Agreement in Existential Sentences

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Introduction

The Question:

Existential sentences (ES) are sentences with there in the subject position (e.g. There is a book on the desk). Subject-verb agreement refers to the form that the verb displays, depending on the person and number of the subject (e.g. Mary is at the party; The girls are at the party). The goals of this project are the following: (i) to gather some basic data on the judgments of native English speakers on what is and is not possible subject-verb agreement in ES and corresponding non-ES; (ii) to use these data in assessing general claims made by Chomsky and others that subject-verb agreement in ES is the same phenomenon as subject-verb agreement in non-ES; and (iii) to use these results to further develop the theory of English subject-verb agreement phenomena, and other aspects of the theory of sentence structure that rely on the analysis of subject-verb agreement in ES.

In sum, this project is not about the subjects themselves or their individual behaviors. It is about discovering underlying grammatical principles relevant to agreement in ES.

Chomsky (1995, 2000, 2001, 2008) has claimed, based on the limited data illustrated in (1a-b) below, that subject-verb agreement in ES is the same phenomenon as subject-verb agreement in non-ES. Significant aspects of his recent work in syntactic theory are predicated on this claim. Further, this claim has simply gone unquestioned and is assumed correct in later work by others working in syntactic theory (e.g. Deal 2009; Richards 2012). This has led to analyses which not only fail to account for the actual broader range of agreement facts (e.g. (1c-f) below), but which also mis-analyze other aspects of syntax such as Case-marking and agreement-related movement phenomena which are contingent upon claims about subject-verb agreement.

The following are some of the possible agreement patterns observable in normal spoken English:

1) a. There is a cat in the yard/ A cat is in the yard
b. There are/were cats in the yard/ Cats are/were in the yard
c. There’s cats in the yard/ Cats are in the yard
d. There was cats in the yard/ Cats were/was in the yard
e. There is a cat and a dog in the yard/ A cat and a dog are/is in the yard
f. There is only me in this picture/ Only I am in that picture

What is significant about the patterns (1c-f) is that they show subject-verb agreement in ES deviating from rather than conforming to subject-verb agreement in non-ES. Some earlier work has been done to begin to address this basic problem of inadequate data and its consequences (e.g. Sobin 1994, 1997, forthcoming), but much more conclusive would be an empirical study such as the one proposed here.

There are three subparts to this inquiry into the nature of subject-verb agreement in ES. One subpart is intended to confirm/replicate earlier results (Sobin 1997) for agreement in ES with be, including the possibility of a singular verb form with a plural nominal, as seen in (1c-d) above, and what is termed ‘left conjunct agreement’, as seen in (1e). This subpart also allows us to
investigate whether present vs past tense is a factor in agreement in ES. A second subpart asks whether ES without *be* (e.g. There has/have arrived a bus and a cab) display the same range of agreement possibilities as ES with *be*. The third subpart looks at how agreement works in ES and non-ES involving expressions of quantity (e.g. There was/were a number of questions asked about pollution; A number of questions were/was asked about pollution). Most of these questions have, to my knowledge, never been investigated empirically. All of these questions go toward shedding light on the nature of subject-verb agreement in ES and the question of its comparability to subject-verb agreement in non-ES. These results in turn are critical to determining the relevant underlying grammatical principles, the main objective of this work.

We have gathered data from adult native speakers of English (materials attached) on possible subject-verb agreement patterns in ES and corresponding non-ES in order to determine the extent to which the resulting data ‘fit’ the predictions of the various theories cited above. The fit of the data to the various theories under consideration should go toward resolving a variety of significant theoretical issues involved in the theory of agreement in natural language.

**Subjects:**

The subjects used in this experiment were adult college students enrolled in LING 3357 Language Variation. 86 students participated in the experiment. Based on self-reporting, it was determined that 35 of these subjects were native speakers (NS) of English. All of these subjects indicated that (i) they view themselves as native speakers of English, and (ii) that English is their first/primary language. All of these informants indicated that their exposure to English began in early childhood (no later than age 5; most from birth). The non-native speakers divide roughly into two groups: those who claimed to be native speakers but who also said that English was not their first/primary language (NNS1); and those who said that they were not native speakers of English and that English was not their first/primary language (NNS2). The work being reported here deals with various aspects of agreement among these different groups of speakers.

All of these subjects had no specific training in or knowledge of the specific phenomena being queried in this experiment.

**Materials:**

The main research instrument was a written questionnaire asking for acceptability judgments (0-5, 0 being impossible and 5 being completely natural) of 137 sentences comprising ES and their non-ES counterparts. The sentences in the questionnaire were randomized, and subjects had no specific knowledge or training in regard to the particular phenomena being judged. Refer to Appendix A for the non-randomized set of sentences and acceptability levels.
Procedure:

Subjects were told that the experiment was seeking judgments about natural, casual speech, and not about grammar book ‘correctness’. They were given the following instructions:

You will be given a questionnaire containing a series of sentences. Please read each sentence one at a time and rate the sentence with a number in the range of 0 to 5 as follows:

i Good (5): It sounds quite natural, like something that you might easily say or expect to hear;
ii Impossible (0): Even if it can be understood, there is something about it that just sounds wrong--on one who speaks English natively would say it this way.
iii A rating of less than 5 and more than 0 indicates where the sentence falls between the best and worst ratings.

