# AGREEMENT VARIATION IN ENGLISH EXISTENTIAL CONSTRUCTIONS

# AGREEMENT VARIATION IN ENGLISH EXISTENTIAL CONSTRUCTIONS

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# Abstract

This thesis focuses on providing an account of the variation in agreement in English existential constructions of the form There-BE-plural NP. Copular agreement in these constructions can be either singular or plural. Unlike most English sentences, which show verbal agreement with the syntactic subject (the element in Spec, TP), standard agreement in these constructions is assumed to show number agreement with the plural, post-copular NP. Though many English speakers prefer the plural agreement, the full and abbreviated singular is attested and must be accounted for. This thesis aims to provide a syntactic and semantic account of the agreement patterns within these constructions. Semantic conclusions are drawn from a semantic judgment survey which investigated the effect of agreement type on NP interpretation. The syntactic account mainly draws on the notion that number agreement is the result of an NP moving before the verb at some point in the derivation (Kayne 2011), and the parallels between English existentials and Icelandic constructions involving long-distance agreement (Kučerová 2016).

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# Contents

Chapter 1

# Introduction

## 1.1 Existential Constructions

This thesis is concerned with the agreement variation observed in existential constructions.[1] Existential constructions are sentences like (1a), which are of the form *There*-BE-NP. *There* in these cases is taken to be an expletive (or dummy subject), and NP being the label for a nominal phrase.[2] These sentences are structurally different from most English sentences, which begin with a logical subject. The logical subject of a sentence is taken to be what the sentence is about, and typically occurs before the verb. Since the logical subject generally occurs before the verb it is also usually the syntactic subject of the sentence and thus determines the form of the verb ((1b); *A bear*). In the cases at hand, the logical subject occurs post-verbally. In sentences like that in (1a), the logical subject occurs after the verb, with expletive *there* in the syntactic subject position (Spec,TP)

1a) There is a bear outside our tent.

b) A bear is in our tent.

The cases of existential constructions (ECs) of interest to the present thesis are those that occur with a plural associate NP, as in (2). With these sentences, agreement morphology is clearer, as the agreement facts for sentences with singular associates (like (1a)) are ambiguous. They may be showing singular agreement with the NP or some default agreement. In standard cases of these sentences, the post-verbal NP is thought to provide the number feature which yields the usual plural agreement in these constructions.

2. There are cookies in the oven.

ECs with plural associates, however; can give rise to variation in the form of the auxiliary even though English agreement patterns are fixed as in (3-4). In (3), it is only possible for the verb to agree with the singular subject, *Kevin*. The plural, post-verbal NP does not influence agreement. Similarly, in the copular sentences in (4), it is only possible to have plural agreement with the subject, *Students*. Variation is also not possible in ECs with a singular associate (5).

3a) Kevin eats cookies.

b) *Kevin eat cookies.

4a) Students are lazy.

[1] This thesis will describe the constructions under consideration as existential constructions, expletive constructions, and expletive-associate constructions. I use these terms interchangeably.
[2] Throughout this thesis, NP and DP are used interchangeably. I do not make a distinction between them.

b) *Students is lazy.

5) *There are bear outside our tent.

As can be seen in (6b-c), using the sentence in (2), both the singular and plural forms are possible in ECs. The singular form can be split into two forms; full *is*, and contracted *'s*. Though some find the full singular form odd, it has been attested in Smallwood (1997) that in semi-formal contexts the non-contracted form is actually preferred.

6a) There are cookies in the oven.

b) ? There is cookies in the oven.

c) There's cookies in the oven.

There is no split however with the plural form, as something like *there're*, is unattested, (7).

7. *There're cookies in the oven.

This type of variation is exhibited in many more complex expletive constructions. The following section will illustrate the construction types where agreement optionality appears to be allowed as well as where it is disallowed.

**1.2 Data**

This section lists examples of the contexts in which agreement variation occurs and where it seems to be disallowed. The judgments described are based on native speaker elicitation from colleagues as well as from the literature where indicated.

*1.2.1 Structural Intervention*

In trying to account for the observed variation it is necessary to examine the constructions that may provide insight into the syntactic structure of these sentences. Structural interveners may interrupt the ability of a head to find a goal for agreement. One such intervention construction involves negation, as in (8), which shows the negative particle intervening between the copular BE and the associate NP.

8a) There are no cookies left.

b) ? There is no cookies left.

c) There's no cookies left.

Another type of structural intervention is adjunction. Adjuncts can appear after the copula and before the plural NP (9a), or directly after the expletive (9b). An adjunct generally does not affect the agreement between subject and verb (see (10)), however; given that existential

constructions show agreement with a post-verbal element, the potential effects of structural interveners must be examined. (The % symbol indicates varied acceptability).

9a) %There are/is, I believe, some cookies left.

b) %There really are/is cookies left.

10) Peter, I believe, drives/*drive Jane to school.

*1.2.2 NP Type*

Data that has not been previously considered in the literature (to my knowledge) is shown in (11).[3] The pattern in (11) displays the ungrammaticality of the full singular form (11b) when the NP appears with certain numbers or numeral quantifiers.

11a) There are few/several/at least 5/5 butts in the ashtray.

b) *There is few/several/at least 5/5 butts in the ashtray.

c) There's few/several/at least 5/5 butts in the ashtray.

In the other examples listed, the full singular form is, according to native speaker judgments, only slightly odd. Here however, it is unacceptable, while the contracted singular and the plural agreement are grammatical. I have not seen this pattern discussed in the current literature, and it is as yet unclear as to why native speakers have strong judgments about the ungrammaticality of (11b).

Post-verbal coordination structures are also relevant to this pattern. In coordination structures appearing in syntactic subject position, verbal agreement is fixed. As seen in (12), the agreement on the verb is always plural, regardless of the plurality of either conjunct.

12a) A cookie and an apple *'s/*is/ are in the bag.

b) Some cookies and an apple *'s/*is/ are in the bag.

c) An apple and some cookies *'s/*is/ are in the bag.

In post-verbal position though, English exhibits first-conjunct agreement, which allows agreement to occur only with the first conjunct of the coordination structure, (13).

13a) There 's/is/?are a cookie and an apple in the bag.

b) There 's/is/?are an apple and some cookies in the bag.

c) There 's/?is/are some cookies and an apple in the bag.

[3] Special thanks to Heather Stephens who made this observation.

As reported in Schütze (1999), (13) shows that when the first conjunct is singular (13a,b), singular agreement (contracted and non-contracted) is preferred over the plural, even though the conjoined NPs are technically plural. Plural agreement is preferred when the plural conjunct occurs first, though singular is still acceptable (13c).

*1.2.3 Progressives*

Though it is possible to form an existential sentence with unaccusative verbs, they are typically only used in formal settings (14a) and sound somewhat odd otherwise. It does not appear to be possible to form ECs with unergatives or transitive verbs (15)-(16). However, it is possible to form these sentences in (what appears to be) the progressive aspect in each case and in doing so, the copular variation emerges here as well (14c), (15c), (16c). Bjorkman & Cowper (2015) discuss this pattern extensively in their aim to provide an account of not only simple but more complex existential constructions.

14a) ? There arrive guests.

b) *There's/is/are arrive guests.

c) There's/?is/are guests arriving.

15a) *There laugh children.

b) *There's/is/are laugh children.

c) There's/?is/are children laughing.

16a) *There play boys hockey.

b) *There's/is/are play boys hockey.

c) There's/?is/are boys playing hockey.

**1.3 Data Summary**

As previously mentioned, verbal agreement in English is typically fixed, with the verb showing agreement with the syntactic subject. The question then, is why is it possible to have variation in verbal agreement in existential constructions? Furthermore, what factors might influence the choice between singular and plural agreement?

The data under consideration for the remainder of this thesis will be those that provide insight into the structural and semantic nature of existential constructions. The constructions that may reveal the structural nature of these constructions are those presented in subsection 1.2.1, which involve structural intervention, namely negation and adjunction sentences. Additionally, data in subsection 1.2.3 will be investigated. The section presents the apparent availability of the progressive aspect in these constructions, even with ergative and transitive verbs which typically

do not appear in existentials. The data in subsection 1.2.2 regarding coordination structures may also reveal the nature of agreement in these constructions.

Data which may explain something about the semantic nature of existential constructions are those with NPs appearing with number/numeral words discussed in subsection 1.2.2. The nature of existential sentences appearing with certain quantifiers is discussed further in Chapter 5.

### 1.4 Outline of the thesis

The goal of this thesis is to propose an analysis of how agreement plays out in existential constructions and to determine what structural factors influence the acceptability of the observed variation. Chapter 2 will be a review of the current literature on agreement in existential constructions. Chapter 3 will outline the analyses proposed by other authors on agreement. In this chapter I will also outline the author's explanation of agreement in ECs or explain my interpretation of how agreement would be established based on their framework. Chapter 4 will discuss the nature of the progressive cases of ECs and also include a section which will evaluate several syntactic structures which may account for the variation. In Chapter 5 I will present some semantic details about existential constructions. Chapter 6 will present my own account of agreement in ECs in light of the variation and semantic facts, and Chapter 7 will summarize the thesis.

Chapter 2

# Literature Review

## 2.1 Questions concerning ECs

Before providing my own analysis of existential constructions it is necessary to consider the major questions concerning them, as well as present the answers to them put forth by other investigators. These constructions are puzzling in several ways, and each researcher aims to account for these constructions by answering some or all of the questions summarized in Table 1. I will also evaluate their proposals in terms of how well they may account for the variation that is central to this thesis. First however, I will explain the questions in Table 1 and why they are important. A detailed explanation of the questions relating to semantics will be saved for Chapter 5.

Table 1: Questions concerning expletive-associate constructions

| Major Questions Concerning Expletive Constructions | Hazout (2004) | Felser & Rupp (2001) | Bjorkman & Cowper (2015) | Kayne (2016) |
|---|---|---|---|---|
| 1. Base generated position of Expl? | ✔ | ✔ | ✔ | ✔ |
| 2. Status of Expl? | ✔ | ✔ | ✔ | ✔ |
| 3. Agreement? | ✔ | ✔ | | ✔ |
| 4. Case of post-copular NP? | ✔ | ✔ | | |
| 5. Account of the definiteness restriction? | | ✔ | | ✔ |
| 6. Account of stage-level properties? | ✔ | ✔ | ✔ | |

The first three questions concerning expletive constructions are inter-related. As seen in Chapter 1, though the expletive appears in the syntactic subject position, it is not a referential subject in the same way an NP is. Expletive *there*, does not appear to have the same function, so what exactly is its semantic function?

As presented in Chapter 1, standard plural agreement as well as singular agreement is possible in these constructions. I mentioned as well that structural intervention may provide insight into the nature of existential constructions. Some authors characterize the expletive as an intervener between the agreement head and the target of agreement. Others see it as a dummy subject which merges in Spec, TP. The position of this element determines how agreement takes place. If it is taken to be generated lower in the structure, as an intervener between an agreeing head and its target, then it must first move in order to establish plural agreement.

Further, there is the question of Case. According to the Case-Filter, all DPs must be licenced by abstract Case. Since the associate is not in a position to be assigned nominative (Spec, TP) and the copula does not assign accusative, how is the associate licenced?

The final two questions are related to semantics. Expletive-associate constructions exhibit a definiteness restriction or definiteness effect. This is a semantic restriction such that existential verbs may only occur with indefinites, and are illicit with definites (1).

1. *There are the stars in the sky.

Existential sentences can also only occur with stage-level predicates. These predicates denote temporary states (2a), and contrast with individual level predicates, which denote permanent qualities of individuals (2b). ECs are illicit with individual level predicates (2c).

2. a) There are butterflies fluttering.

b) Butterflies are beautiful.

c) *There are butterflies beautiful.

**2.2 Current proposals**

Each of the following works addresses some combination of these questions and develops proposals to account for them. Only Kayne (2016) deals directly with agreement variation in existential constructions, the others mainly address how to establish plural agreement. As such, in addition to presenting their answers to the aforementioned questions, I will evaluate how their proposals might address the variation.

*2.2.1 Hazout (2004)*

Hazout is largely concerned with the semantic properties of existential constructions, specifically the semantic status of the expletive as well as the stage-level properties of these constructions. He is also concerned with how agreement proceeds given the position of elements. To begin his analysis, Hazout compares copular clauses and existential clauses from the point of the semantic status of the post-verbal element, as seen in (3). In (3a), the post copular NP is a predicate, assigning a property to the referential subject ‘John and Bill’. In (3b) on the other hand, even though the italicized words are the same, they do not attribute a property to the expletive in subject position.

3. a) John and Bill are *students in this class*.

b) There are *students in this class*. (Hazout 2004: 395)

Given the similarity between the sentences in (3a) and (3b), Hazout draws the comparison between these sentences and those in (4) in which the post-copular adjective conveys some property, but does not attribute it to any individual.

4. a) The coffee is cold.

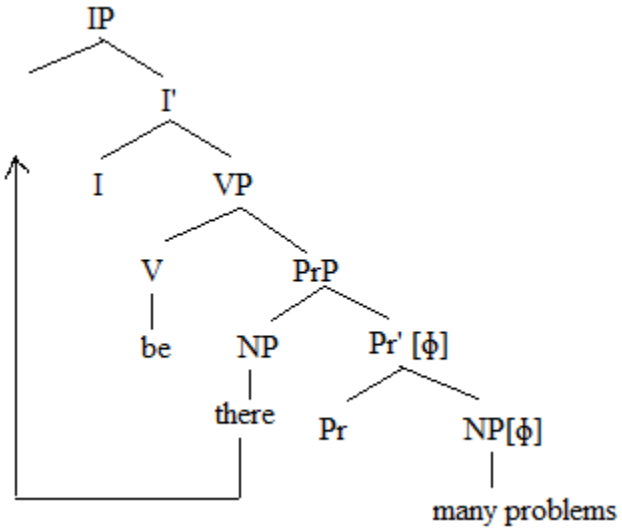
b) It is dark (in this room). (Hazout 2004: 398)

He accounts for these facts by adopting the perspectival structure approach of Borschev & Partee (2001) (B&P).

B&P argue that each sentence has a perspectival centre. The perspectival centre of a sentence is either THING, as in a referential subject which the rest of the sentence is predicated of, or LOC(ation), where the location is picked out and the sentence is viewed in terms of what is in that location. Hazout argues that the perspectival structure of existential sentences is the location of events. With regard to the restriction of existential constructions as only being able to occur with stage-level predicates, Hazout states that this relates to the unavailability of stage-level predicates to denote an 'atmospheric interpretation'. Predicates like 'cold' and 'dark' are able to describe the atmosphere of a location whereas predicates like 'tall' or 'crazy' can only describe individuals (or THINGs). Thus, he argues that a predicate may or may not have a referential subject and argues that the structure of *there*-existential sentences is that in (5).

As can be seen in (5), Hazout takes the post-copular NP as a predicate (labeled as a Predicate Phrase, PrP), which takes the expletive as its subject to satisfy its EPP feature. Since the NP is licenced in the derivation as a predicate rather than an argument, it does not require Case licencing. The agreement seen in these sentences is two-fold. First, there is subject predicate agreement between the expletive subject in Spec, PrP and the NP, by which the ϕ-features of NP are inherited by the expletive. Then, there is specifier-head agreement between the expletive (which bears a full complement of ϕ-features through agreement), and I, which moves the expletive to its specifier, yielding standard plural agreement.

5. There are [many problems]




(Hazout 2004: 411)

On this account of expletive constructions, variation in copular agreement should occur, since the expletive would inherit the ϕ-features of its sister prior to the ϕ-probing of I/T. Further evidence against this account comes from English conjoined NPs. Recall (8b) from Chapter 1, (repeated here as (6)), in which the singular agreement is preferred. Since the conjoined NP creates a plurality of entities, the number feature marking the conjunction phrase should be plural and therefore, the expletive should agree with the plural feature and through Spec-Head agreement produce plural copular agreement. Therefore, this proposal cannot account for the variation seen in the cases from Chapter 1.

6. There‘s/is/?are an apple and some cookies in the bag.

*2.2.2 Felser & Rupp (2001)*

Felser & Rupp (F&R) are concerned with answering all the questions listed in Table 1, with their focus being the Germanic languages. The data which motivates their account is those expletive constructions which occur with the copula (7a), unaccusative verbs (7b), (seen in Chapter 1) and raising verbs (7c).

7. a) There are cookies in the oven.

b) There arrived new students to the class.

c) There seems to be cookies left.

The authors note that the expletive occupies positions that are usually occupied by arguments, but that number agreement is with the associate NP which must have stage-level properties. As such, they assume that the expletive has a defective ϕ-feature set, bearing only a person feature. They argue that the semantic status of the expletive is that it is an overt

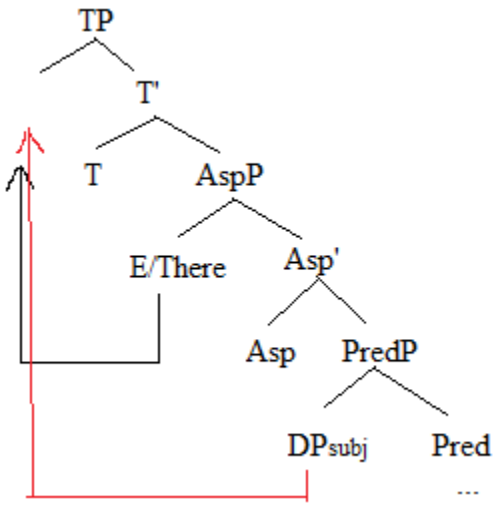
instantiation of a spatio-temporal event argument, which they take to be associated with some abstract location. They adopt Diesing (1992)'s Mapping Hypothesis,[4] in which the domain of existential closure (which maps the subject of an existential sentence onto the nuclear scope) is AspP (as opposed to VP for Diesing), where the expletive is the last argument to merge. They argue that adding an event argument into the derivation is similar to adding an agent to an ergative verb, thus only these types of predicates allow a subject position. This process can make individual level predicates become stage-level, as in (8).

8. a) Mary was smart (i.e., she was a smart person)

b) Mary was being smart (i.e., by making a smart remark). (F&R 2001: 24)

The structure of these sentences according to F&R, is as in (9), where the event argument can be realized as either an overt expletive or an event argument without phonetic content. The base generated position of the expletive is in AspP as an event argument, where it maps onto the nuclear scope. If the event argument is realized as an overt expletive, it is interpreted as a strong definite, thus restricting the possibility of another definite from occurring in the sentence (accounting for the definiteness effect). In terms of the stage-level properties of these constructions, they are accounted for by the availability of the predicate internal subject position of stage-level predicates. F&R argue that the overt expletive, since it is an argument, must move to Spec, TP to check the EPP and get Case, it also values the person feature on T. Then number agreement is with the post-copular associate which gets assigned default Case since it is not in a Case checking position.

9.



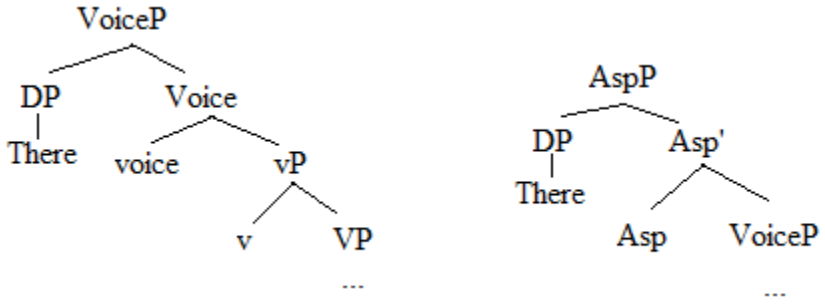

[4] A detailed account on the Mapping Hypothesis will be provided in Chapter 5.

In my view, this proposal does not seem to allow for the variation in agreement seen in Chapter 1. The authors do not address why there is an alternation between an overt argument and a phonetically null one. Nor do they take either of these arguments to be interveners for agreement between T and the lower DP. It is unclear why there should be an overt and phonetically null element that serve the same function, and yet act differently from each other (with one being able to move to Spec, TP and check features and the other staying in-situ). Furthermore, it is not clear why the features of T can be valued by two separate arguments given that they adopt Chomsky's framework. I therefore judge that this proposal is unable to account for agreement variation.

