Agree is fallible, EPP is not: Investigating EPP effects in Dutch

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0. The talk

In this talk, we present an investigation into EPP effects in Dutch. On the basis of this data, we argue for two broader conclusions:

1. Infl can have locative content, following Ritter and Wiltschko (2009).

   We show that the EPP property of Spec,IP in Dutch can be satisfied not only by an expletive, but also by locative phrases (Zwart 1992).

   Based on an online survey of native speakers (n=671), we argue specifically that locative proforms may appear in Spec,IP.

   Following Ritter and Wiltschko (2009) on Salish, we propose that Infl may carry a [+/-distal] feature, alongside tense.

2. Agreement can fail without inducing ungrammaticality (Preminger 2011), but the satisfaction of EPP is obligatory.

   Using the data described above, we show that the EPP property of Spec,IP must be satisfied by one of two types of XPs in Dutch, in addition to the expletive:
   - a DP with phi-features
   - a locative proform specified as [+distal] or [-distal]

   We argue that this reflects two different probes on Infl, Dist(al) and Phi, either of which can remain unvalued, as long as the EPP is satisfied.

1. The EPP in Dutch

Dutch is a V2 language: in every matrix clause, the verb must fill the second position. The V2 restriction does not apply in embedded clauses.
(1) Jan **koopt** vanmiddag een boek.
   Jan *buys* this.afternoon a book
   ‘Jan is buying a book this afternoon.’

(2) Vanmiddag **koopt** Jan een boek.
   This.afternoon *buys* Jan a book
   ‘This afternoon, Jan is buying a book.’

(3) Een boek **koopt** Jan vanmiddag.
   A book *buys* Jan this.afternoon
   ‘A book is what Jan is buying this afternoon.’

(4) *Jan vanmiddag **koopt** een boek.*

(5) *Vanmiddag een boek **koopt** Jan.*

Dutch also has an EPP effect, independent of the V2 effect. As in English, subjects move to Spec,IP. We use a *yes-no* question to control for V2 effects.

(6) [CP [C’ Heeft [IP Jan [vP een boek gekocht ]]]]
   ‘Did Jan buy a book?’

Dutch subjects must follow the highest verb or auxiliary and precede the positive polarity item *wel*, a low adverb.

(7) Heeft Jan *wel* een boek gekocht?
   has Jan **PPI** a book bought
   ‘Did Jan indeed buy a book?’

(8) *Heeft *wel* Jan een boek gekocht?*

Dutch also has impersonal passives, which are subjectless. In these, we see that some XP must appear in order to satisfy V2, such as the expletive pronoun *er*:

(9) *(Er)* werd gedanst.
    EXPL was danced
    ‘There was dancing.’

**Question:** Does Spec,IP have to be occupied in impersonal passives?

**Yes!** In *yes-no* questions without V2 (10) or when another element satisfies V2 (11), the expletive *er* must appear in Spec,IP:

(10) Werd *(er) gedanst?*
    was EXPL danced
    ‘Was there dancing?’

(11) Gedanst werd *(er).
    danced was EXPL
    ‘There was dancing.’
Er occupies the same position as a DP subject. The expletive must precede the positive polarity item wel and follow the highest verb or auxiliary.

(12) a. Werd *(er) wel gedanst?  
   was EXPL PPI danced  
   ‘Was there dancing?’
  b. *Werd wel er gedanst?
  c. *Werd wel gedanst er?

Observation: It’s not just the expletive that can satisfy the EPP property of Spec,IP, as pointed out by Zwart (1992).

Locative proforms, specifically the distal daar and the proximal hier, appear to be able to satisfy the EPP also.

(13) Werd *(daar/hier) gedanst?  
    was there/here danced  
    ‘Was there dancing there/here?’

Locative proforms can also co-occur with er.

(14) Werd er daar gedanst?  
    was EXPL there danced  
    ‘Was there dancing there?’

As evidence that daar is in Spec,IP in (13), observe that it must be positioned in the same way relative to the positive polarity item wel:

(15) a. Werd daar wel gedanst?  
    was there PPI danced  
    ‘Was there dancing there?’
  b. *Werd wel daar gedanst?
  c. *Werd wel gedanst daar?

