How to Probe Expletives
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1. Introduction
(1) a. There is someone in the garden.
    b. Someone is in the garden.
(2) \[ e \text{ is someone in the garden} \]
    \( \Rightarrow \) How does the associate of there get Case?
(3) There are some men in the garden.
- Chomsky (1986~): there is just a place-holder for subject position to satisfy the EPP.

i) How do expletives enter into derivations?
ii) How are expletives characterized in terms of formal features?
    b. Expletives have unvalued \( \phi \)-features that may or may not be valued by their associates.
(5) \[ e \text{ is} [\text{there someone}] \text{ in the garden} \]

2. Arguments for the Move-Approach to the There-Construction
<A conceptual problem of the External Merge analysis of the there-construction>
    \( \Rightarrow \) It seems true that external Merge is involved only in the D-structure property, i.e., building up structures for selectional relations.

- Chomsky (2000):
(6) \[ T \text{ [} \_p \text{ be } [\text{SC someone in the garden}] \text{]} \]
(7) There is likely to be someone in the garden.
(8) a. \[ \text{TP there to } [\_p \text{ be } [\text{SC someone in the garden}] \text{]} \]
    b. \[ \text{TP there } T \text{ [} \_p \text{ be } [\text{AP likely } [\text{TP } t \text{ to } [\_p \text{ be } [\text{SC someone in the garden}]]]]] \text{]} \]
    \( \Rightarrow \) There has an uninterpretable feature ([uPerson]) to be active.
T Agrees with not only there but also someone: Multiple Agree

(9) There are likely to be some men in the garden.

⇒ In (1a), the [uPerson] feature of there needs to probe, which looks anomalous.


(10) [T [v be [sc someone in the garden]]]

<An empirical problem of such an analysis>

(11) a. There is likely to be someone in the garden.

b. *There is likely someone to be in the garden.

(12) [to [v be someone in the garden]]

(13) [TP there to [v be someone in the garden]]

⇒ The Merge-over-Move analysis does not work any more, since internal Merge is now characterized as a cost-free operation.

Chomsky (2004, p. 8): Move (or Internal Merge according to his terminology) is “an operation that is freely available,” and “accordingly, displacement is not an ‘imperfection’ of language; its absence would be an imperfection.”

(14) \[\begin{array}{c}
\alpha P \\
\downarrow \\
\text{there} \quad \text{the associate} \\
[+\alpha\phi][-\text{Case}] \\
[+\alpha\phi][-\text{Case(Part)}]
\end{array}\]

(15) \[\begin{array}{c}
\text{DP} \\
\downarrow \\
\text{there}[-\alpha\phi][-\text{Case}] \quad \text{the associate}[+\alpha\phi][-\text{Case(Part)}]
\end{array}\]

(cf. Sabel (2000) and Hornstein and Witkos (2003))

Belletti (1988): “[b]ecause partitive is an inherent Case assigned by verbs, it will typically be assigned to the direct object of both transitive and unaccusative verbs.”

(16) a. Hän pani kirjoja pöydälle.

he put book_{part,pl} on the table
‘He put some books on the table.’

b. Helsingistä tulee kirjeitä.
   ‘There come some letters from Helsinki.’

c. *Miehiä on tavannut Pekan kadulla.
   ‘Some men met Peter in the street.’

(17) a. *There seem that a lot of people are intelligent.
   b. *There seem to a lot of people that it is raining outside.

- Only unaccusative verbs license the *there*-construction:

   (cf. Hoekstra and Mulder (1990)

(18) a. There just may not exist a solution (to this problem).
   b. There occurred a catastrophe (in that country).

(19) a. *There walked a man with a dog.
   b. *There ate a man a pudding.

#Partitive Case is involved in the probe-goal system exactly in the same way as other structural Cases.

⇒ The vP that is involved in checking of Partitive Case is taken to constitute a strong phase.

(20) **Phase-Impenetrability Condition**

In Phase α with head H, the domain of H is not accessible to operations outside α, only H and its edge are accessible to such operations. (Chomsky 2000, p. 108)

N.B.: V’s ability of assigning partitive Case is suppressed when v carries a CAUSE feature. (cf. Deal 2009)

(i) a. There bloomed a rosebush on the patio.
   b. *There bloomed a rosebush very slowly on the patio.

