

# Expletive *There* as an External Argument: A Unified Analysis of *There*-Constructions

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Katsutoshi Yanaka

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## 1. Introduction

In generative syntax, the derivation of *there*-constructions has long been a focus of the research. However, not much has been discussed about the role of expletive *there*, except that it serves as a dummy subject. In this paper, I would like to argue against this view, and claim that expletive *there* plays an important role in syntax other than a filler of the empty subject position. I propose that it is a scene-setting argument which requires its predicate to describe an abstract location. I also argue that expletive *there* is an external argument, and is base-generated in [Spec, *v*P]. By this proposal, I make an attempt to challenge the puzzle of what kinds of predicates are compatible with *there*-constructions. Specifically, we will focus on the types of verbs that can appear in *there*-constructions. It is generally said that the verbal class is restricted to unaccusative, but this generalization does not seem to hold in cases like (1c, d) and (2).

- (1) a. There exist a number of similar medieval crosses in different parts  
of the country. (Milsark (1974: 252))  
b. There arose a storm here. (Belletti (1988: 4))  
c. \*There died some people in that fire. (Breivik (1983: 232))  
d. \*There suddenly opened a window behind me.
- (2) a. There walked into the room a tall man with blond hair.  
(Rochemont and Culicover (1990: 1))  
b. Suddenly there entered the room a six-edged troll.

(Bobaljik and Jonas (1996: 208))

In (1), the verbs are all unaccusative, but (1c, d) are ruled out. To make matters worse, the verbs in (2) are not unaccusative, but both sentences are nonetheless acceptable. At first sight, it seems no longer possible to maintain the unaccusative analysis, but I will show that it is the most plausible analysis by examining the relevant data in detail.

This paper is organized as follows. In section 2, we observe some unresolved problems with previous analyses of *there*-constructions. Section 3 discusses the syntactic status and function of expletive *there*, and I propose that it is an external argument serving as a scene-setting element. In section 4, we examine the predicates that occur in *there*-constructions, and provide evidence that such predicates can all have an unaccusative structure. Section 5 is a concluding remark.

## 2. Unresolved Problems

In this section, we briefly review previous analyses of *there*-constructions and make explicit what remains to be accounted for. First, we discuss the unaccusative analysis advocated by Burzio (1986), Belletti (1988), and Bowers (2002). Second, we discuss the Presentational *There*-Insertion analysis advocated by Aissen (1975), Newmeyer (1987), and Rochemont and Culicover (1990).

### 2.1 Unaccusative Analysis

Burzio (1986), Belletti (1988), and Bowers (2002) suggest that the verbs must be unaccusative in order to derive *there*-constructions. Roughly speaking, it follows that the base structure of *there*-constructions should be as follows:

$$(3) \left[ {}_{IP} \left[ e \right] \left[ {}_{VP} V DP_{\text{subj}} \right] \right]$$

They assume that expletive *there* can be optionally inserted in the empty subject position instead of raising the DP. The above analysis correctly predicts the grammaticality of (4).

- (4) a . There remained a relatively small amount of activity in Canadian Studies.  
 b . There lie a lot of mines under the ground.  
 c . There arrived a bus at the bus stop.

However, as can be seen in (5), some unaccusative verbs are incompatible with *there*-constructions in spite of having the same underlying structure as (4). Thus, their unaccusative analysis cannot account for the above facts without resorting to a stipulation that the verbs in *there*-constructions must denote the existence or appearance of entities, but not disappearance or change of state.

- (5) a . \*There disappeared a man in front of us. (Breivik (1983: 232))  
 b . \*There vanished some goats.  
 c . \*There melted ice into water.  
 d . \*There froze water in the pond.

Such a stipulation must be reduced to a general principle of grammar for a better analysis. We will return to this issue in section 3.

## 2.2 PTI Analysis

Further recalcitrant data are given in (6). These sentences involve unergative or transitive verbs, which have the underlying structure represented in (7).<sup>1</sup>

- (6) a . Thereupon, there ambled into the room my neighbor's frog.  
 (Milsark (1974: 96))  
 b . There stepped out in front of his car a small child.  
 (Aissen (1975: 1))  
 c . Suddenly there ran out of the bushes a grizzly bear.  
 d . There hit the newsstand a book by Chomsky.  
 (Guéron (1980: 671))  
 e . There reached his ear the sound of angel voices.  
 (Newmeyer (1987: 297))  
 f . There suddenly enters my mind the beefy figure of the Rev P C Underhill.  
 (ukmags/03 N0000000734)

(7) [IP DP<sub>Subj</sub> [VP V (DP<sub>Obj</sub>) ]]

Aissen (1975), Newmeyer (1987), and Rochemont and Culicover (1990) regard the sentences in (6) as distinguished from the ones in (4). They assume that (6) involve postposing of the subject and Presentational *There*-Insertion (PTI). The derivational steps are illustrated in (8).

(8) a. [IP DP<sub>Subj</sub> [VP V (DP<sub>Obj</sub>) ]]

b. [IP [IP t [VP V (DP<sub>Obj</sub>) ]]] DP<sub>Subj</sub> ]  
(Postposing of DP<sub>Subj</sub>)

c. [IP [IP there [VP V (DP<sub>Obj</sub>) ]]] DP<sub>Subj</sub> ]  
(Insertion of *there*)

Since they assume that this type of *there*-construction has a different history of derivation, the unaccusative analysis for normal *there*-constructions seems to be maintained. Borrowing the term of Rochemont and Culicover (1990), we call the sentences in (6) PTI constructions.