In contrast, when er is in Spec,IP, locative proforms are not subject to this restriction:

(16) a. Werd er daar wel gedanst?  
    was EXPL there PPI dancing  
    ‘Was there dancing there?’
  b. Werd er wel daar gedanst?  
    was EXPL PPI there dancing  
  c. Werd er wel gedanst daar?  
    was EXPL PPI dancing there  
    ‘Was there dancing there?’

This suggests that if daar occurs on its own, it has the function of the expletive er, namely, it serves to satisfy the EPP.
This seems to be restricted to locative proforms, as non-location denoting elements, such as temporal proforms, cannot occur without *er.*

(17) Werd *(er) toen gedanst?
was EXPL then dancing
‘Was there dancing at that time?’

In sum, it seems that the expletive *er*, locative proforms, and nominal subjects can satisfy the EPP in Dutch.

**A point of variation:** Zwart (1992) points out that some full PPs also seem to be able to appear in Spec,IP.

However, Dutch speakers give mixed answers when presented with locative and non-locative PPs in Spec,IP:

(18) a. %Werd in het park gedanst?
was in the park danced
‘Was there dancing in the park?’
b. %Werd tijdens de vergadering gelachen?
was during the meeting laughed
‘Was there laughing during the meeting?’

We wanted to investigate this systematically and assess to what extent Dutch speakers allow adverbials of various kinds to satisfy the EPP.

2. **Questionnaire**

It seems to be the case that more things than nominals can satisfy the EPP in Dutch, namely locatives. We conducted a questionnaire to see the extent to which this is true and whether other types of adverbs might also satisfy the EPP.

Our research questions are as follows:

(i) Do locatives actually play a role in satisfying the EPP?
(ii) What other types of adverbs can satisfy the EPP, thereby licensing the omission of *er*?

2.1 **Methodology**

**Participants:** 932 participants took part in our questionnaire. A large number of them were excluded on the grounds of (a) native language was not Dutch, (b) native language information was not given, and (c) questionnaire was not fully completed. We further excluded participants for inaccuracy on control sentences; we return to this.
The remaining 671 participants were native Dutch speakers. We also gathered information on age, gender, place of birth (and youth), whether they lived abroad longer than a year, and other languages and dialects spoken.

Materials: We conducted a grammaticality judgment task. We asked people to rate test sentences on a Likert scale ranging from 1 (“I would never say it like this”) to 5 (“I would say it like this”).

Test sentences: Sentences involved impersonal passives formulated as yes-no questions. Because impersonal passives lack a subject, they form a good testing ground for determining what else can satisfy the EPP. The use of yes-no questions was to avoid a potential confound from V2.

(19) Werd er gehuild?
    was EXPL cried
    ‘Was there crying?’

We varied two factors: (i) presence or absence of er and (ii) type of adverb. The adverb condition involved 9 types. We considered both temporal and locative adverbials in the form of proforms, adverbs, and PPs. We also included high and low adverbs, to see whether adverb height might have an effect on how the EPP is satisfied.

Adverb type was crossed with the presence or absence of er, to allow for a comparison which isolates the EPP effect. Representative examples are given below.

(20) *No adverb*
    Werd (er) gehuild?
    was EXPL cried
    ‘Was there crying?’

(21) *Low adverb (niet ‘not’, wel PPI)*
    Werd (er) wel gehuild?
    was EXPL PPI cried
    ‘Was there indeed crying?’

(22) *Temporal proform (toen ‘then’ , nu ‘now’, dan ‘thenFUT’)*
    Werd (er) toen gehuild?
    was EXPL then cried
    ‘Was there crying then?’

(23) *Locative proform (daar ‘there’, hier ‘here’)*
    Werd (er) daar gehuild?
    was EXPL there cried
    ‘Was there crying there?’
(24) Temporal adverb (gisteren ‘yesterday’, morgen ‘tomorrow’, eergisteren ‘the day before yesterday’)
Werd (er) gisteren gehuild?
was EXPL yesterday cried
‘Was there crying yesterday?’