They were then given a set of warm-up sentences to judge and asked if they had any questions. They then proceeded to complete the main questionnaire.

Results & Discussion:

The results of this experiment and its consequences will be discussed in detail in the following sections. The characterization of the experiment and instructions to subjects are in Appendix A.

The first section (Sobin) deals with the NS agreement data and the claim (Chomsky 2000, 2001, 2008; Richards 2012) that agreement in expletive sentences and in non-expletive sentences is due to a single agreement strategy. The data show that there are distinct patterns of agreement in these two domains (confirming the agreement patterns listed above in (1)), shedding doubt on the claim that there is a single system of agreement for both. They further show that singular verb-plural associate combinations are productive, shedding doubt on the claim that There’s is a ‘frozen form’, as has been claimed.

The second section (Dominguez) investigates left conjunct agreement phenomena in NNS1 and NNS2. This work offers, among other things, insight into how extensive/universal left-conjunct agreement may be as a verb-first agreement strategy.

The third section (Hernandez) deals with agreement involving complex expressions of quantity of the form ‘DP$_{sg}$ of DP$_{pl}$’. Our initial intuitions are that certain of these expressions are singular (e.g. a group of protestors was/*were standing in the street.) and others are plural (e.g. a number of problems were/*was evident). This section investigates how agreement works generally in ES and in non-ES involving these expressions.

The fourth section (Lopez-Cobos) deals with the question of whether agreement patterns for NNS1 are similar to or different from those of NS along the dimension of preferring past singular agreement in ES to present singular agreement. This tests the extent to which the
intuitions of these groups are comparable (possibly extending the NS group), and the extent to which the Contractibility Hypothesis (see below) holds for all of these subjects.

The fifth section (Morales) also deals with agreement involving complex quantified expressions of the form 'DP_{sg} of DP_{pl}' among NS. The focus here is on the degree to which agreement involving such expressions in ES is or is not LCA-like, that is whether the initial singular DP appears to play a role in driving singular agreement.

The sixth section (Rahymov) investigates the extent to which LCA is evident among NNS1 and NNS2, a pattern of verb-first agreement which is pervasive among NS, as Sobin shows.
1 Divergent patterns of agreement: verb-first vs. subject-first in NS

Nicholas Sobin

What follows here is a non-technical discussion of the research question and the results of this research. For full discussions of the technical details and theoretical implications of this work, see Sobin (to appear, 2012, 2013, ms.). The average level of acceptability for each sentence from the NS appear in Appendix B.

1.1 The Traditional MP analysis of agreement and Case

In non-technical terms, the prevailing view in Minimalist syntax is that the subject of a sentence originates in a low position in the sentence structure, immediately preceding the main verb. All auxiliary verb elements are above it (1). The finite verbal element (called ‘T’) probes downward for the potential subject nominal and acquires its agreement features (2). T and the verb immediately below it combine to form the finite verb (3). Finally, T either raises the nominal to subject position (4a) or it places there in subject position (4b).

1) \[ T \text{ be } \text{people singing} \]
   \[
   \begin{array}{c}
   [3/pl] \\
   [3/pl]
   \end{array}
   \]

2) \[ T \text{ be } \text{people singing} \]
   \[
   \begin{array}{c}
   [3/pl] \\
   [3/pl]
   \end{array}
   \]

3) \[ T+be \text{ people singing} \]
   \[
   \begin{array}{c}
   [3/pl] \\
   [3/pl]
   \end{array}
   \]

4) a. \[ \text{people } T+be \text{ singing} \]
   \[
   \begin{array}{c}
   [3/pl] \\
   [3/pl]
   \end{array}
   \]

   ‘People are singing

   OR

   b. \[ \text{there } T+be \text{ people singing} \]
   \[
   \begin{array}{c}
   [3/pl] \\
   [3/pl]
   \end{array}
   \]

   ‘There are people singing

The core claims concerning agreement are that (i) agreement is relatively early, and (ii) there is a single system of agreement in both ‘existential’ sentences (ES) such as (4b) and in ‘non-existential’ sentences (non-ES) such as (4a).
1.2 Problems for the traditional view

However, there are in fact significant disparities in agreement and Case marking possibilities between what we might term ‘verb-first’ agreement (involving T and a c-commanded DP) as sometimes seen in English ES on the one hand, and ‘subject-first’ agreement in involving T and a subject-positioned DP on the other. Some of these disparities, which have been documented before (e.g. Sobin 1997), are seen in (5-8).