Certainly, the PTI analysis resolves the issue of verb selection; it can be said that unergative and transitive verbs are available in the case of PTI constructions. Furthermore, this analysis straightforwardly accounts for why no definiteness effect is observed in (6). Diesing (1992) assumes that material in VP is mapped into the nuclear scope, where existential closure applies, and is assigned an existential interpretation. She suggests that the subject in normal *there*-constructions remains inside of VP at LF, and as a result undergoes obligatory existential closure, yielding the definiteness effect. In PTI constructions, on the other hand, the subject is extraposed to the IP-adjoined position, which is not in the scope of existential closure. Thus, the subject does not have to be indefinite.

Although the PTI analysis, as discussed above, explains some exceptional behavior of *there*-constructions, it poses some other problems.

First, this analysis predicts that any kinds of verb can appear in *there*-constructions, but this prediction is not borne out as demonstrated in (9).

(9) a. \*There laughed during the class many students.

b. \*There danced on the stage a girl with short hair.

- c . \*There ate an apple a boy with glasses.
- d . \*There played tennis in the court an old couple.

As a matter of fact, verbs in the PTI construction are also strictly restricted. Milsark (1974) observes that unergative or transitive verbs are available if they express the emergence of entities with an adjacent locative expression, as illustrated in (6).

The second problem is the contrast between (10) and (11).

- (10) a . There walked into the building several high-school girls.
- b . There ran out of the bushes a grizzly bear.
- (11) a . \*There carefully walked into the building several high-school girls.
- b . \*There angrily ran out of the bushes a grizzly bear.

The examples in (11) differ from those in (10) only in the presence of subject-oriented adverbs. However, (11) are far worse than (10). Since PTI constructions are derived by subject extraposition and the insertion of *there*, the unacceptability of (11) cannot be accounted for.

The last problem is concerned with the role of expletive *there*. It is unclear why expletive *it* cannot be chosen as a filler of the empty subject position. If an expletive is required just for satisfaction of the EPP, (12) would be well-formed, contrary to fact.<sup>2</sup>

- (12) a . \*It walked into the building several high-school girls.
- b . \*It ran out of the bushes a grizzly bear.

As discussed above, the PTI analysis is shown to be untenable. From the next section on, we will make an attempt to develop a unified analysis of *there*-constructions by examining the role of expletive *there*. We will return to the issue of verb selection in section 4.

### 3. The Syntactic Status and Function of Expletive *There*

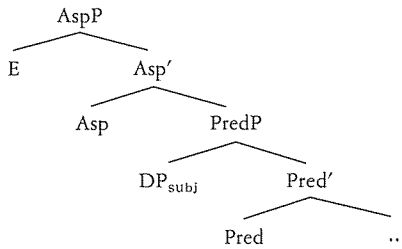
This section discusses the role of expletive *there* by examining its occurrences in *there*-constructions. We first review the analysis of Felser and Rupp (2001), and propose that expletive *there* serves as a scene-setting argument,

which is base-generated in [Spec, *v*P] as an external argument.

### 3.1 Felser and Rupp (2001)

It is widely assumed that expletive *there* bears no semantic contents and plays no role in sentence interpretation. Chomsky (1986, 1991, 1993) argues that *there* is replaced at LF by its associate NP, but the question remains why language allows the existence of such a meaningless element. Felser and Rupp (2001) argue against Chomsky's view, and claim that *there* plays a significant role in interpretation. They propose that expletive *there* is an overt realization of the spatio-temporal argument postulated by Kratzer (1995). They also argue that the spatio-temporal argument is located in AspP, which they assume is located between T and V (or Pred), and functions as a subject of stage-level predicates (SLP). (13) is a basic structure of SLPs they postulate. Note that the label E represents the spatio-temporal argument.

(13)



Felser and Rupp (2001) further argue that this spatio-temporal argument is regarded as thematic or quasi-thematic when it is overtly realized. Their analysis predicts that (14b) is ungrammatical since the predicate nominal is not saturated (in Rothstein's (1983) sense) by a subject.

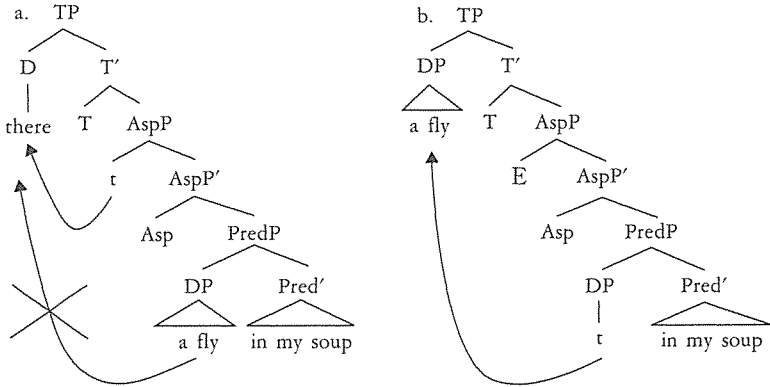
(14) a. There is a solution.

b. \*A solution is.

They suggest that an overt realization of spatio-temporal argument is

optional. In EPP languages, it affects syntactic operations.<sup>3</sup> If a spatio-temporal argument is realized as *there*, it is required to raise to [Spec, TP] to satisfy the EPP of T instead of the associate DP. The presence of *there* blocks the associate DP from raising, as shown in (15). Note that E is the same as *there* except the absence of phonetic contents.

