection up, between C and T. When a complementizer *að* [+D, $+T_{val}$] is merged in C, it fully satisfies the features of a [−D, $+T_{uv}$] C, hence nothing else will be attracted to CP, i.e. the EXPL will stay put and follow the complementizer.

2.2. Deriving the EPP-Effects: English vs. Icelandic

2.2.1. Existential constructions and the Definiteness Effect

In section 1.2., I have given a detailed analysis of an English unaccusative construction (with and without the EXPL). In this section I compare English and Icelandic on the basis of these two parallel constructions:

(8a) There has been a cat in the kitchen.
(8b) *There has a cat been in the kitchen.

(9a) Það hefur verið einhver köttur í eldhúsinu.
there has been some cat in the kitchen
(Vangsnes 2002: 44)

(9b) Það hefur einhver köttur verið í eldhúsinu.
there has some cat been in the kitchen

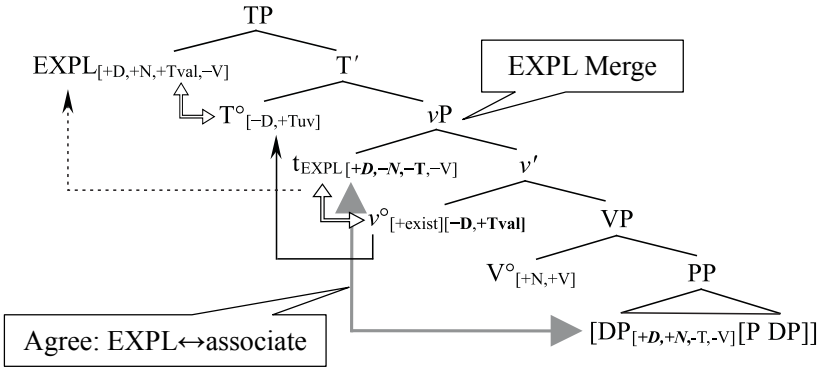
The English construction (8b) is ungrammatical, whereas its Icelandic counterpart (9b) is good. This contrast can be accounted for if we make the following two assumptions: (i) the English EXPL is base-generated in Spec,*v*P, whereas the Icelandic EXPL may be introduced in either Spec,*v*P or Spec,TP[24], and (ii) nominals – DP/NP categories – can only be displaced by a [−D,+T] functional probe (*v*, T) if their own D-feature is active. As discussed in detail in section 1.2, when the EXPL enters the computation, it seeks an appropriate goal (the associate) with which it establishes Agree. Equipped with the N-features specific of the associate, it is able to check/value the functional features of both *v* and T (and C in Icelandic). I have also proposed that the Definiteness Effect results from the probing/Agree relation of the expletive with the associate which it freezes in place by inactivating its D-feature. I believe that *einhver köttur* 'some cat' is a DP/NP category in both (9a) and (9b), understood as non-specific in both constructions, however, only the one in (9a) is parallel to the English construction exhibiting the Definiteness Effect with the associate displaying NP-behaviour, (it had its D-feature inactivated and will be completely unattractable[25]). The one in (9b) moves to Spec,*v*P thanks to its active D-feature, which will only be inactivated when the EXPL finally merges in Spec,TP.[26] In English this second option is unavailable due to the fact that the EXPL always merges in *v*P. The derivations (8a)/(9a) depicted under (10) proceed in a parallel fashion until they complete the TP, after that the Icelandic EXPL further moves to Spec,CP, which does not take place in English. Under (11) I depict the derivation of (9b).

[24] This means that in Icelandic the semantic property [+exist] can feature in either *v* or T. Icelandic must have [+exist] available in T to derive TECs, and it is plausible that unaccusatives should only use the option with *v*; but since the language has both options, it seems that unaccusatives are just as well derivable if the EXPL merges in T. The derivation converges as all the functional features are checked/valued. An anonymous reviewer asks whether the movement of the associate before the merge of the expletive does not violate the Merge-over-Move condition. In the system proposed here the EXPL needs to be merged in its theta position, so merging it in Spec*v*P in a derivation in which it is not a [+exist] theta-position would crash the derivation. The bigger question, for which I cannot offer a straightforward explanation, is why Icelandic allows [+exist] to figure in either Spec*v*P or SpecTP.

