Feature Inheritance and a Condition on Pure EPP Satisfaction*

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1. Theoretical Background

One of the central issues in Generative Linguistics has been to characterize the nature of the computational system of human language by revealing fundamental properties of movement, an operation inherent and unique to human language. Since the systematic introduction of formal features in the minimalist program (Chomsky (1993, 1995)), it has been generally assumed that movement is feature-driven. More specifically, overt movement is driven by a strong categorical feature such as a strong D-feature of T. Hence, one important task is to construct a restrictive theory of movement and strong features.

The classical version of the minimalist program assumes that a strong feature derives the cyclicity (Chomsky (1995: 233)). However, as an inevitable consequence of the assumption, there is a theoretically problematic stipulation: strong features are exempt from the minimality condition. The stipulation is necessary not to exclude a sentence like (1a), the derivation of which is illustrated in (1b).

(1a) Chomsky (1995)

a. What did John see?

b. [CP What did C [TP John T [VP see t]]?]

(1b) involves the overt movement of the subject John and the accusative what, which are, by definition, driven by strong D-features of T and C, respectively. A question, then, is why the strong D-feature of T does not block the overt movement of what, because violations of the feature-based minimality condition are regarded as evidence for the existence of a given formal feature.

The stipulation is virtually eliminated under the recent phase-based approach (see Chomsky (2008)). The main feature of this approach is derivational simultaneity. Operations in a given phase apply all at once. This derivational simultaneity resolves the problem in (1). Let us go over the relevant portion of the derivation of (1a), which is illustrated in (2):

(2) Who did John see?

a. [[s_p] John v* [VP V who]]

b. C [T [[s_p] who [[s_p] John v* [VP V who]]]]

c. [CP Who C [TP John T [[s_p] who [[s_p] John v* [VP V who]]]]]

<CT-who; C-T-John>

(2a) indicates the derivational step in which the small v is created. (2b) indicates that C and T are introduced in the derivation. The point at issue is the derivational step given in (2c), where the subject John and the accusative what move to the spec of TP and CP, respectively. Technical details aside, these two movement operations are assumed to apply all at once. Although the phase head C alone licenses the movement of the accusative wh phrase, it is the C-T pair that licenses the movement of the subject due to the Feature Inheritance schematized in (3):

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(3) Feature Inheritance

\[ \text{[CP C (φ) [TP T [\text{SUBJECT} \nu ... ]]]} \]

In this sense the phase head C is involved in both movement operations. Thus, we expect no minimality violation in the relevant respect.

The notion of Feature Inheritance plays a key role in eliminating the stipulation. Therefore, one important task should be to find evidence for Feature Inheritance and explore its theoretical implications.

2. Aim

The goal of this paper is to argue for the existence of Feature Inheritance by demonstrating that the Partial Inheritance in (4b) is a real option. We then explore its theoretical implications for the current phase-based theory.

(4) a. Inheritance

\[ \text{XP(=Phase)} \]
\[ \text{X} \]
\[ \text{YP} \]
\[ \text{[F1, F2]} \]
\[ \text{ZP} \]

b. Partial Inheritance

\[ \text{XP(=Phase)} \]
\[ \text{X} \]
\[ \text{YP} \]
\[ \text{[F1, F2]} \]
\[ \text{ZP} \]

Since the gist of Feature Inheritance is that the phase head X transmits to the head Y its features [F1 and F2] traditionally assumed to be originated in Y, it is hard to empirically verify the existence of Feature Inheritance, if all the relevant features are inherited by the head Y. Suppose that features F1 and F2 are features that have been regarded as features of the head Y as shown in (4a). Then, we have no way of knowing whether Y inherits the features from X. However, suppose that Y does not inherit all the features from X, and one of the features, [F1], traditionally assumed to be a feature of Y, remains at X, as in (4b). This configuration clearly supports the existence of Feature Inheritance.

3. Partial Inheritance of EPP: Expletives in (Insular) Scandinavian and Germanic Languages

This section addresses distributions of the expletives in Insular Scandinavian and Germanic Languages, claiming that EPP is a kind of an edge feature of a phase head and Partial Inheritance is involved in the clause-initial requirement on expletives in these languages.

