

WHERE *THERE* IS, AND WHY*

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1. Introduction

Generative linguists have long been interested in so-called existential *there*, also sometimes called expletive or presentational *there* (Allan, 1971; Jenkins, 1972, 1975; Milsark, 1974, 1977, a.o.). A canonical existential context for *there* appears in (1a), while (2a) illustrates a “presentational” use with the unaccusative verb *appear*.

- (1) a. There are unicorns (in the garden).
- b. Unicorns are in the garden.
- (2) a. There appeared a light on the horizon.
- b. A light appeared on the horizon.

Several questions arise from the distribution of *there* and its role in existential constructions. From the perspective of Minimalist syntactic theory, in which operations take place only when necessary, it has been a puzzle why *there* occurs in sentences like (1a) and (2a), given that their counterparts in (1b) and (2b) are also well-formed. Syntacticians have also asked where the DP associate of *there* occurs: though it is the semantic subject of the clausal predicate, it apparently does not surface in the canonical clausal subject position. From a comparative perspective, moreover, *there* sentences exhibit striking differences from existential constructions in other languages (Freeze, 1992), giving rise to the semantic question of how *there* contributes to existential interpretations, and whether its semantic contribution, if any, is consistent across the full range of *there*-constructions.

Different approaches to these questions have resulted in two main types of analyses. The first is the expletive analysis, broadly adopted in current Minimalist syntactic work (Chomsky, 1995, a.o.). The second is the inverted-predicate analysis, more generally accepted in work focusing specifically on existential constructions (Hoekstra and Mulder, 1990; Freeze, 1992; Moro, 1997; Belvin and Dikken, 1997, a.o.).

Both of these approaches face an empirical problem, however. Existing analyses have mostly focused narrowly on *there* in existential and unaccusative clauses, often overlooking the fact that while *there* cannot occur with simple transitives and unergatives, as in (3), it is well-formed in all kinds of progressive clauses, including transitive and unergative ones,

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as in (4). Recent syntactic work on *there* has also sometimes glossed over the fact that it is possible with stage-level—but not individual-level—adjectives, as in (5).

- (3) a. * There laughed children. / *There children laughed.
- b. * There read people the handout. / *There people read the handout.
- (4) There are people laughing/ reading the handout.
- (5) There are taxis available/ *yellow.

Neither mainstream analysis of *there* can account for these data, and work that has addressed data like (4) (e.g. Deal, 2009) does not discuss (5). Deal's account also requires untenable representations for English auxiliaries, with each auxiliary projecting its own vP.

We therefore propose a new approach to *there*, framed in both syntactic and semantic terms. Our main claims are that *there* is not a semantically vacuous expletive, and that it is sensitive to both the argument structure and the temporal/event structure of its complement.

2. The Problem

Minimalist syntactic theory has focused on *there* in existential copular sentences and in clauses with unaccusative verbs, but has often overlooked the fact that *there* is well-formed with transitive and unergative verbs, albeit only in progressive or passive clauses.

- (6) *There* in progressive transitive clauses:
 - a. There were children eating cake.
 - b. There are thousands of satellites orbiting the earth.
- (7) *There* in passive transitive clauses:
 - a. There was a cake taken from the freezer by the chef.
 - b. There were stories being told outside.
- (8) *There* in progressive unergative clauses:
 - a. There are children playing outside.
 - b. There were dogs running around.
- (9) *There* in progressive unaccusative clauses:
 - a. There was a strange car arriving.
 - b. There was a tree growing in the yard.

Sentences of these types have not always been overlooked, but often post-associate progressive and passive participial phrases have been analyzed as reduced relative clauses within the associate DP, on analogy with sentences like (10) (Moro, 1997; Law, 1999). On this account, the sentences in (6) through (9) do not involve progressive or passive main verbs, but are instead simple copular existential clauses.

- (10) There is a person (who is) standing on a table.

The existence of truly progressive *there*-sentences is central to the claims made in this paper, and so it is important to consider this alternative account. Deal (2009, citing Rajesh Bhatt p.c.) argues compellingly against the reduced-relative analysis of progressive and passive *there* sentences. This argument is based on the positions in which full relative clauses can occur in progressive *there* sentences. Deal observes that an unambiguous reduced relative clause modifying an ordinary argument DP must precede any full relative clause modifying the same DP, as in (11).

- (11) a. The person [standing on the table] [who I met yesterday] is tall.
 b. * The person [who I met yesterday] [standing on the table] is tall.¹

This pattern holds across the board for true reduced relatives, but does not hold in *there* sentences. As shown in (12), progressive and passive participial phrases can follow a full relative clause that modifies the associate DP:

- (12) a. There is [a person [who I met yesterday]] [standing on the table].
 b. There was [a student [who we know]] admitted to the PhD program today.