(15)



Adoption of Felser and Rupp’s analysis also enables us to account for the fact that predicates in *there*-constructions are restricted to SLPs (i.e., predicate restriction in the sense of Milsark (1974)), as shown in (16).

- (16) a. There were several people sick after the banquet. (SLP)
- b. There has been a lot accomplished.
- c. \*There are many people tall. (ILP)
- d. \*There are several students honest.

However, this analysis makes an undesirable prediction: since an overt realization of the spatio-temporal argument is completely optional, it cannot be explained why the sentences in (17) are all unacceptable in which the predicates are certainly stage-level.

- (17) a. \*There died some people.
- b. \*There disappeared a man.
- c. \*There dried up puddles. (Freeze (1992: 566))

d. \*There melted lots of ice cream. (ibid.)

Although Felser and Rupp's treatment of expletive *there* does not account for the inability of *there* to occur in some SLPs such as *die* and *melt*, it captures the fact that possible predicates in *there*-constructions are limited to SLPs. We will adopt their view that expletive *there* is an external argument of SLPs, which enters into a predicational relation with the rest of elements including the logical subject. In what follows, we will slightly modify their analysis of the syntactic status and function of expletive *there*, so that (17) can be ruled out correctly. Before we discuss the role of *there*, we will consider the role of external arguments in the next section.

### 3.2 The Role of External Arguments

Since Williams (1981), it has been suggested in the literature that external arguments are distinguished from internal arguments; for instance, internal arguments but not external arguments affect the interpretation of their selecting verbs (as pointed out in Marantz (1984)) and play a significant role in delimitedness (as pointed out in Tenny (1994)). The relevant examples are presented in (18) and (19), respectively.

- (18) a. take a book from the shelf  
 b. take a bus to New York  
 c. take a nap  
 d. take an aspirin  
 e. take a letter in shorthand (Kratzer (1996: 113-4))
- (19) a. Bill ate the apple in three minutes /??for three minutes.  
 b. Bill ate apples \*in three minutes / for three minutes.

Following Marantz (1984), Kratzer (1996) assumes that the external argument of a verb is not an argument of the verb, and proposes that it is an argument introduced by the functional head above VP.<sup>4</sup> In her proposal, while internal arguments receive a  $\theta$ -role from the verb, external arguments are compositionally assigned a  $\theta$ -role from VP; in other words, they are, unlike internal arguments, not selected by the verb. Hale and Keyser



(1993) suggest that what is called “agent role” is assigned to external arguments through a predication with VP. It implies that the  $\theta$ -role of external arguments is not predetermined by the verb, and they are licensed under predicational relation with VP.<sup>5</sup>

Belvin and den Dikken’s (1997) analysis of *have*-constructions supports the idea that there is no predetermined  $\theta$ -role for external arguments. They discuss two types of *have*-constructions: experiencer *have*- and causative *have*-constructions, illustrated in (20a, b), respectively.

(20) a . I had a strange man walk into my office. Experiencer

b . We had a murderer escape from prison yesterday. Causative

(Belvin and den Dikken (1997: 156 (a), 173 (b)))

As suggested in Belvin and den Dikken (1997), (20a) and (20b) have the same structure; the only difference is whether the matrix subject (= the external argument) is Causer or Experiencer. They argue that this difference is attributed to the contents of the predicates: if the clausal complement of *have* contains a pronominal link associated with the matrix subject, it will be interpreted as Experiencer; otherwise, it will be interpreted as Causer. The link can be explicit (as in (21)) or implicit (as in (22)). Note that in the case of implicit links as in (22), *an employee* and *a son* must be *John’s* in order for *John* to be interpreted as Experiencer.

(21) a . *John* had mosquitoes buzzing all around *his* head.

b . *She* had people asking for *her* autograph all the time.

(Belvin and den Dikken (1997: 166))

(22) a . *John* had a guy from the mob threaten *an employee* last week.

b . *John* had *a son* arrested in Huntington Beach last fourth of July.

(ibid.: 167)

The data in (20)–(22) indicate that no  $\theta$ -role is assigned to external arguments by the verb, but they are licensed by entering into a proper predicational relation with the predicate. Therefore, external arguments that fail to enter into a proper predication are expected to be ruled out.

### 3.3 Expletive *There* as an External Argument

In the previous section, we concluded that external arguments are licensed by a proper predication, but not by a  $\theta$ -role assigned from the verb. In this section, slightly modifying the analysis of Kratzer (1996), we assume that external arguments are base-generated in [Spec, *v*P] in the VP shell structure, and a predicational relation is established with VP.<sup>6</sup> We then adopt Felser and Rupp's (2001) idea that expletive *there* is an argument, although we deny its status as an overt realization of the spatio-temporal argument. Now I propose that expletive *there* is base-generated in [Spec, *v*P] as an external argument and serves as a scene-setting argument, whose existence indicates that the subject of the sentence is an abstract scene (or location). It follows that the structure of *there*-constructions is (23).