3.1. Expletive First!

Verb second languages like Icelandic, German, and Yiddish have an interesting restriction on the distribution of expletives: expletives must appear in the clause-initial position. The core paradigm can be schematized as in (5), which corresponds to the examples (6) to (8). (5a) indicates that expletives must appear in the clause initial position. As shown in (5b), expletives cannot appear in so called inverted verb second order. However, the sentence becomes grammatical if the expletive is not pronounced as in (5c).

(5) Expletive First

a. Expletive V ... XP
b. *XP V Expletive...
\[ \text{c. XP V (*Expletive) ... (ok, if the expletive is unpronounced)} \]

(6) Icelandic (Vikner 1995: 70)

a. \text{Pað} hefur \text{komið strákur}
\text{there has come a boy}
\[ \text{b. "Í gær hefur Pað komið strákur}
\text{yesterday has there come a boy}
\[ \text{c. Í gær hefur komið strákur}
\text{yesterday has there come a boy}

(7) Yiddish (Vikner 1995: 69)

a. \text{Es iz gekumen a yingl}
\text{there is come a boy}
\[ \text{b. *Nekhtn iz es gekumen}
\text{Yesterday is there come}
\[ \text{c. Nekhtn iz gekumen}
\text{Yesterday is come}

(8) German\(^1\) (Vikner 1995: 69)

\[ ^1 \text{As pointed out by an anonymous reviewer, es is not always} \]
Recall that it has generally been assumed that EPP is a property of TP and that expletives can be used as a test for the presence of EPP in the spec of TP. Under this traditional view of EPP and expletives, it is almost impossible to account for the initial position requirement on expletives in the languages under discussion. Clearly, the problem lies in the very assumption that EPP is a feature originated in T. We argue that the data can be regarded as evidence that EPP is a kind of an edge feature of the phase head C, claiming that Partial Inheritance is involved in the initial position requirement. More concretely, in languages like Icelandic, German, and Yiddish, an EPP feature of the phase head C does remain in the phase head C and only phi-features of C are inherited by T, as illustrated in (9).

subject to the clause initial requirement on expletives. German es can be divided into two types in terms of the clause initial requirement. This paper only addresses the so-called Vorfeld (Spec-CP)-es in the sense of Grewendorf (1988) and Safir (1985), which is subject to the requirement. The other type of es is somehow "linked" to an (empty) external argument position (es in the impersonal middle construction and the existential construction "es gibt ACC NP") or can be regarded as a quasi-argument, which can control PRO. See Safir (1985) for the relevant discussion.

In Mainland Scandinavian languages such as Swedish, Norwegian, and Danish, the clause initial requirement on expletives is inactive. Given the present analysis, Mainland Scandinavian languages differ from Insular Scandinavian languages like Icelandic in that unlike Icelandic, Mainland Scandinavian languages disallow partial inheritance of φ features in C for some language specific reason. If correct, this line of thought predicts further that Mainland Scandinavian languages, but not Insular Scandinavian languages, disallow constructions involving an isolated EPP feature in C. The prediction is partially verified by the fact that Stylistic Fronting and Quirky Subject constructions are attested in Insular Scandinavian languages, but not in Mainland Scandinavian languages. See Holmberg and Platzack (1995) for an overview of the typological differences.

\[(9) \text{Partial Inheritance}\]

\[
\begin{tikzpicture}
  \node (C') at (0,0) {C'};
  \node (C) at (-1,0) {C};
  \node (TP) at (1,0) {TP};
  \node (T) at (2,0) {T'};
  \draw[->] (C) -- (C');
  \draw[->] (C) -- (TP);
  \draw[->] (TP) -- (T);
  \node (EPP) at (-2,0) {EPP};
  \node (SUB) at (0,-1) {SUB};
  \node (inheritance) at (0,-2) {Inheritance \rightarrow [ϕ]};
\end{tikzpicture}
\]

Our argument, if correct, implies that EPP is not a feature of T but a feature originated in C, which in turn provides empirical evidence for Feature Inheritance. In the next subsection we discuss further evidence for the present argument.