Given the ungrammaticality of (11b), the word orders in (12) cannot be explained if the participial phrases are DP-internal modifiers. If they were, we would expect them to obligatorily precede the associate-internal full relative clauses. From this we conclude that *there* is indeed generally available in passive and progressive clauses, and that this fact must be explained by any general account of the syntax of *there*.

2.1 The theoretical problem of progressive *there*

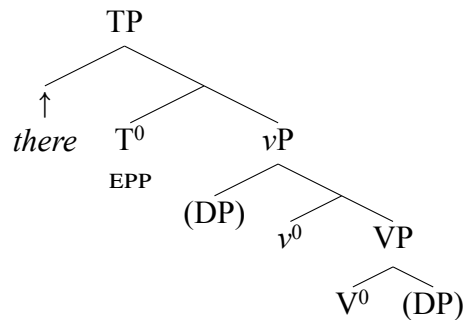
An adequate theory of *there* constructions must account for the availability of *there* in progressive and passive clauses, and should unify these with the other contexts where *there* occurs. This section discusses in more detail how the most prevalent views of *there* fall short in this regard. The expletive analysis of *there* (Chomsky 1995) overgenerates; while the inverted predicate analysis of *there* argued for by Hoekstra and Mulder (1990), Freeze (1992), Moro (1997), and Belvin and Dikken (1997), among others, undergenerates.

The expletive analysis, which treats *there* as a pure expletive, is perhaps the most widely adopted. Chomsky (1995), for example, proposes that *there* merges in [Spec,TP] to satisfy a clausal EPP requirement, as in (13).

This analysis of *there* has been central to Minimalist arguments for principles such as *Merge over Move*, used to account for the ungrammaticality of sentences like (14a). And given *Merge over Move*, the grammaticality of (14b) has been used to argue for the phase-based division of the numeration into separate lexical arrays.

¹This string is grammatical, but with a different structure, in which [standing on a table] is a modifier inside the full relative clause, rather than as a separate modifier of the noun [person].

(13)



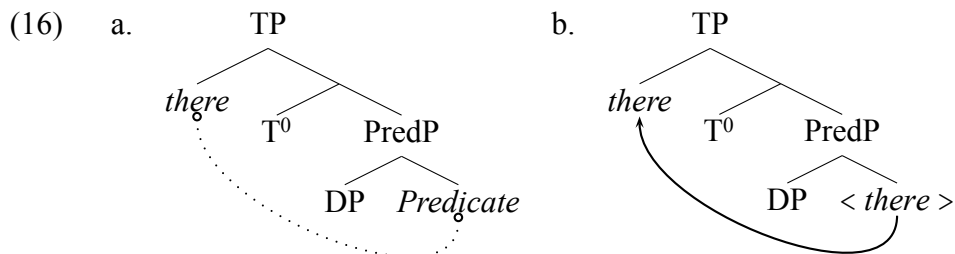
- (14) a. * There seems a man to be $t_{[a\ man]}$ in the room.
 (cf. There seems t_{there} to be a man in the room.)
 b. There was a proposal made that a man should be $t_{[a\ man]}$ in the room.
 (cf. A proposal was $t_{[a\ proposal]}$ made that there should be a man in the room.)

However, the expletive analysis was designed to account for *there* with unaccusative verbs, and perhaps with passives. Since all that is formally required is a clause-level EPP feature and the presence of *there* in the numeration (or lexical array), the account makes incorrect predictions about the possibility of *there* in non-progressive clauses. Specifically, it wrongly permits *there* in active transitive and unergative clauses, even if modified to permit *there* in progressive contexts. The expletive analysis thus overgenerates.

The inverted-predicate analysis of *there*, by contrast, undergenerates. The core idea behind such accounts is that *there* originates as a possibly expletive clausal predicate, and moves to subject position. The syntax of existential sentences thus parallels that of inverted locative clauses like (15a), as argued by Freeze (1992). The presence of *there* in the structure permits both the PP predicate and a weak indefinite subject to remain low in the clause.

- (15) a. On the table was a beautiful bouquet of flowers.
 b. There was a beautiful bouquet of flowers on the table.

Essentially, then, under an inverted-predicate analysis *there* establishes an abstract relation with a (covert or overt) predicate, as in (16a), or *there* is itself an (expletive) predicate, which then inverts to subject position, as in (16b).