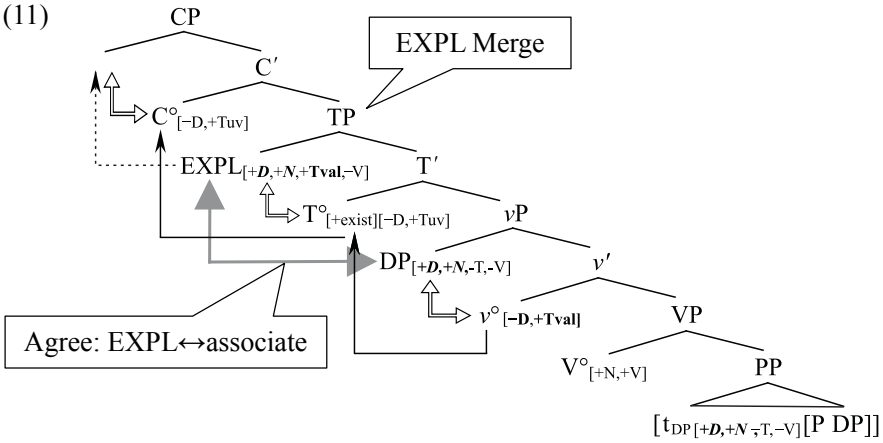
[25] Vangsnes (2002: 48–49) gives examples with truly Bare NPs (BN) which are shown to always follow the verb. In our terms, this means that they lack the functional feature layer responsible for any interaction with functional probes that can force displacement.

[26] The movement of the associate to Spec,*v*P in (9b) is not OS: (i) it is not optional, something must move to Spec,*v*P to satisfy the functional features of *v*, (ii) if it were to be treated as OS, it would have to be disallowed in this example, which is an "auxiliary + participle" construction.

(10)



(11)



As shown above, the EPP effects are accounted for without a single reference to the EPP.[27] They are derived by the need to check the functional features of the probing functional heads. The observed agreement patterns result solely from feature checking/valuation relations and are unconnected to the EPP or Nominative Case, as there is NO Case in the constructions under discussion. We also have an account of the EXPL-

[27] An anonymous reviewer raises several questions concerning my disposal of the EPP, namely why still only functional heads have the property responsible for the EPP-effects and isn't my analysis just replacing the EPP with a mechanism that requires checking via overt movement of the formal features of these heads. There is no denying the facts: the EPP-effects exist and my analysis constitutes a different way of accounting for them, however, what my analysis has and the traditional ones do not, is a conceptually motivated reason for their appearance embedded deeply in the properties of functional heads, i.e. in their feature matrix. The EPP-effects arise with functional heads only, because only they bear features that require checking via Merge, which puts them in opposition to lexical categories to which such effects are not peculiar.

associate relation, which in the analysis proposed here is established via Agree in syntax. This Agree relation leaves the associate's D-feature inactive, hence the perceived Definiteness Effect (were it not for the presence of the EXPL, this very same DP could get as far as Spec,TP and enter a D/T feature checking/valuation relation with *v* and T), it also allows the EXPL to assume the φ-features of the associate, hence the apparent associate-verb agreement, which in fact is the EXPL-verb agreement.

2.2.2. Raising EXPL-constructions

This section is devoted to two constructions: one involving a raising verb subcategorizing for an infinitival clause with an EXPL subject (where I also offer an analysis of parallel constructions without the EXPL); and the second parallel to the first one, but this time there is an additional Experiencer argument taken by the raising verb intervening between the matrix subject position and the embedded subject. Let us begin with the following contrast between English and Icelandic:

(12a) There$_j$ seems [$_{TP}$ t$_j$ [$_{vP}$ t$_j$ to [$_{VP}$ be someone in the room]]].
(12b) *There$_j$ seems[$_{TP}$ t$_j$ [$_{vP}$ someone$_i$ to [$_{VP}$ be t$_i$ in the room]]].
(12c) Someone$_i$ seems [$_{TP}$ t$_i$ [$_{vP}$ t$_i$ to [$_{VP}$ be t$_i$ in the room]]].