5) a. There is/?are a boy and a girl singing.
   b. A boy and a girl are/*is singing.
6) a. There’s books on the desk.
   b. Books are/*is on the desk.
7) a. There has to be hundreds of photos...  
   b. Hundreds of photos have/*has to be...
8) a. There is only me in that picture/*There am only I ...
   b. Only I am in that picture

First, typical of verb-first agreement is ‘left conjunct’ agreement (LCA) as in (5a). In LCA, the verb ignores what would be a plural coordination and agrees instead with the first/nearest member of the coordination, a phenomenon not seen in subject-first agreement in (5b). LCA is typical of verb-first languages such as Arabic and Welsh. The sentences in (6-7) exemplify the commonly-heard singular agreement possibility in ES with a plural associate DP. I suspect that ‘there is’ would be more common if ‘is’ were not contractible, as modal ‘have’ and ‘was’ are not. More will be said about this possibility below. Finally, as in (8), on the occasions when pronouns can appear in ES, they clearly must display ACC rather than NOM. Further, unlike a noun-based associate DP, such pronominal DPs completely disallow agreement, forcing the 3sg form of the verb. Given such disparities, it is problematic to predicate subject-first agreement on verb-first agreement, as Minimalist analyses have generally done. Simply claiming that there’s is a frozen form is insufficient to bridge these differences.

1.3 Empirical support

The evidence gathered in this experiment and analyzed with Wilcoxon statistics points to the conclusion that there is not a single system of agreement shared by ES and non-ES. It appears that agreement does not take place early (stage (2) above), but instead takes place after stage (4), when the surface subject is established, and that subject-first agreement and verb-first agreement are two distinct agreement strategies. The evidence to follow strongly supports this conclusion. When agreement involves the verb preceding the nominal (‘verb-first’ agreement as in (4b)), we see evidence of ‘left conjunct’ agreement (LCA), which we do not see in sentences where the

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1 “There has to be hundreds, if not thousands, of photographs or observations down at the finish line,” said State Police Superintendent Col. Timothy Alben. -Boston Herald 4/16/13
nominal precedes the verb (subject-first agreement as in (4a)). Further, in ES, a singular verb form is consistently available regardless of whether the associate nominal is singular or plural. This is due to the possibility of subject-first agreement in ES involving *there*, as will be spelled out further below. Limitations on the presence of a singular verb form with a plural nominal in ES may be explained by the Contractibility Hypothesis (discussed below).

In sum, there is pervasive evidence against the prevailing view of a single agreement system and for what appears to be a more ‘surfacy’ dual system of agreement. For a more technical and detailed account of the theories involved, see Chomsky (2008), Richards (2012), and Sobin (2012, 2013, forthcoming, & ms.)

As noted above, the subject set included 35 native American-English-speaking college students. Subjects were given a written questionnaire asking for acceptability judgments (0-5, 0 being impossible and 5 being completely natural) of 137 sentences comprising ES and their non-ES counterparts. They were told that the experiment was seeking judgments about natural, casual speech, and not about grammar book ‘correctness’. The sentences in the questionnaire were randomized, and subjects had no specific knowledge or training in regard to the particular phenomena being judged. There is a lot of ‘noise’ in such an experiment due to factors such as sentences being presented in isolation and in written form, and monitoring toward perceived prestige social norms despite the request for judgments as to what seems normal as ‘casual’ speech. Nonetheless, the results offer confirmatory evidence of the ES/non-ES agreement mismatches noted above and of the likely productivity of singular verb-plural associate combinations in ES.

1.3.1 Left-conjunct agreement

Evidence of LCA in ES (only) is abundantly present, as seen in the following data. (Here, the numbering of items consists of ‘S’ (‘sentence’) or ‘WS’ (‘warm-up sentence’) and the original numbering from the paradigm data set found in Appendix B.)

<table>
<thead>
<tr>
<th></th>
<th>avg level of acceptability</th>
<th>level of significance (Wilcoxon Test (one-tailed))</th>
</tr>
</thead>
<tbody>
<tr>
<td>S17) There is a cup and a pencil on the desk.</td>
<td>4.514285714</td>
<td>( \alpha \leq 0.01 ) (N = 33)</td>
</tr>
<tr>
<td>S18) There are a cup and a pencil on the desk.</td>
<td>1.542857143</td>
<td>( \alpha \leq 0.01 ) (N = 33)</td>
</tr>
<tr>
<td>S21) There was a cup and a pencil on the desk.</td>
<td>4.542857143</td>
<td>( \alpha \leq 0.01 ) (N = 34)</td>
</tr>
<tr>
<td>S22) There were a cup and a pencil on the desk.</td>
<td>1.228571429</td>
<td>( \alpha \leq 0.01 ) (N = 34)</td>
</tr>
<tr>
<td>S25) There is a cup and some pencils on the desk.</td>
<td>4.2</td>
<td>( \alpha \leq 0.01 ) (N = 31)</td>
</tr>
<tr>
<td>S26) There are a cup and some pencils on the desk.</td>
<td>1.885714286</td>
<td>( \alpha \leq 0.01 ) (N = 31)</td>
</tr>
<tr>
<td>S29) There was a cup and some pencils on the desk.</td>
<td>4.371428571</td>
<td>( \alpha \leq 0.01 ) (N = 27)</td>
</tr>
<tr>
<td>S30) There were a cup and some pencils on the desk.</td>
<td>2.314285714</td>
<td>( \alpha \leq 0.01 ) (N = 27)</td>
</tr>
<tr>
<td>S33) There is some cups and a pencil on the desk.</td>
<td>1.771428571</td>
<td></td>
</tr>
</tbody>
</table>
S34) There are some cups and a pencil on the desk. 4.314285714 \(\alpha \leq 0.01\) (N = 30)
S37) There was some cups and a pencil on the desk. 2.857142857
S38) There were some cups and a pencil on the desk. 4.6 \(\alpha \leq 0.01\) (N = 27)