3.2. EPP as a property of C: Evidence from embedded V2

Our argument crucially relies on the assumption that expletives in the languages under discussion are licensed in CP. In this subsection we show that this assumption is independently motivated by data concerning embedded V2 phenomena.

It is well-known that not all V2 languages allow embedded V2. In fact, Icelandic and Yiddish allow the embedded verb second while German does not, which is summarized in table (10) and the corresponding examples are given in (11).

\[(10) \text{Embedded V2}\]

<table>
<thead>
<tr>
<th>Language</th>
<th>Complementizer + XP + V + Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>Icelandic</td>
<td>OK</td>
</tr>
<tr>
<td>Yiddish</td>
<td>OK</td>
</tr>
<tr>
<td>German</td>
<td>No</td>
</tr>
</tbody>
</table>

(11) a. Icelandic (Vikner 1995: 72)
\nJón efsat um að áður eigna þá Maria snemma á
John doubt on that tomorrow will Maria get up
early

b. Yiddish (Vikner 1995: 72)
Jonas tsveyfelt az morgen vet Miriam fri öyfshetyn
John doubt on that tomorrow will Maria get up
early

c. German (Vikner 1995: 66)
*Er sagt, daß diesen Film haben die Kinder gesehen
He says, that this film have the children seen

**Authier (1992), Holmberg & Platzack (1995), Vikner (1995), and Watanabe (1993), to name a few, argue that the availability of the embedded V2 option can be reduced to whether a given language allows iterated CPs. Icelandic and Yiddish allow iterated CPs; thus they allow the embedded verb second. On the other hand, German does not have this option and it disallows the embedded verb second.**³ The relevant configuration is illustrated in (12).


³ An anonymous reviewer questioned whether left dislocation in German might be a potential counterexample to the present claim that German does not allow iterated CP structure. Although a detailed analysis of German left dislocation, of course, is beyond the scope of this paper, we would like to suggest that the construction cannot be a serious threat to the present claim, by indicating that a left dislocated phrase occupies a position higher than the spec of CP.

The examples (i) and (ii) are examples of left dislocation in German.

(i) [Diesen Froesch], den hat [TP die Prinzessin gestern this.ACC frog RP.ACC has the princess yesterday geküsst].

This frog, the princess kissed (it) yesterday.

(Boeckx and Grohmann 2005:143)

(ii) [Diesen Froesch], [TP die Prinzessin hat den geküsst].

This ACC frog the princess has RP.ACC kissed

'This frog, the princess kissed (it) yesterday.'

(Boeckx and Grohmann 2005:144)

In (i), the resumptive pronoun *den*, an accusative demonstrative pronoun, occupies the position immediately preceding the finite verb and this resumptive pronoun agrees with the dislocated phrase *Dieser Froesch* in Case, Number and Gender. The example (ii) indicates that such a resumptive pronoun can stay in a lower position.

The point at issue is the position of left dislocated phrase in (i). If the phrase occupied the spec of CP, an example like (i) would be a counterexample to the claim that German does not allow iterated CP structure. Now observe the following contrast:

Let us assume that the availability of the embedded verb second order is determined by the availability of the iterated CP structure. If expletives in the languages under discussion license an EPP feature of the phase head C, as we have claimed in 3.1, a prediction then is that the availability of the embedded verb second order correlates with the distribution of expletives in the embedded context.⁴

This prediction seems empirically correct. As shown in (13a) and (13b), Icelandic and Yiddish (languages with the embedded V2 option) do allow the expletive subject in the embedded clause. However, in German, which does not allow the embedded verb second, the

(iii). [Diesen Froesch], wer glaubt der Bauer, hat den geküsst?

this. ACC frog who believes the farmer has RP.ACC kissed

'This frog, who does the farmer believe kissed *(him)?'

(iv). *[Diesen Froesch], <den> wer <den> glaubt der Bauer hat geküsst?

*This frog, who does the farmer believe kissed?'

(Boeckx and Grohmann 2005:146)

Given that the ungrammaticality of (iv) can be attributed to the fact that the spec of CP cannot be doubly filled in German, the well-formedness of (i) implies that the left dislocated phrase occupies a position higher than the spec of CP.