*2.2.3 Bjorkman & Cowper (2015)*

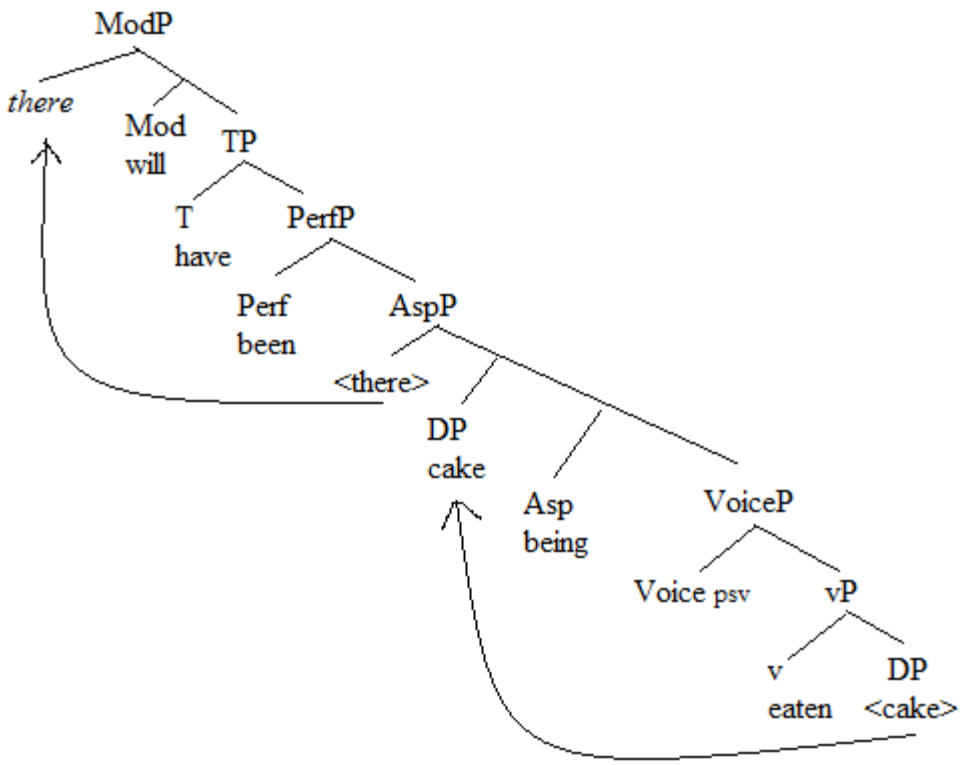
As mentioned in Chapter 1, it is noted in Bjorkman & Cowper (2015) that existential constructions are permissible in the progressive aspect (and passive voice) of unergative and transitive verbs, where they are impermissible in simple tense. Their main concern is accounting for the progressive cases as well as addressing where the expletive is base generated in the structure and what exactly its status is in the derivation. The progressive data is what motivates the authors' proposal. They argue for the structures presented in (10), in which the expletive is merged in Spec, AspP (in progressive) or Spec, VoiceP (in passive).

10. a b.




In accounting for the stage-level properties of these constructions they argue that "the semantics of *there* requires that its complement contain a temporal or event variable that can be bound by *there*" (B&C 2015: 9). They assume, like F&R (2001) that stage-level predicates allow for an internal subject position, which can be bound by the expletive. A derivation is exemplified in (11). In order to rule out illicit second specifier constructions, they state that the expletive can either merge with a head with no other specifier or that it can merge with a head whose first specifier was moved there. They conclude that the expletive may merge in Spec, AspP or Spec, VoiceP. They also argue with regard to the semantic status, *there* is not actually an expletive, but an element sensitive to the argument structure and event structure of the sentence.

11. There will have been cake being eaten.




(Bjorkman & Cowper 2015: 12)

This thesis deals with agreement variation in existential sentences with copular agreement and in Chapter 4 I will present a different analysis of the progressive cases of these constructions. As it stands, it is unclear why *there* should be able to merge in different specifiers when other elements in a structure have fixed merge positions (i.e. object merged as complement of VP, subject merged in Spec, vP). Furthermore, even though Bjorkman & Cowper do not take *there* to be semantically vacuous, they also do not seem to suggest that it may serve as an intervener between a probe and a lower argument. Based on these observations, this proposal does not account for the variation in copular agreement.

*2.2.4 Kayne (2016)*

The major aim of Kayne (2016) is to unify all instance of *there* to one entity, and to account for the definiteness effect. He identifies four types of *there*: 1. expletive *there*, 2. locative *there*, 3. *there* as in therefore/thereby/thereof etc., and 4. deictic *there*. Since each of these instances of *there* have the same spelling, he argues that they must underlyingly be the same thing. This is done simply for the cases in 2 and 3, which Kayne argues reduce to deictic *there*, through silent elements. This is illustrated in (12) for locative, and (13) for the *there* of thereof (Kayne 2016: 6).

12. a) We went there yesterday.

b) We went to THAT there PLACE yesterday.

13. a) They have spoken thereof.

b) They have spoken THAT there THING of.

Kayne suggests that in order to reduce expletive *there* to deictic *there*, it must be associated with an NP, like in the previous cases. He notes however, the parallels between these constructions and the difference between definite possessors (14a) and indefinite ones (14b).

14. a) He is my friend.

b) He is a friend of mine.

This suggests that if *there* originates with an indefinite DP, they must separate through movement. Kayne proposes the derivation in (15). The indefinite DP provides a source for the expletive *there* to enter the derivation as a response to the prohibition of non-specific subjects. As in the derivation, following (15a), there is subsequent raising of the NP (15b), in order to separate from *there* while leaving a trace. Then the verb is merged (15c), after which the remnant phrase ([there <books>]), moves to syntactic subject position (15d). Kayne suggests that all cases of indefinite subjects are remnant phrases, originating as proper subparts of larger phrases.

15. a. [there books] on the table --> raising of 'books'

b. books [there <books> ] on the table --> merger of V

c. were books [there <books>] on the table --> remnant movement

d. [there <books>] were books <[there <books>]> on the table (Kayne 2016: 8)

In terms of agreement in these sentences Kayne argues that if the number features of the silent copy of the associate inside the remnant phrase are visible to ϕ-agree, then plural agreement is a case of subject-verb agreement. If the number features inside the remnant subject can be ignored, then the singular is acceptable. He does not, however, offer any reason as to why or how it would be (in)visible to some speakers.

In arguing for the unification of all instance of *there* to deictic *there*, Kayne states that the expletive originates inside a DP as in the non-standard form, *that there NP* and that the definiteness effect boils down to a conflict between deictic *there* and the ability of certain determiners to occur with it.

Of the proposals reviewed here, Kayne (2016) is the only one to address the variation which is the main focus of this thesis. As such, several of the ideas presented will be adopted for my own proposal and expanded on in subsequent chapters. My own proposal will address all of the questions outlined in Table 1 to varying degrees, though the main focus is to give an account of the variation in agreement.

### 2.3 Summary

This chapter has presented several works which address how agreement proceeds in English existential constructions, as well as other relevant questions. Though none of the authors provide an extensive account of how variation might occur, if they address it at all, some of the notions presented here will be revisited in later chapters. The following chapter will present various theories of agreement and analyse how they might explain the variation presented in this thesis.

Chapter 3

# Theories of Agreement

## 3.1 Approaches to agreement

This section will outline different formulations of agreement. As mentioned, in most English sentences verbal agreement is with the syntactic subject, regardless of whether or not this element is the logical subject of the phrase. The fact that agreement still occurs in constructions with post-verbal subjects indicates that agreement is a complicated phenomenon. Understanding how agreement works in these cases could shed light on agreement phenomenon more broadly, so it is useful to evaluate the various theories of Agree put forth by the following authors, starting with Chomsky (2000).

The syntactic operation of Agree, as proposed by Chomsky, is the basis for many current accounts of agreement phenomena within the generative tradition. Many languages appear to have certain elements in a phrase with overt forms that depend on the features of another element in the phrase. This can be seen in English, with verbs agreeing with NP subjects in number and person features. In (1a), the verb *to be,* takes the 3rd person, plural form *are*, reflecting the features of the NP subject *The girls*. In (1b), on the other hand, the verb in singular form creates an ungrammatical construction.

1. a) The girls are pretty.

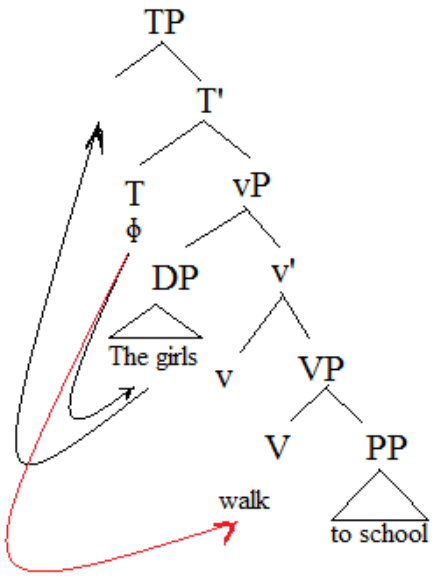
   b) *The girls is pretty.

### *3.1.1 Chomsky (2000)*

Chomsky argues that what determines the relationship between elements, seen in (1), is features, of which there are two types; uninterpretable and interpretable. Nominal elements enter the derivation with a full set of interpretable features, known as ϕ-features (person, gender, number). In the case in (1), *The girls* enters the derivation with interpretable person and number (not gender since English does not exhibit gender agreement). The functional projection T (which encodes tense) enters the derivation with uninterpretable ϕ-features, and must search for an element with matching interpretable features in order to copy them to the verb. The element with uninterpretable features is a probe (P) that must search for an element with matching interpretable features, which is the goal (G). Agree, targets the information on G and copies it onto P. The process occurs in order to delete the features prior to being sent to the interfaces (PF and LF). Once the relation between P and G is established, the goal must move to be in a local configuration with P and satisfy another type of uninterpretable feature known as the EPP. The EPP allows functional projections to have an extra specifier position for elements to move to. In English, [Spec, TP] hosts the subject position and must be overtly filled. The process of a simple derivation is illustrated in (2).

In (2), v selects an external argument which merges in its specifier (*The girls*). T probes for ϕ-features, finds the DP and copies the features. The EPP feature on T moves the argument to [Spec, TP] and T assigns the features to the verb. T is unable to access the ϕ-features of the lower DP (embedded within the PP, *school*) due to the Phase Impenetrability Condition (PIC), which restricts access of a probe only as far as the left edge of the lower phase (i.e. T only has access to [Spec,vP]).

2. The girls walk to school.




The PIC also requires movement to occur in short successive steps. This is illustrated in (3). Pure merge of an expletive can satisfy the EPP feature of the lower TP domain. Since it is at the left edge, the higher domain has access to it and it moves to [Spec,TP] of the higher domain.

3. a) T- is likely [ to be a proof discovered] – Merge of Expl in lower [Spec, TP] to satisfy EPP

b) T- is likely [ there to be a proof discovered] – Move of Expl to higher [Spec, TP] for EPP

c) There is likely to be a proof discovered. (Chomsky 2000: 104)

In terms of agreement in existential constructions, Chomsky argues that it is a case of Long-Distance Agreement (LDA). Deletion of features, for Chomsky is an "all or nothing" operation and G must be ϕ-complete (i.e have a full complement of ϕ-features) in order to delete the features of the probe. Due to a preference for merging elements over moving them, Chomsky takes the expletive to merge in [Spec, TP]. This forces T to probe the lower domain for an element with ϕ-features, due to the expletive being ϕ-incomplete. Because the expletive has

already merged in [Spec, TP], the lower element remains in situ, creating a non-canonical agreement pattern, as in (4).

4. There are books on the table.

Recall that the data under consideration in this thesis shows variation in plural and singular agreement of the copula in English expletive constructions. In light of this data, I believe this conception of English expletive constructions is incorrect. I will now present more complex proposals of agreement and consider how they might account for the variation at hand. At the end of this section I will outline which notions from these proposals I will adopt in order to account for the data.

*3.1.2 Bejar (2003)*

Bejar (2003) presents a theory of Agree to account for context sensitive agreement patterns in languages like Georgian, in which a verb agrees with the person feature of the object, unless that object is 3rd person, in which case it agrees with the subject. The verb agrees in number with the subject, unless that subject is singular, in which case it agrees with the object. These cases contrast with the patterns in languages like English and Spanish for example, where agreement in both number and person is with the canonical subject (in most cases). The fact that Georgian exhibits a different locality pattern for the person and number feature causes Bejar to decompose the probe, and have the features probe separately.

On Chomsky's account, agreement is "all or nothing", with a ϕ-probe searching its domain for a matching ϕ-complete DP, however, for Bejar, Agree is the sum of three procedures: Probe, match, and value. First, P probes for a goal with matching features. The operation match evaluates the features of a potential goal. A goal has matching features as long as the features of the probe are a proper subset of the features of the goal. The operation value assigns the feature values of the goal to the probe. A probe that is unvalued in the derivation remains active and can project, inducing a second cycle of agreement which includes additional arguments. Bejar argues that non-canonical agreement patterns are the result of failure to either match or value. In the case of Georgian, (which she argues has person probing from a lower agreement head) if match from the lower agreement head identifies a 3rd person object, the person probe cannot be valued, and the probe projects to include the subject in its search domain.

In English, non-canonical agreement is exhibited in the constructions under investigation in this thesis. Bejar suggests that in these constructions, the expletive bears only a person feature and therefore has a defective ϕ-bundle. Match identifies it as a goal (since all default values in English induce intervention effects), but its defective nature prevents the probe from being valued. Only when it displaces to Spec, TP, can the probe match with and be valued by the lower argument.

Comparing Chomsky and Bejar's explanation of expletive constructions, the first difference is the base generated position of the expletive. While Chomsky has it merging in Spec, TP, Bejar has it lower in the structure as an intervener between the probe and the lower goal. I will also argue that the expletive originates lower in the structure, between the probe and a lower argument; however, Bejar's account seems to be somewhat inconsistent. She states that each ϕ-probe will probe separately, but it is unclear why a person probe should take note of the other features on a given element. Given that she states that the expletive is a defective intervener, it would appear as though she has introduced a ϕ-completeness requirement. Presumably once the person probe finds an element with a person feature they should match, regardless of the other features of the element. Though her explanation of expletive constructions may be incorrect, there still may be a way to explain them given how languages exhibit variation in context sensitive environments.

In terms of cross-linguistic variation of context sensitive agreement, Bejar states that the locus of variation can come from three places: 1. the number of agreement heads in a clause 2. the position of agreement heads in a clause or 3. the degree of ϕ-specification of agreement heads. Bejar notes that English clauses are consistent in the other two areas. The loci of ϕ-features are always T and v, which appear in the same positions and search the domain for person and number. In terms of English expletive constructions, however, I take option 1 to potentially be able to provide an account of the variation. This will be explored in Chapter 4.

*3.1.3 Bejar & Kahnemuyipour (2014)* (B&K)

Bejar & Kahnemuyipour (2014), (henceforth B&K) investigate a somewhat similar phenomenon to English expletive constructions. They propose an analysis of agreement in Persian specificational clauses. Specificational clauses in Persian are similar in form to the English example in (5), in that they show a non-standard agreement pattern (B&K 2014:1).

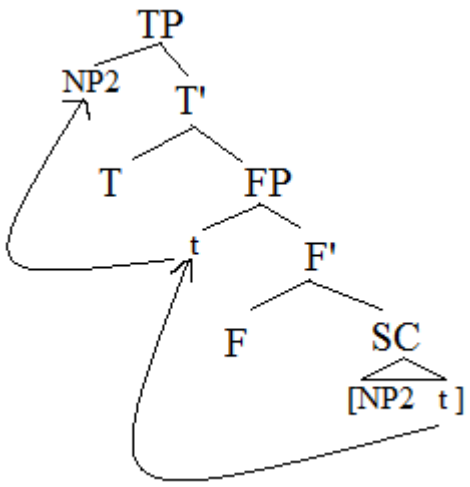
5. The murderer is me.

In English, the copula agrees with the canonical subject *The murderer*, as expected. These sentences in Persian however, exhibit copula agreement with the second NP. B&K assume that the structure of these clauses is such that both NPs are introduced in a small clause selected by a functional head, and subsequently NP1 moves to Spec, TP for EPP reasons, (6) (B&K 2014: 8).

6. behatarin dust-e Soroosh man-Ø-**am**

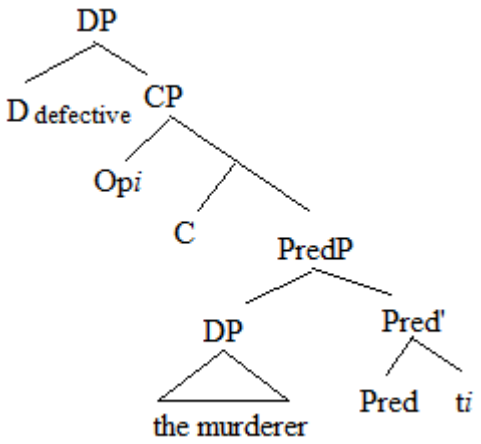
Best friend-Ez Soroosh I-be-**1sg**

'Soroosh's best friend is me.'




B&K argue that NP2 agreement in Persian arises when the first NP is 3rd person and the second NP is 1st/2nd. This leads them to argue that Persian exhibits a person sensitivity and that the probe must be more "fine-grained" and searches for specific ϕ-features. The reason why specificational contexts in Persian exhibit NP2 agreement is because NP1 has a defective ϕ-feature set relative to the more articulated probe. They take the structure of NP1 in specificational clauses to be as in (7) (B&K 2014: 28). B&K assume that the locus of ϕ-features is on D, and that the features on the D head must be valued via agree with the lower nominal. Due to the fact that the lower nominal is contained inside a CP, D is unable to agree with the features of *a murderer*, and thus has a defective ϕ-bundle.

7.




The way agreement proceeds in Persian then is as in (8) (B&K 2014: 29). B&K argue that specificational subjects are intentional NPs and take them to have a defective ϕ-bundle as a result of being within a CP. When D is merged, it cannot access the ϕ-features lower in the structure, and can therefore only have a minimal nominal feature, which allows the

computational system to recognize it as a nominal. Because of this, the defective features are not enough to satisfy the probe and the probe must continue on to NP2 to find a suitable goal.

----------→

| | | | |
|---|---|---|---|
| 8. | AGR... | NP1 | NP2 |
| | [_*n*] | [ *n* ] | [ *n* ] |
| | [_*d*] | | [ *d* ] |
| | | | ([ part ]) |
| | | | ([ speaker ]) |

In contrast to the preceding account of agreement, NP1 in these clauses exhibit no intervention effects, and the probe is able to simply "pass over" an NP that does not match its specifications, due to its defectivity. It could be possible that English involves a finer grained probe involving number and person. Since the expletive is believed to have a defective ϕ-bundle, involving only person, the probe may be able to pass over it and agree with the features of the lower element, resulting in the standard plural agreement pattern. In order to get singular agreement in expletive constructions, it would need to be the case that for some English speakers, the minimal person feature on "there", is enough to satisfy the probe.

Though there appears to be some similarities between copular clauses and English expletive constructions, this account will not be explored. Given that I do not assume the expletive to be embedded in a CP, it is not clear to me how I could explain why it is the case that some speakers allow the defective element to satisfy the probe and others do not. This would also require that for those speakers for whom the singular is allowed, to use it consistently instead of the plural.

*3.1.4 Doggett (2004)*

A similar construction to expletive sentences is English locative inversion sentences, in which a prepositional phrase appears in the canonical subject position and the verb agrees with the lower argument, as seen in (9).

9. a) Over the rainbow is a pot of gold.

b) In the oven are chocolate-chip cookies.

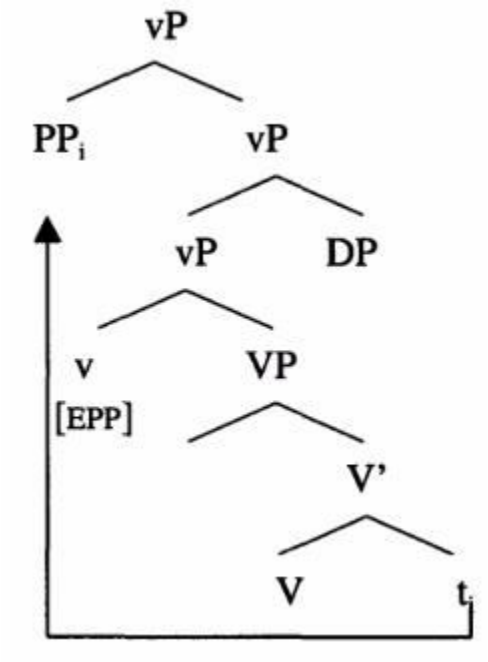
This construction is striking, given that it appears that a PP has "jumped over" a DP, which is a violation of Shortest move, formulated in (10) (Doggett 2004: 13).

10. Shortest Move

> Movement of α to β is prohibited if y is a potential landing site for α and y is closer to α than β.

Doggett provides multiple diagnostics which suggest that the PP is indeed in Spec, TP at the final stage of the derivation, but it begins lower in the phrase, in a position to the right of the DP argument. Doggett's aim is to argue against the notion of equidistance and in doing so she provides a novel account of the derivation and agreement in these locative inversion constructions. She argues that these constructions involve a presentational focus feature on v, since the post-verbal DP appears to have presentational focus as new information. The structure she provides for locative inversion sentences is that in (11) (Doggett 2004: 25).