This approach to *there* is less widely adopted than the expletive analysis in syntactic work generally, but it is more prevalent in work that focuses specifically on existentials, including Freeze (1992), Moro (1997), Hoekstra and Mulder (1990), and Belvin and Dikken (1997). This is in large part because the inverted predicate analysis is primarily designed

to account for the appearance of *there* in existential clauses, in the context of a broader cross-linguistic understanding of existential constructions.²

This analysis undergenerates, however, in that it cannot easily account for the occurrence of *there* with verbal predicates in non-copular clauses, including not only simple unaccusatives but also passive and progressive constructions. In particular, inverted-predicate accounts of *there* are forced to treat passive and progressive participial constituents as reduced relative clauses, which as shown earlier is not a tenable view.

2.2 Towards a better account

Our goal here is to unify the contexts in which *there* is possible, so as to provide a formal explanation for why *there* is possible in these contexts but not in others. To this end, the next section describes in more detail the problematic progressive contexts, and also takes a more fine-grained look at the copular and unaccusative clauses where *there* is usually discussed.

3. The full distribution of *there*

Descriptively, we divide the contexts in which *there* occurs into five types, listed in (17).

- (17) a. Existentials / locatives: There is an apple on the table.
 b. Stage-level adjectives: There is an apple available/*red.
 c. Simple unaccusatives: There fell several apples from the tree.
 d. Passives: There were two apples found in the grass.
 e. Progressives (incl. unergatives and transitives): There are children playing.

In all of these contexts, *there* occupies the canonical subject position of the clause. Finite verb agreement is with a lower associate DP,³ and the associate obeys the familiar *definiteness effect*; i.e., it must be a weak indefinite (Milsark, 1974, 1977).⁴

We now consider each of these contexts in turn, focusing on the differences between them. The generalizations given here were for the most part originally reported in Milsark (1974), with some additions from the corpus-based study by Breivik (1990).

3.1 Existentials, Locatives, and Stage-level Adjectives

Existential clauses, illustrated in (18), are often regarded as the core context for *there*. They often include a post-associate locative phrase, which is sometimes regarded as the main

²Such analyses build on the observation that in many languages, existential constructions have the same syntax as inverted locative constructions. From this perspective, English existentials are unusual in having an expletive subject, and no inversion. The inverted predicate analysis aims to eliminate this oddity by taking *there* itself to be a predicate—possibly a locative predicate—that inverts.

³For many speakers, agreement in *there*-sentences is optional, alternating with default 3sg inflection.

⁴There are well-known exceptions to the definiteness effect, which we set aside here, along with what Milsark (1974) calls “outside verbals.” In these constructions, the associate is linearly right-peripheral, and *there* is possible even with simple unergatives and transitives (Milsark 1974, 1977). See also Deal (2009).

predicate of the clause. This locative element may be absent in English *there*-existentials, as in (18c), in contrast to many other languages where existentials are possible only with an overt (and inverted) locative predicate (Freeze, 1992, a.o.).

- (18) a. There are papers on my desk.
 b. There is a problem with your analysis.
 c. There are solutions.

Some other copular clauses, with adjectival predicates, also allow *there*. Generally, only stage-level predicates are possible, as in (19). As shown in (20) and (21), neither individual-level adjectives nor any nominal predicates are grammatical with *there*.⁵

- (19) a. There are firemen available.
 b. There are children asleep.
 (20) a. * There are firemen tall.
 b. * There are children happy.
 (21) a. * There is no one an island.
 b. * There can be men nurses.

It is difficult to establish the precise position of either *there* or the associate in copular constructions such as these, due to the limited inflectional structure available in copular clauses generally. We thus postpone discussion of this question until section 4.

3.2 Unaccusatives (but not all unaccusatives)

As noted by Breivik's (1990), *there* in plain unaccusative clauses is essentially unattested in modern colloquial English, and most speakers judge such examples as somewhat archaic or stilted. Nonetheless, most speakers do find sentences like those in (22) acceptable. Note that the associate in these examples surfaces post-verbally, in what is widely assumed to be its base position.⁶

- (22) a. There arrived a strange car.
 b. There grew an unusual tree in that forest.

However, not all unaccusative verbs are compatible with *there*. In particular, unaccusatives denoting a change of state, like those in (23), cannot occur with *there* (Levin, 1993; Deal, 2009). Nor can transitive and unergative verbs as, illustrated in (24).

- (23) a. * There fell a tree in that forest.
 b. * There melted an ice cube.

⁵To the extent that the examples in (21) are acceptable, the associate and the nominal predicate seem to be interpreted together as a noun-noun compound, in an existential clause without an overt predicate. Thus, (21b) can be interpreted as meaning that male nurses exist.

⁶This has been used as evidence for the unaccusative hypothesis, as argued by Perlmutter (1978).

- (24) a. * There ate children cake.
 b. * There has someone told a story.
 c. * There will dance a performer./*There will a performer dance.