(25) Locative adverb (beneden ‘underneath’, binnen ‘inside’, buiten ‘outside’)
Werd (er) buiten gehuild?
was EXPL outside cried
‘Was there crying outside?’

(26) Temporal PP (na het feest ‘after the party’, tijdens de lunch ‘during lunch’, voor het diner ‘before dinner’)
Werd (er) na het feest gehuild?
was EXPL after the party cried
‘Was there crying after the party?’

(27) Locative PP (aan het strand ‘at the beach’, op het plein ‘at the square’, in het park ‘in the park’)
Werd (er) op het plein gehuild?
was EXPL at the square cried
‘Was there crying at the square?’

(28) Other PP (dankzij de band ‘thanks to the band’, ondanks het weer ‘despite the weather’, vanwege de ramp / het feest ‘because of the disaster / party’)
Werd (er) vanwege de ramp gehuild?
was EXPL because.of the disaster cried
‘Was there crying because of the disaster?’

To avoid effects of verb type, we used 27 unergative verbs for each condition, for a total of 486 test sentences.

We split these over nine questionnaire versions, so that, in each, no verb appeared in more than one adverb condition. Each version ended up with 54 test sentences. We also included 16 control sentences (8 grammatical, 8 ungrammatical), which were the same in all versions of the questionnaire. These control sentences were used to exclude participants who made mistakes on three or more of them.

Procedures: We posted the questionnaires on social media sites and in the newsletter of the Dutch Linguistic Society (Genootschap Onze Taal). The questionnaires were hosted on the platform SurveyMonkey®. We ensured that every version of the questionnaire had roughly the same amount of respondents.

2.2 Data

Note: In some of our data analysis, we group judgments of 1, 2, and 3 as “ungrammatical” and 4 and 5 as “grammatical.” We apply this grouping for the sake of simplicity, that is to make the data more insightful and to enable statistical analyses.
2.2.1 Verbs and Versions: We looked at the confidence intervals for every verb and questionnaire version. No questionnaire versions stood out. Among the verbs, however, the verb *genieten* ‘to enjoy’ showed very different behavior from the rest of the verbs. As we are assuming choice of verb should not have an effect, we excluded this verb from the data set.

2.2.2 Presence of *er*: Our data shows that sentences with *er* are generally judged grammatical. The data below only includes sentences in which no adverb was present.

(29) **Table 1:** Grammaticality of sentences with and without *er* and no adverb

<table>
<thead>
<tr>
<th></th>
<th>Without <em>er</em></th>
<th>With <em>er</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammatical</td>
<td>4327</td>
<td>15295</td>
</tr>
<tr>
<td>Ungrammatical</td>
<td>13119</td>
<td>2151</td>
</tr>
</tbody>
</table>

(30) **Graph 1:** Grammaticality of sentences with and without *er* and no adverb

2.2.3 Effect of adverbs: Our data shows that adverbs lie on a *cline* in terms of how ungrammatical the resulting sentences are when *er* is absent (from close to ungrammatical, such as low adverbs (avg = 1.41) to degraded, such as locative PPs (avg = 2.75)).

However, the locative proforms stand out clearly in the set of adverbs and are rated markedly higher (avg = 3.80).

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1 It may be surprising that the “without *er*” graph and the “with *er*” graph are not the inverse of each other. We believe this is due to a number of speakers who may not require *er* even in impersonal passives. We have yet to verify this, but we know from previous research, that a subgroup of people allow *er* to be absent in certain constructions where it is otherwise required (Wesseling and Klockmann 2015).
Table 2: Average grammaticality rating of sentences with different adverb types when *er* is absent