(21) a. There is someone in the garden.
   b. [{\textit{v}^* [\textit{v} be [\textit{dp} there someone] in the garden]}]

(22) [{\textit{v}^p there, [{\textit{v}^*+be [\textit{vp} someone, [\textit{v} be [\textit{op} t_i t_j] in the garden]}]}]

(23) [{\textit{C} \textit{Pres} [{\textit{v}^p there, [{\textit{v}^*+be [\textit{vp} someone, [\textit{v} be [\textit{dp} t_i t_j] in the garden]}]}]}]

(24) [{\textit{CP} \textit{TP} there, [{\textit{Pres} [{\textit{v}^p \textit{t}', [{\textit{v}^*+be [\textit{vp} someone, [\textit{v} be [\textit{op} t_i t_j] in the garden]}]}]}]}]
2.2. An Alternative of the External Merge-Approach

- Abe (1997), Bošković (2002):
  
  (i) no EPP in infinitival TP

  (ii) successive-cyclic A-movement is forced by the Minimize Chain Links

(31) there is likely [\text{TP to be someone in the garden}]

(32) Someone is likely to be in the garden.

(33) [\text{TP there T} [\text{iP v+is someone in the garden}]]

\[ \Rightarrow \text{Bošković (2002) tries to get rid of the EPP, and } \text{there} \text{ is inserted into the Spec-TP to check its Case-feature.} \]

- Nomura (2004):

(34) a. That he’ll resign and that he’ll stay in office seem at this point equally possible.

  b. *It seem at this point equally possible that he’ll resign and that he’ll stay in office.

  c. It seems at this point equally possible that he’ll resign and that he’ll stay in office.  \( \text{(McCloskey 1991, p. 564-565)} \)

In (30), T necessarily picks up \text{there} as its goal, since the latter is active.
(35) \[
\begin{array}{c}
\text{DP} \\
\text{D} \\
\text{CP}
\end{array}
\]
\[it[+\alpha\phi][-\text{Case}] \quad \text{the associate}[+\beta\phi]\]

(36) a. I dislike it that he is so cruel.
   b. I didn’t suspect it for a moment that you would fail.
   c. I regret it very much that would could not hire Mosconi.

- Lasnik (1995):

(37) a. There is likely to be a building demolished.
   b. There is a building likely to be demolished.

\[\Rightarrow (37b) \text{ involves a reduced relative. The reason is attributed to the status of partitive Case as inherent.}\]

(38) a. How is there likely to be [a building demolished t]?
   b. ?* How is there a building likely to be [demolished t]?

(39) a. There will be a man available.
   b. \[e \text{ will be } [_{\text{SC}} \text{ a man available}]\]

(40) \[e \text{ will be } [_{\text{SC}} \text{ someone in the garden}]\]

# In (38b), \textit{a building} can check its partitive Case with either the upper or lower be.

(41) *There is likely someone to be in the garden.

(42) a. \[_{\text{VP}} \text{ be } [_{\text{AP}} \text{ likely } [_{\text{TP}} \text{ to } [_{\text{IP}} \text{ v+be } [_{\text{VP}} \text{ demolished } [_{\text{DP}} \text{ there a building}}]]]]]]])]
   b. \[_{\text{VP}} \text{ therei } [_{\text{VP}} \text{ a building}] [_{\text{AP}} \text{ likely } [_{\text{TP}} \times [_{\text{IP}} \text{ v+be } [_{\text{VP}} \text{ demolished } [_{\text{st}} \text{ t}]])]]]]])]

\[\Rightarrow \text{ Under the assumption that successive-cyclic A-movement is forced by the Minimize Chain Links, the intermediate Spec-TP cannot be used by more than one element at a time.}\]
3. Empirical Problems

- Bošković (2002): The expletive there does not move.

(43) John seems to Mary to be smart.

(44) a. *Deux soldats semblent au général manquer (être manquants) à la caserne.
   Two soldiers seem to the general to be missing at the barracks.
   ‘Two soldiers seem to the general to be missing from the barracks.’
   b. *Deux soldats semblent au général être arrivés en ville.
   Two soldiers seem to the general to have arrived in town.
   ‘Two soldiers seem to the general to have arrived in town.’