S41) There is some cups and 5 pencils on the desk. 2.342857143
S42) There are some cups and 5 pencils on the desk. 4.4 \(\alpha \leq 0.01\) (N = 30)

S45) There was some cups and 5 pencils on the desk. 3.114285714
S46) There were some cups and 5 pencils on the desk. 4.428571429 \(\alpha \leq 0.01\) (N = 23)

WS8) Were there a book and a pen on the table? 1.484848485
WS15) Was there a book and a pen on the table? 4.393939394 \(\alpha \leq 0.01\) (N = 32)

In working with subjects who are not linguistics professionals, it is clear that different people will assess ‘acceptability/naturalness’ differently. What is more consistent is the subject-internal judgments of relative acceptability between test items. This is what we see in the above Wilcoxon test data. There is clear evidence here of subjects strongly favoring LCA in existential sentences. A similar pattern of agreement is not evident in the subject-first agreement data below.

S19) A cup and a pencil is on the desk. 2.485714286
S20) A cup and a pencil are on the desk. 4.742857143 \((\alpha \leq 0.01\) (N = 28))
S23) A cup and a pencil was on the desk. 2.514285714
S24) A cup and a pencil were on the desk. 4.257142857 \((\alpha \leq 0.01\) (N = 28))
S27) A cup and some pencils is on the desk. 1.45714286
S28) A cup and some pencils are on the desk. 4.485714286 \((\alpha \leq 0.01\) (N = 32))
S31) A cup and some pencils was on the desk. 1.685714286
S32) A cup and some pencils were on the desk. 4.542857143 \((\alpha \leq 0.01\) (N = 33))
S35) Some cups and a pencil is on the desk. 1.628571429
S36) Some cups and a pencil are on the desk. 4.314285714 \((\alpha \leq 0.01\) (N = 30))
S39) Some cups and a pencil was on the desk. 1.2
S40) Some cups and a pencil were on the desk. 4.057142857 \((\alpha \leq 0.01\) (N = 29))
S43) Some cups and 5 pencils is on the desk. 0.54857143
S44) Some cups and 5 pencils are on the desk. 4.314285714 \((\alpha \leq 0.01\) (N = 34))
S47) Some cups and 5 pencils was on the desk. 1.2
S48) Some cups and 5 pencils were on the desk. 3.8 \((\alpha \leq 0.01\) (N = 30))
S11) Some cups is on the desk. 0.571428571
S12) Some cups are on the desk. 4.8
S15) Some cups was on the desk. 0.457142857
S16) Some cups were on the desk. 4.685714286

Here, subjects clearly prefer the plural verb form with a plural subject. Interestingly, sentences (S19) and (S23) show somewhat high acceptance of a singular verb form with a conjoined subject consisting of singular DPs. When a plural DP is introduced into either coordinate position, the acceptability of a singular verb form falls.\(^2\) Thus, although agreement with a subject has its own complexities, the patterns of agreement here are clearly distinct from those seen in ES.

### 1.3.2 The general availability of singular verb-plural associate in ES

In these data, a singular verb-plural associate combination in ES is consistently significantly more acceptable than a plural subject-singular verb combination in the corresponding non-ES. This is true even in some cases where the ES is of very low acceptability, as in (S9/S11).

S9) There is some cups on the desk. 1.457142857
S11) Some cups is on the desk. 0.571428571 \(\alpha \leq 0.005 \ (N = 18)\)

S13) There was some cups on the desk. 2.46
S15) Some cups was on the desk. 0.46 \(\alpha \leq 0.005 \ (N = 23)\)

S33) There is some cups and a pencil on the desk. 1.771428571
S35) Some cups and a pencil is on the desk. 1.628571429 NS

S37) There was some cups and a pencil on the desk. 2.857142857
S39) Some cups and a pencil was on the desk. 1.2 \(\alpha \leq 0.01 \ (N = 26)\)

S41) There is some cups and 5 pencils on the desk. 2.342857143
S43) Some cups and 5 pencils is on the desk. 0.542857143 \(\alpha \leq 0.01 \ (N = 27)\)

S45) There was some cups and 5 pencils on the desk. 3.114285714
S47) Some cups and 5 pencils was on the desk. 1.2 \(\alpha \leq 0.01 \ (N = 25)\)

\(^2\) Note that in sentences such as ‘[DP That/*those boy and girl] are at the door again’, the subject DP is internally singular, as the possible determiner indicates, but externally plural, as the plural verb agreement form indicates. Thus, number disparities may exist between the internal contents of a DP and its external character. In this light, (S19) and (S23) suggest that some of the subjects in this experiment are willing to regard the conjoined DP as singular so long as neither conjunct is plural.
But there WAS a lot of books on the floor.  