<table>
<thead>
<tr>
<th></th>
<th>Average Rating</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Adverb</td>
<td>1.25</td>
<td>0.72</td>
</tr>
<tr>
<td>Low Adverb</td>
<td>1.41</td>
<td>0.92</td>
</tr>
<tr>
<td>Temporal Proform</td>
<td>1.88</td>
<td>1.25</td>
</tr>
<tr>
<td>Temporal Adverb</td>
<td>1.96</td>
<td>1.28</td>
</tr>
<tr>
<td>Other PP</td>
<td>2.36</td>
<td>1.38</td>
</tr>
<tr>
<td>Locative Adverb</td>
<td>2.53</td>
<td>1.43</td>
</tr>
<tr>
<td>Temporal PP</td>
<td>2.60</td>
<td>1.46</td>
</tr>
<tr>
<td>Locative PP</td>
<td>2.75</td>
<td>1.48</td>
</tr>
<tr>
<td>Locative Proform</td>
<td>3.80</td>
<td>1.35</td>
</tr>
</tbody>
</table>

Graph 2: Average grammaticality rating of sentences with different adverb types when *er* is absent

This pattern is particularly clear when we compare the difference between sentences with and without *er*. We see that locative proforms stand out – the presence of *er* results only in a small improvement (.42). All other conditions show an improvement that is at least 4x larger (> 1.8).
(33) **Table 3**: Average difference between ratings of sentences with an adverb and *er* and ratings of sentences with only an adverb

<table>
<thead>
<tr>
<th></th>
<th>Average Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Adverb</td>
<td>3.44</td>
</tr>
<tr>
<td>Low Adverb</td>
<td>3.25</td>
</tr>
<tr>
<td>Temporal Proform</td>
<td>2.79</td>
</tr>
<tr>
<td>Temporal Adverb</td>
<td>2.53</td>
</tr>
<tr>
<td>Locative Adverb</td>
<td>2.09</td>
</tr>
<tr>
<td>Temporal PP</td>
<td>1.93</td>
</tr>
<tr>
<td>Other PP</td>
<td>1.91</td>
</tr>
<tr>
<td>Locative PP</td>
<td>1.81</td>
</tr>
<tr>
<td>Locative Proform</td>
<td>.42</td>
</tr>
</tbody>
</table>

**Interesting finding**: If we look only at what are supposed to be grammatical sentences containing *er*, we see that adverb types which are judged best without *er* are generally judged worse with *er*.

(34) **Table 4**: Average rating of sentences with *er* and a particular adverb type

<table>
<thead>
<tr>
<th></th>
<th>Average Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Adverb</td>
<td>4.69</td>
</tr>
<tr>
<td>Temporal Proform</td>
<td>4.67</td>
</tr>
<tr>
<td>Low Adverb</td>
<td>4.66</td>
</tr>
<tr>
<td>Locative Adverb</td>
<td>4.62</td>
</tr>
<tr>
<td>Locative PP</td>
<td>4.56</td>
</tr>
<tr>
<td>Temporal PP</td>
<td>4.53</td>
</tr>
<tr>
<td>Temporal Adverb</td>
<td>4.48</td>
</tr>
<tr>
<td>Other PP</td>
<td>4.26</td>
</tr>
<tr>
<td>Locative Proform</td>
<td>4.22</td>
</tr>
</tbody>
</table>

2.2.4 **Summary and Interpretation**:

We see the following in our data set:

i. When no adverb is present, sentences with *er* are judged more grammatical than sentences without *er*.

ii. When *er* is not present, sentences with locative proforms have the highest rating (between 1.05 and 2.39 points higher than the other adverb types, on a 5-point scale).

iii. Furthermore, sentences with locative proforms are judged most similarly to their counterparts containing *er*.

iv. We also see that adverb types which have the highest grammaticality score when *er* is absent tend to receive the lowest grammaticality score when *er* is present.
We take this to suggest that:

- In the absence of *er*, there is nothing to satisfy the EPP. Thus, such sentences are rated much lower than sentences with *er* (finding (i)). Assuming an EPP violation produces the ungrammaticality, the results confirm that *er* has an EPP function.
- Since we see that in the absence of *er*, locative proforms have a relatively high average rating (3.8) (finding (ii)), we take this to mean that locative proforms are also capable of satisfying the EPP. This is further supported by the finding in (iii) above.
- The inverse relation we see in (iv) suggests that certain adverb types may compete with *er* (to satisfy the EPP).