- (23) [<sub>vP</sub> there *v* [<sub>vP</sub> DP V (PP<sub>LOC</sub>) ]]

Thus far, my proposal is essentially the same as Felser and Rupp's (2001). In order to solve the overgeneration problem identified in (17), I further assume that expletive *there* must be associated with some locative phrase within its predicate, VP. The manner of licensing *there* is exactly the same as that of the experiencer subject of *have*-constructions discussed in section 3.2: a locative link associated with expletive *there* is necessary for it to be interpretively licensed.<sup>7</sup> In the case of *have*-constructions, even if the predicate has no link to the matrix subject (explicitly or implicitly), the sentence can be legitimate because the matrix subject can be interpretively licensed as Causer. In the case of *there*-constructions, if the predicate (i.e., VP) lacks a locative link, expletive *there* will no longer be licensed since it does not play any role except in setting a scene (or location). The remainder of this section discusses some arguments for my proposal.

In the first place, arguments should be given in favor of the assumption that expletive *there* is associated with a locative expression in VP.

Expletive *there* is identical in form with deictic locative *there*. Based on this fact, Breivik (1989) analyzes the historical development of expletive *there*. He shows the following steps in the development of *there*-

constructions:

- (24) a . *There*<sub>2</sub> lives an old man.  
 b . *There*<sub>2</sub> lives an old man, in that house.  
 c . *There*<sub>1</sub> lives an old man in that house.
- (i) In some sentences, a stressed locative adverb appears in the topic (pre-verbal position). (= 24a)  
 (ii) In order to render explicit the referent of *there*<sub>2</sub>, a co-referential locative adverbial is often added. (= 24b)  
 (iii) *There*<sub>2</sub> becomes semantically redundant. As a result, it lost the locative meaning and phonological stress. This led to a functional change from *there*<sub>2</sub> to *there*<sub>1</sub>. (= 24c)

If Breivik's analysis is on the right track, the association of *there*<sub>2</sub> with a co-referential locative adverbial triggers a functional change of *there*<sub>2</sub>. In this sense, we can assume that *there*<sub>1</sub>, which in itself has lost semantic contents, still keeps the association with a locative expression.<sup>8</sup> We can also say that expletive *there*, as a result of acquiring the argument status at the expense of independent semantic contents, requires an anchoring locative expression. Note that this locative expression can be explicit or implicit, as in the case of experiencer *have*-constructions. Sentences like (25) are perfect because each predicate, inherently or by discourse, is associated with an implicated location.

- (25) a . There comes a time when we face several environmental problems.  
 b . There followed a rainstorm. (Milsark (1974: 252))  
 c . There exists a complicated and extensive hierarchy of agents with specific abilities. (ukbooks/08 B0000000317)  
 d . There was a quarrel about who is the winner.

The sentences (17), repeated here as (26), are, on the other hand, not at all acceptable since each predicate does not involve a location, neither explicitly or implicitly. Thus, part of my proposal that expletive *there* is a scene-setting argument is supported by its historical development.

- (26) a . \*There died some people.

- b. \*There disappeared a man.
- c. \*There dried up puddles.
- d. \*There melted lots of ice cream.

Further data uphold the rest of my proposal that expletive *there* is base-generated in [Spec, *v*P] as an external argument. (27) reveal that adding a locative phrase to the predicates in (26) cannot save the sentences. Freeze (1992) attributes the unacceptability of (27) to the subcategorization property of the verbs in question. He notes that unaccusative verbs like *dry up* and *melt* are not subcategorized for a locative argument; the added locative phrases in (27) are not arguments but adjuncts, which we assume cannot be associated with expletive *there*.<sup>9</sup>

- (27) a. \*There died some people in that fire.
- b. \*There disappeared a man in front of us.<sup>10</sup>
- c. \*There dried up puddles in the street.
- d. \*There melted lots of ice cream in the sun.

Why can't a locative adjunct be linked to expletive *there*? This problem will be easily resolved if we assume that expletive *there* is an external argument. As noted in section 3.2, external arguments are licensed and assigned an interpretation by entering into a proper predicational relation with VP. This indicates that adjuncts above *v*P do not affect either the licensing or interpretation of external arguments. The fact that the matrix subject in (28b) cannot be interpreted as Experiencer in spite of the presence of an explicit co-referential pronoun suggests that the locative expression *in his room* is located above *v*P, and thus fails to serve as a link with the subject.

- (28) a. Pinnochio<sub>i</sub> had Geppetto step on his<sub>i</sub> leg.
- b. Pinnochio<sub>i</sub> had Geppetto step on a wood-boring beetle in his<sub>i</sub> room.  
(Herley (1998: 203))

The same logic applies to the cases in (27) if expletive *there* is base-generated in [Spec, *v*P]. We have argued that expletive *there* requires a predicate with an explicit or implicit locative expression. The fact that expletive *there* fails to be licensed in (27) suggests strongly that a locative

adjunct, which we assume is located above *vP*, is irrelevant to its licensing, and that expletive *there* must be licensed (through predication) within *vP*. Such behavior of *there* is identical with the matrix subject of experiencer *have*-constructions. By transitivity, my proposal that expletive *there* functions as an external argument in the structure (23) is tenable.<sup>11</sup>

Our analysis of expletive *there* also accounts for the ungrammaticality of (9), repeated here in (29), in which the verbs are not unaccusative.

- (29) a . \*There laughed during the class many students.  
 b . \*There danced on the stage a girl with short hair.  
 c . \*There ate an apple a boy with glasses.  
 d . \*There played tennis in the court an old couple.

In the PTI analysis discussed in section 2.2, nothing prevents the occurrence of (29) in a principled way. Once we assume that expletive *there* is an external argument, however, (29) will straightforwardly be accounted for. In English, no two external arguments are allowed for a single verb.<sup>12</sup> In (29), predicates like *laugh* and *eat an apple* require an agentive subject for the sake of saturation. Obviously, expletive *there* cannot be a candidate because it can only be interpreted as an abstract location. Since no second external argument is allowed, the ungrammaticality in (29) naturally follows.