(45) a. Il semble au général y avoir deux soldats manquants à la caserne.
   There seems to the general to have two soldiers missing at the barracks.
   ‘There seem to the general to be two soldiers missing from the barracks.’
   b. Il semble au général être arrivés deux soldats en ville.
   There seems to the general to have arrived two soldiers in town.
   ‘There seem to the general to have arrived two soldiers in town.’

(46) a. A man seems to Mary to be in the garden.
   b. Some men seem to Mary to be in the garden.

(47) a. There seems to Mary to be a man in the room.
   b. There seems/?*seem to Mary to be men in the room. (Boeckx 2000)

(48) a. There seems to be a man in the room.
   b. There seem to be men in the room.

- Goto (2008):

(49) a. Following Chomsky (2000), the EPP is a selectional requirement rather than a feature to be checked.
   b. The EPP can be satisfied by Move before Agree takes place in English.
   c. Following Abe (2002), Probe is subject to the MLC while Move is subject to the SM.

(50) John seems to be smart.

(51) \[ C \ _ C \ _ T \ _ I \ _ [v^P \ _ VP \ _ {\_ T^P \ _ T \ _ {\_ T} \ _ to \ _ be \ _ John \ _ smart}] \]

(52) \[ C \ _ C \ _ T^P \ _ John _ I \ _ T \ _ I^P \ _ v \ _ [VP \ _ {\_ T^P \ _ t} \ _ ‘to \ _ be \ _ t_i \ _ smart}] \]}
(53) a. John seems to Mary to be smart.
   b. \[C\ C [T; T [v [v \text{ seem to Mary \text{ to be } John \text{ smart}}]]]]
\[C\ C [T; T [v [v \text{ seem to Mary to be } t; smart}}]]]
\[\text{John probes for its uninterpretable Case-feature and hits } T \text{ for its goal.}\]

(54) a. English D-N Case-feature: uninterpretable, unvalued
   b. French D-N Case feature: uninterpretable, valued

(55) a. Only unvalued features can act as probes.
   b. #Goto (2008) crucially assumes the external Merge analysis of the \textit{there}-construction.


i) Expletives lack Case features.

ii) Pesetsky and Torrego (2007): Formal features are characterized with both interpretability and valuation.

(57) a. The expletive \textit{there} carries uninterpretable and unvalued $\phi$-features.
   b. The values of the $\phi$-features may be supplied by its associate.

(58) \[
\begin{array}{c}
\text{DP} \\
\text{D} \\
\text{N} \\
\text{there} [+\alpha\phi] [-\phi] \\
\text{the associate} [+\alpha\phi][-\text{Case(}\text{Part})]
\end{array}
\]

- the case where \textit{there} has $[+\alpha\phi]$: 

(59) \[v^* [v^* \text{ be } \text{[\alpha\phi there someone]} \text{ in the garden}]]

(60) \[C\ C [T; \text{Pres } [v^* \text{ there, } [v^* v^* + \text{be } [v^* \text{ someone, } [v^* t; \text{ be } \text{[\alpha\phi t; t]} \text{ in the garden}]]]]]]

(61) \[C\ C [T; \text{Pres } [v^* \text{ there, } [v^* \text{ t; } [v^* v^* + \text{be } [v^* \text{ someone, } [v^* t; \text{ be } \text{[\alpha\phi t; t]} \text{ in the garden}]]]]]]

(62) Only unvalued features can act as probes.

\[\text{The expletive } \textit{there} \text{ has no access to the option given in (49b), contrary to normal DPs.}\]

(63) a. There seems to Mary to be a man in the room.
   b. There seems/\textit{?} $\text{seem}$ to Mary to be men in the room.

- Schütze (1999): default agreement

(64) There is/\textit{s} are lots of cookies on the table.
(65) a. There appear/?appears to be cookies on the table.
    b. There tend/?tends to be cookies on the table when Johnnie comes home.

(66) Default agreement occurs if two occurrences of unvalued \( \phi \)-features establish an Agree relation.

(67) \[ \ldots \ T \ldots \ [ \ \text{there} \ \ \text{associate} ] \ldots \]
    \[ \phi_{\text{unvalued/uninterpretable}} \ \ \phi_{\text{unvalued/uninterpretable}} \]

N.B. Feature matching as a result of probing deprives the feature(s) involved of the label [uninterpretable].

(68) Unvalued \( \phi \)-features may be supplied with default values that are specified in a given language.