(13a) Það$_j$ virðist [$_{TP}$ t$_j$ [$_{vP}$ t$_j$ [$_{VP}$ vera einhver í herberginu]]].
there seems be someone in the.room

(13b) Það$_j$ virðist [$_{TP}$ t$_j$ [$_{vP}$ einhver$_i$ [$_{VP}$ vera t$_i$ í herberginu]]].
there seems someone be in the.room

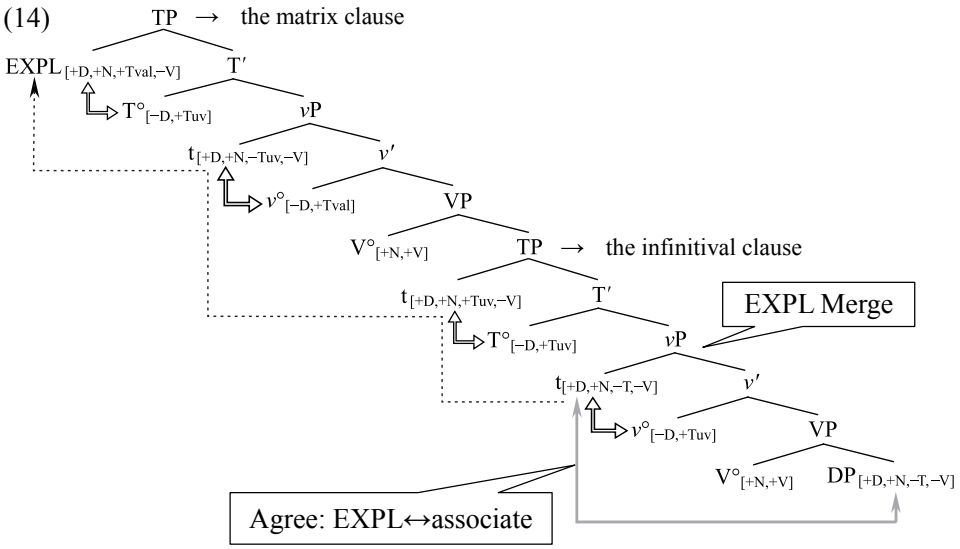
(13c) Einhver$_i$ virðist [$_{TP}$ t$_i$ [$_{vP}$ t$_i$ [$_{VP}$ vera t$_i$ í herberginu]]].
someone seems be in the.room

The one ungrammatical English example (12b) has a grammatical counterpart in Icelandic (13b). I believe that the difference between the two languages in the case of the EXPL-constructions boils down to the availability of the Spec,TP position for EXPL-Merge in Icelandic, which is the option used in (13b).

In both (12a) and (13a), there is an unaccusative infinitival verb (V = [+V,+N], *v* = [−D, +T$_{uv}$]). The associate merged in the complement position of *be/vera* is a non-specific DP *someone/einhver* with a following feature matrix: [+D,+N,−V,−T], which due to the verb's unaccusativity will not enter into any Agree relation with it. The light verb *v* [−D,+T$_{uv}$] is endowed with a [+exist] Θ-role and is thus waiting for Merge to apply and fill its specifier. The EXPL merges in Spec,*v*P and establishes Agree with the associate; the specific agreement features the EXPL acquires through this Agree are

subsequently shared with *v* (and T, after it is attracted to Spec,TP).[28] The associate remains in the postverbal position due to its inactivated functional feature layer. The only element available for raising is the EXPL. Because it shares the agreement features with the associate, it will carry them on into the matrix clause and share them with the matrix functional probes *v* and T, hence the observed apparent long-distance verb-associate agreement, which is literally just regular subject-verb agreement. I depict the derivation below.

(14)



The derivation of the grammatical Icelandic example (13b) differs from the one presented above at the point where in (14) the EXPL is merged. In (13b) what happens at this point is *v* attracting the underlying object to its specifier (*v* checks/values its func-