11.




Given that the PP ends up in Spec, TP, yet agreement occurs with the lower argument, she makes the case that it has a defective ϕ-set, bearing only a person feature. The focus feature on v, forces the DP argument to the right specifier of v and the EPP feature of the head allows the PP to move up to an "escape hatch" position, where the probe on T will have access to it. Evidence for the DP being in the right specifier comes from locative inversion particle constructions, in which the DP must occur to the right of the particle.

Doggett argues that the focus feature must be checked first in the derivation, in order to derive the correct word order and allow for the PP to be able to move into a position where it can be targeted by the probe on T. If the EPP were satisfied first, then the DP would move into the left specifier, disallowing locative inversion. A consequence of this proposal is that in principle it

would predict that English could end up with OVS word order in double object constructions like that in (12) (Doggett 2004: 52). Doggett argues that the lack of ϕ-completeness of the PP allows T to enter into an Agree relation with the lower DP, checking all the uninterpretable features of T and allowing the DP to get Case. In (12) however, the DP always blocks the PP from moving, and since the DP is ϕ-complete, this satisfies the features of T including Case features, preventing the lower DP from having Case, making the derivation illicit.

12. *The books placed on the table John.

In my estimation, there are several parallels between English expletive constructions and English locative inversion constructions. Table 1 illustrates these similarities.

Table 2: Similarities between English expletive constructions and English locative inversion constructions

| Construction: | Expletive | Locative Inversion |
|---|---|---|
| Transitivity Restriction (unable to occur with transitive verbs) | Yes | Yes |
| Non-canonical agreement | Yes (usually) | Yes (always) |
| Starts low, moves high | Yes | Yes |
| Defective ϕ-set | Yes (standard assumption) | Yes (according to Doggett) |
| Agreement variation | Yes | No |

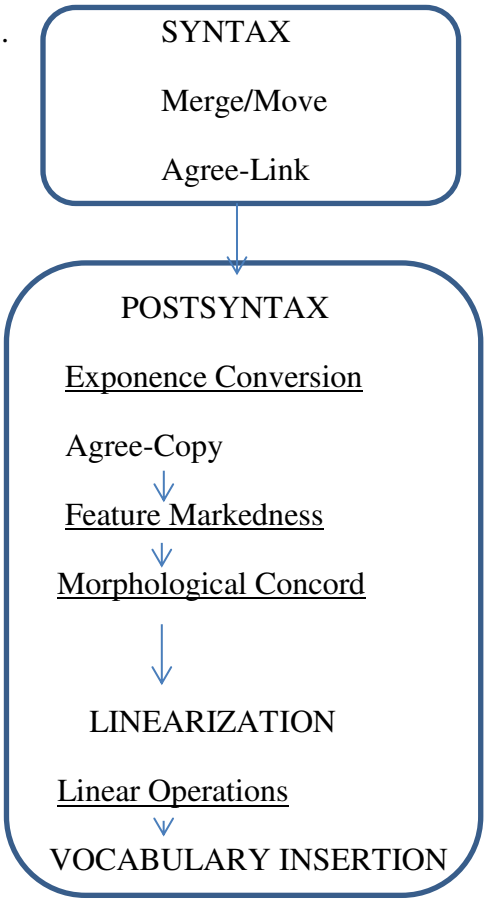
Though in her own analysis, Doggett follows Chomsky in stating that expletives satisfy the EPP through pure merge in Spec, TP, there seems to be many similarities between these two types of constructions. However, I will not adopt this account as a potential analysis for agreement variation in the constructions at hand. The PP in locative inversion originates in a position to the right of the DP. In order to have singular copular agreement in existential constructions, I assume that the expletive must originate in a position such that it acts as an intervener between the agreement head T and the associate, and thus blocks plural agreement. Adopting this structure would also require a return to the notion of equidistance, since the associate would have to move past the expletive to the right specifier of vP. That being said, some notions presented in this work will be revisited in a later chapter.

*3.1.5 Arregi & Nevins (2011)*

Arregi & Nevins (2011) (henceforth A&N) aim to provide an agreement analysis of Basque auxiliaries. They take Agree to be a two-step process; step one occurring in the syntactic component (Agree-Link) and step two in the post-syntactic/morphological component (Agree-Copy). Agree-link establishes a relation between a probe and a viable goal. Agree-Copy, is the

point at which the features from the goal are copied onto the probe, and when this happens in the post-syntactic component is subject to parametric variation with regard to other morphological operations that must take place first. This is illustrated in the diagram in (13), which is a simplified version of the diagram provided in their book (A&N 2011: 22).

13.



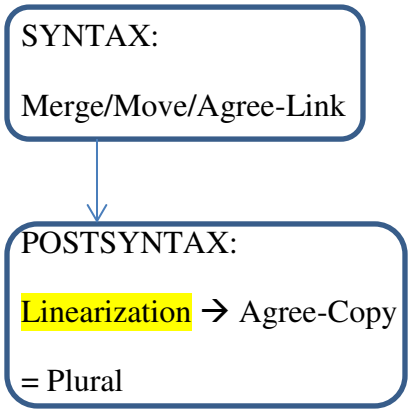

The syntax component sets up the necessary relations to feed to the post syntactic component. In the first post-syntactic component; Exponence Conversion is the "first step" of syntax-morphology mapping, taking the relations set up in the syntax and copying features from goal to probe. The Feature Markedness module evaluates the derivation in terms of morphotactic constraints and is responsible for morphological repairs; the Morphological Concord module is responsible for feature insertion operations. Linearization linearizes elements prior to the insertion of vocabulary items.

The authors support their proposal by examining three dialects of Basque. They argue that in Basque, only features from an absolutive goal can be copied to the probe. In ditransitive constructions with both a dative and an absoutive argument, the probe agrees with both arguments (Multiple Agree), but only the features of the absolutive goal are reflected on the auxiliary. This is true for two of the three dialects they consider. In the third one, called Lekeitio, the dative undergoes an impoverishment rule (First Dative Impoverishment) whereby the dative becomes impoverished to absolutive and the features of the dative goal are copied to the probe.

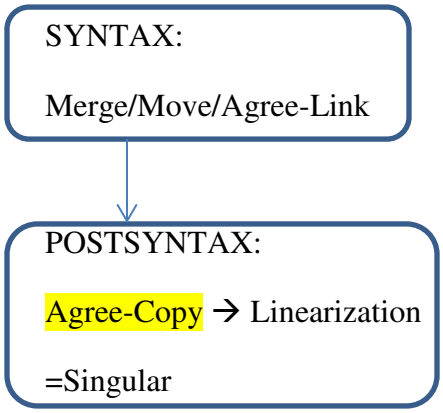
In terms of English existential constructions, the operations can play out in one of two ways. Models 1 and 2 illustrate:

Model 1: Linearization

Grammar 1:



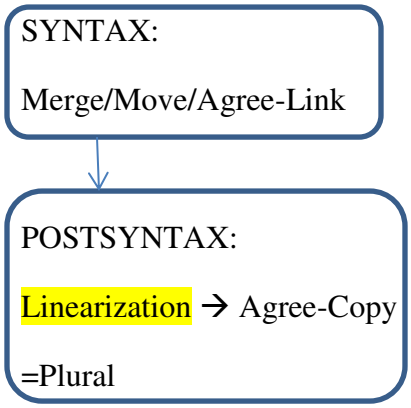

Grammar 2:



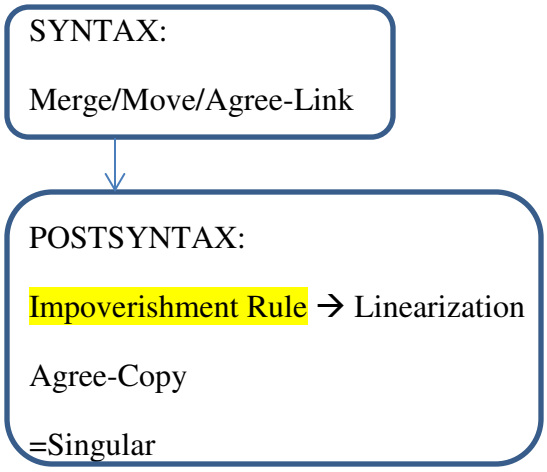

Model 1 illustrates the two different grammars that show the process of agreement based on when linearization of elements occurs.[5] In Grammar 1, linearization moves the expletive out of the domain of the probe, so the probe copies the features of the lower goal. In Grammar 2, Agree-Copy occurs before linearization, and since the expletive is the first NP with a link to the probe, its features are the ones copied.

Model 2: Impoverishment

Grammar 1:




Grammar 2:




Model 2 paints the difference in terms of impoverishment, as in the Basque scenario. Grammar 1 plays out as it does in Model 1, with linearization moving the expletive out of the

[5] To be clear, this model relies on the accessibility of phi-feature values based on linearization. Linearization cannot affect Agree-Link, but it can affect Agree-Copy.

way, so the probe can copy the features of the lower goal, resulting in plural agreement. Grammar 2 on the other hand shows an impoverishment rule in the post syntactic component. In the Lekeitio Basque dialect, when the probe encounters two goals with different inherent case, the First Dative Impoverishment Rule makes the dative argument become absolutive. For A&N, impoverishment occurs in the Feature Markedness module, thus the Agree-Copy operation must occur after this has occurred. Here, in Grammar 2, the probe encounters two goals with a difference in number (one having number, the other not), so the impoverishment rule targets the element with number and impoverishes it to unmarked singular. Then linearization of the expletive occurs and the impoverished features of the lower goal are copied.

In principle either one of these possibilities could account for the data surrounding existential constructions. Model 2 seems enticing given that English displays first conjunct agreement with conjoined post-verbal NPs, as in (14).

14. a) There is a pencil and crayons in the desk drawer.

b) There are crayons and a pencil in the desk drawer.

It is difficult to argue for Model 2, however, given that first conjunct agreement is illicit when the conjoined NP is in subject position, as in (15). In terms of both Models 1 & 2, it is not clear what kind of evidence would be necessary to argue for the adoption of either model given that English is much less morphologically rich compared to Basque.

15. *An apple and cookies is on the table.

Furthermore, there is a fundamental difference between the A&N proposal for Basque and English existential constructions. A&N are dealing with dialectal variation while the variation under consideration here is between individual speakers. Adopting a model based in their analysis may seem ad hoc as it may apply only to these particular cases.

### 3.2 Summary

This chapter has outlined various proposals of the Agree operation. I have presented the conceptions of Agree and discussed how the proposals may be applied to English existential constructions. As explained, notions from Bejar (2003) and Doggett (2004) will be explored in the coming chapters. The next chapter aims to address the progressive cases of existential constructions and show that they can be reduced to instances of secondary predication. I will also present some potential syntactic structures for existential constructions and evaluate if and how they allow for agreement variation.

Chapter 4

# Structural Evaluation

## 4.1 Data review

The intention of this chapter is to present potential syntactic structures for existential constructions and evaluate how agreement would proceed given their structural properties. The structures presented represent initial attempts to account for agreement variation in light of the information presented in Chapters 2 and 3. With this aim in mind, I will first address the data which may be considered "outlier data", and unify them with the rest of the constructions.

Recall from Chapter 1, the existential constructions that allow for copular agreement variation: simple existentials (1), negation (2), ECs with interveners (3), ECs with numeral words (4), ECs with conjoined NPs, (5) unaccusative progressive (6), unergative progressive (7), and transitive progressive (8).

1. There's/is/are books on the table.
2. There is not/isn't/are not/aren't many cookies left.
3. There really is/are cookies left.
4. There's/are several/few/at least 5 butts in the ashtray.
5. There's/?is/are some cookies and an apple in the bag.
6. There's/is/are guests arriving.
7. There's/is/are marathoners running.
8. There's/is/are dogs eating treats.

Additionally, Chapter 1 reviewed constructions that disallow variation, or disallow existential constructions in general. As can be seen in the following examples, it is unacceptable to use the full singular form in existential constructions with numeral words (9), and existential constructions are ungrammatical with unergative (10) and transitive verbs (11).

9. *There is several/few/at least 5 butts in the ashtray.
10. *There run marathoners.
11. *There eat dogs treats.

Given that unergative and transitive verbs are typically unable to appear in existential constructions, it is necessary to account for their appearance in what seems to be the progressive aspect. Before evaluating the data against two potential structures for existential constructions, I will argue that there is actually nothing special about the progressive cases and in fact, these are not progressives at all, but an instance of secondary predication.[6]

[6] Thanks to Cassandra Chapman and Dr. Ivona Kučerová who noticed this.

### 4.2 Nothing special about progressives

The instances of variation in unergative and transitive progressive forms are striking since expletive constructions are generally disallowed in the simple tense forms (10)-(11). However, they bear a resemblance to secondary predicates in terms of their semantic function and their distribution. An example of depictive predication is illustrated in (12), with (12a) showing secondary predication of the subject and (12b) showing predication of the object.

12. a) Michael drove his car drunk.

    b) Peter ate the meat raw.

In terms of the semantic function of secondary predication, Pylkkanen (2008) states, "…in addition to attributing a property to an individual (i.e. to one of the arguments of the verb), depictives assert that the state described by the adjective holds during the event described by the verb. In this way depictives are like adverbs: they attribute a property to the event described by the verb". Secondary predicates assign some attribute to an argument at the time of an event, thus in (12a), the quality of being drunk is attributed to John at the time of him driving his car. Similarly in (12b), the quality of being raw is attributed to the meat at the time of it being eaten. In the case of expletive constructions, like that in (7), I argue that the secondary predicate is *running*, and it is a quality being attributed to *marathoners* at the time of existence. Expletive constructions are a form of existential constructions, which assert the existence of some entity. For instance, to take the simple example in (1), repeated here as (13) (with the copula in plural), the meaning of the sentence is simply to state that books are in a state of existing, while being on the table. Thus in the progressive cases, what appears to be a transitive or unergative verb is actually a secondary predicate attributing a quality to an individual while it is existing.

13. There are books on the table.

According to Simpson (2005), secondary predicates occur in the VP domain or inside a sentential argument/adjunct. If they are in VP, they must follow an NP, but they can occur either before a PP (as in (14a) or after a PP (14b).

14. a) Jumping **fully clothed** into the water was a bad idea.

    b) Jumping into the water **fully clothed** was a bad idea. (Simpson 2005: 74)

Comparing these to the "progressive" cases in (15) it appears that the same shifting is possible, with the "progressive" appearing before or after a PP.

15. a) There are dogs **eating treats** in the park.

    b) There are dogs in the park **eating treats**.

This alone is not enough evidence though, since PPs adjuncts (underlined) can occur on either side of genuine progressives (in boldface) as in (16).

16. a) Children **are eating** cake <u>in the kitchen</u>.

    b) Children **are** <u>in the kitchen</u> **eating** cake.

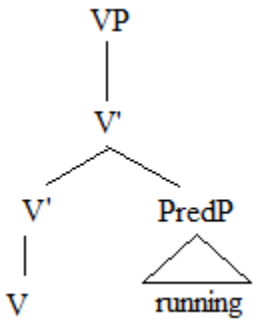
However, it is possible to add a secondary predicate which appears as progressive to sentences in the progressive aspect, (17).

17. a) Birds are flying through sky **chirping** in the morning.

    b) Birds are flying through the sky in the morning **chirping**.

While progressive aspect denotes an ongoing action being performed by the subject, a secondary predicate ascribes an attribute to an individual. In (17), what is being attributed to birds is *chirping*, while they are continuously flying. I propose that the structure of expletive constructions in "progressive" is as in (18).

18.




Thus, these cases are not instances of true progressive aspect, but of secondary predication and are more like the simple expletive sentences like that in (1). With this is mind, I now turn to a presentation and evaluation of initial proposals to account for agreement variation.

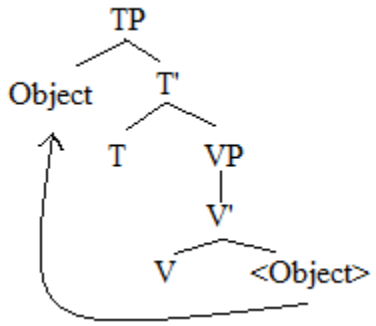
### 4.3 Evaluating proposals

#### *4.3.1 Source of variation: number of AGR heads*

Recall that Bejar (2003) suggests that one source of non-canonical agreement is a discrepancy between the number of arguments and the number of agreement heads in the clause. I take this to be a potential source of the variation due to the fact that existential constructions

appear to occur with unaccustaive verbs (verbs that do not assign accusative Case; this includes copular *be*). As such, the structure of unaccustive verbs is that of (20).[7]

20. Letters arrived.




In non-expletive unaccusative constructions, the object of the verb moves to Spec,TP for EPP and to receive Case. Consider now the assumption made by Kayne (2016), that expletive *there* to enter the derivation as a response to the prohibition of non-specific subjects; thus the expletive enters the derivation attached to another DP. As such the derivation would be as in (22). The unaccusative verb *arrive* takes [there[letters]] as its complement.

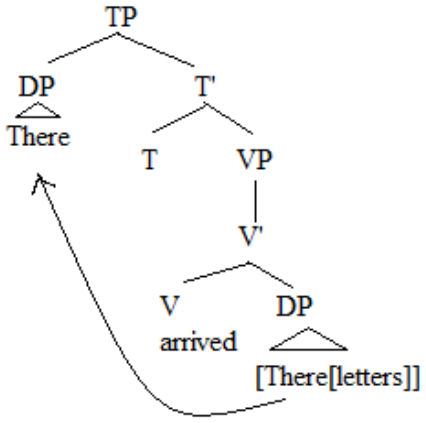
I will adopt Doggett (2004)'s definition of closeness, (21) and argue that the expletive is the closest DP, it is targeted for EPP and moves to Spec, TP.

21. Closeness: β is closer to τ than α if τ c-commands β and β c-commands α.

T cannot target the whole complex DP due the restriction of non-specific subjects noted by Kayne (2016). Indefinite possessives must be split apart by movement (*my friend* vs. *a friend of mine*), and so too must the expletive and indefinite DP. This leaves the question of how the lower DP gets Case given that it is not in a position to check this feature against a Case assigning head (T,v). I leave this question for now and turn to existential constructions with the copula, and examine how a structure similar to that in (22), may account for the data.

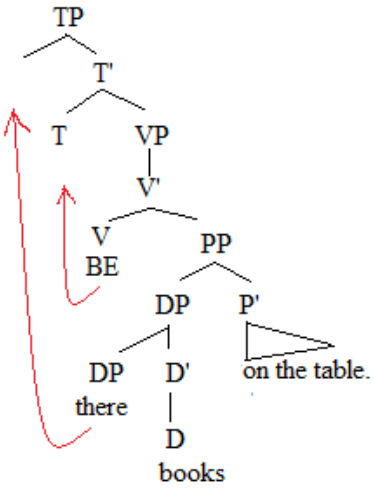
22. There arrived letters.

[7] This is by no means the universally accepted structure for unaccusative verbs. For those who take vP to always be a strong phase, present in all English sentences, the object would move to Spec, vP first.




The structure in (23) shows the derivation of an expletive construction with copula *be*. In this derivation, V selects for a PP small clause with [there[books]] as its subject. Recall that this structure plays on Bejar (2003)'s notion that a source of agreement variation is a discrepancy with the number of arguments and the number of agreement heads in the clause. I take it to be the case on this account that v is not an agreement head and thus does not probe for ϕ-features.[8] As such, T is the only head which probes for ϕ-features.

23. There's/is/are books on the table.

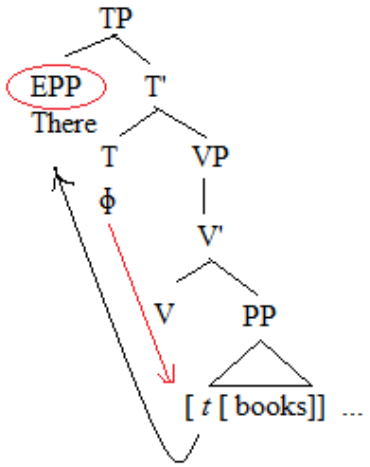



The point at which T is probing for ϕ-features, is the point where the grammars allowing singular agreement and plural agreement diverge. To explain, I will separate the derivations:

[8] To make this point clear, I simply omit the vP altogether in the structures. It could be either that the vP is present but not a strong phase, or that it is not there at all, though I make no strong case for either.

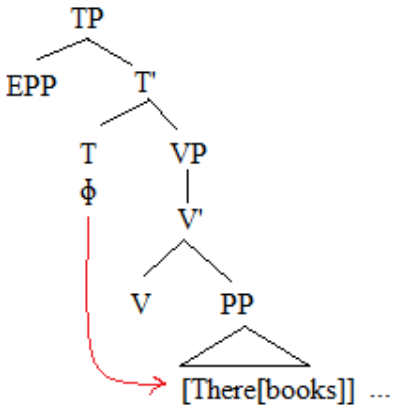
Plural derivation: Before T probes for ϕ-features, the EPP feature probes for a DP and moves the expletive to Spec,TP. T then probes for ϕ-features and Agrees with the lower NP, which remains in-situ. This is played out in (24).