The unaccusative contexts in which *there* occurs are special in two ways. The associate DP is low, after the main verb, and the construction is sensitive to the contrast between change-of-state and non-change of state verbs. The second property, in particular, suggests that there is more to the licensing of *there* than the absence of an external DP argument.

3.3 Passives

All passive clauses in English allow *there*, as illustrated in (25).

- (25) a. There were cakes eaten.
 b. There was a ship sunk.
 c. There were enormous trees felled.

Given the argument-structure parallels between passives and unaccusatives, this might seem unsurprising. But in contrast to the unaccusative examples in (22), note that the associates in (25) are pre-verbal, and thus have clearly moved from their first-merge positions.

3.4 Progressives

Progressive clauses are perhaps the least frequently discussed context in which *there* occurs. They allow *there* regardless of the transitivity of the verb: as (26) and (27) demonstrate, transitive and unergative verbs are fully grammatical with *there* in the progressive.

- (26) a. There were children eating cake.
 b. There were cats chasing each other.
 c. There are thousands of satellites orbiting the earth.
 (27) a. There are children playing outside.
 b. There are athletes training in every available space.
 c. There were dogs running around.

Unaccusatives also allow *there* in progressive clauses, though this is unsurprising given that *there* is also possible with simple unaccusatives.

- (28) a. There was a tree growing in the yard. (cf. There grew a tree...)
 b. There was a car arriving at the station. (cf. There arrived a car...)
 c. There is a solution emerging from our talks. (cf. There emerged a solution.)

Examples like those in (28) are interesting in two respects, however. First, these sentences lack the formal or archaic flavour often observed for unaccusative *there* sentences; together with the grammaticality of (26) and (27), this further confirms that it is the syntax of progressive aspect that allows *there* in this context, rather than the argument structure of

the main verb. Second, in unaccusative progressive *there* clauses, the associate is no longer postverbal as it was in (22), but instead appears in a derived preverbal position between the auxiliary and the progressive participle—the same position occupied by the associate in the unergative and transitive progressive clauses above.

4. Unifying the distribution of *there*

As discussed above, the most prevalent accounts of *there*-constructions have focused on only a subset of the relevant data, with the result that the expletive analysis overgenerates (failing to block cases where *there* is impossible), and inverted predicate analyses undergenerate (failing to recognize passive and progressive clauses as possible contexts for *there*).

In this section we develop a unified analysis of *there*, building on Deal's (2009) account. Focusing on the fact that *there* is possible with only a subset of unaccusatives, Deal proposes that *there* merges to an empty specifier position (as in the standard view), but that this specifier is generally in *vP*. The lack of an empty *vP* specifier prevents *there* from merging with simple unergatives and transitives. Deal argues further that change-of-state unaccusatives, but not simple unaccusatives, have an event argument (a causing event) that occupies [Spec,*vP*] and prevents *there* from merging in that position.

We adopt the core of this analysis, that *there* originates in the lower phase of the clause, and cannot merge in [Spec,*vP*] if an external argument already occurs there. We depart from Deal, however, in our account of progressive and passive *there* clauses. Deal discusses these briefly, crucially assuming that auxiliary *be* occupies a *vP* shell above both passive Voice⁰ and progressive Asp⁰. This *vP* shell provides a merge position for *there* (see also Harwood 2013). This analysis requires that auxiliaries in general be projected as *vPs*, a position to which we do not ascribe (Cowper 2010; Bjorkman 2011, 2014, a.o.).

Deal's proposal also does not obviously distinguish between the grammatical and ungrammatical contexts for *there* in adjectival copular clauses, since all that is required is an empty [Spec,*vP*]. We argue that *there* is sensitive not only to the argument structure of its complement, but also to its temporal or event structure: the impossibility of *there* with nominal and individual-level adjectival predicates follows if *there* requires its complement to contain a time or event variable. The felicity of *there* in progressive clauses illustrates an interesting interaction between the temporal/event and argument structure requirements imposed by *there*. Essentially, the progressive creates a predicate of times above VoiceP, giving a new context in which *there* can merge.

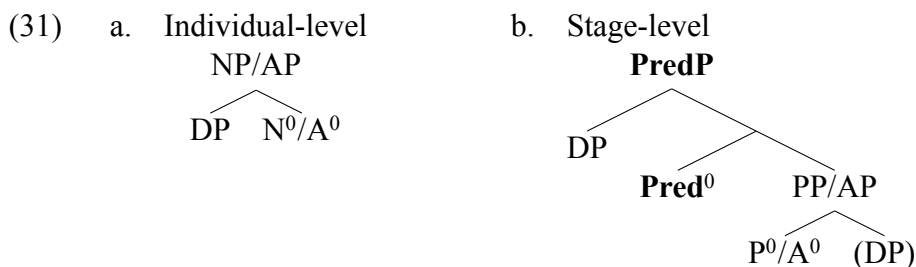
4.1 Existentials and stage-level adjectives: the role of temporal structure

This section begins with the contrast between (29), where *there* is possible, and (30), where it is ungrammatical. The generalization, often noted, is that *there* is possible with stage-level copular predicates, but not with individual-level predicates.