But a lot of books WAS on the floor.

There is a number of questions coming out of this project.

A number of questions is coming out of this project.

There was a lot of crows flying by.

A lot of crows is flying by.

There was a number of pencils taken from the desk.

A number of pencils was taken from the desk.

There was a lot of questions asked about pollution.

A lot of questions was asked about pollution.

There has been a lot of questions asked about this idea.

A lot of questions has been asked about this idea.

There has been a large number of crows flying by.

A large number of crows has been flying by.

There has been a lot of trains arriving this morning.

A lot of trains has been arriving this morning.

There was a group of protesters standing on the corner.

A group of protestors was standing on the corner.

There is a flock of birds flying by.

A flock of birds is flying by.

There was a few protesters standing on the corner.

A few protesters was standing on the corner.

There was a quantity of grapes thrown at the window.

A quantity of grapes was thrown at the window.

Regarding (S107/S109) and (S119-S122) below, ES with arrive were consistently rated as low in acceptability/naturalness. The intuition of the investigators was that ‘a squad of police’ (below) should be treated as singular; however, these subjects preferred plural, as in (S121/S122).
Nonetheless, in the ES (S119/S120), despite the very low acceptability rating of both items, the singular was rated as significantly more acceptable than the plural.

S119) There has arrived a squad of police. 1.685714286
S120) There have arrived a squad of police. 0.4 \( \alpha \leq 0.005 \) (N = 18)

S121) A squad of police has arrived. 2.628571429
S122) A squad of police have arrived. 3.828571429 \( \alpha \leq 0.01 \) (N = 27)

Even various of the warm-up items reveal the general availability of singular verb-plural associate, as in (WS11/WS12).

WS11) There has to be hundreds if not thousands of pictures of that place. 4.64
WS12) There have to be hundreds if not thousands of pictures of that place. 3.274
\( \alpha \leq 0.005 \) (N = 21)

1.3.3 The Contractibility Hypothesis

As noted at the outset of this section, the traditional MP approach posits a single system of agreement such that ES and non-ES must always have the same agreement result. The only agreement disparity which the traditional view recognizes is the ubiquitous use of there’s, regardless of the number of the associate, as in (S49-S54).

S49) There’s a cup on the desk. 4.857142857
S50) There’s some cups on the desk. 4
S51) There’s a cup and a pencil on the desk. 4.8
S52) There’s a cup and some pencils on the desk. 4.285714286
S53) There’s some cups and a pencil on the desk. 4.257142857
S54) There’s some cups and 5 pencils on the desk. 3.771428571

This possibility is discarded without analysis as a ‘frozen form’. (No characterization is offered of what a ‘frozen form’ is or how such a thing works in derivation involving phases.) However, as we have seen in the preceding data, there are other significant agreement disparities beyond the one with there’s. Verb-first agreement in ES displays LCA, which subject-first agreement does not. Further, the singular uncontracted verb-plural associate combination is consistently available in ES, though with one possible exception, the combination there is DPs. That is what we turn to here.

Notice that in sentences (WS11/WS12), the singular uncontracted verb form has to is highly acceptable, and significantly more acceptable that the plural verb form. Further, is we compare the combination there is DPs to its past tense counterpart there was DPs, we find very
consistently that the past tense form is significantly more acceptable than the present tense form. This is also seen in the following data.

S9) There is some cups on the desk. 1.457142857
S13) There was some cups on the desk. 2.457142857 \( \alpha \leq 0.005 \) (N = 21)

S33) There is some cups and a pencil on the desk. 1.771428571
S37) There was some cups and a pencil on the desk. 2.857142857 \( \alpha \leq 0.005 \) (N = 23)

S41) There is some cups and 5 pencils on the desk. 2.342857143
S45) There was some cups and 5 pencils on the desk. 3.114285714 \( \alpha \leq 0.025 \) (N = 25)

Past be is consistently viewed as more viable than present be in ES with a plural associate. This too is a pattern of agreement not seen in subject-first agreement with a plural subject, as in the following data.

S11) Some cups is on the desk. 0.571428571
S15) Some cups was on the desk. 0.457142857

S27) A cup and some pencils is on the desk. 1.485714286
S31) A cup and some pencils was on the desk. 1.685714286

S35) Some cups and a pencil is on the desk. 1.628571429
S39) Some cups and a pencil was on the desk. 1.2

S43) Some cups and 5 pencils is on the desk. 0.542857143
S47) Some cups and 5 pencils was on the desk. 1.2

What may be at work here is ‘contractibility’. Note that is is contractible but was is not. Further, modal has to, as in (WS11) is not contractible. When we compare the matched is/was ES pairs above, we find that the ES with the uncontractible singular verb is always significantly more acceptable than is the ES with an uncontracted but contractible singular verb.\(^3\) Such data suggest the hypothesis in (9).

9) The Contractibility Hypothesis

In sentences with singular verb-plural associate, contracted singular verb forms (productive, not ‘frozen’) are preferred to uncontracted singular verb forms, if available.