[28] An anonymous reviewer raised a question concerning my proposal that the EXPL always shares its agreement features with the associate. The reviewer gives the following example as evidence that this is not always the case: *There's five people on the bench.* Such examples do not have to necessarily harm the analysis presented here. If we assume, that the EXPL can only take on a [Person] feature (an idea similar to that of Chomsky 1999), then it would have to permit 3rd person agreement without any specification for number. This would give us the optionality of picking between the singular and the plural form in 3rd person. This is essentially everything that syntax needs to know feature-wise. Once the derivation is handed over to Spell-Out, and possibly further to Morphological Form (in the sense of Distributed Morphology), the most specified element will be inserted in place of the bundle of features representing the copula, giving the two options: *is* and *are*. A very interesting analysis of this particular phenomenon is proposed by Sobin (1997), where he presents a "virus theory" of plural agreement in EXPL-constructions in English, and claims that the only true agreement is the singular one, as in the example given by the anonymous reviewer. If Sobin's analysis is on the right track, then my system would have to include the aforementioned modification, namely that the EXPL can only bear a [Person] feature and thus it is the only one it shares with the associate. Again, I am grateful to the reviewer for attracting my attention to these particular facts.

tional features against the DP object). The EXPL will only be merged in TP from where it will establish the EXPL-associate relation with the moved object. At the point of movement to Spec,*v*P, the functional features of the underlying object are active (hence attractable); these features become inactivated through Agree established between the EXPL and the underlying object when the EXPL (merged in Spec,TP) marks it as its goal. This derivation is unavailable in the English existential construction, because in English existentials the EXPL can only be merged in Spec,*v*P, never in Spec,TP.[29] The (c) examples have identical derivations where the underlying object surfaces in the sentential subject position. On the way there, it has moved through the specifiers of the embedded *v*, T, the matrix *v*, eventually ending up in the matrix Spec,TP. Its functional features are active throughout the derivation, it visibly agrees with the matrix verb (though it checked the features of all the functional heads it has been attracted by, it has not valued the features of the embedded ones; this is due to the fact that valuation involves mutual sharing of specific feature values, which both the embedded *v* and T lack being [+T_{uv}] – they have no T features to share, hence just checking, no valuation).

In all of the above examples the embedded TP is infinitival (*v* = [−D,+T_{uv}], T = [−D, +T_{uv}]) and thus must be selected if the derivation is to converge (without the tense content, the TP is not a legitimate syntactic object unless subcategorized for). The derivations of (12a) and (12c) have thus the following intermediate stages under (15a) and (15b) respectively:

(15a) … [$_{TP}$ **there$_i$** [$_{vP}$ **t$_i$** to [$_{VP}$ be someone in the room]]]
[+D,+N,+T_{uv},−V]

(15b) … [TP **someone$_i$** [vP **t$_i$** to [VP be **t$_i$** in the room]]]
[+D,+N,+T_{uv},−V]

At these intermediate stages of their respective derivations the infinitival TPs may be selected by an ECM verb, a raising verb or by a prepositional complementizer *for*. We know what happens to the embedded subject when a raising verb subcategorizes for one of these TPs, however the fate of the embedded subject is different when selected by ECM/*for*. Both the EXPL and the DP have so far unaffected lexical features in their fea-

[29] Possibly in the English passive EXPL-constructions the EXPL is merged in TP, hence we derive the following:

(i) There was a man killed in the accident.

This may be due to the fact that there is actually an external Θ-role present in *v*P. Though the theta-role is present, it cannot be actually discharged, and the Spec,*v*P is not a theta-position. The problem is that the *v*P cannot be at the same time specified as [+exist], hence the EXPL cannot be merged there. The EXPL, whenever present, will then have to be merged in Spec,TP. An anonymous reviewer suggests an attractive solution to the above sentence, namely an analysis in which the D/NP in question is a reduced relative clause. Similar examples are given in Chomsky (1999:20) also analyzed as such. This would make my system more elegant for English, and I am grateful to the reviewer for pointing this out.

ture matrix. The lexical verb and the prepositional complementizer are both specified [−N,+V] and may thus establish an Agree relation with the embedded subjects. This relation will change their lexical feature matrix into [+N,+V] (the DPs will surface as ACC) due to which they will disallow access to their agreement features, but they will remain visible to functional probes because Agree with purely lexical heads does not inactivate the functional feature layer (the purely lexical heads are blind to functional features and reach directly for the lexical features).

Again, I have derived the above constructions and accounted for the differences between them without reference to the EPP, Case or agreement. The DP associates involved in the discussed constructions under (12) and (13) bear no Case thanks to which they can actually share their agreement features. If it were agreement features that were responsible for movement, we would need to assume that the EXPL possesses its own agreement features, which mysteriously happen to be identical to the ones of the associate. If it were Case that drives movement, then again it is quite surprising that the associate would choose to be left behind. In my analysis, it is neither Case nor agreement that drives the derivations, nevertheless they constitute visible (often morphological) evidence, that particular feature checking/valuation operations took place.