We take the main result here to be the finding that locative proforms can satisfy the EPP. We now turn to the question of why this should be possible.

3. Locative proforms and the EPP

3.1 Motivating a locative feature in Dutch

Main Claim: We have seen that distal and proximal locative proforms are capable of satisfying the EPP. We propose that Infl in Dutch carries a [+/-distal] feature, which allows for a locative proform to satisfy the EPP.

In developing this proposal, we adopt Ritter and Wiltschko’s (2009) view of INFL. Ritter and Wiltschko propose that Infl can have locative content sensitive to [+/-distal].

Ritter and Wiltschko (2009): Ritter and Wiltschko suggest that Infl universally serves to *anchor* the event in the utterance, but that this can be done along a variety of dimensions, including tense, location, or person.

The claim that Infl may be a locative head is motivated by data from Salish. In Halkomelem Salish, auxiliaries express whether an event is distal or proximal and tense is contributed by optional adverbials.

(35) a. í qw’eyílex tú-tl’ò.  
PROX dance he  
‘He is/was dancing here.’  
b. lí qw’eyílex tú-tl’ò.  
DIST dance he  
‘He is/was dancing there.’

This is the inverse of English, in which auxiliaries express present and past tense and location is marked by optional modifiers:

(36) a. **He is** dancing.  
b. **He was** dancing.
On this basis, they propose that Infl universally functions to anchor the event to the utterance, but can be sensitive to various dimensions, including tense, location, or person. Halkomelem Salish marks the relation between the location of the utterance and the location of the event, whereas English indicates the relation between utterance time and event time.

Formally, Ritter and Wiltschko employ a coincidence feature [+/-coin] on Infl:

- **[+coin]**: The location or time of the event coincides with the location or time of the utterance.
- **[-coin]**: The location or time of the event does not coincide with the location or time of the utterance.

This works in the systems of Halkomelem Salish and English, respectively, as follows:

- **Location on Infl**: If [+coin], the location of the utterance and event coincide, resulting in a proximal interpretation (35a). If [-coin], the location of the utterance and event do not coincide, resulting in a distal interpretation (35b).
- **Time on Infl**: If [+coin], the time of the utterance and event coincide, resulting in a present tense interpretation (36a). If [-coin], the time of the utterance and event do not coincide, resulting in a non-present tense interpretation (36b).

**What about Dutch?**

Dutch, like English, obligatorily expresses Tense on Infl as we see below.

(37)  a.   Hij danst.
      He dances
      ‘He is dancing.’
   b.   Hij danste.
      He danced
      ‘He danced.’

Thus, Dutch appears to be a language in which Infl is sensitive to the temporal dimension.

**Our proposal:** We propose that Infl in Dutch is in some respects like Salish, in that it is also sensitive to locative content (in addition to temporal content). This will allow for an explanation of how locative proforms are able to satisfy the EPP.

3.2 Implementing a temporal and locative Infl in Dutch

We recast Ritter and Wiltschko (2009)’s idea in terms of Agree. The main difference is that we replace their universal [+/-coin] feature with separate tense and location features, which we call [T] and [Dist].
In this view, the temporal or locative content on Infl is determined by which of these features a language selects for.

Infl in Dutch merges with both a T and a Dist feature, while English merges only with a T feature and Halkomelem Salish only with a Dist feature. Following Pesetsky and Torrego (2004), we take these features to be interpretable but unvalued on Infl, with the [T] or [Dist] value contributed by the verb.

(38) *English*

```
    IP
   /   \
 Infl  VP
   |    |
  [iT] V
     [uT]
```

(39) *Salish*

```
    IP
   /   \
 Infl  VP
   |    |
  [iDist] V
     [uDist]
```

(40) *Dutch*

```
    IP
   /   \
 Infl  VP
   |    |
  [iT,iDist] V
     [uT]
```

**On the features contributed by the verb:** We propose that languages may also vary as to what feature is contributed by the verb. In English and Salish, Infl and V carry matching features, but we propose that there is a mismatch in Dutch, such that Infl carries both Dist and T but V only contributes T.