Clearly, if uncontracted singular verb-plural associate combinations are possible (‘productive’, as they appear to be), and if contraction is a productive process (which we believe it to be), then there is no point to ascribing there’s to idiomatic/frozen status. The productive system is already in place and ‘free’, so that an additional derivational route is unnecessary and unmotivated. The preference stated in (9) may well be due to a social perception that the speaker should either do

\(^3\) These pairs represent all of the cases in which verb-first agreement could alternatively result in plural agreement due to the plural associate or plural left-conjunct.
the more prestigious plural agreement or should make a deviation from the available prestige form as obscure as possible. The contracted form is also phonetically more economical.

1.4 General conclusions

These data point toward a significant ‘targeting’ difference between rightward (verb-first) agreement as in ES and leftward (subject-first) agreement. Verb-first agreement and subject-first agreement are distinct agreement strategies. Verb-first agreement seeks the first lexically concrete DP, resulting in left-conjunct agreement when the associate is a coordination similar to what is seen in verb-first languages (Arabic, Welsh). However, subject-first agreement operates primarily with the ‘highest’ DP in subject position. The disparity in agreement targets between subject-first agreement and verb-first agreement casts considerable doubt on the claim of a single agreement process with subsequent raising to surface subject position. It appears instead that there are two distinct and complementary agreement strategies in operation in English.

The traditional single agreement system theory attempts to dispense with counter examples to it involving there’s such as There’s people singing by claiming that there’s is a ‘frozen form’. However, such a claim cannot account for the broad range of counter evidence presented here. Since singular verb-plural associate combinations appear to be productive in ES, and since contraction is also a productive process, the claim of a frozen form there’s seems unnecessary. Instead, there may be a preference for what is a productive contracted form, a claim embodied in the Contractibility Hypothesis.

The dual agreement system proposed here can be very briefly summarized as follows. Sentences begin as in (10) (= (1) above). Subsequently, either the nominal is placed in subject position or there is inserted in subject position. If the nominal is placed in subject position as in (11a), then T agrees with the subject (subject-first agreement) as in (11b). Alternatively, if there is inserted into subject position, it may or may not bear the agreement features 3/sg. If, as in (12a), there bears 3/sg, then subject-first agreement applies, and we get singular agreement whether the nominal is singular or plural, as in (12b). Alternatively, if there lacks agreement features as in (13a), then only verb-first agreement can take place, as in (13b). When the nominal is a coordination, subject-first agreement can only see the coordination, and the agreement will always be plural, as in (14). However, verb-first agreement cannot see the coordination, and instead looks for the first lexical nominal phrase (the left conjunct) for agreement, as in (15).

(Note that (15) could alternatively be due to subject-first agree, but that also can only be singular. There is no source for plural agreement in (15).)

10) T be people singing [3/pl]

11) a. people T be singing [3/pl]
b. people        T  be        singing        (subject-first agreement  
[3/pl]      [3/pl]          with a true subject)
‘People        are        singing’

12)    a. there        T  be        people  singing        (subject-first agreement  
[3/sg]          [3/pl]
‘There        ’s/was/is        people  singing’

b. there        T  be        people  singing        (subject-first agreement  
[3/sg]          [3/sg]          [3/pl]          with EXPL (there))
‘There        are        people  singing’

13)    a. there        T  be        people  singing        (verb-first agreement  
[3/pl]
‘There        are        people  singing’

b. there        T  be        people  singing        (verb-first agreement  
[3/pl]          [3/pl]
‘There        are        people  singing’

14)    [a girl and a boy]        are/*is        singing.

15)    There        is/*are        [a girl and a boy]        singing.        (left-conjunct agreement)

Thus, ES have two options for agreement, subject-first agreement with there bearing [3/sg] (so that a 3/sg verb form is always an available option in ES), or verb-first agreement with a lexically concrete associate DP. Non-ES only undergo subject-first agreement. The low acceptability of there is DPs is a result of the Contractibility Hypothesis. This form is disfavored due to the possibility of a contracted form there’s DPs, a productive form.
2 Dimensions of agreement in ES: Non-native speakers

Yuliana Dominguez

As previously reported, left-conjunct agreement (LCA) and evidence supporting the Contractability Hypothesis (CH) are commonly observed in NS data. A further topic of analysis is NNS1 and NNS2’s behavior in ES agreement.

2.1 Subjects

In this part of the study, the non-native speakers were divided in two groups: those who claimed 1) that they were native speakers of English, 2) that English was not their first/primary language, and 3) that their earliest age of exposure to English (AoE) was (0-5) (NNS1); and those who said 1) that they were non-native speakers of English, 2) that English was not their first/primary language, and 3) whose AoE was above 5 (NNS2). There was a total of 17 subjects in the NNS1 group and a total of 28 subjects in the NNS2 group.

2.2 Verb-first agreement

Left-conjunct agreement in ES (only) is also observed in non-native speaker data (NNS1 and NNS2) regardless of the verb tense.