(29) There is a unicorn in the garden./ There are firemen available/asleep/in the hall.

(30) * There are firemen tall/friendly/famous/emergency personnel.

We propose that the sentences in (30) are ruled out because individual-level predicates lack temporal/event structure that is present with stage-level predicates. This structure is lacking both syntactically and semantically: we assume that individual-level predicates compose directly with a DP argument, while stage-level predication is mediated by additional structure (see Welch, 2011 for a proposal along similar lines for Tl̥içq̥ Yatì). This mediating head, which we label Pred^0 , syntactically introduces the subject of predication in its specifier, and semantically introduces an eventuality.⁷



We suggest that the semantics of *there* requires that its complement contain a temporal or event variable that can be bound by *there*, and the fact that Pred^0 introduces such an eventuality is what allows *there* to subsequently merge.⁸ It is the absence of an eventuality argument in individual-level predication that prevents *there* from merging, via a ban on vacuous quantification.

4.2 Passives and unaccusatives: the role of argument structure

Looking beyond copular clauses, our next task is to account for the presence of *there* in unaccusative and passive clauses, such as those in (32), while excluding it from simple transitive and unergative clauses.

- (32) a. There has been a cake eaten.
 b. There will arrive a strange car.

Here we essentially adopt the proposal in Deal (2009), though we assume a distinction between a verbalizing head v^0 (which is like Pred^0 in that it introduces an eventuality variable), and a Voice^0 head above v^0 that introduces external arguments.

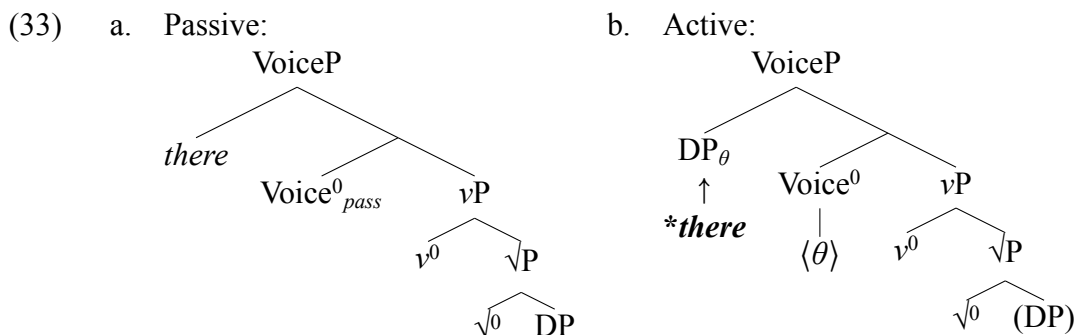
The presence of v^0 means that all verbal clauses have the minimal event structure required by *there*. Some other factor must therefore be involved in ruling out *there* in transitive and unergative contexts. Like Deal, and many others, we assume that the relevant factor is the presence of an external argument.

The key property of passive and unaccusative Voice^0 , which distinguishes it from the active Voice^0 of unergatives and transitives, is that no DP arguments remain unsaturated

⁷Alternatively, Pred^0 could simply introduce a temporal interval.

⁸Because the specifier of Pred^0 is occupied by the logical subject of predication, we assume that *there* merges slightly higher, in the specifier of inner (i.e. situation) aspect, which we take to be encoded by a head immediately above Pred^0 .

after Voice⁰ has merged.⁹ This is shown for passive Voice⁰ in (33). The active Voice⁰ head shown in (33b), by contrast, requires a thematic DP external argument to be merged in its specifier. Because the external argument occupies this position, *there* is unable to merge, and so cannot occur.



In both passive and unaccusative clauses, all DP arguments are saturated no higher than the head in whose specifier *there* merges.

4.3 Progressives: the interaction of argument and temporal structure

Now we turn to progressives, where *there* is possible even in transitives and unergatives, like those in (34).

- (34) a. There are raccoons eating garbage on the patio.
 b. There is a robin singing in the cherry tree.