24.




Singular derivation: T probes the lower domain for ϕ-features and comes across the ϕ-defective expletive which bears an active person feature, blocking agreement between T and the lower DP. Since the expletive intervenes between T and the lower DP, and the expletive is ϕ-defective, agreement fails and appears as default singular. This is illustrated in (25).

25.



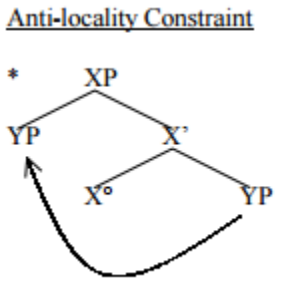

This is effectively the account of agreement in expletive constructions presented by Bejar (2003), in more detail. I have not however made mention of separate ϕ-probes, but instead assumed the ϕ-completeness requirement. Again though, there is the problem of how the post copular element gets Case. According to Alexiadou & Anagnostopoulou (2001), there is a

restriction on multiple arguments remaining in their merged positions (which they term the subject-in-situ generalization; the SSG). According to the SSG, both v and T have a Case feature and at least one DP argument must move out of the VP to check the Case feature of v or T, by Spell-Out. This is due to the restriction on multiple covert Case checking of elements.

In the above derivation, the only Case feature which needs checking is the one on T. Since v is not a ϕ-probe, it is also not a case assigning head. The case feature on T can be checked covertly, allowing the indefinite to remain in the VP and the expletive to move to Spec, TP strictly for EPP reasons. This preserves the linear order of elements in these sentences.

However, Case is checked by adjacency. The indefinite, which needs Case, must be adjacent to T in order to receive nominative Case, but this move from within the complement, to Spec, VP is impermissible given Abels (2003)'s anti-locality constraint in (26). Since [books] is within the complement of V, movement from this position to the specifier of the same head is impermissible. Furthermore, negation may interrupt adjacency between T and the lower DP, thus the indefinite cannot be assigned Case in this manner. [9]

26.




(Abels 2003: 12)

I turn now to another proposal involving locality and timing.

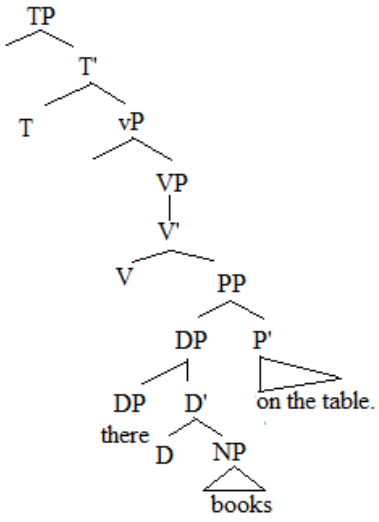
*4.3.2 Locality and timing*

Another potential structure relies on the locality properties and timing of certain operations. The proposed structure is represented in (27), which maintains the vP as a strong phase and v as a ϕ-agreement head. Bejar (2003) argues that in English both T and v are specified as ϕ-probes, but that agreement on v is morphologically null. If it is the case that all English sentences have a T and v phase and both heads are ϕ-probes, then there must be a way to derive the variation, given these specifications. As with the last proposal, I shall adopt Kayne (2016)'s assumption that the expletive and associate originate together in the structure. I shall

[9] Including the v, even as a non-strong phase head does not resolve the issue of adjacency. Spec, vP may provide a landing site for the indefinite that is not subject to anti-locality, but the adjacency between T and v may still be interrupted by negation.

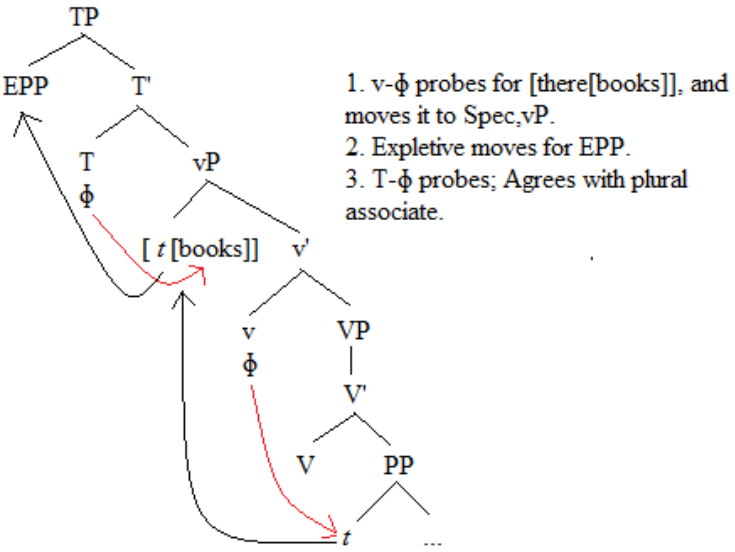
examine the structure in (27) and determine how the variation comes about in two separate derivations.

27. There's/is/are books on the table.



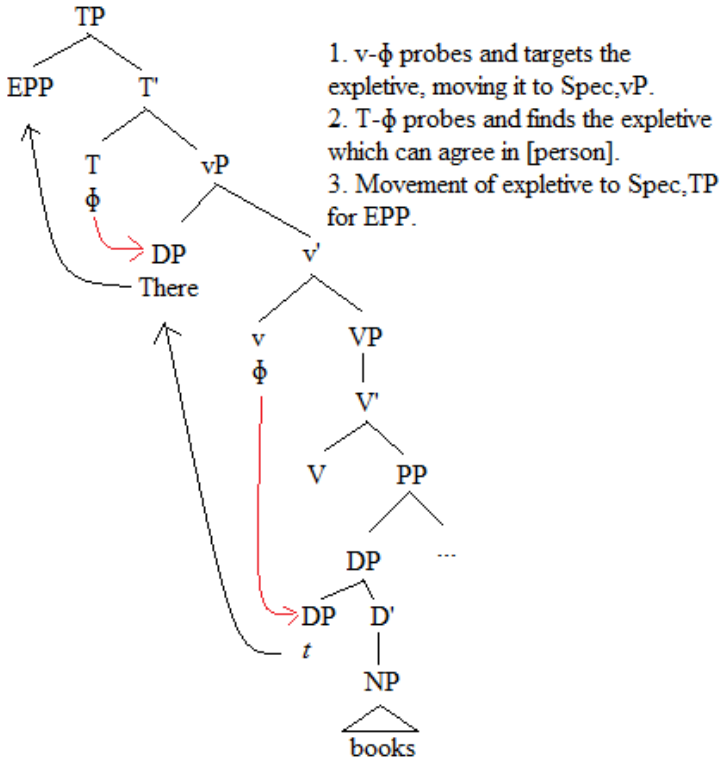

Plural derivation: At the beginning of the derivation, the V head selects a PP small clause complement with [there[books]] in its specifier. The ϕ-probe on v probes its domain and targets the whole complex DP for movement to the specifier of vP. At this point, the expletive must be separated from the indefinite and it moves to Spec,TP to check the EPP feature. The T probes the domain to find the plural indefinite, and can Agree with it in person and number features, yielding plural agreement (28).

28.



Singular derivation: Again, the derivation starts with the V head selecting a PP small clause with [there[books]] in its specifier. Now, v probes the domain and is able to target the expletive in order to separate it from the indefinite and move it to Spec, vP. At the time T probes, the only thing accessible to it is the expletive, which bears only a person feature. Since T can only agree with the expletive in person, it exhibits default number agreement and appears as singular (29).

29.




On this analysis, the unaccusative cases of expletive constructions pose a problem. Consider the examples in (30). In both derivations I have argued that v can target either [there[books]] as a whole, or the expletive on its own in order to separate the expletive and the indefinite. In the unaccusative case in (30b), it seems as though v cannot target the whole DP and move it to Spec, vP, due to the fact that main verbs in English do not raise to T. However, why this should affect the probing of v is unclear. Also, while in possessives the indefinite is separated from the possessor by a preposition (recall *my friend* vs. *a friend of mine*), it does not appear that introducing an element in T to intervene between the expletive and the associate makes the derivation better (30c). Only in cases with copula be, does v seem to be able to target the whole DP, and I have no explanation for why this should be so.

30. a) There arrived letters.

b) *There letters arrived.

c) *There will/can/shall letters arrive.

d) There are letters on the table.

From a semantic perspective, it is necessary that the associate be in the specifier of vP according to the Mapping Hypothesis put forth in Diesing (1992). A detailed account of this hypothesis will be in Chapter 5. Briefly, Diesing states that there are two subject positions in a sentence, Spec, TP and Spec, VP. She does not distinguish between vP and VP in her proposal. Depending on which of these positions a DP subject is in determines its interpretation. The lower subject position creates the nuclear scope, and the domain of existential closure. Thus, DPs in this position must be interpreted existentially. Given that we are dealing with existential sentences, the associate (which I have stated is the logical subject) must be in the specifier of the nuclear scope to be interpreted existentially. It could be the case that the associate is able to move covertly, however; the trace of the expletive is in the Spec of vP. Moving the associate covertly would require the projection of a second specifier, in the unaccusative cases as well as the singular grammar case illustrated above. If it is possible for the associate to move with the expletive to Spec,vP, then it should do so overtly, rather than covertly.

### 4.4 Summary

In this chapter I have reduced the "progressive" cases of English expletive constructions to cases of secondary predication. I have also presented two potential structures and attempted to show how agreement variation might be achieved given these structures. Ultimately the "number of AGR heads" proposal falls short. In its current form, the "locality and timing" account also does not appear to work; however, this account will be modified in a later chapter and forms the basis of my proposal of agreement variation in existential constructions. The following chapter outlines the semantic properties of English existential constructions.

Chapter 5

# The Semantics of English Expletive Constructions

According to some authors, the agreement associated with an indefinite NP influences the interpretation of the NP (Landman 2011, Rett 2014, Wechsler & Zlatić 2000, Sauerland & Elbourne 2002, to name a few). What the interpretation is depends on the constructions being examined by the author; Landman (2011) outlines a packaging vs. grinding process of NP interpretation, Rett (2014) distinguishes an individual vs. degree interpretation whereas Wechsler & Zlatić (2000) and Sauerland & Elbourne (2002) make an individual vs. group distinction. In terms of existential constructions, my focus in terms of the interpretation of the associate depends on the nature of the NP (count or mass), as well as the agreement. I follow Wechsler & Zlatić (2000) and Sauerland & Elbourne (2002) and distinguish between an individual vs. group interpretation.

In this chapter, I will outline the important semantic facts surrounding existential constructions. Not only is it important to consider how the agreement in these constructions affects the interpretation of the NP, the type of NP itself must also be considered. Since these constructions only allow indefinite NPs (and my focus is on ECs that occur with a plural NP associate) I will begin with a discussion on the nature of bare plural indefinite NPs.

## 5.1 The interpretation of Bare Plurals

In English, as well as some other languages, it is possible for plural nouns to appear in their "bare" form, without a determiner of any kind, like in (1) and these NPs are separated into two groups; count (1a) and mass (1b). Count nouns are those that denote entities that are easily countable, and mass nouns are those that are not so easily counted. Of *Students* in (1a) for instance, it can easily be stated that 20 students are studying, or any number, given that students are easily individuated. It is not clear however, what it would mean to say that some number of meat is delicious. Does it refer to different types of meat? Different cuts? Different individual bites of meat? Due to this lack of individuablity, these NPs are thought of as one mass sum.

1. a) Students are studying for exams.

   b) Meat is delicious.

For the current purposes, I will focus on the interpretation of bare plural subjects. The constructions under consideration are of the form There-BE-plural NP. As I have stated in Chapter 1, the associate NPs in existential sentences function as the logical subjects of these phrases, thus it is necessary to understand the nature of their interpretations. Bare plural subjects can be interpreted in two ways, namely generically, or existentially.

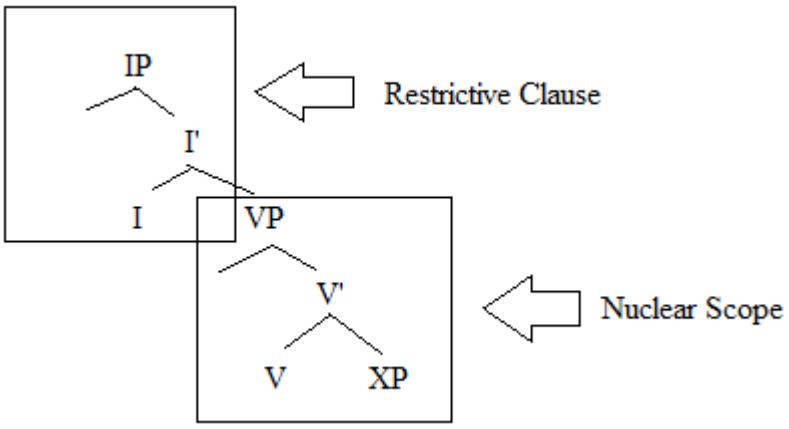
Table 3: The interpretation of bare plural subjects

| | Count | Mass |
|---|---|---|
| Generic | Kittens are cute. | Bread is delicious. |
| Existential | Kittens are fighting. | Bread is on the table. |

This difference is modelled by the Mapping Hypothesis, proposed by Diesing (1992). In the sentences corresponding to the generic interpretation, what is predicated of the bare plural is a general quality of those individuals. The property of 'being cute' is a general property of kittens. Similarly, someone who utters "Bread is delicious", clearly believes that all bread is generally delicious. The same cannot be said on the existential interpretation. It is not a continuous property of kittens that they are fighting, nor is bread always on a table. In the existential sentences, the existence of some particular entities is being asserted and something is being said about those entities. So then to say, "Kittens are fighting" is to say that some particular kittens exist and they are currently fighting. Similarly in the mass example, it is asserted that some bread exists, and that it is currently on a contextually relevant table. Diesing argues that due to the difference in interpretation, there are two subject positions corresponding to these interpretations. The position of the NP at the level of logical representation (LF) determines its interpretation.

The overt subject position in English is Spec, TP. It was proposed by Chomsky (2000) that all English sentences must have an overt element in Spec, TP to satisfy the EPP feature (which is how he justifies the insertion of expletive-*there*). However, according to Diesing, this restriction does not carry over into the semantic domain, and bare plurals can map onto either subject position at LF. This is illustrated in (2). Spec, TP (or Spec, IP) is the overt subject position and maps onto the restrictive clause. Bare plurals in Spec, VP are part of the Nuclear scope of the clause and are interpreted existentially.

2.



Diesing argues that bare plurals lack their own quantificational force; they introduce variables and must be bound by an operator to receive quantificational force. To attain a generic reading, bare plurals are mapped onto the restrictive clause (Spec, IP) and bound by a generic operator. On the existential reading, the bare plural lowers from its surface position to the lower subject position, mapping onto the nuclear scope, and being bound by existential closure. In the cases under consideration, the overt expletive always blocks the associate from being in the restrictive clause, thus these sentences are always interpreted existentially.

The justification for this split comes from the related phenomena of predication type. As has been noted, expletive constructions can only occur with stage-level predicates as opposed to individual level predicates. This is illustrated in (3). The predicate *beautiful* is taken to denote a permanent state of some individual, thus (3a) asserts that it is a permanent property of butterflies that they are beautiful. In contrast, stage-level predicates denote temporary states, thus (3b) asserts that there are butterflies and they are currently fluttering their wings. Diesing argues that individual level predicates allow only a generic reading of the subject, and map onto the restrictive clause at LF. Stage-level predicates are generated in the nuclear scope, Spec,VP. This is observed in (4a). Since individual level predicates must be mapped onto the restrictive clause, they are unable to occur in there-expletive constructions since the expletive is blocking the subject from being in Spec,IP.

3. a) Butterflies are beautiful.

   b) Butterflies are fluttering.

4. a) *There are butterflies beautiful.

   b) There are butterflies fluttering.

Diesing's explanation of the aforementioned facts is that there are two different forms of the verb BE. One BE which selects an individual level predicate and allows for a theta role to be assigned in Spec, IP. This theta role denotes a property of an individual, therefore in (3a), *Butterflies* in Spec, IP is mapped onto the restrictive clause and given the theta role of `having property x` with x being the individual level predicate. Stage-level BE on the other hand, does not assign a theta role in Spec, IP.

### 5.2 *There* and the definiteness effect

The merged position of the expletive as well as its semantic status has long been a topic of investigation. Recall from Chapter 3 that Chomsky (2000), asserts that the expletive is inserted into a given derivation due to a preference for merge of elements over the more complex operation (according to him) move. On his view, the expletive is merely a dummy subject whose purpose is to check the EPP feature in Spec, TP. It has also been suggested that the expletive is a predicate (Hazout 2004), or an overt event argument (Felser & Rupp 2001). Where Chomsky

takes the merged position of the expletive to be Spec, TP, other authors (Hazout 2004; Felser & Rupp 2001; Bjorkman & Cowper 2015) take it to be merged in some other specifier, and then moved to Spec, TP for EPP.

The featural composition of the expletive is also a topic of investigation. Where Chomsky takes the expletive to have no features, others have argued that it is an element with at least a person feature. Sabel (2000) argues that expletive-*there* originates within the associate DP and is an overt instantiation of the formal D feature which can be sub-extracted from the DP and moved to Spec, TP. The view that the expletive originates within the DP is adopted by Kayne (2016) discussed earlier, and may account for the definiteness effect.

As discussed briefly in Chapter 2, expletive constructions are illicit with definite associates. This is illustrated in (5), which also shows that these constructions are illicit with certain quantifiers. However, some other quantifiers are compatible in these constructions, as in (6). As shown in Chapter 1 though, certain quantifiers (*few, several, at least 5*), disallowed the full singular agreement pattern in existential constructions. Thus, it is necessary to understand the nature of those quantifiers which are able to appear in existentials at all, in order to explain what about them might restrict agreement. Milsark (1974) aims to provide an account of the possibility of some quantifiers in existential constructions and not others.

5. *There are the/all/most birds singing.

6. There are some/many/several birds on the windowsill.

Milsark notes that bare plurals are ambiguous between a universal and non-universal reading (7a), but when appearing in an existential sentence, the non-universal interpretation is forced, as in (7b). In (7a), the speaker may be referring to *Dogs* in a universal sense, and asserting that all dogs have the quality of being friendly. With the addition of a quantifier like *some*, it becomes the case that the speaker is referring to some contextually relevant dogs. In (7b) on the other hand, it must be the case that the speaker is referring to some contextually relevant dogs and not all dogs, and the addition of *some* does not change the interpretation.

7. a) (some) Dogs are friendly.

b) There are (some) dogs in the park.

In attempting to unify the class of elements disallowed from appearing in existential sentences, Milsark develops the following classification of elements into the categories of strong and weak (8) (Milsark 1974: 46), with only weak elements being allowed to occur in existentials.

8.

| WEAK | STRONG |
|---|---|
| *a* | "definites" |
| *sm* | *the* |
| number determiners | demonstratives |
| $\phi$ plural and mass | pronouns |
| determiner in nonuniversal | possessive DET's |
| reading | universals |
| | *all* |
| | *every* |
| | *each* |
| | *any* when not polarity |
| | item of *some* |
| | $\phi$ DET in universal |
| | reading |

Like Diesing (1992), Milsark also notes the restriction of certain predicates in existentials. He distinguishes between *state-descriptive* predicates (stage-level) which are able to occur in existential sentences, and *property* predicates (individual level), which do not. He tests weak and strong subjects against the two types of predicates (I have taken only one of his examples from each class to illustrate); weak subject with state predicate (9), weak subject with property predicate (10), strong subject with state predicate (11), and strong subject with property predicate (12) (Milsark 1974: 52).

9. A man was drunk outside.

10. *A man was intelligent.

11. Everyone was drunk.

12. Everyone was intelligent.

The fact that only weak subjects are disallowed from taking property predicates leads him to postulate that properties can only be predicated of "strong"/universal NPs. Unlike Diesing who argues for a syntactic account of the predicate restriction in terms of theta-role assignment, Milsark takes this as a semantic restriction of a property predicate on its subject.

There are apparent counterexamples which he notes, like that in (13) with the same element occurring as both the subject of a property predicate (13a) and in an existential sentence (13b).

13. a) Some people are jackasses.

b) There are some people in the room. (Milsark 1974: 54)

He argues however, that these sentences are quite different from each other. He states that in (13a), *Some* acts as a quantifier, which operates over a set of entities picking out a certain number of those entities for which it holds that they are jackasses. In this way it is similar to saying "some and not others". This interpretation does not make sense in (13b). The interpretation of this sentence has to do with the event of "being in a room", and the word *some* describes that there are a certain number of people being in the contextually relevant room. Given this distinction, Milsark argues that the strong category of determiners constitutes the set of quantifiers and the weak category constitutes cardinality words, which pick out the size of a set denoted by the NP, no different from words like *one, two…five* etc.