NNS1

WS 8) Were there a book and a pen on the desk? 2.2
WS 15) Was there a book and a pen on the table? 4.7 \( \alpha \leq 0.01 \) (N=13)

17) There is a cup and a pencil on the desk. 4.1
18) There are a cup and a pencil on the desk. 1.8 \( \alpha \leq 0.01 \) (N=9)

21) There was a cup and a pencil on the desk. 4.1
22) There were a cup and a pencil on the desk. 2.1 \( \alpha \leq 0.01 \) (N=12)

25) There is a cup and some pencils on the desk. 4.3
26) There were a cup and a pencil on the desk. 2.5 \( \alpha \leq 0.01 \) (N=13)
29) There was a cup and some pencils on the desk. 4.1
30) There were a cup and some pencils on the desk. 2.2 \( \alpha \leq 0.01 \) (N=14)

33) There is some cups and a pencil on the desk. 3.72
34) There are some cups and a pencil on the desk. 4.16 \( \alpha \leq 0.05 \) (N=10)

37) There was some cups and a pencil on the desk. 3.6
38) There were some cups and a pencil on the desk. 4.3 \( \alpha \leq 0.05 \) (N=6)

41) There is some cups and 5 pencils on the desk. 3.4
42) There are some cups and 5 pencils on the desk. 4.2 \( \alpha \leq 0.05 \) (N=7)

NNS2

WS 8) Were there a book and a pen on the desk? 2.8
WS 15) Was there a book and a pen on the table? 4.2 \( \alpha \leq 0.05 \) (N=16)

17) There is a cup and a pencil on the desk. 4.6
18) There are a cup and a pencil on the desk. 2.6 \( \alpha \leq 0.01 \) (N=19)

21) There was a cup and a pencil on the desk. 4.6
22) There were a cup and a pencil on the desk. 2.8 \( \alpha \leq 0.01 \) (N=13)

25) There is a cup and some pencils on the desk. 4.6
26) There are a cup and some pencils on the desk. 2.5 \( \alpha \leq 0.01 \) (N=15)

29) There was a cup and some pencils on the desk. 4.6
30) There were a cup and some pencils on the desk. 3.6 \( \alpha \leq 0.01 \) (N=11)

33) There is some cups and a pencil on the desk. 2.57
34) There are some cups and a pencil on the desk. 4.75 \( \alpha \leq 0.01 \) (N=18)

37) There was some cups and a pencil on the desk. 2.25
38) There were some cups and a pencil on the desk. 4.5 \( \alpha \leq 0.01 \) (N=14)
2.3 General availability of singular verb forms in ES

Moreover, as the following data show, for both NNS1 and NNS 2, singular verb-plural associate combinations in ES are consistently of higher acceptability that the same singular verb form in the corresponding non-ES.

**NNS1**

9) There is some cups on the desk. 2.5  
11) Some cups is on the desk. 1.11 \( \alpha \leq 0.01 \) (N=13)

13) There was some cups on the desk. 2.9  
15) Some cups was on the desk. 1.0 \( \alpha \leq 0.01 \) (N=10)

33) There is some cups and a pencil on the desk. 3.7  
35) Some cups and a pencil is on the desk. 1.8 \( \alpha \leq 0.01 \) (N=10)

37) There was some cups and a pencil on the desk. 3.6  
39) Some cups and a pencil was on the desk. 2.0 \( \alpha \leq 0.01 \) (N=11)

45) There was some cups and 5 pencils on the desk. 3.38  
47) Some cups and 5 pencils was on the desk. 1.38 \( \alpha \leq 0.01 \) (N=13)

**NNS2**

9) There is some cups on the desk. 2.6  
11) Some cups is on the desk. 0.5 \( \alpha \leq 0.01 \) (N=11)

13) There was some cups on the desk. 2.1  
15) Some cups was on the desk. 0.7 \( \alpha \leq 0.05 \) (N=12)

33) There is some cups and a pencil on the desk. 2.5  
35) Some cups and a pencil is on the desk. 1.0 \( \alpha \leq 0.05 \) (N=15)

37) There was some cups and a pencil on the desk. 2.2  
39) Some cups and a pencil was on the desk. 1.1 \( \alpha \leq 0.05 \) (N=10)

45) There was some cups and 5 pencils on the desk. 2.53
47) Some cups and 5 pencils was on the desk. $0.89 \quad \alpha \leq 0.01 \ (N=13)$

Results from the two preceding sections provide insight into how universal left-conjunct agreement may be as a verb-first agreement strategy. NNS (1&2) and NS prefer left-conjunct agreement as a verb-first agreement strategy in ES. Also, as shown in the data above, non-ES and ES have different types of agreement systems.

### 2.4 Monitoring

A comparison between NS and NNS (group 1 and 2) shows that both NNS groups accept the combination plural verb-plural coordinate associate with a singular left conjunct more than NS. This might be accounted for as the result of monitoring. NNS1 and NNS2 appear to be influenced by the perception that such coordinated associates in ES should trigger plural-verb forms, as they do when they are in subject position.