I now move on to a discussion concerning constructions very similar to those in (12) and (13), but this time the raising verb subcategorizes for an Experiencer argument which in English takes the form of a PP (within which there is a lexically Case-marked DP/NP) and in Icelandic an inherently Case-marked DP. As proposed in section 1.1.1, the main difference between the inherently and lexically Case-marked DP/NPs is that the former, but crucially not the latter, can share their agreement features with functional probes. The lexically Case-marked nominals lost this ability the moment they entered into Agree with a lexical head (V, P); the inherently Case-marked nominals bear Case, but it has not been assigned derivationally, i.e. the DP/NP bears no markings of an Agree relation, in that way, the inherently Case-marked DP/NPs resemble the ones without Case: just like them they can share their agreement features through their active functional feature layer. What makes an inherently Case-marked DP/NP different from the nominals bearing no Case, is that it has an incomplete φ-feature set, to be precise it only bears a [+Person] feature, which it is free to share with functional probes (these probes, however, will be allowed to complete their defective D(N)-feature (agreement) set against another goal). Below, I give the relevant examples (the Icelandic examples are taken from Holmberg and Hróarsdóttir 2003: 998).

(16a) The horses$_i$ seem to me [t_i to be slow].
(16b) *To me$_i$ seem t_i [the horses to be slow].
(16c) *There seem to me [the horses to be slow].

(17a) *Hestarnir$_i$ virðast mér [t_i vera seinir].
the.horses seem me.dat be slow

(17b) Mér$_i$ virðist/virðast t$_i$ [hestarnir vera seinir].
me.dat seems/seem the.horses be slow

(17c) Það virðist/*virðast einhverjum manni [hestarnir vera seinir].
there seems/*seem some man.dat the.horses be slow

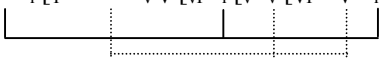
In English the only grammatical option (if we want to keep the embedded clause infinitival) is (16a) in which the embedded subject surfaces in the matrix subject position. To the naked eye the data in (16) and (17) seem to show that whatever is good in Icelandic is bad in English, and vice versa. More precisely, the embedded subject in Icelandic cannot reach the matrix subject position, whereas this is the only available option in English. Now, this suggests that the contrast between these constructions is in the Experiencers. I believe that this is exactly where the contrast can be found and it has everything to do with the nature of Case borne by the Experiencer: lexical in English and inherent in Icelandic, but is not necessarily connected to the fact that one of them is a PP and the other a DP.[30] To translate it into the language of the system introduced here, the English Experiencer will not share its N-features with any functional probe, whereas the Icelandic one will. This difference also sheds light on why the EXPL is allowed in the Icelandic example (17c) and absolutely forbidden in the English counterpart (16c). If, as proposed in the preceding sections, the EXPL must enter into an Agree relation with the closest goal (Agree is strictly local, as opposed to functional probing), then it follows that the English *there* marking the Experiencer as its goal will not be able to establish Agree with it as its lexical features have already been affected by the preposition and are thus unavailable. The lexical features of the Icelandic inherently Case-marked Experiencer, on the other hand, are ready to be shared under Agree.

As mentioned above, I believe that there is a difference between functional probing and Agree, i.e. Agree must be local and cannot skip any potential goal with the matching categorial feature matrix (meaning, containing the same categorial features irrespective of their values and specifications); the locality involved in the functional probing is different in that, apart from searching the required categorial features, the functional probe must be sensitive to their content (active/inactive, specific/non-specific, wh-DP/DP, transparent/non-transparent, i.e. able/not able to transmit the lexical features, etc.). In the Icelandic examples there seems to be no competition for the Dative Experiencer – it is the closest matching goal, and it can function as the associate for the EXPL in (17c). In English, on the other hand, the closest matching goal for movement is the embedded subject of the infinitival clause, hence the grammaticality of (16a) as opposed to (16b). Nevertheless, the Experiencer is enough to block the EXPL from associating with the embedded subject (16c) (an instance of a classical Chomskyan defective intervention).