Through distinguishing strong and weak determiners as quantifiers and cardinality words, Milsark provides an explanation of the definiteness restriction. He states that *There be* is an instance of existential quantification. Therefore, if an element from the strong group (which are quantifiers) appears in an expletive existential construction, this would be an instance of double-quantification, which is disallowed. Weak determiners are allowed however, since they are cardinality words. Existential sentences with cardinality words then involve only one instance of quantification, which is acceptable.

Diesing (1992) uses this distinction and notes the ambiguity of certain quantifiers between a presuppositional and non-presuppositional reading. Take the examples in (14):

14. a) Some unicorns are in the forest.

    b) There are some unicorns in the forest.

Diesing argues that in (14a), the existence of unicorns is presupposed and states that they are in the forest, while in (14b) the existence of unicorns is asserted prior to the assertion that they are in the forest. This is the result of the strong/weak distinction of quantifiers. While strong quantifiers must undergo QR at LF, weak ones are ambiguous. If they remain in the VP, they must be interpreted as cardinality words. If they undergo QR at LF, then they carry presuppositional force and are interpreted as strong quantifiers.

### 5.3 Interim summary

This section has discussed various semantic facts relating to expletive existential constructions. Both Diesing (1992) and Milsark (1974) note the two different interpretations of bare plurals, being either generic (universal) or existential (non-universal). According to Diesing (1992)'s Mapping Hypothesis, in order to be interpreted as existential (as in expletive sentences), bare plural subjects must be mapped onto the nuclear scope (Spec, VP) at LF to be bound by existential closure. Milsark proposes a distinction between strong determiners being interpreted as universal and weak determiners being interpreted as non-universal.

Similarly both authors note the restriction on existential sentences to stage-level/state-descriptive predicates. Where Diesing provides a syntactic explanation of this, Milsark provides a semantic one, discussed in the previous sections.

It is also the case that existential sentences can only occur with certain types of quantifiers. Only weak quantifiers, which are interpreted as cardinality words, are able to occur in existentials, while strong quantifiers are disallowed.

Given the various semantic restrictions associated with expletive existential constructions, it seemed necessary to investigate the potential semantic consequences of the agreement variation under discussion. The following section presents the results of a semantic judgement survey conducted on the variation.

## 5.4 Semantic judgment survey

An investigation into the semantic differences between "There is" vs. "There are" and how the agreement differences specifically affect interpretation has (to my knowledge) not been extensively explored. While the mass vs. count noun distinction has been examined in ECs (Landman, 2011), this study expands on this work and adds the agreement type as a variable. Since one of the principal questions of this thesis is whether or not there is a difference in meaning associated with this choice, and how this difference might affect the syntactic derivation, it was necessary to run a judgment study to determine the answer. The study consisted of two parallel surveys of the same format. Before presenting the survey and its results, I will first present more of a discussion about the relationship between agreement and semantic interpretation of NPs

### *5.4.1 Agreement and NP interpretation*

As mentioned earlier in this chapter, other authors have observed that agreement type can influence the interpretation of certain NPs in a sentence. I mentioned Landman (2011), who distinguishes between count and mass nouns. He further categorizes mass nouns into mess and neat. His main focus is determining the internal semantics of the different types of nouns and he discusses the idea that mass nouns can often be easily "packaged" into countable entities, and count nouns can be "grinded" into mass nouns, as in the following example in (15) (Landman: 2011: 2).

15. a) We'd like three *waters*, please.

b) After the failed repair attempt, there was *watch* all over the table.

Though he does not discuss the possible influence of agreement on these interpretations, as a native English speaker, I was able to see the extension of the "packaging" operation to count nouns. For instance in (16), which is the type of stimulus item used in the survey, it seems

reasonable that one could "package" individual birds into a group on one interpretation. The agreement pattern this interpretation corresponds to is investigated in the survey.

16. a) There are birds on the windowsill.

b) There is birds on the windowsill.

An author that does illustrate the difference in interpretation of DPs based on agreement is Rett (2014). Her interest is in the polysemy of individual/degree interpretations of DPs, as illustrated in (17), (Rett 2014: 246). In her analysis, she takes the selectional requirements of predicates as well as number agreement to provide evidence for the distinct interpretation of the DPs.

17. a) Many guests are drunk/were arrested after the party. Individual

b) Many guests is more than Bill had anticipated. Degree

She argues that the interpretation is constrained by several factors, for instance plural determiners like *these*, cannot trigger a degree interpretation (Rett 2014: 248), and as can be seen in (18) cannot occur with singular agreement (18b).

18. a) These many children were advanced a grade. Individual

b)*These many children was more than expected. #Degree

Rett argues that the degree interpretation is derived from a semantic process of measurement, and that the measurement operation can be lexicalized, or manifest as a null semantic operator which causes the difference in interpretation of the reference, thus influencing number agreement.[10] I turn now to discuss the data presented by authors who illustrate the distinction between individual and group interpretation of NPs.

Wechsler & Zlatić (2000) observe a distinction of NP interpretation in copular sentences involving definite NP subjects. This distinction is illustrated in example (19). Here, the interpretation of the NP (*The faculty*) is influenced by the agreement. When the copula is singular, the NP is understood as referring to the faculty as a singular entity. When the copula is plural, the NP refers to the individual members of the faculty.

19. a) The faculty is voting itself a raise.

b) The faculty are voting themselves a raise.

According to the authors, these different agreement patterns are the result of a mismatch between index and concord features. Index features provide structural singular agreement which reflects

[10] I did not include a full account of Rett's proposal here. What is relevant is that her data shows an influence of agreement on DP interpretation.

the singularity of the NP, and plural agreement is pragmatic agreement, reflecting the real world context and intention of the speaker to denote a plurality of individuals.

The type of data discussed in Sauerland and Elbourne (2002) are those sentences in some British dialects which allow group nouns to trigger both plural and singular agreement, as seen in (20), (from Kučerová 2017: 43). In order to use plural agreement in these contexts, there must be a particular team that the speaker has in mind which is going to the final. When singular agreement is used, either the speaker means that there is a particular northern team or only northern teams going to the final. Thus depending on the agreement type, the speaker is conveying either an individual or group interpretation, with one option carrying both interpretations.

20. A northern team is/are certain to be in the final.

a. is: ∃ > certain, certain > ∃

b. are: ∃ > certain,*certain> ∃ (Sauerland and Elbourne 2002: 288)

As mentioned, the interpretation of an NP being influenced by agreement is grounded in the literature. The individual/group interpretation of the associate NP was investigated through a semantic judgment survey with agreement type as an independent variable. I turn now to a discussion of the survey and its results.

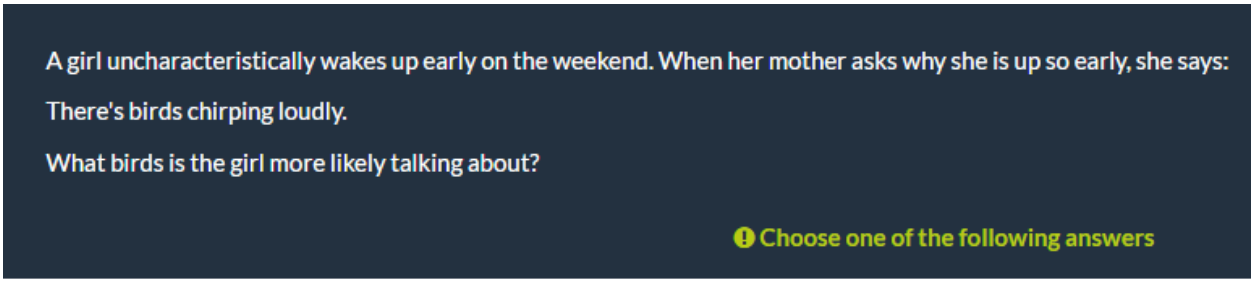
*5.4.2 Judgment Survey*

*Design*. Each survey consisted of 40 items, 20 test items and 20 fillers. The independent variables were the agreement type (i.e. whether the copula appeared in singular or plural) and NP type (i.e. the associate NP was either mass or count). The dependent variable was how the participant interpreted the associate NP, which was either as an individual or a group. Participants were presented with a context sentence in order to set up a situation where an existential sentence could plausibly follow. Then they were asked a comprehension question regarding how they interpreted the existential sentence. Participants could choose either an "individual" interpretation (i.e. where the speaker is distinguishing and emphasizing individuals of a group rather than the group itself) of the post copular NP, or a "group" interpretation.

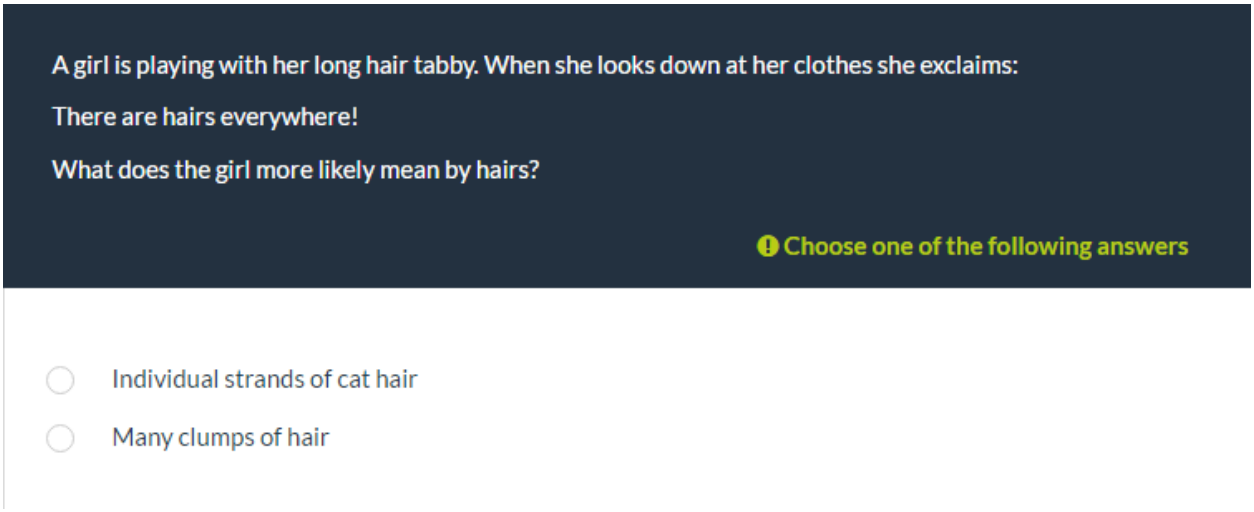
Examples from the surveys are illustrated in (21)-(22).[11] Example (21) demonstrates an EC with singular agreement followed by a count noun, and example (22) demonstrates plural agreement with a mass noun. There were 10 items with a count noun and 10 items with a mass noun.

[11] The full list of stimuli is listed in the Appendix.

21.




22.




The second survey used the exact same scenarios, changing only the agreement type. Any scenario which displayed the response sentence with plural agreement in survey 1 appeared with contracted singular agreement in survey 2 and vice versa.[12] Table 4 lists all the mass and count nouns which appeared in both the surveys. Only the agreement type was manipulated in the surveys.

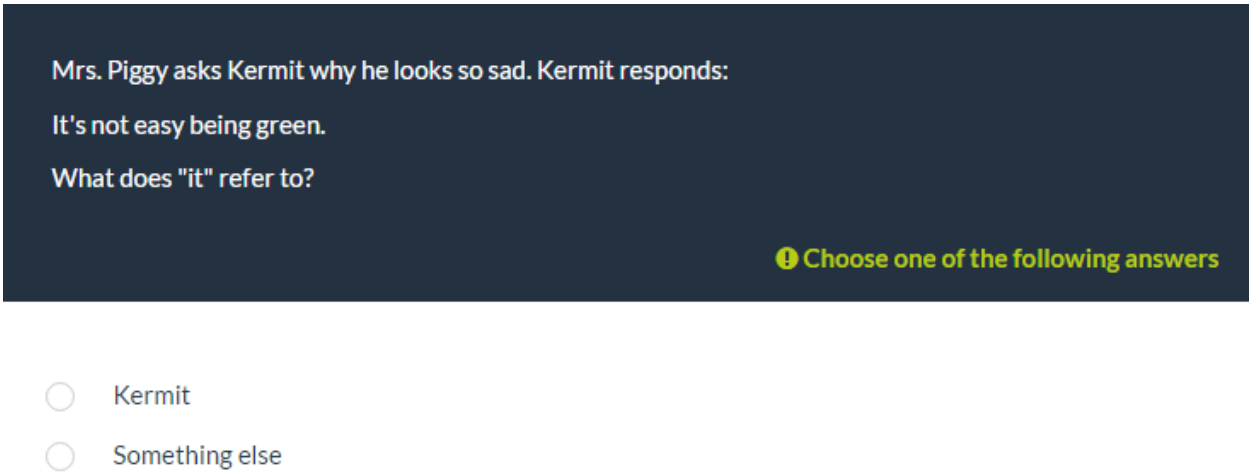
[12] Based on elicitation from English speaking colleagues, it was decided that the contracted singular sounds more acceptable than the full singular form, so the contracted form was tested rather than full singular "is". It may be the case that testing each of the agreement forms could yield more informative results.

Table 4: Count and Mass nouns used in survey

| Count | Mass |
|---|---|
| Presentations | Sugars |
| Chairs | Waters |
| Cats | Hairs |
| Candles | Oils |
| People | Beers |
| Papers | Truths |
| Superheroes | Breads |
| Leafs (Hockey club players) | Times |
| Towers | Coffees |
| Cans | Silences |
| Phones | Kitchenwares |
| Joints (as in places to eat) | Meats |
| Lamps | Soaps |
| Vehicles | Spices |
| Shows | Cereals |
| Chocolate bars | Fruits |
| Shoes | Flours |
| Birds | Juices |
| Emails | Teas |
| Books | Cheeses |

*Fillers*. Filler items were presented in the same way as the test sentences but used the expletive *it* instead of *there*. An example can be seen in (23). There were 20 fillers, 10 beginning with "It's" and 10 beginning with "It is".

23.



*Materials*. There were 40 randomized contexts per survey, with 20 test items and 20 fillers in the same style as the test sentences. After the context sentence, participants were presented with an expletive-BE-NP sentence and then asked a comprehension question as to how they interpreted the expletive.

*Participants*. Participants were recruited mainly through McMaster University's online experiment system. There were 33 participants for Survey 1, all were McMaster students over the age of 18 and native English speakers. Survey 2 had 29 participants: 27 McMaster students plus two outside participants. All were over 18 and were native English speakers.

*Hypotheses*. The intuition about the interpretation of this variation seems to be as follows: if the speaker wants to put emphasis on a group, then they are to use "There is". If emphasis is on the individual members of a group, then they must use "There are" (Ross, 2016). The surveys were designed to test this intuition, thus the hypothesis was that participants would select the group interpretation in singular agreement contexts, and the individual interpretation in plural agreement contexts.

Of the 20 test contexts, 10 had count nouns and 10 had mass nouns. All mass nouns appeared as standard plurals (ex. sugar → sugars). Landman (2011) argues that mass nouns easily undergo a semantic process of "packaging", i.e. they can be packaged into count nouns. It was predicted that given the presentation of mass nouns with a plural marker *–s*, (as seen in Table 4) participants would more easily interpret these nouns as individual entities.

*Results*. The results for both surveys were analyzed using linear mixed effects regression models in the lme4 package in R (Bates et al. 2015). The dependent variable for the surveys was the interpretation. The main question being investigated with these surveys was whether or not there would be a significant difference in interpretation based on the agreement type. As can be seen in Table 5, the group interpretation (coded as 0) was selected by participants much more often than the individual interpretation (coded as 1).

Table 5: Amount of responses by Interpretation

| Individual - 1 | Group - 0 |
|---|---|
| 899 | 1580 |

Table 6 and Table 7 outline the results from both surveys by sentence type and NP type. Overall, as can be seen in Table 6, participants were less likely to pick the group interpretation with singular agreement, but this result was not significant.

Table 6: Combined Survey Results based on Sentence Type

| Variable | Estimate | Std. Error | t-value | p-value |
|---|---|---|---|---|
| Intercept | 3.654 | 3.914 | 9.338 | 5.33 |
| Sentence Type: Singular | -5.796 | 1.621 | -0.358 | 0.721 |

Table 7: Combined Survey Results based on NP Type

| Variable | Estimate | Standard Error | t-value | p-value |
|---|---|---|---|---|
| Intercept | 0.030493 | 0.4631 | 6.584 | 7.56 |
| NP Type: Mass | 0.11524 | 0.05457 | 2.112 | 0.0413* |

Table 7 shows a significant effect of NP type. Regardless of agreement type, participants were more likely to select the individual interpretation when the NP was mass.

*Results By Survey*. Although there is no significant effect of sentence type overall, there was a significant effect seen in Survey 1 that is not seen in Survey 2. This can be seen in Table 8. It seems that participants were less likely to choose the group interpretation with the singular agreement. This significant effect is not observed in Survey 2 (Table 9).

Table 8: Survey 1 Results based on Sentence Type

| Variable | Estimate | Standard Error | t-value | p-value |
|---|---|---|---|---|
| Intercept | 0.38636 | 0.03916 | 9.863 | 3.8 |
| Sentence Type: Singular | -0.05594 | 0.02398 | -2.332 | 0.0198* |

Table 9: Survey 2 Results based on Sentence Type

| Variable | Estimate | Standard Error | t-value | p-value |
|---|---|---|---|---|
| Intercept | 3.448 | 4.114 | 8.321 | 9.54 |
| Sentence Type: Singular | 4.483 | 2.583 | 1.736 | 0.0829 |

*5.4.3 Discussion of results*

Although there was a numerical trend toward significance, the effects of agreement type overall were not significant. They do, however, go in the opposite way predicted as it seems that participants were less likely to choose a group interpretation with singular agreement. This is puzzling given example (19) above, however the syntactic position of the NP may play a role. The NP in (19) appeared before the copula, whereas in ECs they appear after. It is possible that with a larger sample size, both surveys would yield significant results, though it is also possible that the significant results in Survey 1 were pure coincidence. As of now, the effect of agreement type is inconclusive.

The hypotheses regarding the interpretation of mass and count nouns on the other hand, were confirmed. As per Table 7, participants were more likely to select the individual interpretation when the post copular NP was mass. This is evident even when looking at some of the results from certain mass nouns like waters (mean = 71%), hairs (mean = 79%), and silences (mean = 71%). Mass nouns are not usually used with the plural marker, and it is not very often that speakers would say things like *meats* or *flours*. Presenting them this way seems to have forced participants to "package" these nouns and interpret them as individual entities, as per Landman (2011).

According to the results, the effect of agreement type on the interpretation of the associate remains inconclusive. I turn now present my proposal which will account for the two agreement patterns. My account is based on the position of the associate in the structure at the time of Agree. In keeping with Diesing's Mapping Hypothesis, the associate will be in the nuclear scope subject position at LF and would allow both agreement patterns to correspond with both the group and individual interpretation. The following chapter outlines my account of the agreement variation in expletive existential constructions.

Chapter 6

# Toward Understanding Agreement Variation in Existential Constructions

## 6.1 Syntactic assumptions

Before adopting certain assumptions about agreement itself and presenting my own proposal, I will outline certain assumptions about the structure of English existential sentences that will influence agreement. I take the expletive "there" to originate lower in the structure, within the VP. This seems to be a view adopted in several newer works on these constructions, some of which have been discussed in Chapter 2 (Hazout 2004, Felser & Rupp 2001, Bjorkman & Cowper 2015, Kayne 2016, to name a few). Analyses like that in Chomsky (2000) in which the expletive is merged higher, in Spec, TP, will not be able to account for the variation between singular and plural agreement seen in the data presented here. If the expletive were merged higher in the structure, plural agreement should always be established, since nothing would intervene between the probe and the lower goal.

I will also assume that the expletive bears a person feature and thus has a defective ϕ-feature set.[13] It differs from expletive "it" in this regard. Expletive "it" clearly has a full set of ϕ-features, given that it can appear in subject position and verbal agreement is always with this element. For example, non-agreement with "it" in favour of a lower element is illicit, as seen in (1).

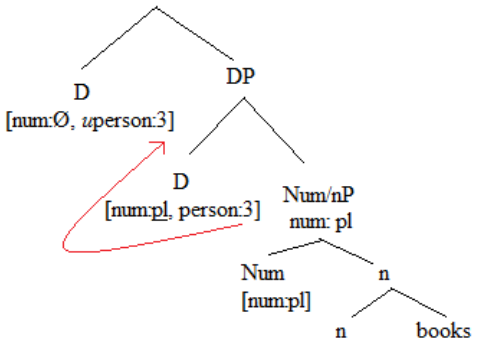
1. a) It is kittens in the photo.

   b) *It are kittens in the photo.