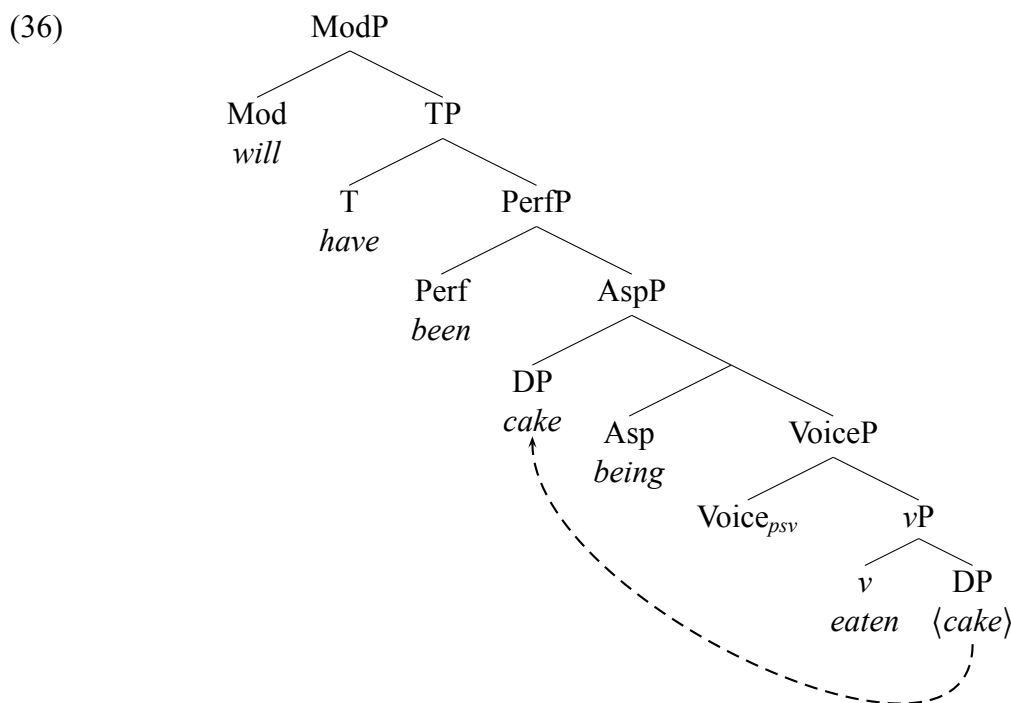
We assume that the progressive is associated with a head Asp⁰, above Voice⁰ but below T⁰. What needs to be explained is why Asp⁰ is able to host *there*, while neither T⁰ nor whatever head is associated with the perfect is able to do similarly.

The core of our proposal is that progressive Asp⁰ provides a new position where *there* can merge, after all arguments are saturated but still within the lower phase of the clause. However, the story cannot be quite as simple as saying that *there* occurs in [Spec,AspP]. In examples like those in (35) it is possible to see that the associate occurs in a derived position: the associate occurs to the left of the passive auxiliary *being* in (35a), and to the left of the unaccusative main verb in (35b), in both cases having originated to the right of the main verb.

- (35) a. There will have been **cake** being eaten.
 b. There may have been **cars** arriving.
 c. There might be **birds** nesting in the cherry tree.

⁹We follow the standard view that passive Voice⁰ itself saturates the external argument position, giving the familiar implicit agent interpretation. For unaccusatives, we assume for concreteness that they involve a non-passive but non-argument-introducing flavour of Voice⁰; alternatively, it could be that unaccusative clauses lack a voice projection entirely.