⁴ Cedric Boeckx raised a question of whether the current phrase structure theory allows such iterated CP structure. Probably he is right in that the Larsonian CP-recursion analysis is no longer available under the bare-phrase structure theory. The only way to generate the iterated CP structure would be to merge C with the "inner" CP. We leave this issue open.
expletive subject cannot occur in the embedded clause as in (13c). Expletives in Icelandic and Yiddish are licensed in the lower CP projection of the embedded clause as schematized in (13d), because these languages, but not German, do allow the iterated CP structure.

(13) Expletive Subjects in the embedded V2
(Vikner 1995: 70)

a. Icelandic
Eg veit at pad hefur komið strákur
I know that there has come a boy
b. Yiddish
Ikh veys az es iz gekumen a yingl
I know that there is come a boy
c. German
*Ich weiß, daß es ein Junge gekommen ist
I know that there a boy come is
d. [CP complementizer [CP expletive V(finite) ...

The contrast in (13) supports the claim that the expletives are licensed in the lower CP projection of the iterated CP structure. This further implies that the clause initial requirement on expletives reflects the fact that partial feature inheritance is a real option. Therefore, the existence of such a requirement can be regarded as a piece of empirical evidence for Feature Inheritance.

4. EPP as an Edge-Feature

What we have claimed so far is that EPP is a kind of an edge feature originated in the phase head C. In this section we explore the nature of an isolated EPP satisfaction on the assumption that EPP is an edge feature.5

Although we have implicitly assumed that expletives occupy the spec of CP, that is, the edge of the phase, as illustrated in (14), a question arises as to why expletives can occupy such an edge position.

(14) Partial Inheritance

```
  CP = Phase
    expletive
      C'          T' 
      C
        [EPP, T]

Inheritance

T
```

Informally speaking, elements in an edge position receive some discourse-related interpretation such as topic or focus. Given that expletives are semantically vacuous, it is natural that they do not occupy the spec of CP. We claim that they are adjoined to the phase head C, since expletives are a non-projected category. In other words, an expletive satisfies the EPP requirement in the CP domain under the configuration given in (15), but not in (14):

(15) EPP satisfaction by head adjunction

```
  CP = Phase
    expletive
      C'          T' 
      C
        [EPP, T]

Inheritance

T
```

It should be noted that there is evidence suggesting that such expletives are adjoined to C but not in the spec of CP. Consider the contrast between (16a) and (16b). In (16a), the embedded topic creates the Topic Island and movement across the embedded topic yields an ungrammatical sentence. In contrast, as shown in (16b), the embedded expletive does not seem to block the extraction. This contrast can be naturally accounted for if the expletive is not in the spec of CP but it adjoins to the head of the lower CP of the iterated CP structure.

(16) <Embedded Topic>

(Rögnvaldsson and Thráinsson 1990: 32)
a. *Maríu, veit eg [CP that [CP this ring promised [TP Olafur e, e]]]
   [TP Olafur e, e]]
   [lit.'to Mary, I know that this ring Olaf promised t e']
   <Expletive>

5 In his discussion of ECM constructions in English, Chomsky (2005, 2008) also mentions the possibility that "EPP can be reformulated in terms of feature inheritance." (Chomsky 2005: 23). Our argument in section 5 will suggest that his original insights might be right.
quirky

EPP
quirky
5.

quirky

EPP-satisfaction by head adjunction: Stylistic Fronting and Wager-class Verbs

5.1. Stylistic Fronting in Icelandic

This subsection we show that Stylistic Fronting in Icelandic involves Partial Inheritance, arguing that an isolated pure EPP feature is satisfied by head adjunction. An example of Stylistic Fronting is given in (18), where the past participle is fronted right after the complementizer.

(18) Óg hélt að kysst heðu hana margir stuðentar

I believed that kissed had her many students

'I believed that many students kissed her.'

(Vikner 1995: 116)

The basic properties of Stylistic Fronting relevant for the present discussion are listed in (19).