Furthermore I argue that the person feature on the expletive is unvalued and must agree with an element with a valued person feature. It enters the derivation with an unvalued person feature and c-selects for an element with valued person, (2).

[13] This is outlined in the literature presented in Chapter 2, (Felser & Rupp 2001; Bjorkman & Cowper 2015; Kayne 2016).

2.




Recall, the notion that the expletive and NP originate together as a unit was presented in Kayne (2016). This configuration establishes a hierarchical relationship between the expletive and the NP, as well as a dependency relation. This hierarchical relation is necessary in order to explain the intervention facts. As mentioned in Chapter 4, I will adopt Doggett (2004)'s definition of closeness, reproduced here as (3).

3. Closeness: β is closer to τ than α if τ c-commands β and β c-commands α.

I argue that the expletive would not be able to intervene between the ϕ-probe and the lower element if it were not closer to the probe. The expletive is part of a separate DP due to the availability of expletive constructions with certain quantifiers appearing in D, as in (4).

4. There are some books on the table.

Furthermore I assume that the expletive must separate from the indefinite through movement due to the parallel between these constructions and possessives noted by Kayne (2016), which was outlined in Chapter 2.

I will also assume that there is a vP which is a strong phase, and that v probes for ϕ features which must be checked prior to Spell-Out. In Chapter 4 I examined ideas surrounding vP as a non-agreeing head and thus a non-phase. In the current proposal, I will adopt standard minimalist assumptions from Chomsky (2000) which argue that v is a phase head, and the vP is always a strong phase (Alexiadou & Anagnostopoulou 2001). I will argue that the variation observed in the cases presented in this thesis is the result of locality properties and the timing of Agree. Recall, the constructions that allow agreement variation:

5. There's/is/are books on the table.

6. There is not/isn't/are not/aren't many cookies left.

7. Is/are there carrots in the fridge?

8. There's/is/are, I believe, cookies left.

9. There‘s/?is/are some cookies and an apple in the bag.

10. There’s/are several/few/at least 5 butts in the ashtray.

11. There arrive guests.

In Chapter 4 I reduced the “progressive” cases to simple existentials through a secondary predicate analysis. Thus my analysis will aim to account for the above constructions.

**6.2 Semantic assumptions**

In light of the semantic facts surrounding existential constructions, I will adopt Diesing’s Mapping Hypothesis. She argues, as I have outlined in the previous chapter, that bare plural indefinite subjects are ambiguous between a generic and an existential interpretation. In order for a bare plural to be interpreted existentially, it must be mapped onto the nuclear scope of the clause at LF. She takes the nuclear scope subject position to be Spec, VP. She makes no distinction between VP and vP in her own work, thus I will take the lower subject position to be Spec, vP.

Given that *there*-expletive constructions are also referred to as existential constructions, I assume the expletive is an overt element meant to remove the ambiguity of bare plural indefinites and force the existential interpretation by blocking the higher subject position. I also adopt Milsark’s perspective that the expletive is an instance of existential quantification. Although rather than take *There be* as the quantifier, I assume that *there* alone is the quantifier. Like other quantifiers, I assume *there* originates with the associate and quantifies over it, blocking other quantifiers to avoid double quantification. This perspective accounts for the definiteness restriction seen in these constructions. The weak quantifiers allowed in these constructions are merely cardinality words rather than quantifiers. Any instance of another strong quantifier occurring in these constructions is illicit given that the indefinite would already be quantified over.

Recall the table in Chapter 2 which outlined the important questions associated with expletive-associate constructions, repeated here:

1. What is the base generated position of the expletive?
2. What it the semantic status of the expletive?
3. What accounts for the agreement pattern in expletive-associate constructions?
4. What is the Case of the associate?
5. What accounts for the definiteness restriction?
6. What accounts for the stage-level properties of these constructions?

At this point I have answered questions 1, 2, and 5. I have stated that the expletive originates lower in the phrase in a position intervening between T and the associate. I have also stated that it is a special quantifier which bears a person feature and forces existential interpretation of the

associate. The quantifier analysis also accounts for the definiteness restriction. I turn now to the question that is the main focus of this thesis, question 3. The next section will outline my proposal of agreement variation in existential constructions.

## 6.3 Agreement variation – Locality and timing

Inspiration for the current proposal comes from two sources, namely Kayne (2011) and Kučerová (2016). I will discuss each in turn.

### *6.3.1 Suspension of number agreement*

I turn first to Kayne (2011) in which he notes Greenberg's (1966) Universal 33:

> 12. When number agreement between the noun and verb is suspended and the rule is based on order, the case is always one in which the verb precedes and the verb is in the singular.

This generalization asserts that it is more often the case that number agreement is suspended in precisely the cases under consideration here, in V…NP contexts. In expletive associate constructions, the associate always occurs after the copula, so the question is then, why is plural agreement the more common pattern? This notion leads Kayne to propose the following related generalization:

> 13. Verbal number agreement always requires that the NP (or DP) in question precede the verb at some stage of the derivation. (Kayne 2011: 7)

An instance of the initial generalization in Italian is illustrated in (14), in which plural agreement is allowed in (14a), where the object moves to a pre-verbal position. In (14b) though, the verb cannot show plural agreement with *loro*, which appears post-verbally.

> 14. a) Li ho visti. ('them I-have seen(m.pl.)')
>
> b) *Ho visti loro. ('I-have seen(m.pl.) them') (Kayne 2011: 8)

Recall Kayne (2016)'s proposal from Chapter 2. His argument involves movement of the remnant phrase which includes the expletive and a copy of the associate along with its number features, repeated here in (15).

> 15. [there <books>] were books <[there <books>]> on the table.

He gives a comparatively similar example as seen in (16), and offers an alternative analysis, stating that *lo hanno mangiato* must have moved leftward past *i gatti* in the derivation.

> 16. Lo hanno mangiato i gatti. ('it have eaten the cats' = 'the cats have eaten it')

Further evidence comes from English expletive constructions that have verbal variation of intransitive main verbs. Though the standard example of expletive constructions involves the verb *arrive*, for which it is unclear if variation is possible, there appears to be acceptable variation with a verb like *come*, illustrated in (17).

17. There come/comes times to laugh.

Given the evidence here, I will assume that in order to get plural number agreement, the plural element must at some point in the derivation occur before the verb. I turn now to discuss Kucerová (2016)'s account of agreement in Icelandic which is comparable to the current phenomenon.

*6.3.2 Icelandic agreement*

Kučerová (2016) discusses long-distance agreement (LDA) in Icelandic. This appears to be a similar phenomenon to the pattern considered here. The Icelandic verb always agrees with a nominative argument, however, in bi-clausal sentences with a dative argument intervening between the probe and the nominative, LDA can appear to be optional (18) (Holmberg and Hróarsdóttir, 2004: 1000), or it can be blocked entirely (19) (Holmberg and Hróarsdóttir, 2004: 1010-11).

18.

a. Það finnst mörgum stúdentum tölvurnar ljótar.
*EXPL* *finds.SG* ***many*** ***students.DAT*** *computers.DEF.NOM* *ugly.NOM*

b. Það finnast mörgum stúdentum tölvurnar ljótar.
*EXPL* *find.PL* ***many*** ***students.DAT*** *computers.DEF.NOM* *ugly.NOM*

'Many students find the computers ugly.'

19.

a. Það virðist einhverjum manni hestarnir vera seinir.
*EXPL* *seems.SG* ***some*** ***man.DAT*** *horses.DEF.NOM* *be* *slow.NOM*

b. *Það virðast einhverjum manni hestarnir vera seinir.
*EXPL* *seem.PL* ***some*** ***man.DAT*** *horses.DEF.NOM* *be* *slow.NOM*
x

'A man finds the horses slow.'

Like in expletive-associate constructions, an intervener appears to block agreement between the verb and a lower argument, in Icelandic the dative can act as an intervener, in the English cases here, it is the expletive. Kučerová's proposal relies on the timing of movement in relation to Agree. She argues that LDA only arises if there is no intervening dative argument between the probe (v) and the Nominative argument at the time when Agree takes place. The movement under consideration is known as Object Shift (OS). OS is a phenomenon which moves a dative argument to the edge of the vP phase. Crucially, this movement is only possible if the verb also moves to T. The movement also has semantic consequences such that if the argument undergoes OS it must be interpreted as given or specific, and if not, it must be interpreted as new or non-specific.

Kučerová argues for the notion that the possibility of LDA correlates with the ability of a dative intervener to undergo OS. This is illustrated in the chart below:

*Correlation between* LDA *and* OS*:*

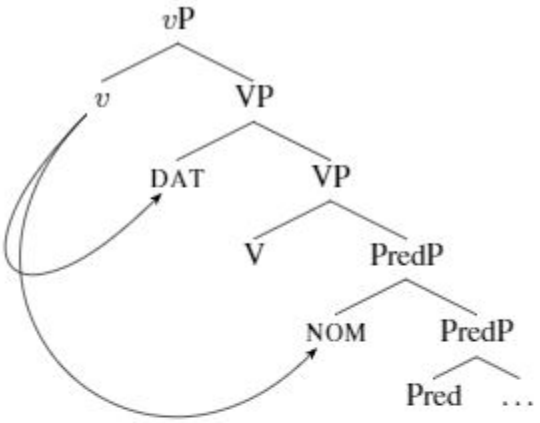
| Quantifier | Is LDA possible? | Is OS possible? |
|---|---|---|
| almost all | no | no |
| few | no | no |
| all | no | no |
| both the | no | no |
| almost all the | no | no |
| each | no | no |
| many | yes | yes |
| three | yes | yes |
| exactly three | yes | yes |
| few of the | yes | yes |
| some pl | yes | yes |

(Kučerová 2016: 10)

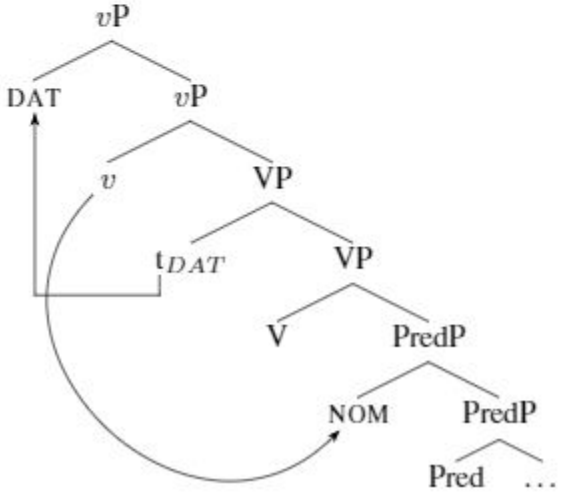
As is shown, if an argument is able to OS, then LDA is also possible. Kučerová groups the datives into two types, Dative A, which is that group of datives that cannot undergo OS and thus block LDA, and Dative B, those datives which can OS and are thus transparent to LDA. The following structures illustrate how each type of derivation should proceed. (20a) shows those derivations involving datives of type A. These arguments cannot undergo OS, thus the dative always intervenes between the v-probe and the nominative argument, and therefore disallowing LDA. (20b) however, shows a dative of type B undergoing OS to the edge of the vP, after which the v-probe searches the domain and finds the nominative to establish LDA. After agreement has been established within the vP, subsequent Agree between v and T occurs, with T being the locus of the morphological realization of Agree.

20.

a. Dative-A ↛ OS: *LDA:




b. Dative-B → OS: ✓LDA:




In short, if at the time v probes for ϕ-features it comes across a dative argument, default agreement occurs because the dative can check but not value the features of the probe. On the other hand, if the dative has undergone OS prior to probing, the probe may agree with the nominative argument, which can check and value the features of the probe, yielding plural agreement.

The ideas presented in the previous two sections may seem contradictory. At no point in the Icelandic derivation does the nominative argument appear before the verb, which should provide evidence against Kayne's generalization. Notice however, that Icelandic differs from English in that its arguments come with inherent case. English does not generally show morphological case, but arguments must move in order to be assigned Case. Thus I suggest that Kayne's generalization holds of arguments that require movement for syntactic Case.

*6.3.3 Current proposal*

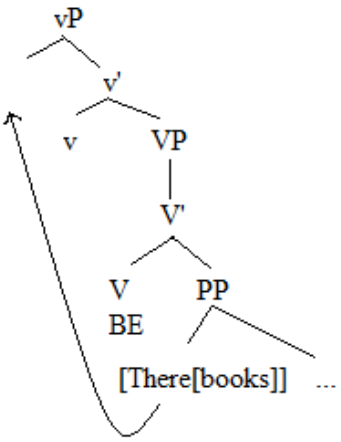
The current proposal relies on the timing of separation between the expletive and the plural indefinite as well as the timing of Agree. Crucially, I depend on the possibility of the mapping of the plural indefinite onto the nuclear scope to occur covertly. The surface word order of the sentences under consideration is always There-BE-pluralNP, thus I propose that the potential difference in interpretation arises due to the position of the plural NP at the time of Agree.

I will now outline my proposal of how each derivation must proceed in order to get the variation under consideration by considering the simple cases of ECs as in (21). I have assumed that the expletive and the plural indefinite originate together and must be separated through movement, and I propose that this movement must occur as soon as possible, thus the expletive moves to Spec, vP, and subsequently moves to Spec, TP for EPP reasons. As Bejar (2003) and Kučerová (2016) discuss, vP is a phase whose heads bear ϕ features which require agreement. The expletive must first stop at the phase boundary, where it can check but not value the features on v, before moving to Spec, TP to satisfy the EPP.

21. There BE books on the desk.

In order to end up with plural agreement the derivation must proceed as follows; first the expletive must separate from the plural NP and move to the phase boundary, Spec, vP, where it checks but does not value the features of the probe on its way to Spec, TP, (22).

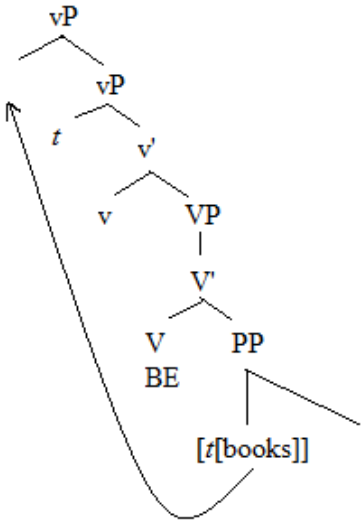
22.




Subsequently, the plural NP moves to another specifier of vP. In terms of double specifiers, Doggett (2004) discusses the hurdling vs. “tucking-in” distinction as it relates to English locative inversion constructions. She argues that locality of movement is derived via Shortest Agree: Agree between probe P and goal α is prohibited if β is a potential goal for P and β is closer to P than α. (Doggett 2004: 7), as well as the requirement that movement must extend

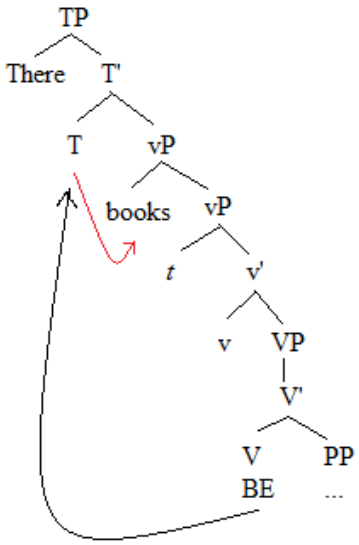
a given tree. Since specifiers do not block agreement between its head and a lower goal, v can Agree with *books*, and hurdle it to a higher specifier, where it can value the number feature on v. In keeping with Bejar (2003), ϕ-features are valued on both v and T, but only morphologically realized through agreement with T.

23.



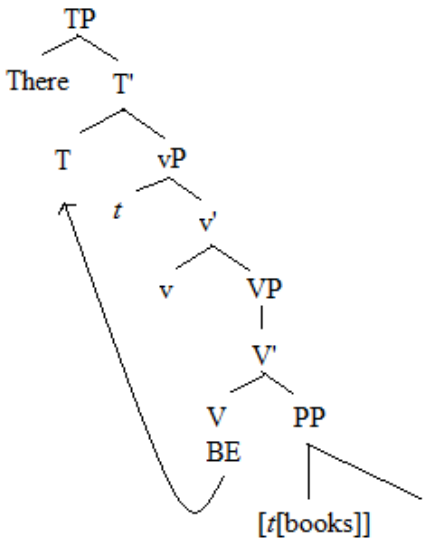

After this movement, seen in (23), V moves to T, which triggers T to probe for ϕ features. A probe only has access to the specifier of the next phase, and since the plural NP is in the highest specifier position of the phase and has a full complement of ϕ features, the probe is able to agree in number, and morphologically realize plural agreement on the copula, (24).

24.



The difference between the derivations which produce plural and singular agreement has to do with the placement of the plural element at the time of Agree. The beginning of the derivation proceeds unchanged, the expletive separates from the plural indefinite and stops in Spec, vP prior to moving to Spec, TP. If at this point, the plural NP does not undergo the semantically motivated movement to Spec, vP in order to overtly place itself in the nuclear scope subject position, then V moves to T triggering the probe. The feature probe on T then can only Agree with v, which only has a checked person feature. At this point, default values are assigned and the morphological realization on the copula is singular, (25).

25.




This analysis relies on the ability of the associate to move either overtly or covertly to the nuclear scope subject position, in order to be interpreted existentially. The different positions of the plural indefinite at the time of Agree thus accounts for the two different agreement patterns. I will now extend the proposal to other cases.

### 6.4 Extension to other cases

I have just outlined my proposal of agreement variation in simple existential constructions. I turn now to extending the analysis to encompass the other types of ECs. These were listed earlier in Section 1, and are repeated here:

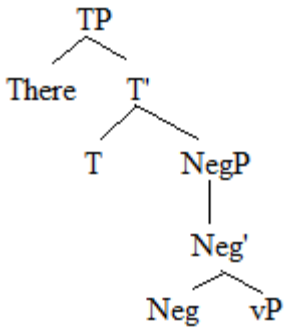
- There is not/isn't/are not/aren't many cookies left.
- There is/are, I believe, cookies left.
- There's/?is/are some cookies and an apple in the bag.
- There's/are several/few/at least 5 butts in the ashtray.
- There arrive guests.

The proposal I have put forth can be applied relatively easily to the first three construction types, with the last three requiring some explanation.

*6.4.1 Negation and adjunction constructions*

As mentioned, extension of the proposal to the first three types of construction is simple. The structure in (26) shows the addition of a negation phrase into the derivation which occurs between T and vP. Since the negation phrase is not a phase, it does not affect locality properties, thus T probes for whatever it encounters in the specifier of vP. As in the simple case, depending on what the probe encounters, singular or plural agreement will result.

26.




Adjunct phrases also do not affect locality or agreement. Adjunct phrases are not arguments and thus adjoin to the bar level of a category (rather than in specifier or complement position). Though in a sentence like in (28), there appears to be an element with ϕ-features, it is not in an argument position and not a target for Agree.

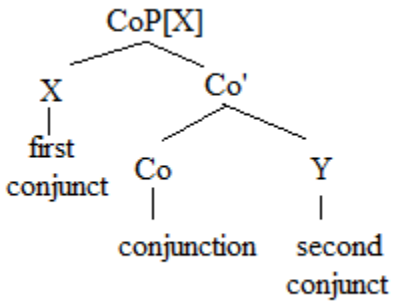
28. There are/is, I believe, some cookies left.

The analysis I have proposed thus can be applied to the aforementioned cases with relative ease. I turn now to the more complex constructions to apply the proposal.

*6.4.2 Conjunctive phrases, numeral words and intransitives*

I begin with conjunction phrases and adopt the structure presented in (29) from Johannessen (1998: 109), which presents coordination structures with a hierarchical structure. He argues that a conjunction head requires two arguments in order to be saturated, one in its specifier and the other in its complement. He also argues that the projection inherits the features of the argument in its specifier through spec-head agreement and thus projects the features of its first conjunct. Unlike other heads, like T, he states that a conjunction head does not project its own categorial features, and thus those features must be filled through spec-head agreement.

29.




This analysis of conjunction phrases accounts for the fact that English exhibits first conjunct agreement which was illustrated in Chapter 1, with another example shown in (30).[14] As can be seen however, there is variation when the first conjunction is plural, with both plural and singular agreement being possible. Johannessen argues that the conjunct in complement position does not play a role in agreement and only the features of the first conjunct are projected to the label.

30. a) There‘s/?is/are some cookies and an apple in the bag.

b) There‘s/is/?are an apple and some cookies in the bag.