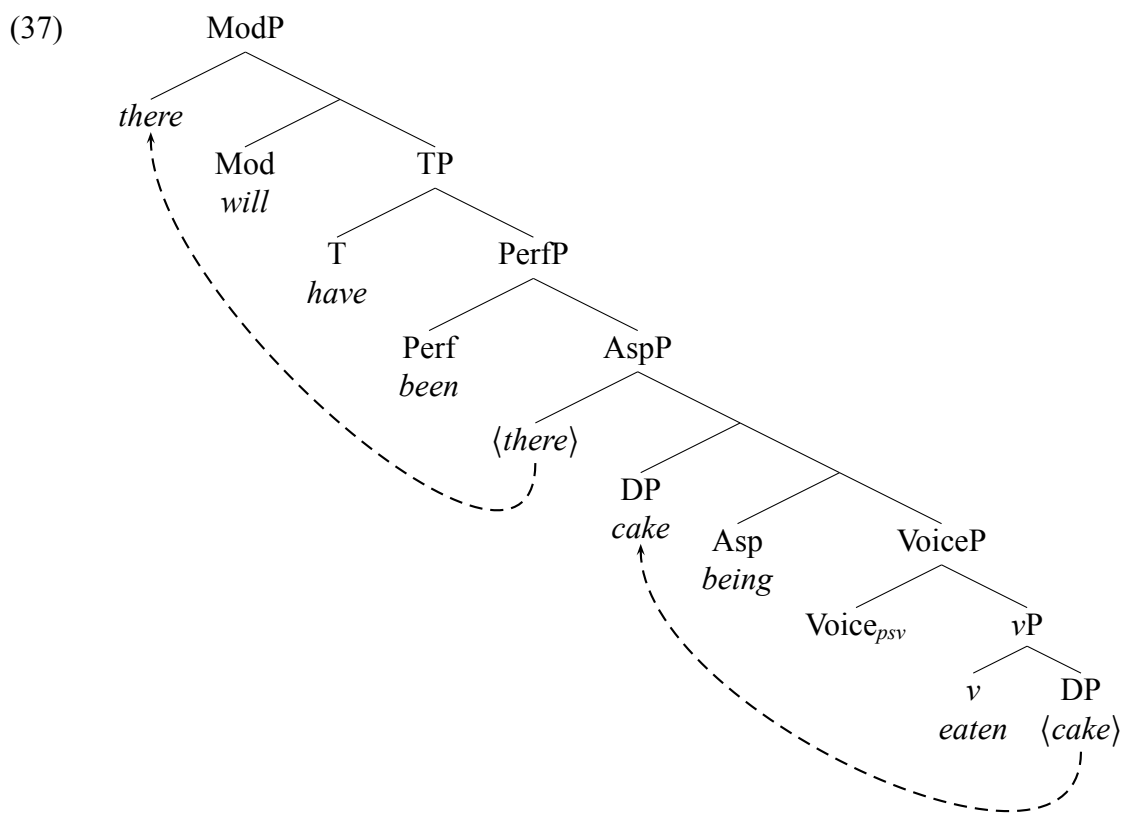
Following Cowper (2010) and Harwood (2014), a.o., we assume that the position of *being* in (35a) is the progressive head (Asp⁰), while *been* occupies the perfect head Perf⁰. All the verbal elements that precede the associate occupy positions above AspP, and the (participial) main verb, we assume, appears no higher than Voice⁰. Given its linear position, the associate can therefore be no lower and no higher than [Spec,AspP], as shown in (36).



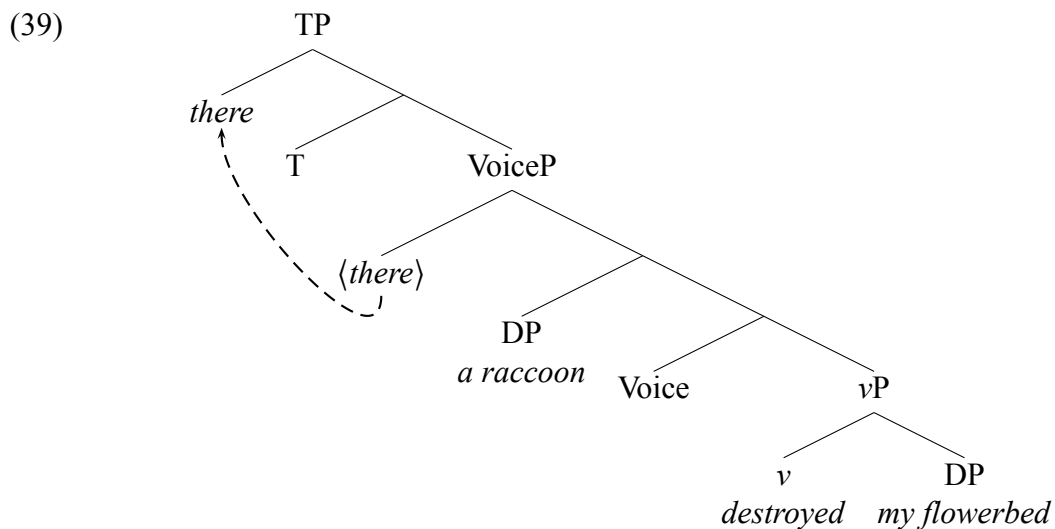
Having established where the associate appears in the structure, we are ready to address the question of where *there* merges.¹⁰ Since *there* is sensitive to the presence or absence of progressive aspect, and in fact cannot appear in an active unergative or transitive clause that lacks progressive Aspect, we claim that *there* merges no higher than [Spec,AspP]. The argument-structure requirements of *there* prevent it from merging in, or lower than, [Spec,VoiceP]. This means that both *there* and the associate—here, *cake*—must appear in [Spec,AspP], as shown in (37) and that a structure with multiple specifiers must therefore be permitted.

However, if *there* can merge as the second specifier of a head whose first specifier is the associate, we again face the question of why *there* cannot occur in simple transitives and unergatives. If (37) is possible, why should *there* not merge as a second [Spec,VoiceP], just as it is the second [Spec,AspP] in (37)? In other words, what rules out the sentences in (38), with the structure in (39), regardless of the order of the verb and the associate?