If only phrases that agree with Infl can merge with it, the ability of locative proforms to satisfy the EPP in Dutch immediately follows: in the absence of an expletive or DP, the iDist feature on Infl can be valued by the uDist feature contributed by a locative proform, resulting in movement to Spec,IP.

Illustrating this, Dutch Infl originates with iT, iDist, and uPhi features. Verbs always come equipped with a uT feature, which can value the iT feature on Infl. In Dutch, this triggers V-to-I movement. We assume that head movement is not sufficient to satisfy the EPP.
Infl has two further probes, $u\Phi i$ and $i\text{Dist}$, which can agree with DPs or locative proforms. Upon valuation, the agreed-with element can be used to satisfy the EPP by moving to Spec,IP.

When there is only a DP in the structure, $u\Phi i$ agrees with the DP that moves to Spec,IP, thereby satisfying the EPP (43). This means that, in the absence of a locative proform, $i\text{Dist}$ remains unvalued, which does not result in ungrammaticality (Preminger 2011).

(42) Huilt hij?
    Cries he
    ‘Is he crying?’

(43) a. Agree Relations
In impersonal passives with a locative proform (44), there is no DP to value \( u \Phi \) and move to Spec,IP. However, \( i \text{Dist} \) can be valued by a locative proform, which allows it to satisfy the EPP. In the absence of a DP, \( u \Phi \) remains unvalued, but again, the failure to agree does not induce ungrammaticality (Preminger 2011).

(44) Werd daar gehuild?
Was there cried
‘Was there crying?’

(45) a. CP
    └── IP
        ├── I’
        │   └── [\(iT, i\text{Dist}, u\Phi\)]
        │       └── daar ... werd ... gehuild
    └── [\(u\text{Dist}\)] [\(uT\)]

b. CP
    └── IP
        └── I’
            └── [\(iT, i\text{Dist}, u\Phi\)]
                └── daar ... werd ... gehuild
When neither a DP nor a locative proform is present (46), there is no goal for \( u \)Phi or \( i \)Dist to be valued on. As we have seen previously, the failure to agree does not induce ungrammaticality. However, in this case, there is also nothing to satisfy the EPP, which does lead to ungrammaticality. Thus, agree is fallible, the EPP is not.

(46) *Werd gehuild?
     Was cried

(47) a. CP
    \[
    \begin{array}{c}
    \text{C} \\
    \text{IP} \\
    \text{I'} \\
    \text{I} \\
    \text{[\( iT, iDist, u \Phi \)]} \\
    \text{werd … gehuild} \\
    \text{[\( uT \)]}
    \end{array}
    \]

    b. CP
    \[
    \begin{array}{c}
    \text{werd} \\
    \text{C} \\
    \text{IP} \\
    \text{I'} \\
    \text{I} \\
    \text{[\( iT, iDist, u \Phi \)]} \\
    \text{werd} \\
    \text{werd … gehuild}
    \end{array}
    \]

4. Related Issues

4.1 Expletive er

We saw in our data that expletive er can satisfy the EPP. If the assumption that only phrases that Agree with Infl can merge with it is correct, it follows that er has to agree with Infl.

However, as we see in the following example, agreement takes place between the verb and the object; thus, the presence of er does not interrupt agreement between the verb and a phi-featured DP.

(48) Worden / *wordt er jongens geslagen?
     Was.PL / was.SG EXPL boys hit
     ‘Was there boy-hitting?’
We know $er$ satisfies the EPP in this example because it must immediately follow the verb (49) and it occurs preceding the positive polarity item $wel$ (50).

(49) *Worden jongens er geslagen?
    Were boys EXPL hit
(50) Worden er (wel) jongens (*wel) geslagen?
    Were EXPL PPI boys PPI hit

‘Was there (indeed) boy-hitting?’

How can we account for this?

In the development of $er$, we see a conflation of the 3rd person genitive plural ending of the personal pronoun $iro$ ‘of them’ in Old Dutch ($–re$ or $–er$ in Middle Dutch) (Philippa et al. 2003), and the unstressed form $der$ ‘there’ of the locative proform.