However, we in turn face another puzzle: why can the sentences in (2) and (6) be acceptable, although the verbs are considered as unergative or transitive? In the next section, we examine the predicates in question in more detail, and show that (2) and (6) are no longer exceptions to our analysis.

#### 4. Predicate Type in *There*-Constructions

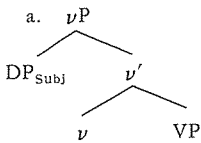
In the previous section, we saw that the predicate which requires an agentive (or causative) subject is not compatible with *there*-constructions. This entails that the predicate must be saturated before expletive *there* is introduced in [Spec, *vP*]; specifically, its structure must be unaccusative.

This section focuses on the predicate structure of *there*-constructions. We especially discuss what are traditionally termed unergative and transitive verbs. In the generative literature, verbs of manner of motion such as *run* and *swim* have been regarded as typical unergative verbs, but we show that they may have an unaccusative structure, based on the analysis by Levin and Rappaport (1995). We further argue that some transitive verbs may also have an unaccusative structure, in which case they become compatible with *there*-constructions.

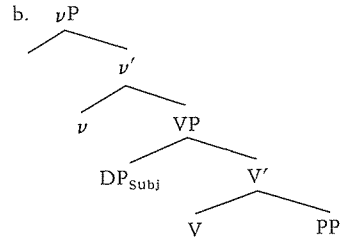
#### 4.1 The Structure of Intransitive Verbs

Before we go on to the discussion of the predicate type in *there*-constructions, we need to make explicit the structural distinction between two types of intransitive verbs: unergative and unaccusative. Perlmutter (1978) argues that meaning is reflected in a syntactic structure; briefly speaking, the underlying subject position varies depending on the properties of verbs. It has been specifically argued that agentive verbs such as *run* and *swim* have their subjects originate in the surface position, whereas non-agentive verbs such as *exist* and *melt* have their subjects originate in the object position. Within the current minimalist framework, we can state that each structure is as follows, the former for unergative verbs and the latter for unaccusative verbs:<sup>13</sup>

(30)



Unergative

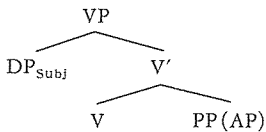


Unaccusative

It has been widely assumed that which structure should be taken hinges on the meaning of verbs; for instance, agentive verbs take the former and non-agentive verbs the latter.

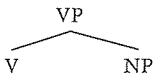
However, we will consider the above contrast from a different point of view. Hale and Keyser (1993) argue that the appearance of a subject is forced by predication, which results from Chomsky's (1986) principle of Full Interpretation. Based on this idea, we argue that the VP-internal subject in (30b) is forced to appear by predication. Hale and Keyser (1993) demonstrate how predication is established inside of VP by using Lexical Relational Structures (LRSs). Roughly speaking, LRSs represent a structural relation holding among a lexical head, its categorial projections and its arguments. The LRS of unaccusative verbs will be thus as follows:<sup>14</sup>

(31)



In (31), PP (or AP) serves as a predicate, and it forces the appearance of the subject DP in [Spec, VP]. On the other hand, the LRS of unergative verbs will be represented as (32). According to Hale and Keyser (1993), the NP, which incorporates into V, is not a predicate, so no subject DP is forced to appear in the LRS.<sup>15</sup> As a result, the subject DP of unergative verbs is external to VP.

(32)



Taking into consideration that the underlying subject position is determined by the requirement of predication, we will consider verbs of manner of motion which have been assumed to be unergative.

## 4.2 Verbs of Manner of Motion

### 4.2.1 Verbs of Manner of Motion in *There*-Constructions

In section 3.3, we noted that the acceptability of (2) and (6), repeated here as (33), remains to be accounted for under the assumption that expletive *there* is an external argument and no two external arguments are allowed for a single verb. The question is why unergative and transitive verbs can appear in *there*-constructions.

- (33) a. There walked into the room a tall man with blond hair.  
 b. Thereupon, there ambled into the room my neighbor's frog.  
 c. There stepped out in front of his car a small child.  
 d. Suddenly there ran out of the bushes a grizzly bear.  
 e. Suddenly there entered the room a six-edged troll.  
 f. There hit the newsstand a book by Chomsky.  
 g. There reached his ear the sound of angel voices.  
 h. There suddenly enters my mind the beefy figure of the Rev P C Underhill.

In fact, this question has been a direct counterargument for the unaccusative analysis discussed in section 2.1. In this section, however, some arguments are provided for maintaining the unaccusative analysis without leaving the above examples exceptional; namely, the predicates in (33) may have an unaccusative structure.

Let us first consider the unergative verbs in (33). It is observed in previous studies that verbs of manner of motion become available in *there*-constructions when they are accompanied by a directional phrase. Consider the contrast between (34) and (35).

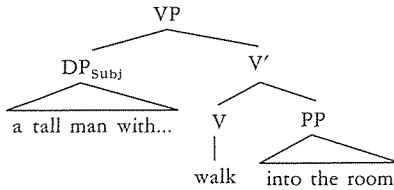
- (34) a. There walked into the room a tall man with blond hair.  
 b. There ambled into the room my neighbor's frog.



- (35) a . \**There* walked a tall man with blond hair.  
 b . \**There* ambled my neighbor's frog.