(19) Stylistic Fronting

a. Head Movement: It applies to an element typically analyzed as a head, such as past participles, adjectives, adverbs, negation, and particles. It is clause-bounded.

b. EPP driven: The fronted constituent does not have to receive special interpretation such as focus or topic.

c. No EPP inheritance: It requires a subject gap.

(Holmberg and Platzerk (1995), Maling (1990), Roğvaldsson & Thráinsson (1990))

Stylistic Fronting in Icelandic proposes an element such as past participles, adjectives, adverbs, negation, and particles to the clause initial position. A property shared by these elements is that they have the status of a non-maximal projection under the bare-phrase structure theory. Let us assume that Stylistic Fronting is a kind of head movement in a generous sense. This assumption is not incompatible with the clause-boundedness of Stylistic Fronting. The fronted element does not have to be interpreted as focus or topic as stated in (19b). So, it is natural to assume that the operation is EPP driven. Note also that the subject gap restriction suggests that the spec TP does not have to be filled, which implies that T does not inherit the EPP feature from the phase head C. In short, Stylistic Fronting can be analyzed as an instance of Partial Inheritance. Thus the derivation of (18) can be illustrated as in (20), where the fronted past participle adjoins to the lower C:

claim can also extend to a special ECM construction of the wager type in English.

(Rögnvaldsson and Thráinsson 1990: 33)

b. ?Pennan man; held ég [CP að [CP Pað haft [TP This man I think I [CP that [CP there has [TP stundum verið talða illa um eði]]]

sometimes been talked bad about eði]]]]

[lit. 'This man, I think [that people have sometimes talked badly about it']

Assuming our reasoning is correct, it can be extended to other phenomena. Since we are dealing with phenomena involving Partial Feature Inheritance, our argument ought to be able to apply to Partial Feature Inheritance in general. Our theory-internal hypothesis is given in (17).

(17) Condition on Partial Inheritance (CPI)

No element that satisfies a pure EPP feature alone may stay at the edge position.

The following two consequences of the CPI in (17) should be noted. One is that pure expletives (expletives without phi-features) may not occupy an edge position such as CP. The other is that no element that undergoes A'-movement remains at its intermediate landing site. Since a feature triggering movement to an intermediate landing site, an edge position, is a kind of an edge-feature, the moved element must reach its "final" landing site. If it stays, the sentence is excluded by the CPI.6

5. EPP-satisfaction by head adjunction: Stylistic Fronting and Wager-class Verbs

This section shows that the CPI in (17) is independently supported: In 5.1 we discuss Stylistic Fronting in Icelandic and argue that pure EPP is licensed under the head adjunction structure. In 5.2 we argue that our

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6 Yoshiro Endo suggested that the analysis might be extended to quirky subject constructions. We agree with his idea that pure EPP satisfaction may be involved in the constructions, because Insular Scandinavian languages do allow Stylistic Fronting and quirky subjects, whereas Mainland Scandinavian languages do not (see Holmberg and Platzerk (1995: 11)). However, our analysis cannot be easily extended to quirky subject constructions. A quirky subject does not have to be a head; thus it would occupy the edge of phase, which is presumably not compatible with the CPI in (17). We leave open the question of why quirky subject constructions are observed in Insular Scandinavian languages but not in Mainland Scandinavian languages and simply assume that a quirky subject has to be an interpreted topic.
Our analysis also predicts that Stylistic Fronting does not constitute an island, because the edge of the CP phase, an escape hatch for extraction, is not filled. This prediction is borne out by (21).

(21)  Stylistic Fronting

Um Pennan atburði yona ég [CP að [CP rætt, verði
About this incident hope I [CP that [CP talked + gets + C
[e, e₄ a fundinum]]
[at the meeting]]
‘I hope that this incident will be discussed at the meeting.’
Rógnavaldsson and Thráinsson (1990: 32)

5.2.  Wager-class Verbs

So far we have discussed Partial Inheritance found in the CP phase. A natural prediction is that Partial Inheritance ought to be able to be found in the other phase, the full-fledged *vP. In this subsection we discuss the special ECM construction of the wager type in English. We show that the core properties of the construction are exactly what the CPI in (17) predicts.