¹⁰As noted above, for both Deal (2009) and Harwood (2014), *there* merges in the specifier of a vP shell above Asp⁰. In (35a), this vP shell is headed by the auxiliary that ends up pronounced as *been*; for us, this is the head labelled Perf⁰. Since we have already rejected a vP-shell analysis of auxiliary BE, this aspect of their analysis cannot be directly incorporated into our account. An obvious problem with the vP-shell account is that Perf is absent from the structure in (35c), but *there* can nonetheless occur. See Cowper (2010) and Bjorkman (2011, 2014) for broader arguments against the syntactic projection of auxiliaries in VP or vP shells.



- (38) a. *There destroyed a raccoon my flowerbed.
 b. *There a raccoon destroyed my flowerbed.



There are two possible answers to this question. First, suppose that in general a head can host only one externally merged specifier (Rezac n.d.; Sheehan 2013). *There* can thus merge either with a head that has no other specifier, or with a head whose first specifier moved to that position from lower in the structure. A second option would involve refining

the argument-structure requirement of *there*, so that all DP arguments must be saturated in the complement of the head with which *there* merges. Any DP in the specifier of that head must thus have saturated an argument position lower in the tree. Either of these approaches would allow *there* to occupy a second specifier of Asp⁰, while still ruling out *there* as a second specifier of transitive/unergative Voice⁰.

4.4 Change-of-state unaccusatives: a final complexity

The last contrast to account for is the one between (40) and (41).

- (40) There arrived/appeared/loomed a strange car.
 (41) * There melted/fell/vaporized a car.

The generalization appears to be that causative (a.k.a. change-of-state) unaccusatives do not allow *there* (Levin 1993). Following Deal (2009), we assume that this subclass of unaccusatives have an extra event argument—a causing event—which somehow prevents *there* from merging in the relevant specifier position. For Deal, this higher event argument occupies the specifier where *there* would normally merge, blocking insertion of *there*.

If we adopt the view that a single head cannot have more than one externally merged specifier, then Deal's proposal can be adopted essentially as it stands: the extra event argument is externally merged as a specifier in the highest phrase in the verbal domain, and blocks the insertion of *there* as a second specifier of the same head.

An alternative semantic explanation might derive from the relation between *there* and the variables it must bind. If the highest head in the verbal domain has an event variable as a specifier, then two event variables would intervene in the structure between *there* and the individual variable in the weak indefinite internal argument.¹¹ Perhaps *there* cannot bind the individual variable across *two* intervening event variables.

4.5 Summary: where is *there*?

In an improvement from both the expletive and inverted predicate analyses, we have not identified a single base position for *there* in all clauses. Instead we have proposed that *there* can merge to any constituent whose individual arguments have all been satisfied, subject to a general syntactic constraint; i.e. a ban on multiple externally-merged specifiers within a single phrase.

The associate, meanwhile, surfaces either *in situ* or in the same phrase where *there* merged, at the edge of the lower phase of the clause. With stage-level predicates and unaccusatives, the associate surfaces *in situ*, while in both passives and progressives, it moves to the specifier of either Voice⁰ or Asp⁰, the same projection in which *there* merges.

Putting this all together, we can say descriptively that *there* merges as a specifier of the highest head in the lower phase of the clause, assuming a dynamic approach to phases

¹¹We assume without discussion that the definiteness effect is due to a semantic requirement of *there*, that it bind an individual variable.

in which the phase head is not necessarily a particular projection (i.e. v^0), but simply the highest head present in a particular derivation within a given domain (Bobaljik and Wurmbrand, 2005; Wurmbrand, 2014; Wurmbrand (2013); a.o.). The upper bound of the lower phase, we assume, is Asp^0 , which is therefore the highest category where *there* can merge. Once *there* has merged, no further aspectual or argument-structural heads can occur: the phase has ended.

5. Conclusion

Existential *there* has (at least) the following properties: (a) it can merge only with a constituent containing an eventuality variable, resulting in an “eventuality” effect); (b) it can merge only with a constituent all of whose phrasal arguments are saturated; and (c) it can merge only with a constituent containing an individual variable (i.e. a weak indefinite), resulting in the definiteness effect.

There are two main points that follow from our analysis of *there*’s distribution. The first is that *there* is not an expletive, in the sense assumed in standard generative accounts. The second is that in addition to the well-studied definiteness effect, *there* exhibits an eventuality effect: it requires exactly one open temporal or eventuality argument.

Several issues remain open for future investigation. We have not provided a formal semantic analysis of *there*; this remains open for future work. There is also an important project investigating the relation between *there* and the inner phase edge. We have not provided an explicit formal account of why associate movement occurs in passives and progressives. And finally, this analysis does not clearly distinguish unaccusatives from other cases, despite their different frequency and acceptability in contemporary English.

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