In order to achieve a unified analysis of *there*-constructions, we need to explain the fact observed in (34). It has long been an unresolved problem, but under the assumption that the appearance of a subject is forced by predication, we can find a clue to the solution. If the logical subject in (34) is base-generated inside of VP, as shown in (36) and the predicate does not take an agentive external argument (i.e., it takes an unaccusative structure), we can expect (34) to be grammatical without resorting to any special rules which allow the presence of expletive *there*; namely, it is only merged in [Spec, *v*P], as in the case of *there*-constructions with unaccusative verbs.

(36)



In what follows, we present evidence for the idea that verbs of manner of motion may have an unaccusative structure when they are accompanied by a directional phrase.

#### 4.2.2 Resultative Constructions

In this section, we will make use of resultative constructions as an unaccusative diagnostic. Levin and Rappaport (1995) argue that all resultative constructions are constrained by the Direct Object Restriction (DOR): briefly speaking, result phrases cannot be predicated of any elements but a direct object. They also argue that the DOR applies to the underlying structure, so unaccusative subjects are also able to license result phrases while unergative subjects are not, as shown in (37).

- (37) a . The river froze solid.

- b . The bottle broke open. (Levin and Rappaport (1995: 39))  
 c . \*He danced sore.  
 d . \*Don't expect to swim / jog sober! (ibid.: 187)

The fact that the addition of a fake object saves (37c, d) is a strong argument for the DOR.

- (38) a . He danced his feet sore.  
 b . Don't expect to swim / jog yourself sober! (ibid.)

As can be seen in (37) and (38), verbs of manner of motion behave as typical unergative verbs. However, as pointed out in Levin and Rappaport (1995), these verbs behave as unaccusative when the result phrase denotes a direction. Let us consider (39) and (40).

- (39) a . She danced / swam free of her captors.  
 b . They slowly swam apart.  
 c . However, if fire is an immediate danger, you must jump clear of the vehicle. (ibid.: 186)

- (40) a . \*She danced / swam herself free of her captors.  
 b . \*They slowly swam themselves apart.  
 c . \*However, if fire is an immediate danger, you must jump yourselves clear of the vehicle.

In contrast to (38), (39) are grammatical despite the absence of a fake object. Moreover, (40) show that the presence of a fake object renders the sentences ungrammatical. This indicates that verbs of manner of motion with a directional phrase may be unaccusative.<sup>16</sup>

#### 4.2.3 The Causative Alternation

Levin and Rappaport's (1995) analysis of the causative alternation provides us with further evidence that verbs of manner of motion may behave as unaccusative. (42) are examples in which the causer of the action and the moved entity are separately expressed. Unlike (41), what is moved is located in the object position.

- (41) a . The soldiers marched to the tents.

- b. The mouse ran through the maze.  
 (42) a. The general marched the soldiers to the tents.  
 b. We ran the mouse through the maze.

(Levin and Rappaport (1995: 188))

Note that the causative alternation is usually impossible or marginal without a directional phrase.<sup>17</sup>

- (43) a. ??The general marched the soldiers.  
 b. \*We ran the mouse. (ibid.)

These facts indicate that the presence of a directional phrase makes available the object position of the verbs in question. If the causer of the action and the moved entity are identical, it will lead to sentences like (39). What is important here is that the base position of the moved entity is inside of VP and the causer of the action occupies a distinct position, which we assume is [Spec, *v*P].

From the above discussion, the structure of (30) for verbs of manner of motion seems to be plausible.

#### 4.2.4 Consequences

We have seen that verbs of manner of motion can have an unaccusative structure when they co-occur with a directional phrase. If our analysis is on the right track, we can explain why verbs of manner of motion, unlike other unergative verbs, are allowed in *there*-constructions such as (33a-d). Since the logical subject in (33a-d) is an internal argument and the predicate is already saturated within VP, expletive *there* can appear in [Spec, *v*P].

Furthermore, as a consequence of the unaccusative analysis, we can account for the contrast observed in (10) and (11), repeated here as (44) and (45).

- (44) a. There walked into the building several high-school girls.  
 b. There ran out of the bushes a grizzly bear.  
 (45) a. \*There carefully walked into the building several high-school girls.  
 b. \*There angrily ran out of the bushes a grizzly bear.

Subject-oriented adverbs generally co-occur with an agentive subject. Thus,

the unacceptability of (45) suggests that the logical subject of *there*-constructions does not serve as an agentive subject which licenses the co-occurrence of subject-oriented adverbs. Under the unaccusative analysis this result is straightforwardly predicted. Since expletive *there* occupies [Spec, *v*P], in which the appearance of an agentive subject is licensed, the logical subject is only interpreted inside of VP as an moved entity which has no volition.<sup>18</sup>

### 4.3 Transitive Verbs in *There*-Constructions

It is widely assumed that transitive verbs cannot appear in English *there*-constructions with a few exceptions presented in (33e-h).

- (33) e. Suddenly there entered the room a six-edged troll.  
 f. There hit the newsstand a book by Chomsky.  
 g. There reached his ear the sound of angel voices.  
 h. There suddenly enters my mind the beefy figure of the Rev P C Underhill.

It is observed in the literature that transitive verbs are compatible with *there*-constructions only if the verbal complex consisting of a verb and its object denotes the appearance of entities (see the discussion of Guéron (1980)). Following Bobaljik and Jonas (1996), we can also assume that the predicates in (33e-h) are unaccusative in the same way as those in (33a-d).