We lack synchronic evidence as to whether $er$ carries phi-features or a Dist-feature. We propose that these features are unvalued, leaving the expletive with features that are sufficient to trigger movement for EPP purposes, but not to trigger agreement, as depicted below.

(51) a. CP
    C
    IP
    I
    [iT, iDist, uPhi]
    vP
    er
    [uDist/Phi]
    worden ... jongens ... geslagen
    [uT] [iPhi]

b. CP
    worden
    C
    IP
    I
    [iT, iDist, uPhi]
    vP
    er
    worden
    [uDist/Phi]
    worden ... jongens ... geslagen
    [uT] [iPhi]
4.2 Predictions on optionality

**Prediction:** Both iDist and uPhi can trigger movement to Spec,IP. This predicts optionality in what is used to satisfy the EPP – a DP or a locative proform.

In this section, we show that this is right, once we understand the interaction of subject movement with definiteness.

**Subjects and locative proforms:**

Two different patterns emerge with subjects. When the subject is definite, it must occupy Spec,IP rather than a locative proform. We see this when we control for V2, such as in embedded sentences or yes-no questions:

(52) a. …dat (*daar) Jan (daar) een boek kocht
    ‘that Jan bought a book (there).’
   b. Heeft (*daar) Jan (daar) een boek gekocht?
    Has there Jan there a book bought
    ‘Has Jan bought a book (there)?’

Like definite subjects, indefinite subjects are able to occupy Spec,IP (53), but unlike definite subjects they aren’t required to. Instead, a locative proform can appear in Spec,IP (54). This shows that there is optionality when the subject is indefinite.

(53) a. …dat iemand daar een boek kocht
    ‘that someone bought a book there.’
   b. Heeft iemand daar een boek gekocht?
    Has someone there a book bought
    ‘Has someone bought a book there?’

(54) a. …dat *(daar) wel iemand een boek kocht
    ‘that someone bought a book (there).’
   b. Heeft *(daar) wel iemand een boek gekocht?
    Has there PPI someone a book bought
    ‘Has someone bought a book (there)?’

We propose that whether a DP or a locative proform satisfies the EPP is truly optional, but that definite subjects must escape the verb phrase and so are forced to move to Spec,IP for independent reasons (Diesing 1992).

**Expletive er and subjects / locative proforms:**

When we compare *er* to locative proforms, we would expect optionality in what satisfies the EPP. However, when both *er* and a locative proform are present, then *er*
must be the element to satisfy the EPP, and not the locative proform. This is illustrated through word order restrictions: *er* must precede the locative.

(55) Werd (*daar) er (daar) gehuild?
    Was there EXPL there cried
    ‘Was there crying (there)?’

The same holds for indefinite subjects.

(56) a. Was er iemand in de tuin?
    Was EXPL someone in the garden
    ‘Was there someone in the garden?’

b. *Was iemand er in de tuin?
    Was someone EXPL in the garden

Thus, we see that *er* takes precedence over DPs and locative proforms, suggesting the following pattern.

(57) Er > DP, Locative Proform

One thought might be that *er* is part of a last resort mechanism. However, we do not expect a need for last resort when a DP subject or locative proform is available, since we have shown that these are equally capable of satisfying the EPP.

We leave this as an open issue.

5. Conclusions

1. In this talk, we have offered evidence for the idea that Infl can have locative content (Ritter and Wiltschko 2009), from the use of locative proforms to satisfy EPP in Dutch. This may provide part of an explanation for why expletives often have a locative origin.

2. In addition, we argued that the logic of the EPP in Dutch demonstrates that Agree is fallible (Preminger 2011), but the EPP is obligatory.

This result suggests that the EPP is not a property of a feature (e.g. Chomsky 1995; Pesetsky and Torrego 2001), but rather is a characteristic of a head. It may then be wrong to think of the EPP property as a feature that needs to be satisfied.

One type of proposal that could be compatible with these conclusions is one in which the EPP is tied to phonological requirements, as in Landau (2007) and recent work by Norvin Richards (2010, forthcoming book Contiguity Theory).
6. References