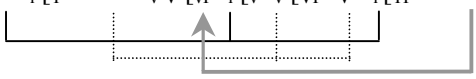
[30] We believe that functional probes ignore lexical heads, hence for the matrix *v*, both the English and the Icelandic Experiencer is a DP, the difference boils down to the lexical feature matrix of the NP within the DP, which is affected by Agree in English, and unaffected in Icelandic.

There is one interesting fact about the Icelandic example (17b): the finite verb optionally exhibits agreement either with the Dative Experiencer (SG) or with the embedded subject (PL). The construction with the EXPL allows only one agreement pattern: the one with the EXPL sharing the features of its Dative associate (SG). In this paper I essentially follow Boeckx (2000) in assuming that inherently Case-marked DPs have an incomplete φ-feature set ([+Person]), nonetheless, we need to account for the optionality of this agreement and its derivability within the present framework. Consider the proposed derivations of (17b) with two different agreement patterns:

(18) Dative Experiencer → person and number agreement (3rd. SG)
$[_{TP}$ Mér$_i$ $[_{T'}$ virð**ist**$_{v\text{-}V}$ $[_{vP}$ t_i $[_{v'}$ t_v $[_{VP}$ t_V t_i $[_{TP}$ hestarnir vera seinir]]]]]].



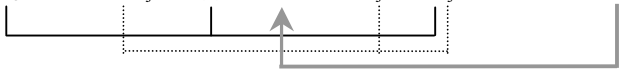
(19) Dative Experiencer→person agr. (3rd.) / Embedded subject→number agr. (PL)
$[_{TP}$ Mér$_i$ $[_{T'}$ virð**ast**$_{v\text{-}V}$ $[_{vP}$ t_i $[_{v'}$ t_v $[_{VP}$ t_V t_i $[_{TP}$ hestarnir vera seinir]]]]]].



When the Dative Experiencer [+D,+N_{Person},−V,−T] moves to Spec,*v*P in both (18) and (19), it checks/values the functional D-feature of *v* and its own T feature. The moment the matrix T is merged, it will seek an appropriate goal to satisfy its functional features. At that point in the derivation the Dative Experiencer and *v* bear an identical functional feature matrix and thus T may attract them both. This is where I believe the optionality applies: (a) <u>if *v* moves first</u>, there will never be any relation between *v* and the embedded subject, even if the embedded subject were to move to Spec,*v*P, it would not enter any relation with *v* because it has already moved on to T and is no longer there to check/value its remaining φ-features (they will be set by default as SG) as in (18); (b) <u>if the Dative Experiencer moves first</u>, it will leave the Spec,*v*P empty and thus make it possible for *v* to enter into Agree with another matching goal and complete the valuation of its D (N)-features. This agreement will always be only partial (Boeckx 2000), i.e. it will only show a different number value than the Dative subject, the person value established by the Dative is not re-valued and no matter what person the embedded subject is, the agreement will always be 3rd person; as in (19).

Holmberg & Hróarsdóttir (2003: 998) show that when the Dative Experiencer is a *wh*-element, the only possible agreement is the default one (3rd.SG).

(20) $[_{CP}$ Hverjum$_i$ $[_{C'}$ hafa$_j$ $[_{TP}$ (t_i) hestarnir$_k$ $[_{T'}$ t_j $[_{vP}$ t_i t_j $[_{VP}$ virst t_i $[_{TP}$ t_k vera seinir]]]]]]].



I believe that in such a construction it is always the verb that is attracted first to TP, and the *wh*-element follows (if at all, see Holmberg and Hróarsdóttir 2003: 1007[31]). When the C_{wh} is finally introduced, it will be the *wh*-element that goes first as the maximally matching goal, it is at that point that the embedded subject moves to Spec,TP. I propose that this movement heads directly towards Spec,TP, not stopping by in Spec,*v*P, as there is nothing in *v*P to attract there. I consider this movement to be an instance of Stylistic Fronting, which has been proposed by Holmberg (2000: 448) to be contingent on the presence of a "subject gap" and assumed to involve only the movement of the phonological matrix of the moving category (PF-movement). The agreement pattern is clearly unchanged, which seems to support this solution – if there are no categorial features of the embedded subject present, then nothing can re-value the functional feature matrix of *v* in T.