Although the verbs in question apparently take a direct object, there is the indication that in the relevant sense of appearance, they behave somewhat differently from normal transitive verbs. Compare (46) and (47).

- (46) a. A book by Chomsky hit the newsstand.  
 b. The sound of angel voices reached his ear.  
 c. The beefy figure of the Rev P C Underhill suddenly enters my mind.  
 (47) a. The newsstand was hit by a book by Chomsky.  
 b. \*His ear was reached by the sound of angel voice.  
 c. \*My mind is suddenly entered by the beefy figure of the Rev P C

Underhill.

(47) are passive counterparts of (46), and passivization is impossible in (47b, c). Although (47a) is grammatical in form, the appearance reading in (46a) is lost under passivization. These data indicate that the nominal immediately following the verb behaves as a locative adverbial rather than a direct object.<sup>19</sup> If it is correct, the predicates in (33e–h) are similar to unaccusative verbs like *come in* and *appear*.

#### 4.4 Summary

Thus far, we have claimed that expletive *there* is an external argument serving as a scene-setting element, and predicates in *there*-constructions are restricted to unaccusative as illustrated in (30b). We have further argued that verbs of manner of motion and several transitive verbs may have an unaccusative structure which is compatible with *there*-constructions. Therefore, the examples in (33) are no longer exceptional. As a consequence of the unaccusative analysis, we can also capture the fact that no agentive reading is allowed in *there*-constructions. Thus, we can conclude that *there*-constructions are derived in the following way:<sup>20</sup>

- (48) a.  $v$  [<sub>VP</sub> DP<sub>Subj</sub> V PP ]  
 b. [<sub>vP</sub> there  $v$ -V [<sub>VP</sub> DP<sub>Subj</sub>  $\tau_V$  PP ] ] (Merger of *there*)  
 c. T [<sub>vP</sub> there  $v$ -V [<sub>VP</sub> DP<sub>Subj</sub>  $\tau_V$  PP ] ] (Merger of T)  
 d. [<sub>TP</sub> there<sub>i</sub> T [<sub>vP</sub>  $\tau_i$   $v$ -V [<sub>VP</sub> DP<sub>Subj</sub>  $\tau_V$  PP ] ] ]  
 (Move of *there*)

In this paper, we leave open the question of what motivates the movement of the logical subject to a right-peripheral position in the case of some verbal *there*-constructions as seen in (33).

## 5. Concluding Remark

At the beginning of this paper, we showed some inadequacies of the assumption that expletive *there* does not play any roles except in filling an empty subject position. Under that assumption, it was impossible to capture

the relationship between expletive *there* and the predicates in *there*-constructions. Instead, I proposed that expletive *there* is a scene-setting argument whose function is to require VP elements to be predicated of an abstract location (or scene). We further argued that such a requirement follows from expletive *there*'s syntactic status as an external argument, which we assume is licensed by a proper predication with VP. In parallel with experiencer *have*-constructions, we added the requirement that expletive *there* is interpretively licensed only if its VP contains a locative expression either explicitly or implicitly. Under this analysis, it is straightforwardly expected that unaccusative verbs denoting a change of state such as *die* and *melt* cannot appear in *there*-constructions. Finally, we examined some unergative and transitive verbs that occur in *there*-constructions. By means of some unaccusative diagnostics, we concluded that their logical subjects are base-generated inside of VP, and the unaccusative analysis can be maintained as a unified theory of *there*-constructions.

### Notes

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<sup>1</sup> We use the terms 'unergative' and 'unaccusative' in the sense of Perlmutter (1978).

<sup>2</sup> Rochemont and Culicover (1990) argue that expletive *there* is selected to satisfy the Empty Category Principle (ECP). In the current minimalist framework, such an explanation is no longer valid since the ECP has been abandoned.

<sup>3</sup> Felser and Rupp (2001) argue that the spatio-temporal argument is visible to the MLC when it is realized as *there*.

<sup>4</sup> Krazter (1996) assumes VoiceP, but it essentially corresponds to a light *v* in the shell structure. In this paper, we adopt the latter category for a slot of external arguments.

<sup>5</sup> In their analysis, the concept of theta-assignment is not adopted. They

argue that argument structure is reformulated as lexical relational structure, in which theta-theoretic properties are determined as a result of predication. Since external arguments are not present in the projections of a lexical verb, their theta-theoretic properties are determined by VP. Failure of predication leads to a violation of principle of Full Interpretation (see Chomsky (1986)).

<sup>6</sup> For more information about the mechanism of predication, see Williams (1980).

<sup>7</sup> We assume that expletive *there* has no semantic contents but an abstract location. The abstract location by itself does not specify a particular place as the deictic locative *there* does, so it needs to be specified by other locative expressions.

<sup>8</sup> Kuno (1971) and Freeze (1992) also point out the association of expletive *there* with a locative expression in the predicate, although we do not adopt their analyses here.

<sup>9</sup> Note that a locative adjunct occupies a higher position than a locative argument. The contrast between (i) and (ii) indicates that a locative adjunct cannot appear inside of VP.

(i) He put his hand on his heart in front of us.

(ii) \*He put his hand in front of us on his heart.

We assume here that a locative adjunct is located in the *vP*-adjoined position.

<sup>10</sup> Verbs of disappearance are exceptional. Consider the following examples.

(i) \*There disappeared a man in front of us.

(ii) Into the vortex there disappeared ship after ship.