(69) \[ \text{there}_i \quad \ T \ldots \ [ \ t_i \ \ \text{associate} ] \ldots \]
    \[ \phi_{\text{unvalued/uninterpretable}} \ \ \phi_{\text{unvalued/uninterpretable}} \]

(70) a. There seems to Mary to be a man in the room.
    b. There seems/\(? \ast \) seem to Mary to be men in the room.

(71) a. Il semble au général y avoir deux soldats manquants à la caserne.
    ‘There seem to the general to be two soldiers missing from the barracks.’
    b. Il semble au général ètre arrivés deux soldats en ville.
    ‘There seem to the general to have arrived two soldiers in town.’

(72) a. Il a été mangé des pommes.
    ‘It has been eaten apples.’
    b. Il est venu quelques hommes.
    ‘It has come some men.’

(Hoekstra and Mulder 1990, p. 47)

(73) a. Expletives carry uninterpretable and unvalued \( \phi \)-features.
    b. The values of the \( \phi \)-features may or may not be supplied by their associates, depending upon the inherent nature of the expletives.

(74) a. It seems to Mary that John is honest.
    b. \( e \ T \) seem to Mary [it [that John is honest]]

- ECM cases:

(75) We proved there to be a thief among us.

(76) \[ [v^* \ n^* \ \text{prove} \ [T \ \text{to} \ [v^* \ \text{there}_{i} \ [v^* \ \text{+be} \ [v_{\text{VP}} \ \ \text{a thief}_{j} \ [v^* \ \text{be} \ [v^* \ \text{t} \ \text{be} \ [\alpha \ t_i \ t_j \ \text{among us}]]]]]]] \]
(77) a. *We proved to the authorities Smith to be the thief.
   b. We proved Smith to the authorities to be the thief.
(78) a. *We proved to the authorities there to be a thief among us.
   b. *We proved there to the authorities to be a thief among us.
- Takano (1998): The ungrammaticality of (77a), (78a, b) is attributed to a violation of the MLC.
(79) a. There seems to Mary to be a man in the room.
   b. There seems/?*seem to Mary to be men in the room.
   ➔ The ungrammaticality of (78b) is captured under the assumption that there is no default agreement in the v-V complex, unlike the C-T complex.

References

(1) a. Who is there in the garden?
   ?b. *Where is there a man?
   \[ v^* \text{ carries only one edge feature.} \]
   \[ \text{The grammaticality of (7a) indicates that the whole complex } [_{ap} \text{there who}] \text{ can go to the Spec of } vP. \]

(2) a. \[ [_{vp} [_{ap} \text{there, who]} [_{vp} \text{who, [v} t_{be} [_{ap} t_i t_j \text{in the garden}]]]] \]
   b. \[ [_{cp} \text{who, [T Pres}_{vp} [_{ap} t_i t_j \text{, [v} v^* \text{+be [vp who, [v} t_{be} [_{ap} t_i t_j \text{in the garden}]]]]]] \]

(3) There are/is a woman and five men in the garden.
   a. \[ [_{ap} \text{there, [a woman and five men]}] \rightarrow \text{there}_{pl} \]
   b. \[ [_{ap} \text{there, [a woman]}] \text{ and } [_{ap} \text{there, [five men]}] \rightarrow \text{there}_{def} \]
   \[ \text{In order to apply across-the-board movement to } \text{there} \text{ in (3b), } \text{there} \text{ must keep default } \phi\text{-features.} \]

Howard Lasnik (p.c.):

(1) There seems/*seem to someone to be men in the room.
(2) OK There seem to some people to be men in the room.
(3) There seems/??seem to some people to be a man in the room.
   \[ \text{-> Maybe, only when the associate of } \text{there} \text{ and the experiencer mismatch wrt their numbers, the default agreement shows up.} \]
   \[ \text{#the derivation of (2):} \]
   \[ \text{T seem to [there some people] to be [there men] in the room} \]
   \[ \text{-> the two occurrences of } \text{there} \text{ are literally merged in the Spec-TP.} \]
   \[ \text{#What’s wrong if } \text{there} \text{ is only associated with the experiencer?} \]
   \[ \text{-> Maybe, partitive Case is literally assigned to the associate by } \text{there}. \]
(4) There seems/seem to John and Mary to be men in the room.
   \[ \text{seems should be better.} \]