2.3.4. Transitive Expletive Constructions (TECs)

This section will, naturally, be mostly devoted to the Icelandic data, as English does not allow TECs. If the above assumptions concerning the base-generation position of the EXPL in English are correct, then this alone constitutes enough evidence for the lack of TECs: the EXPL would compete with the external argument for the Spec,*v*P position where both of them are usually merged, hence one excludes the other. I also claim that in English EXPL-constructions *v* bears a special semantic role ([+exist]) which can only be assigned to an EXPL and which stops *v* from attracting the underlying OBJ into Spec,*v*P. As illustrated in section 2.2.1, Icelandic makes use of two options for EXPL-Merge: it can be merged in either Spec,*v*P or Spec,TP (in which case the underlying OBJ is moved to Spec,*v*P). In TECs the EXPL must always and only be merged in Spec,TP for the reasons I have mentioned for English: we need both the EXPL and the external argument, and they both must receive their theta-roles. The EXPL in Icelandic always moves on to Spec,CP and thus the constructions are structurally comparable to topicalized structures. Consider the following construction (Alexiadou and Anagnostopoulou (1998: 497), originally from Holmberg (1986)):

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[31] Holmberg and Hróarsdóttir (2003: 1007) suggest that the *wh*-Dative does not move through the Spec,TP and this is why the position is available for the embedded subject. We believe, however, that the *wh*-Dative must be moved to the edge of TP anyway (before C is merged) because it contains a feature unrecognizable to the phasal probe (T in this case). Following Bošković (2004), we assume that any element bearing a feature not checked by its phasal probe, hence unrecognizable to it, will be "thrown out" of the spell-out domain of a given phase and moved to the edge. This operation is of the Last Resort kind and applies at the point when the phase is ready to be sent off to Spell-Out, it is a kind of "avoid crashing" strategy. This kind of analysis gives us an account of object *wh*-movement (even a long distance one) without any look-ahead: the object will be consecutively thrown out of each phase that cannot check its *wh*-feature. We believe that this is the only kind of operation that can create an additional specifier. In English multiple wh-questions *v* will not raise the *wh*-object to its specifier if it has a *wh*-subject at its edge, however, Polish *v* seems capable of applying this operation multiply.

(21) Það hefur sennilega einhver alveg lokið verkefninu.
there has probably someone completely finished the.assignment

Numerous authors (Alexiadou and Anagnostopoulou 1998; and Jonas and Bobaljik 1996, among others) take the adverb placement in such examples to suggest that the non-specific subject *einhver* 'someone' is external to the VP. With that, I could not agree more. However, I do not agree that it is in a derived position, either. I believe that it is in its base position, but this position is Spec,*v*P, an assumption surely not unheard of. Interestingly, the aforementioned authors also propose that *sennilega* 'probably' is a TP adverb, hence it precedes the non-specific subject they assume to be in Spec,TP. I believe that adverbs such as *sennilega* 'probably' are actually *v*P-adjoined, while adverbs such as *alveg* 'completely', *stundum* 'sometimes', *aldrei* 'never' or *ekki* 'not' are VP-adjoined (Jonas 1996: 171), hence the bracketed version of (21), would be as follows:

(22) [$_{CP}$ Það$_i$ [$_{C'}$ hefur$_j$ [$_{TP}$ t$_i$ [$_{T'}$ t$_j$ [$_{\mathbf{vP}}$ **sennilega** [$_{vP}$ einhver t$_j$ [$_{\mathbf{vP}}$ **alveg** [$_{VP}$ lokið verkefninu]]]]]]]].

Consider also the following topicalized structures from Jonas & Bobaljik (1996: 196):

(23a) Í gær kláruðu **þessar mýs** sennilega (*þessar mýs) ostinn.
yesterday finished these mice probably the.cheese
def. subject

(23b) Í gær kláruðu (?margar mýs) sennilega **margar mýs** ostinn.
yesterday finished probably many mice the.cheese
indef. subject

If the definite subject in (23a) occupies the Spec,TP (and apparently must move out of the *v*P) and precedes the adverb *sennilega*, and if the indefinite subject is actually preferred to appear in the post-*sennilega* position, then, I think there is good reason to believe that it remains in Spec,*v*P (as the indefinite associate in the EXPL-constructions) and that the adverb marks the edge of *v*P, and not TP. Svenonius (2002: 220–222) quotes the examples copied above and claims that definite subjects are not generally felicitous in a post-adverbial position and gives more examples of the same kind taken originally from Sigurðsson (1990: 50).