Elaborating on Postal’s (1974) observation on so called “B-verbs,” Bošković (1997) discusses restrictions imposed on the subject position of the infinitival complement of wager-class verbs in English. Below, we briefly go over three properties of the construction relevant to the CPI in (17).

First, PRO cannot be the subject of the infinitival complement of wager-class verbs as in (22):

(22)  *John wagered [PRO to be crazy]

(Bošković 1997: 52)

Second, full-fledged NPs cannot stay at the subject position of the infinitival complement as in (23), but if they move out to a higher position by passivation and A'-movement, the sentences become acceptable.

(23)  NP Subject

a.  *He alleged Melvin to be a pimp
(Postal 1974: 304)

b.  *John wagered a stranger to have been in that haunted house.
(Bošković 1997: 58)

(cf. John believes Mary to have kissed Bill)

(24)  Passive

a.  Melvin was alleged to be a pimp.
(Postal 1974: 304)

b.  John was wagered by the press to be crazy
(Bošković 1997: 52)

(25)  WH-extraction

a.  Who did they allege to be a pimp?
(Postal 1974: 305)

b.  Who did John wager to be crazy
(Bošković 1997: 61)

Third, an expletive or a pronoun may stay at the subject position of the infinitival complement.

(26)  Expletive

a.  He alleged there to be stolen documents in the drawer.
(Bošković 1997: 58)

b.  John wagered there to have been a stranger in that haunted house. (Bošković 1997: 58)

(27)  Pronoun

a.  Mary alleged him to have kissed Jane
(Bošković 1997: 58)

b.  Mary never alleged him to be crazy.
(Bošković 1997: 59)

Bošković convincingly argues that the contrast between (23) and (24-27) should be attributed to the phrase structural status of NPs: Only a non-projected category, an element with the status of a head, can remain in the subject position of the infinitival complement, as in (27). Like clitics, pronouns have the status of heads. However, once coordinated, they lose the status of a head. As shown in (28), the coordinated pronouns, which are no longer a head, cannot remain in the subject position of the infinitival complement:

(28)  Coordinated Pronouns

a.  *Mary alleged him and her to have kissed Jane
(Bošković 1997: 59)

b.  *Mary never alleged him and her to be crazy.
(Bošković 1997: 59)

A generalization emerging from the present discussion
is that only a non-projected category in the sense of Chomsky (1994, 1995) can stay at the subject position of the infinitival complement of *wager*-class verbs and a projected category has to move out from that position. We claim that these properties unique to the special ECM construction of the *wager*-type should be attributed to the agentivity of *wager*-class verbs as shown by the contrast in (29):

(29) a. Mike viciously alleged/announced her to be a liar.
   b. *Mike viciously believed her to be a liar.

(From Nishikawa and Matsumoto 2007: 235)

Unlike standard ECM verbs like believe, *wager*-class verbs do assign the agent theta roles to its subject, since the adverb viciously can co-occur with only an agentive verb. This means that \( v \) of a *wager*-class verb, which we call agentive \( v \), assigns agentive theta-role to its external argument. Making a natural assumption that *wager*-class verbs exhibit the unusual properties due to the presence of the agentive \( v \), we propose the following structure for *wager*-class verbs, claiming that Partial Inheritance is involved in the agentive \( v \) in the construction.

(30)

Let us assume that the main verb moves out from VP and adjoins to X. The gist of our proposal is that V inherits only phi-features from the phase head, the agentive \( v \), and the EPP feature remains in that phase head.

Now the relevant properties of the construction can be accounted for by the interaction between the present proposal and the CPI in (17) which is repeated as (31):

(31) Condition on Partial Inheritance

No element that satisfies only an isolated EPP fea-

ture stays at the edge position.

The hypothesis (31) implies that a phase cannot have the edge in order solely to satisfy an EPP (or edge) feature, which accounts for the ungrammaticality of the examples in (23).\(^7\) In (23), a full NP such as Melvin, a projected category, cannot adjoin to the agentive \( v \) in order only to satisfy an isolated EPP feature, which is illustrated in (32).\(^8\)

(32) a. *He alleged Melvin to be a pimp
   b. ...