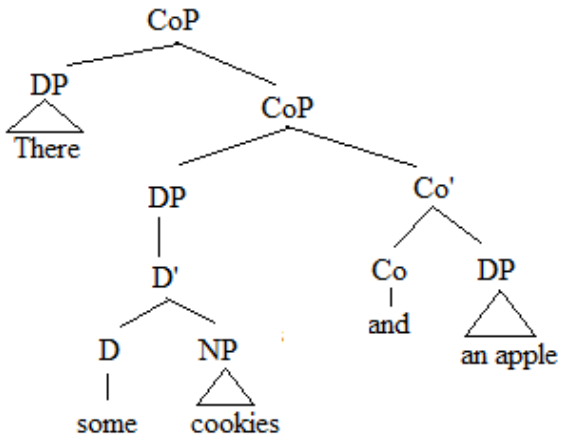
Given the structure of conjunction phrases in (29) and the projection of features, I believe the current proposal can be extended to these cases as well. I therefore propose that the structure of the conjunction phrase of the sentences in (30a) is that in (31), with CoP being able to project another specifier. Since the CoP is labeled with the features of its first conjunct its person feature is able to value the unvalued person feature of the expletive, allowing it to enter the derivation. This configuration also puts the expletive in a c-command relation to the other NPs, thus maintaining it as the closest element to the probe, based on the adopted definition of closeness.

[14] First conjunct agreement only occurs when the conjunct is in a post-verbal position. In pre-verbal position, only plural agreement is allowed:

i. Some cookies and an apple are in the bag.
ii. *Some cookies and an apple is in the bag.

This reflects Kayne’s generalization that number agreement can only occur if an element occurs before the verb at some point in the derivation.

31.




The derivation then proceeds as previously explained. The expletive separates from the plural first conjunct and stops in Spec, vP before moving to Spec, TP. Subsequently the whole CoP (labeled by the features of the fist conjunct) may hurdle to another Spec, vP, checking and valuing its features, after which the copula moves to T which agrees with the valued features of v, yielding plural agreement. If the copula moves to T before CoP moves to Spec, vP, then default singular agreement occurs.

The question of plural agreement with a singular first conjunct remains; seen in (30b). If the highest projection is only labeled with the features of the first conjunct and that conjunct is singular, it should not be possible to have plural agreement in these contexts with a CoP with a singular first conjunct. I assert that this is not a reflection of the syntax, but rather a response to the semantic plurality of items.

I turn now to the constructions involving numeral words like that in (32). Recalling the chart from Kučerová (2016), she details the ability of certain quantifiers to undergo OS. Similar phrases that can undergo OS and thus exhibit LDA in Icelandic include: “exactly three” which resembles *at least 5*, and “few of the”, like *few* in (32).

32. There’s/*is/are several/few/at least 5 butts in the ashtray.

I suggest that there is a semantic restriction on some cardinality words which require them to move to Spec, vP and therefore forces plural agreement. This seems to be the only construction in which the full singular form is judged to be outright unacceptable. It seems then, that if these elements must move to Spec, vP, it should also not be acceptable to have the abbreviated singular form either, yet it is judged as acceptable. I currently have no explanation of this phenomenon, and leave the question as an area of future inquiry.

I will now offer an account of the proposal for the cases of unaccusative verbs like that in (33).

33. There arrive guests.

The previous cases involve the copula verb BE which undergoes V-to-T movement. Main verbs in English however, do not undergo this movement. We know this based on the position of adverbs. Adverbs typically adjoin to the V-bar level, they occur after the copula (34a) and before main verbs (34b). An adverb cannot appear after a verb in its base position (34c), unless the adverb is to the right (34d)

34. a) There are usually many guests at parties.

b) There usually arrive guests at night.

c) *There arrive usually guests at night.

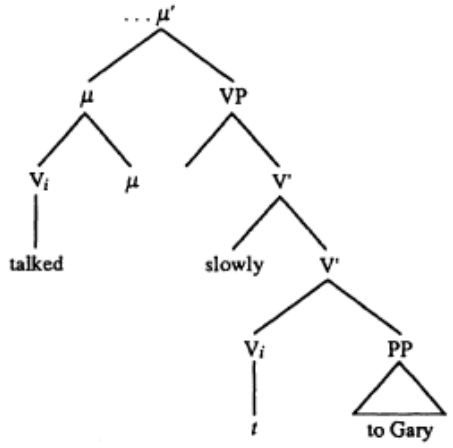
d) There arrive guests at night, usually.

Although main verbs do not move to T in English, there appears to be evidence that they do move to a higher functional projection. In aiming to account for the NP first phenomena of objects, Johnson (1991) proposes that main verbs move out of the VP they head, and NPs move to the specifier of a projection containing VP for Case. Evidence for movement of the verb comes from coordination structures such as those seen in (35).

35. Chris ate [the meat slowly] but [the vegetables quickly]. (Johnson 1991: 584)

Johnson argues that the bracketed sections appear to be like VPs without a verb, and thus analyses these phrases as having undergone "across-the-board Verb Raising".[15] Johnson notes that adverbs may only intervene between a verb and its complement if the complement is not an NP. He thus proposes the following structure, with the main verb moving to a higher functional projection, (36) (Johnson 1991: 585).

36.




[15] Johnson follows the analysis of Larson (1988).

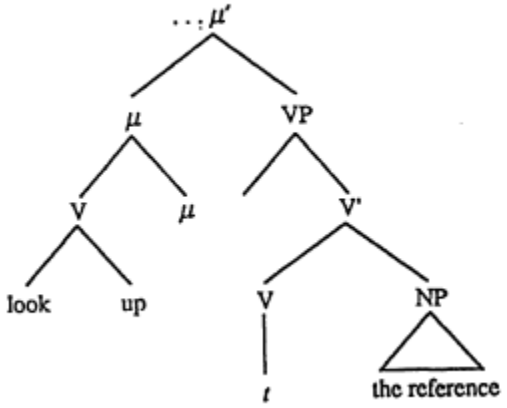
Further evidence of verb movement comes from particle constructions, involving verb + particle pairs such as *look up* and *throw out.*[16] The following examples in (37) illustrate the pattern associated with particle constructions (Johnson 1991: 593), with the particle being able to appear before or after the NP complement. This alternation is only permissible with NP complements, with other types of complements being restricted to appearing after the particle (clausal, prepositional) and pronouns being restricted to appearing before the particle.

37. a) Mikey looked the reference up.

b) Mikey looked up the reference.

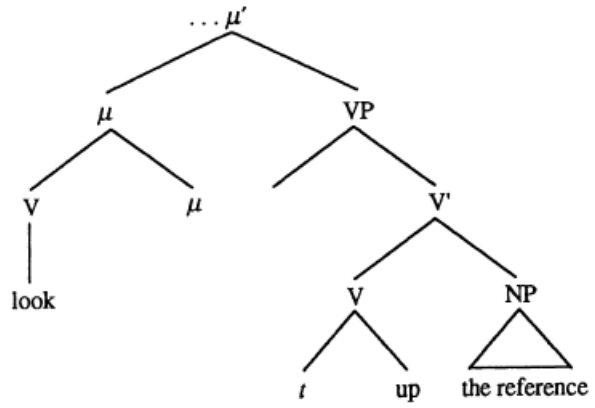
In order to preserve a theory of one-to-one mapping of syntactic items to certain positions, Johnson assumes that the verb + particle are merged to a single syntactic position, the V head, and separated during the syntactic derivation. This bears a similarity to the current constructions, with expletive and the associate originating together and requiring separation. He thus proposes that the V head can move to the higher projection as a whole (38), or head movement can strand the particle in its base position while moving just the verbal element, (39) (Johnson 1991: 600-1). After such movement, the NP can move to Spec, VP.

38.



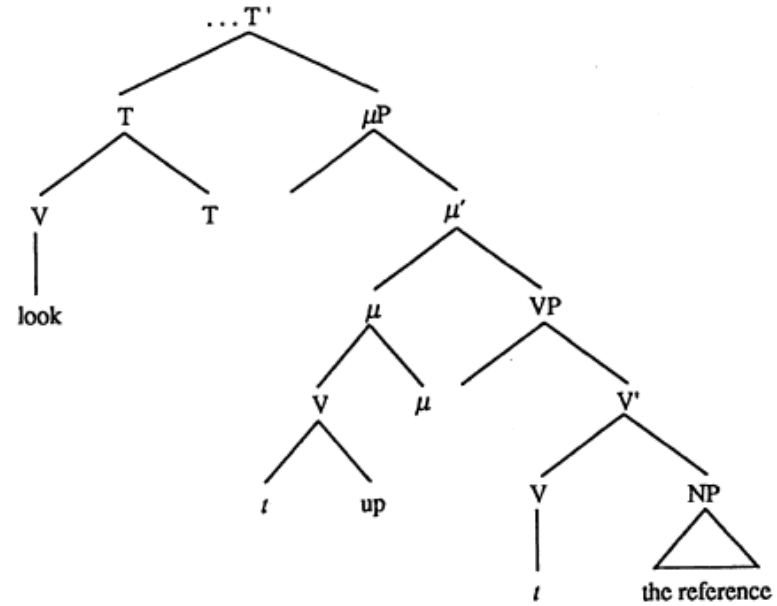

[16] I refer the reader to the original material (Johnson 1991, section 4) for argumentation as to why these are single lexical items.

39.




Johnson proposes that verbs must move to a position which hosts tense morphology. This is the movement which forces the separation, due to the fact that tense can only affect the verbal element (*looked up* vs. **look uped*). He thus argues for the following structure in (40) and the NP may move from complement position to the spec of VP and then optionally to the specifier of the functional projection, with pronouns being forced to do so. He further argues that adverbs cannot adjoin to the functional projection due to the locality properties of adverbs, which require them to be close to the verbs they modify.

40.

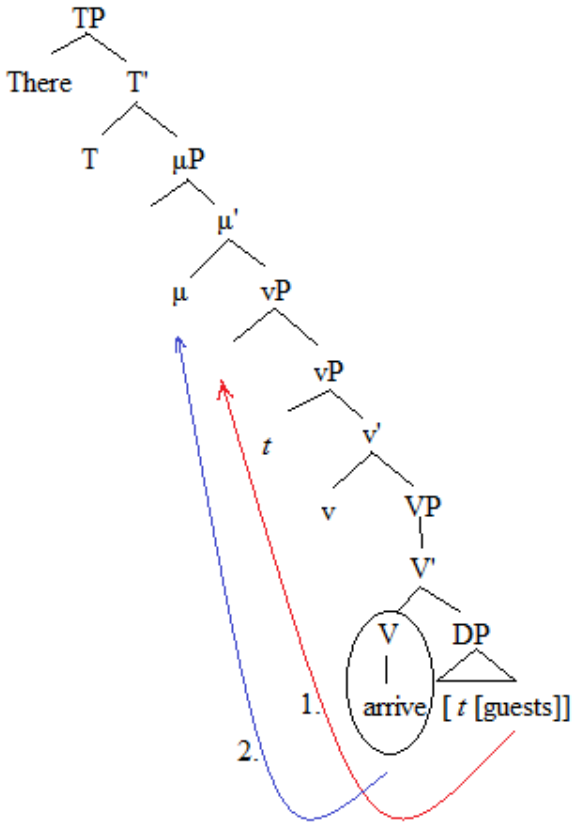



I will extend this analysis of particle constructions to the cases under consideration. As I have discussed in a previous chapter, movement from the complement of V to the specifier of the same projection is a violation of anti-locality constraints. In his work, Johnson does not include

the vP as a phase, though my proposal does and I will assume that the location of this additional functional projection is above the vP layer.[17] Though Johnson argues that the verbal movements take place prior to NP movement in particle constructions, I argue that the complement in existential constructions with unaccusative verbs must move first in order for the verb to show number agreement, as per Kayne's generalization.

Plural agreement in existential sentences with unaccusative verbs thus proceeds as follows: separation of expletive and associate occurs, with expletive stopping in Spec, vP on the way to Spec, TP for EPP. Then, the associate hurdles to another specifier of vP in a position above the verb. Unlike the copula, which is able to move directly to T, the unaccusative verb must move to the functional projection and join with μ. The requirement of verbal morphology on the verb triggers T to probe where it encounters the features of the plural associate and thus shows plural agreement.[18] This is illustrated by the derivation in (41), for the simple unaccusative existential construction.

41. There arrive guests.




[17] Evidence for positions between T and v have been argued for by Bjorkman (2011). I maintain that the verb does not move to v, as that would alter the word order of English when the associate moves overtly yielding the following:

i. *There guests arrive.

[18] Argumentation for the downward transmission of feature values is also given in Bjorkman (2011).

As I have previously mentioned, variation also seems possible in these cases, with the unaccusative verb showing 3rd singular agreement. Compare the following sentences which show a difference in number agreement, with (42a) showing 3rd plural agreement, and (42b) showing 3rd singular. In existential constructions, it seems possible that some unaccusative verbs display this agreement variation (43). I believe the account presented here allows for this variation. The variation arises in the same way it does in the copular cases, depending on when the associate moves to the existential subject position. If the associate moves to Spec, vP prior to verb movement, then there is the standard plural agreement. If it moves covertly, after verb movement, then the singular is permitted.

42. a) They depart for war.

b) He departs for war.

43. a) There depart soldiers daily.

b) There departs soldiers daily.

**6.5 Remaining Questions**

At this point, only two questions pertaining to existential constructions remain: *What is the Case of the associate?* And *What accounts for the stage-level properties of these constructions?*

Since unaccusative verbs do not assign case, nor does the copula, there is no way for the associate to be assigned accusative case. It is also not ever in a position to receive nominative case from T (Spec, TP). In light of these facts and my analysis of the expletive as a quantifier, I adopt Belletti (1988)'s proposal that the associate is assigned partitive Case by V. The function of the partitive is to denote partialness or to pick out subgroups. Given that I have argued for an analysis of the expletive as a quantifier (which indicates quantities), the partitive Case indicates that the NP is a subgroup of entities. Partitive case in Finnish is used to denote partialness or unspecified identities. A parallel Finnish existential construction is illustrated in (44), (Felser & Rupp 2001: 12).

44. Pöydällä on kirjoja.

On the table is books$_{PART}$

'There are some books on the table.'

The partitive Case on the NP in (44) denotes that the NP is unspecified. As displayed in the previous chapter, there seems to be some evidence that the agreement type influences the interpretation of the associate NP, thus the NP itself must be unspecified and therefore be

assigned partitive.[19] Further arguments in favour of this view go beyond the scope of this thesis and I therefore leave it for further investigation.

In terms of the stage-level properties of existential constructions, I have no strong preference between the syntactic analysis offered by Diesing or the semantic one offered by Milsark, both outlined in the previous chapter. Adopting either analysis will have no effect on the current proposal and thus I leave it as a domain of further research.

### 6.6 Summary

This chapter has focused on providing an analysis of how agreement proceeds in English existential sentences given the two patterns of agreement; plural and singular. In outlining a proposal I have also addressed several other questions concerning these constructions. I have argued that the expletive originates with the associate low in the structure, and that the two must be separated through movement. Furthermore I have adopted Milsark's notion that the semantic status of the expletive is a quantifier, thus reducing the definite restriction to a restriction on double quantification. My proposal for how agreement proceeds relies on the timing of certain movements in relation to Agree. I have argued in favor of Kayne's generalization that the associate must precede the verb at some point in the derivation, in order for the verb to show plural agreement, and that if singular agreement is realized, the associate remains in its base position until LF. The following chapter summarizes this thesis and outlines remaining questions for further avenues of research.

[19] See Felser & Rupp (2001) for arguments against this analysis. I did not find them satisfactory in light of the semantic facts found from the survey.

Chapter 7

# Concluding Remarks

## 7.1 Data review

This thesis has been concerned with offering an explanation of agreement variation observed in English existential constructions. The various types of existential constructions that allow variation in plural and singular agreement are as follows: ECs with structural interveners, including negation (1), and adjuncts (2). I have argued that these constructions provide insight into the structure of existential constructions.

1. There's/is/are no cookies left.

2. There is/are, I believe, some cookies left.

Additionally, I have analyzed ECs with different types of associate NPs, namely those appearing with number/numeral words with the associate (3), as well as conjoined NP associates (4)

3. There's/*is/are few/several/at least 5/5 butts in the ashtray.

4. There's/is/are some cookies and an apple in the bag.

These constructions have been addressed in this thesis as they relate to and provide insight into the structural properties of ECs, the process of agreement, and the semantic nature of these constructions. In this thesis I have reviewed the literature on agreement in existential constructions (Chapter 2) as well as the different proposals of how the operation Agree works (Chapter 3).

## 7.2 Semantic facts

Throughout this thesis I have referred to the constructions under consideration as expletive-(associate) constructions, and existential constructions. The term existential construction reflects the fact that these sentences are interpreted existentially. This refers to the interpretation of the bare plural as existential rather than generic. Generic bare plurals are interpreted in the restrictive clause of a sentence. Recall the difference in the existential and generic interpretation of bare plurals from Chapter 5. In (6), it is asserted that there exists some relevant kittens and that they are currently fighting. This differs in (7), where the property of "being cute" applies as a general property to all kittens.

6. Kittens are fighting.

7. Kittens are cute

Bare plural associates of existential constructions are always interpreted existentially, due to the fact that the overt expletive blocks its ability to move to the restrictive clause subject position, thus it is always mapped onto the nuclear scope and bound by existential closure.

It is also the case that existential constructions are subject to the definiteness restriction and may only take stage-level predicates rather than individual level predicates. In Chapter 6 I adopted the notion that the expletive is a quantifier and thus the definiteness restriction reduces to a restriction on double quantification. I presented proposals that attempt to account for the stage-level properties for these constructions, but did not commit to adopting any.

### 7.3 The proposal

In Chapter 6 I offered my proposal of how agreement proceeds in English existential constructions. I suggested that the singular and plural agreement patterns rely on the timing of the associate's semantically motivated movement to the specifier of the vP. I adopted Kayne's generalization, which proposes that plural agreement is only possible if the plural NP occurs before the verb at some point during the derivation. I proposed that if the movement of the associate occurs overtly, prior to V-to-T movement of the copula verb, then the probe is able to agree in number with the plural associate. If movement of the associate occurs at LF, then singular agreement is realized.

Though main verbs in English do not undergo V-to-T movement, I provided evidence that unaccusative verbs also undergo movement to a higher functional projection after the associate has moved to Spec, vP, thus preserving English word order.

### 7.4 Further questions

In this thesis I have addressed the problem of how agreement proceeds in English existential constructions in order to allow for variation. As I have mentioned throughout this thesis, there are several relevant questions related to these constructions, repeated below:

7. What is the base generated position of the expletive?
8. What it the semantic status of the expletive?
9. What accounts for the agreement pattern in expletive-associate constructions?
10. What is the Case of the associate?
11. What accounts for the definiteness restriction?
12. What accounts for the stage-level properties of these constructions?

Though I have attempted to provide answers to each question, I did not provide extensive argumentation for how the associate receives Case or why these constructions only permit stage-level predicates. I leave these questions for future research.

Additionally, this analysis focuses exclusively on English existential sentences. Though I am aware of similar variation patterns in existential constructions in other languages, I have focused

my proposal on how agreement proceeds in English. Whether or not this proposal can be applied to existential constructions in other languages is also a question I leave for future research.

# References:

Abels, K. (2003). *Successive cyclicity, anti-locality, and adposition stranding* (Doctoral dissertation, University of Connecticut).

Alexiadou, A., & Anagnostopoulou, E. (2001). The subject-in-situ generalization and the role of case in driving computations. *Linguistic inquiry*, *32*(2), 193-231.

Arregi, K., & Nevins, A. (2011). *Morphotactics. Studies in Natural Language and Linguistic Theory*, 86.

Bates, D., Maechler, M., Bolker, B., Walker, S., (2015). Fitting Linear Mixed-Effects Models Using lme4. Journal of Statistical Software, 67(1), 1-48.

Béjar, S. (2003). *Phi-syntax: A theory of agreement* (Doctoral dissertation, University of Toronto).

Béjar, S., Kahnemuyipour, A. (2014). Non-canonical agreement in copular clauses.

Belletti, A. (1988). The case of unaccusatives. *Linguistic inquiry*, *19*(1), 1-34.

Bjorkman, B. A. M. (2011). *BE-ing default: The morphosyntax of auxiliaries* (Doctoral dissertation, Massachusetts Institute of Technology).

Bjorkman, B., & Cowper, E. (2015, May). Where there is, and why. In *Proceedings of the 2015 annual conference of the Canadian Linguistic Association*.

Borschev, V., & Partee, B. (2001). The Russian genitive of negation in existential sentences: The role of the theme-rheme structure reconsidered. Ms., University of Massachusetts, Amherst. *Travaux du Cercle Linguistique de Prague (nouvelle serie), v. 4*.

Chomsky, N. (2000). Minimalist inquiries: The framework. Step by step: Essays on minimalist syntax in honor of Howard Lasnik, ed. by Roger Martin, David Michaels, and Juan Uriagereka, 89–155.

Doggett, T. B. (2004). *All things being unequal: Locality in movement* (Doctoral dissertation, Massachusetts Institute of Technology).