(24a) Núna hafa **bófarnir** líklega stolið smjörinu.
now have the.gangsters probably stolen the.butter

(24b) ??Núna hafa líklega **bófarnir** stolið smjörinu.
now have probably the.gangsters stolen the.butter

So, unless we want to go back to AgrPs, or postulate the existence of yet a different functional projection somewhere between C and *v*, I cannot see any other possibility then to assume that the indefinite subject in Icelandic is allowed to stay in its original position throughout the derivation (it checks/values the features of *v* in that position anyway, so the agreement is taken care of there and then, and the *v* (or *v*-V) movement to T can handle its spreading). I believe then that both in Icelandic TECs and topicalized structures, the indefinite subjects are allowed to remain *v*P-internally throughout the derivation. Naturally, TECs being EXPL-constructions only allow indefinite subjects (associates), plus the EXPL is merged in Spec,TP which excludes the subject's movement to that position (the EXPL then moves on to CP). In the topicalized structures above, it is possible that the Spec,TP is not filled at all if the subject is indefinite, and the functional features of T are satisfied solely via verb movement (as in Null Subject Languages). Having said that, I predict the impossibility of Object Shift in TECs, a prediction which is borne out.[32]

3. Summary and conclusions

In this paper I have proposed a novel account of the EPP-Effects which is neither based on Case, not on agreement. I have shown that the EPP as an independent property of language is dispensable as its apparent effects are derivable form the functional feature checking/valuation operations.

I have proposed a purely functional categorial feature matrix for functional heads and an exclusively lexical one for the lexical heads. To account for the interaction between functional probes and lexical categories, I have proposed that the functional heads c-selecting the lexical ones play the role of intermediaries in the exchange of feature values.

Without reference to such notions as Case-checking or agreement-checking, I have been able to derive the output traditionally ascribed to these operations. I believe that the names of the aforementioned operations falsely lead us to believe that this is what syntax is about and what it is driven by, while in reality the presence of particular Case

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[32] An anonymous reviewer recalls the famous examples from Jonas (1996) (examples which also appeared in Jonas and Bobaljik (1993)) and which represent OS in TECs. I have consulted Gunnar Hrafn Hrafnbjargarson (a native speaker of Icelandic) and Øystein Vangsnes, who worked on exactly those examples. Vangsnes (2002: 65, fn. 3) quotes exactly one of their examples:

(i) Það lauk einhver verkefninu$_i$ alveg t$_i$
there finished someone the.assignment completely

(Jonas & Bobaljik 1996: 213)

and writes: "However, several speakers of Icelandic consider this sentence highly deviant, and I have therefore chosen not to copy the example". When it comes to OS, Gunnar Hrafn Hrafnbjargarson (p.c.) wrote: "To the extent that I allow sentential adverbs in TECs, I do not allow full DP OS." I suppose we can safely say that our predictions are borne out.

or agreement we witness constitutes the result of the categorial feature checking operations employed in syntax, but crucially, not its driving force. I have also proposed that there exists no such Case as Nominative: what is perceived as NOM is lack of Case, and in the present terms it means that the DP in question has not entered into any Agree relation and its lexical features remain unaffected (hence available for sharing with functional probes). I have also established the distinctions between DPs bearing lexical, inherent and no Case in the framework proposed here. Even though their categorial feature matrices contain the same set of categorial features, they have varying specific values (lexical [+D,+N,−T,+V], inherent [+D,+N_{Person},±T,−V], no Case [+D,+N,±T,−V][33]). The values may be affected derivationally (the lexical ones via Agree, the functional ones via Merge/Move), which may then influence the agreement pattern in a given derivation.

Thanks to the comparison of the English and Icelandic data, I predicted the impossibility of OS in TECs whose non-specific subject remains *v*P-internally and thus blocks any attempt to move to that position.

Finally, the analysis presented here makes use of the categorial feature matrices – theoretical primitives, whose existence is assumed in every other analysis anyway. I have thus kept my analysis as minimal as it is only possible – a desired result.

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[33] [±T] means that it may or may not have entered a checking relation with a T-bearing functional head.

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