A prediction of the CPI is that although the offending element is the DP occupying the edge of the agentive \( v \), if it undergoes further movement targeting to some higher position, a sentence becomes grammatical. The grammaticality of examples in (25) verifies the prediction. Note also that the grammaticality of examples in (24) is irrelevant for the validity of the CPI, simply because agentive \( v \), involving Partial Inheritance is absent. The derived subject is moved to the matrix subject position in one fell swoop.

A further prediction is that if the infinitival subject has the status of a head, it does not have to move out from the domain of the agentive \( v \), since it has an option to

\(^7\) A prediction is that if *Melvin* in (23a) were assigned a formal feature such as focus or topic, (23a) would be grammatical. However, the option does not seem to be available for some language specific reason. As a matter of fact, English allows neither topicalization nor focus movement inside infinitival clauses. The possibility in question is hard to test. It should also be noted that short-distance topicalization of the subject is barred even in the matrix clause in English (see Lasnik and Saito (1992)).

\(^8\) In (32), we only consider the derivation where the subject DP "tacks in" the inner specifier of the *agentive* \( v \), because the other derivation where the subject DP targets the outer specifier of the *agentive* \( v \) would be excluded by the intervention effect. In such a case, the subject cannot raise to the spec of the matrix TP.
6. A Remaining Issue

Before concluding this paper, we discuss issues concerning the elimination of EPP. A possible interpretation of the present claim is that EPP is eliminated as EPP is a kind of edge features. We briefly discuss a conceptual problem with the present claim.

As Epstein and Seely (2005) correctly state, a major theoretical problem with EPP seems to be its unclear nature and redundancy with other principles in the grammar. It is not totally clear why a clause must have a subject and the fact that the subject position of a finite clause in English has to be filled can be readily accounted for by a certain Case-theoretic reason.

A theoretically attractive approach to the problems with EPP is to entirely eliminate EPP from grammar (Boecckx (2000), Bošković (2002) Epstein and Seely (2005)). To do so, it is a prerequisite to successfully demonstrate that there is no pure/independent EPP and the effects are reducible to other, hopefully well-understood, properties of the computational system such as Case and the Shortest Move.

What we have claimed so far is that an EPP feature is an edge feature without any contribution to discourse-related interpretation. Pure/independent EPP does exist as an edge feature inherited by the lower head as illustrated in (34):

\[
(34) \quad \text{CP (} = \text{Phase)} \quad C \quad \text{TP} \\
\quad \text{[edgeF]} \quad \text{SUBJECT} \quad T \quad T' \\
\quad \text{Inheritance} \quad \text{[edgeF]} = \text{EPP}
\]

However, the conclusion might be conceptually problematic. Recall that a phase is a closed computational unit, and technically, an edge feature creates an escape hatch for (A'-) extraction. Suppose further that this is the “reason d'être” of an edge feature. Then it is totally unclear why an edge feature can be inherited by a lower head as \( T \). The nature of EPP becomes again unclear.

7. Summary

This paper has defended the existence of Feature Inheritance, by demonstrating that Partial Inheritance is a real option on the basis of the data concerning 1) the clause-initial requirement of expletives in German, Icelandic, and Yiddish, 2) Stylistic Fronting in Icelandic, and 3) the restrictions on the subject of the infinitival complements of the \( \text{wager} \) class verbs in English. It has also argued that satisfaction of an isolated EPP feature not inherited by a lower head is restricted by the CPI in (17), which is a natural consequence of the assumption that an edge element has to receive some discourse-related interpretation.

The present paper, if it is correct, has at least three implications. First, it supports the recent view of the phase-based computation in Chomsky (2008) in that it provides empirical evidence in favor of Feature Inheritance. Second, EPP features are not a property of TP, but a kind of an edge feature in a phase head, which might give a positive answer to the question of “whether EPP can be reformulated in terms of Feature Inheritance [Chomsky (2005:23)].” Finally, given the CPI, EPP cannot be regarded as a kind of spec requirement, since an isolated EPP in a phase head can be satisfied by head adjunction.

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