(Bolinger (1977: 46))

While the predicate in (i) denotes the disappearance of *a man*, the one in (ii) denotes the directed movement of *ship after ship*. In this sense, these verbs are interpreted as those in (6). We will later discuss the role which a directional phrase plays.

<sup>11</sup> However, if we assume that expletive *there* is an external argument, we will face the issues of agreement and Case-checking. In this paper we do not discuss the matter in detail, but follow the analysis of Felser and Rupp (2001): expletive *there* checks its Case-feature as a result of agreement with T in a person feature. T's number feature is valued by agreement with that of an associate NP since *there* lacks a number feature. While *there*'s Case is valued as Nominative, the associate NP's Case is valued as Objective by default. Note

that partial agreement is adopted in this analysis.

<sup>12</sup> One of the reasons might be a Case problem, but we do not discuss the matter here.

<sup>13</sup> We borrow Chomsky's (1995, 2000, 2001) VP-shell structure for convenience. Note that the light verb in (30b) does not serve as a transitive marker. The DP subject thus does not receive Case from the light verb. Furthermore, we assume that the theme subject is positioned in [Spec, VP], following Hale and Keyser (1993).

<sup>14</sup> The notation of AP or PP is used for convenience. Essentially, material in AP (or PP) denotes a state or a location.

<sup>15</sup> They argue that an unergative verb is constructed by the incorporation of the nominal into the empty verb. In this sense, unergative verbs are potentially transitive. A similar analysis is found in Kayne (1993).

<sup>16</sup> We have to explain why the subjects in (37c, d) cannot be base-generated in the object position in spite of the presence of the result phrases. Levin and Rappaport (1999) present a plausible solution to this issue. They argue that if the process of a causative event does not entail the process of a resultant event, both events need their own arguments. While (37c, d) fail to satisfy this condition, (39) succeed in event co-identification, which allows the presence of the single argument. For further discussion of event co-identification, see Levin and Rappaport (1999).

<sup>17</sup> The following sentence may be an exception:

(i) She walked the dog every day.

<sup>18</sup> Kirsner (1973) also observes the contrast between (10) and (11). He notes that this phenomenon is also observed with a normal unaccusative verb like *remain*. While the agentive reading is possible in (i), it is impossible in (ii).

(i) Three men remained in the room.

(ii) There remained three men in the room. (Kirsner (1973: 110))

<sup>19</sup> Here, we leave open the questions concerning the Case and category of this locative nominal.

<sup>20</sup> Needless to say, if the verb implicates a location or a direction, PP is optional.

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### Corpus

Collins COBUILD Wordbanks *Online*

## Synopsis

Expletive *There* as an External Argument:  
 A Unified Analysis of *There*-Constructions  
 Katsutoshi Yanaka

In this paper, I investigate the syntactic status and function of expletive *there*, which has been analyzed just as a filler of the empty subject position, and make an attempt to achieve a unified analysis of *there*-constructions.

In the previous studies, *there*-constructions are classified into two types: existential and presentational sentences, as illustrated in (1) and (2), respectively.

(1) a . There remained a relatively small amount of activity in Canadian Studies.

b . There is a solution.

(2) a . There walked into the room a tall man with blond hair.

b . Suddenly there entered the room a six-edged troll.

It has been assumed that the sentences in (2) have a different history of derivation from those in (1); since the predicates in (2) are, unlike those in (1), not restricted to an unaccusative type, expletive *there* is inserted after the rightward movement of the subject from [Spec, IP]:

(3) [<sub>IP</sub> [<sub>IP</sub> there [<sub>VP</sub> V (PP)]] Subj ]

This analysis, however, makes a wrong prediction with respect to verb selection. If *there* plays no role but as a dummy subject, (4) are wrongly predicted to be grammatical.

(4) a . \*There laughed during the class many students.

b . \*There ate an apple a boy with glasses.

Furthermore, some unaccusative verbs such as *die* and *open* are also disallowed, although there is a position where *there* can be inserted:

(5) a . \*There died some people in that fire.

b . \*There suddenly opened a window behind me.

In order to solve these problems, I propose that expletive *there* plays a

significant role in interpretation, serving as an external argument, which I assume to be located in [Spec, *v*P]. Taking into consideration that the VPs in (1) and (2) contain an explicit or implicit locative expression, I define *there* as a scene-setting argument, which is licensed only under a predicational relation with VP. This proposal can correctly rule out (4) and (5) since their VPs cannot be predicated of a location (or scene).

Under the assumption that *there* is an external argument, it is expected that unergative and transitive verbs cannot appear in *there*-constructions since their subjects are also external arguments. The grammaticality of (2) seems to be problematic, but a close examination of the predicates in (2) reveals that verbs of manner of motion can take an unaccusative structure when accompanied by a directional phrase. I use resultative constructions and causative alternation as unaccusative diagnostics.

(6) She danced / swam free of her captors.

(7) We ran the mouse through the maze.

Following Levin and Rappaport's (1995) Direct Object Constraint, according to which result phrases must be predicated of direct objects, we can conclude that the subjects in (6) originate in the object position. The causative alternation in (7) shows that the DP in the object position denotes a moved entity when a directional phrase is present.

Since the predicates in (2) are all verbs of manner of motion with a directional phrase, their underlying structure is the same as that of (1), as illustrated in (8).

(8) T [<sub>*v*P</sub> there *v*-V [<sub>*v*P</sub> DP<sub>Subj</sub> t<sub>V</sub> (PP) ]]

I conclude that all *there*-constructions are derived from the unaccusative structure in (8).