Felser, C., & Rupp, L. (2001). Expletives as arguments: Germanic existential sentences revisited. *Linguistische Berichte*, 289-324.

Greenberg, J.H. (1966) "Some Universals of Grammar with Particular Reference to the Order of Meaningful Elements," in J.H. Greenberg (ed.) Universals of Language, second edition, The MIT Press, Cambridge, Mass., 73-113.

Hazout, I. (2004). The syntax of existential constructions. Linguistic Inquiry, 35(3), 393-430.

Holmberg, A., & Hróarsdóttir, T. (2004). Agreement and movement in Icelandic raising constructions. *Lingua*, *114*(5), 651-673.

Johannessen, J. B. (1998). *Coordination*. Oxford University Press.

Johnson, K. (1991). Object positions. *Natural Language & Linguistic Theory*, *9*(4), 577-636.

Kayne, R. S. (2011). Why are there no directionality parameters. In *Proceedings of WCCFL* (Vol. 28, pp. 1-23).

Kayne, R. (2016). "The Unicity of There and the Definiteness Effect".

Kučerová, I. (2016). Long-distance agreement in Icelandic: locality restored. *The Journal of Comparative Germanic Linguistics*, *19*(1), 49-74.

Kučerová, I. (2017). φ-features at the syntax-semantics interface: Evidence from nominal inflection.

Larson, R. K. (1988). On the double object construction. *Linguistic inquiry*, *19*(3), 335-391.

Landman, F. (2010). Count nouns-mass nouns, neat nouns-mess nouns. *Baltic International Yearbook of Cognition, Logic and Communication*, *6*(1), 12.

Milsark, G. L. (1977). Toward an explanation of certain peculiarities of the existential construction in English. Linguistic Analysis 3: 1-30.

Pylkkänen, L. (2008). *Introducing arguments* (Vol. 49). MIT press.

Rett, J. (2014). The polysemy of measurement. *Lingua*, *143*, 242-266.

Ross, B., (2016, Nov 29). There Is vs. There Are: How to Choose? Retrieved from: https://www.grammarly.com/blog/there-is-there-are/

Sabel, J. (2000). Expletives as features. In *Proceedings of WCCFL* (Vol. 19, pp. 411-424).

Sauerland, U., & Elbourne, P. (2002). Total reconstruction, PF movement, and derivational order. *Linguistic Inquiry*, *33*(2), 283-319.

Schütze, C. T. (1999). English expletive constructions are not infected. Linguistic inquiry, 30(3), 467-484.

Simpson, J. (2005). Depictives in English and Warlpiri. *Secondary Predication and Adverbial Modification; The Typology of Depictives*, 69-106.

Smallwood, C. (1997). Dis-agreement in Canadian English existentials. In Proceedings of the 1997 annual conference of the Canadian Linguistic Association (pp. 227-38).

Wechsler, S., & Zlatić, L. (2000). A theory of agreement and its application to Serbo-Croatian. Language, 799-832.

# Appendix:

The following is a list of stimuli used in the semantics judgment survey. The same scenarios were presented with plural agreement (as presented here) as well as in contracted singular agreement. The same participant did not see the same scenario with both agreement patterns. The lists were randomized such that participants did not see more than three test items in a row and no more than two test items with the same agreement type in a row.

**Count Associate:**

1.A linguistics professor attends a conference and listens to several presentations. Half way through the conference she sends an email to her colleague stating:

There are fascinating presentations here.

CQ: What presentations does the professor most likely have in mind?

1. The presentation on Chinese syntax and the one on German word order
2. A bunch of the presentations

2.A father attends his daughter's first art gallery exhibit, but he is old and needs to sit down. His daughter tells him:

There are chairs by the exit.

CQ: What chairs is the daughter most likely thinking of?

1. The black and red padded chairs by the exit door
2. Some random chairs by the exit

3.A girl goes to the Humane Society to look for a new cat. She explains to the volunteer that she wants a fluffy one. The volunteer tells her:

There are long-haired cats playing in the corner.

CQ: Which cats is the volunteer more likely talking about?

1. The long-haired cats named Dusty, Tiberius, and Lucky
2. A group of long-haired cats

4.When the power goes out in the house during a thunderstorm, a woman tells her boyfriend:

There are candles in the closet.

CQ: which candles is the woman more likely to be talking about?

1. The red one and green one she bought for Christmas last year
2. A bunch of random candles

5.While reporting on the Toronto International Film Festival. A newscaster begins by stating:

There are people here from around the world.

CQ: Which people is the newscaster most likely talking about?

1. Roman from Ukraine, Sandy from Australia, Gong-Yoo from Korea, and Graciella from Mexico
2. A random group of people from wherever

6. A philosophy professor has collected some late assignments from his students. When his TA comes to get them, the professor says:

There are papers to mark on my desk.

CQ: What is the professor more likely to be talking about?

1. Individual assignments from his students Samantha, Jasmine, and Tyler
2. A bunch of papers from whoever

7. After watching Marvel's newest Netflix series, Luke Cage, a girl asks her boyfriend what he thought. He answers:

There are better superheroes.

CQ: Which superheroes is the boyfriend more likely talking about?

1. Daredevil and The Punisher
2. Some random other heroes

8.The Toronto Maple Leafs visit SickKids hospital every year. While discussing the event with reporters, Maple Leafs GM Lou Lamoriello states:

There are Leafs at the Hospital now.

CQ: Who is Lou more likely thinking about?

1. The individual players JVR, Morgan Rielly, and Auston Matthews
2. A random group of Leaf players who are there

9.On a tour of the CN tower, the guide tells his group that it used to be the tallest freestanding structure, but now:

There are towers taller than the CN.

CQ: What towers does the guide more likely have in mind?

1. The towers Burj Khalifa in Dubai and the Canton Tower in China
2. A group of other taller towers

10. A student walks into the department lounge after a guest speaker presentation looking for refreshments. She asks another student if there is anything to drink, and he tells her:

There are cans of pop on the table.

CQ: What cans is the student most likely talking about?

1. Individual cans of Pepsi
2. Multiple cans of different pops

11.A man walks into the Bell store and tells the sales associate that he wants to buy a new phone. The associate says:

There are lots of new phones on this display.

CQ: What does the associate more likely mean?

1. An iPhone, a Samsung and a Nokia are on display
2. A bunch of different phones are on display

12.A man is entertaining his friend from out of town and they are going to get something to eat. He tells his friend:

There are good joints in this area.

CQ: What does the man most likely mean?

1. The restaurants Burger's Priest and Banh Mi Boys
2. A bunch of random joints to eat at

13.A woman goes to the store to pick up a new lamp for her apartment. The sales associate tells her:

There are beautiful lamps over here.

CQ: What does the associate most likely mean?

1. A lamp with a colourful base, and one with a beautiful shade
2. A bunch of lamps the associate thinks are beautiful

14.A man goes to a used car dealership. He tells the owner that he wants a good car family car. The owner says:

There are family vehicles in the lot outside.

CQ: What does the owner most likely mean?

1. A minivan, an SUV, and a large sedan
2. A bunch of family appropriate vehicles

15.A man asks his friend if any of his favourite bands are coming to the city. His friend responds:

There are shows coming up.

CQ: What does the friend most likely mean?

1. A show by Intronaut and one by Meshuggah
2. A bunch of shows the speaker wants to see

16.A girl is talking to her sister excitedly about Halloween coming up. One of the sisters tells the other:

There are chocolate bars hidden upstairs.

CQ: What does the girl most likely mean?

1. A Snickers bar, a Mars bar, and a Twix bar are hidden
2. A bunch of different chocolate bars

17.A skateboarder walks into a shoe store looking for the best brands of skate shoes. The associate tells him:

There are skate shoes on this wall here.

CQ: What the associate most likely mean?

1. A pair of shoes by Circa, a pair by Etnies, and a pair by DC
2. Many different brands of shoes

18.A girl uncharacteristically wakes up early on the weekend. When her mother asks why she is up so early, she says:

There are birds chirping loudly.

CQ: What birds is the girl most likely talking about?

1. The red cardinal and the brown sparrow
2. Several birds outside

19.When asked if she is done working for the day, a TA tells her colleague:

There are emails from students in my inbox.

CQ: Which emails is the TA most likely referring to?

1. Individual emails from her students Brandon, Kedisha, and Semona
2. A bunch of emails from random students

20.In a conversation about Canadian literature, a student asks his professor if he enjoys the work of author Hugh MacLennan. The professor responds:

There are great books by him.

CQ: Which books is the professor most likely talking about?

1. The books called, *The Watch that Ends the Night* and *Barometer Rising*
2. A bunch of books by him are great

**Mass Associate:**

21.A woman orders an iced coffee from the barista. When she takes a sip, she notices it's far too sweet. The barista tells her:

There are sugars in your coffee.

CQ: What does the barista most likely mean by sugars?

1. Individual sugar packets of Redpath
2. A general quantity of sugar

22.A couple of students head to the bar for lunch. When they get to their table, the waiter tells them:

There are waters on the table for you.

CQ: What does the waiter more likely mean by waters?

1. Two individual glasses of water
2. Two glasses with a pitcher of water

23.A girl is playing with her long hair tabby. When she looks down at her clothes she exclaims:

There are hairs everywhere!

CQ: What does the girl most likely mean by hairs?

1. Individual strands of cat hair

2. Many clumps of hair

24.After eating a traditional Italian dish made with anchovies, a girl asks her mom why her hands feel so greasy. Her mother responds:

There are oils in the dish.

CQ: What does the mother most likely mean by oils?

1. omega-3 oil and olive oil
2. A certain amount of oils

25.While at the bar, a girl asks the waitress what kinds of beer are available. The waitress responds:

There are beers from all over Canada.

CQ: What does the waitress most likely mean by beers?

1. Cameron's Cream Ale from Ontario, Picaroon's Blueberry Ale from New Brunswick and Buzzkill Ale from BC
2. A bunch of random different kinds

26. A physics professor is delivering a lecture to his class. He begins by stating:

There are truths still to be discovered

CQ: What does the professor most likely mean?

1. how the implosion of a star becomes an explosion, the origin of elements in the cosmos, and what is on the other side of a black hole
2. Many different truths will be discovered

27.When a woman walks in to a bakery she asks the sales clerk for bread. The clerk tells her:

There are lots of breads to choose from.

CQ: What does the clerk most likely mean?

1. Individual loaves of rye, challah, and whole wheat
2. A bunch of random bread is available

28.When her mother brings out old photo albums, her daughter tells her:

There are good times in there.

CQ: What times do you think the daughter is most likely referring to?

1. Her grade 2 birthday party and her grade 8 trip to Quebec city
2. General times from the past

29.Two bus drivers go out for breakfast at their local diner. When their waitress sees them she says:

There are coffees ready for you.

CQ: What does the waitress most likely mean by coffees?

1. Individual coffee mugs are on the table
2. Tow coffee mugs and a pot of coffee

30. After a student delivers an ill prepared presentation, her professor asks questions she cannot answer which results in a long awkward pause. Another student says to her friend:

There are silences too long to bear.

CQ: What does the student most likely mean by silences?

1. The silence after being called out by your professor and the silence from feeling awkward
2. Most silences are too long

31.While passing by a garage sale, a woman notices some interesting items and stops to look. She turns to her daughter and explains:

There are kitchenwares for sale.

CQ: What does "kitchenwares" most likely refer to?

1. A coffee mug and a large platter
2. Several items that belong in a kitchen

32.A woman walks into a butcher shop looking to buy something to make for dinner. The butcher tells her:

There are lots of meats to choose from.

CQ: What does the butcher most likely mean?

1. A pork roast, veal cutlets and venison chops
2. A bunch of different types of meat

33.A woman walks into a specialty skin care shop looking to buy some soap. The clerk tells her:

There are soaps on the back wall.

CQ: What does the clerk most likely mean?

1. hypoallergenic soap and perfume-free soap
2. A bunch of soaps good for various skin problems

34. A girl wants to make Indian food and looks up a recipe for pork vindaloo. After looking up the ingredients, she exclaims:

There are so many spices in this dish!

CQ: What is the girl most likely referring to?

1. The spices: cardamom, cumin, cinnamon, and cloves
2. A bunch of random spices

35.A boy comes downstairs and is looking for something to eat in the fridge. His mother tells him:

There are cereals in the cupboard.

CQ: What does the mother most likely mean?

1. Rice Krispies and Captain Crunch
2. A bunch of different types of cereal

36.After dinner, a young girl feels like having a snack, but doesn't want anything unhealthy. When she asks her mother what to have, her mother replies:

There are fruits in the fridge.

CQ: What does the mother most likely mean?

1. A red apple, a green apple and a pear
2. Several random different fruits

37.At a bakery, a busy morning requires more product to be made than usual. One baker is looking around for something when her colleague tells her:

There are flours in the back.

CQ: What is the colleague most likely referring to?

1. All-purpose, whole wheat, and gluten free
2. A bunch or random types of flour

38.At a party, a girl asks her friend if there is anything to mix her alcohol with. The friend replies:

There are juices in the fridge.

CQ: What does friend most likely mean?

1. Orange juice and cranberry juice
2. A bunch of different types of juice

39.A woman invites her friends over for an afternoon get-together. When they arrive, she tells them:

There are teas prepared.

CQ: What does the woman most likely mean?

1. Earl Grey, and green tea
2. Several different types of tea

40.A woman goes to the specialty shop and orders a charcuterie board for her party. The associate tells her:

There are many cheeses for the board.

CQ: What does the associate most likely mean by cheeses?

1. Cheddar, gruyere, and brie
2. A bunch of random types of cheese

**Fillers:**

Contracted singular “It’s”:

1. Mrs. Piggy asks Kermit why he looks so sad. Kermit responds:

It's not easy being green

CQ: What does "it" refer to?
1. Kermit
2. Something else

2.When a vessel crash lands in a farmer’s field. Authorities ask where it landed from. The farmer says:

It’s from outer space.

CQ: What does "it" refer to?
1. The ship
2. Something else

3.A girl wants a snack but finds instead that she's eaten a whole bag of Doritos. When asked why, she says:

It's hard to stop eating Doritos.

CQ: What does "it" refer to?
1. Doritos
2. Something else

4.Two old friends reunite after 20 years after bumping into each other at the grocery store. When one sees the other she exclaims:

It's a small world!

CQ: What does "it" refer to?
1. The world
2. Something else

5.At the end of a long week, a man turns to his colleague and says:

It's Friday, thank goodness.

CQ: What does "it" refer to?
1. Friday
2. Something else

6.Things start to settle down after the outbreak of a zombie virus. When someone in a group starts to freak out, his friend says:

It's only the end of the world, relax.

CQ: What does "it" refer to?
1. The world
2. Something else

7.After lunch break, a high-school girl finds a note from her crush in her desk. When her friend asks what it is, she responds:

It's a note from Ash.

CQ: What does "it" refer to?
1. The note
2. Something else

8.A girl comes to Canada and experiences winter for the first time. When it starts snowing, she asks her friend what it is. Her friend responds:

It's snow.

CQ: What does "it" refer to?
1. Snow
2. Something else

9.A girl goes outside on the first day of spring. She asks her friend to go for a walk, saying:

It's a beautiful day!

CQ: What does "it" refer to?
1. The day
2. Something else

10.A guy calls his friend about making plans for the weekend. His friend replies:

It's only Wednesday.

CQ: What does "it" refer to?
1. Wednesday
2. Something else

11.Two people are introduced by a colleague. They shake hands and at the exact same time say:

It's a pleasure to meet you.

CQ: What does "it" refer to?
1. The meeting
2. Something else

12. A boy has had his nose in a book for a while. When his mother asks him what he's reading he says:

It's a mystery.

CQ: What does "it" refer to?
1. The mystery
2. Something else

13.A celebrity goes on a talk show and discusses how he is constantly followed by paparazzi. He says:

It's not easy being famous.

CQ: What does "it" refer to?
1. Being famous
2. Something else

14.While creating stimuli to run an experiment for her thesis, a girl turns to her friend and says:

It's hard being a grad student!

CQ: What does "it" refer to?
1. Grad studies
2. Something else

15.A woman hears rustling in her kitchen during the night. She goes to see what it is carrying a baseball bat, ready to attack. When she gets to the kitchen, her boyfriend turns around and yells:

It's just me!

CQ: What does "it" refer to?
1. The boyfriend
2. Something else

16.A man asks a woman out for lunch. She tells him she's not interested in a date. He replies:

It's only lunch.

CQ: What does "it" refer to?
1. Lunch
2. Something else

17.A mother is lecturing her son after he took her car for a joyride and got a ticket. She tells him if he continues to be a troublemaker, he'll face consequences from the law. She says:

It's just a matter of time, if you don't change.

CQ: What does "it" refer to?
1. Time
2. Something else

18.Two people are looking at the same piece of artwork and have two different interpretations of it. The artist says:

It's all a matter of perspective.

CQ: What does "it" refer to?
1. Perspective

2. Something else

19.A woman goes outside on a sunny day thinking it will be warm so she only wears a light sweater. When she steps out she starts shivering and says:

It's cold out today.

CQ: What does "it" refer to?
1. The cold
2. Something else

20.When Scully sees a bright light overhead and experiences lost time, she exclaims:

It's happening again, Mulder!

CQ: What does "it" refer to?
1. Lost time
2. Something else

Full singular "It is":

1. A woman goes out on a hot summer day and thinks:

It is a good day for a cold Frappuccino.

CQ: What does "it" refer to?
1. The Frappuccino
2. Something else

2.At a bar, a man goes up to a woman and asks what she is drinking. She says:

It is a gin and tonic.

CQ: What does "it" refer to?
1. The gin and tonic
2. Something else

3.A man goes to the doctor and receives a lecture about his smoking habits. He says:

It is not easy to quit.

CQ: What does "it" refer to?
1. Smoking
2. Something else

4. When a mother gets home from work and sees her son has stayed in all day playing video games, she tells him:

It is not good to stay in all day.
CQ: What does "it" refer to?
1. Staying in
2. Something else

5. A guy asks his friend to help him move over the weekend. Afterward, the friend thanks him profusely, and the guy says:

It is no skin off my nose.

CQ: What does "it" refer to?
1. Skin
2. Something else

6. A woman receives a phone call from a friend she hasn't heard from in a while. She tells her friend:

It is nice to hear from you.

CQ: What does "it" refer to?
1. The friend
2. Something else

7. When a girl breaks up with her boyfriend over a fight. Her friend comforts her by saying:

It is not meant to be.

CQ: What does "it" refer to?
1. The relationship
2. Something else

8.When a student begs his professor to hand in a late assignment, the professor tells him:

It is far too late.

CQ: What does "it" refer to?
1. The assignment
2. Something else

9.A guy sees his friend eating an ice cream on a cold winter day and tells him:

It is way too cold for that!

CQ: What does "it" refer to?
1. Ice cream

2. Something else

10.A university graduate is disappointed after not getting a job he really wanted. He doesn't want to appear too down, so he tells his mother:

It is what it is.

CQ: What does "it" refer to?
1. The job
2. Something else

11.On Halloween night, all the neighbours put out spooky decorations and give out the best candy. When the kids get home from trick-or-treating, they say:

It is the best Halloween!

CQ: What does "it" refer to?
1. Halloween
2. Something else

12.When her mother sets down a bowl of mush in from of her, Sally her what it is. Her mother responds:

It is breakfast.

CQ: What does "it" refer to?
1. Breakfast
2. Something else

13.While experimenting with different liquors to make the ultimate cocktail, a guy gets his girlfriend to try his concoction. The girl states:

It is so good!

CQ: What does "it" refer to?
1. The cocktail
2. Something else

14.Luke Cage intervenes in a convenience store robbery. When asked why he keeps fighting crime, he says:

It is the right thing to do.

CQ: What does "it" refer to?
1. Fighting crime
2. Something else

15.A young student of linguistics has the opportunity to meet her idol, Noam Chomsky. When they meet, she tells him:

It is a great honour!

CQ: What does "it" refer to?
1. The meeting
2. Something else

16.During the first intermission of the Leafs vs. Bruins game, a guy is telling his friend on the phone:

It is a great game!

CQ: What does "it" refer to?
1. The game
2. Something else

17.A man invents a new board game and shows one of his friends the prototype to get his opinion. Not wanting to hurt his friend's feelings, the man says:

It is something.

CQ: What does "it" refer to?
1. The game
2. Something else

18.When Brendan Shanahan took over management of the Toronto Maple Leafs, things have been looking up for the organization. Fans declare:

It is a great time for Leafs fans!

CQ: What does "it" refer to?
1. Time
2. Something else

19. The schedule for hockey games is varied. When a girl asks her boyfriend what time the Leafs game starts, he tells her:

It is a quarter after 7.

CQ: What does "it" refer to?
1. The game
2. Something else

20. Scully and Mulder come across a foreign substance that they cannot identify. Mulder immediately proclaims:

It is definitely alien.

CQ: What does "it" refer to?

1. The foreign substance
2. Something else