**NNS1 vs. NS**

18) There are a cup and a pencil on the desk. 2.3
18) There are a cup and a pencil on the desk. (NS) 1.5

22) There were a cup and a pencil on the desk. 2
22) There were a cup and a pencil on the desk. (NS) 1.2

**NNS2 vs. NS**

18) There are a cup and a pencil on the desk. 2.6
18) There are a cup and a pencil on the desk. (NS) 1.5

22) There were a cup and a pencil on the desk. 2.8
22) There were a cup and a pencil on the desk. (NS) 1.2

Moreover, such possible monitoring is observed more in NNS2 than NNS1, which implies that age of exposure (AoE) might play a role in monitoring behavior where those NNS who were exposed to English after five are more inclined to monitor.

### 2.5 The Contractability Hypothesis

NNS1 and NNS2 data also show that contracting the verb has a significant influence on the acceptability level of singular verb-plural associate combinations in ES, as it does for NS. Contracted singular verb forms with a plural associate are highly acceptable.
Furthermore, as stated earlier, the contractibility of the verb involved in ES has a significant influence on the average NS acceptability of singular-verb plural associates. This was observed in the NS data previously presented, where uncontractible singular verbs are always significantly more acceptable with a plural associate than uncontracted but contractible verbs. However, this contractability effect is not observed in the NNS data, where results are rather inconsistent and not significant.

As evidenced in both the NNS1 and NNS2 data, and in contrast to the NS data, there is no apparent inclination toward either form of the verb. The averages of the sentence pairs (9/13), (33/37), and (41/45) are quite similar and not significantly different, suggesting that for both groups of NNS, the singular verb-plural associate combination does not appear to be ‘filtered’ or ‘restricted’ by contractibility.
3 Complex Expressions of Quantity in ES vs. Non-ES

Armida Hernandez

The following is a discussion of the data illustrating agreement involving complex expressions of quantity with the structure:

\[ [\text{DP} \, \text{DP}_{\text{sg}} \, [\text{PP} \, \text{of} \, \text{DP}_{\text{pl}}]] \quad \text{(e.g. a number of sentences)} \]

Our analysis of these data focused on determining, with respect to native-speakers, how agreement works with plural quantifier DP’s vs. singular quantifier DP’s in ES vs. non-ES. Our initial intuition was that certain of these expressions in subject-first position are inherently plural (e.g. a number of problems were/*was evident), i.e., they trigger plural agreement, while others (e.g. a group of protestors was/*were standing in the street) are inherently singular, i.e., they trigger singular agreement. Further, unlike the inherent plurals, these expressions admit the insertion of a number following the quantifier (e.g. a group of 30 dancers). In addition, we examined what happens when these expressions are in post-verbal position in an ES and whether the same holds true.

3.1 Inherently Plural Quantifier Expressions

The following sample data provide evidence of those quantifier expressions which appear to be inherently plural, triggering plural agreement. The data for each quantifier expression are shown first in pairs in non-ES form, followed by the same pair in its corresponding ES form. The data as shown provide evidence that these expressions are inherently plural in both non-ES and ES, though there is some tolerance for singular, more so in ES.

<table>
<thead>
<tr>
<th>avg level of acceptability</th>
<th>level of significance (Wilcoxon Test - one-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>81) A number of questions is coming out of this project.</td>
<td>2</td>
</tr>
<tr>
<td>82) A number of questions are coming out of this project.</td>
<td>4.65</td>
</tr>
<tr>
<td>79) There is a number of questions coming out of this project.</td>
<td>3.6</td>
</tr>
<tr>
<td>80) There are a number of questions coming out of this project.</td>
<td>4.48</td>
</tr>
<tr>
<td>89) A number of pencils was taken from the desk.</td>
<td>2.31</td>
</tr>
<tr>
<td>90) A number of pencils were taken from the desk.</td>
<td>4.8</td>
</tr>
<tr>
<td>87) There was a number of pencils taken from the desk.</td>
<td>3.94</td>
</tr>
<tr>
<td>88) There were a number of pencils taken from the desk.</td>
<td>4.65</td>
</tr>
<tr>
<td>97) A lot of questions has been asked about this idea.</td>
<td>1.74</td>
</tr>
<tr>
<td>98) A lot of questions have been asked about this idea.</td>
<td>4.88</td>
</tr>
<tr>
<td>95) There has been a lot of questions asked about this idea.</td>
<td>3.57</td>
</tr>
</tbody>
</table>
96) There have been a lot of questions asked about this idea. 4.82  \( \alpha \leq 0.01 \) (N=18)  

105) A lot of trains has been arriving this morning. 1.14  
106) A lot of trains have been arriving this morning. 4.97  \( \alpha \leq 0.01 \) (N=33)  
103) There has been a lot of trains arriving this morning. 3.8  
104) There have been a lot of trains arriving this morning. 4.65  \( \alpha \leq 0.01 \) (N=21)  

Following the patterns displayed above, the intuition of the investigators was that ‘a large number’ should also be treated as plural in both non-ES and ES. However, this was not the case in other sentences, as seen in (S101/S102) and (S99/S100). Interestingly, the subjects did favor plural agreement when the expression was in subject-first position. But when the same expression was in post-verbal position in an ES, the subjects were evenly divided, favoring both plural and singular agreement nearly equally.

99) There has been a large number of crows flying by. 4.08  
100) There have been a large number of crows flying by. 4.17  NS

### 3.2 Inherently Singular Quantifier Expressions

Our initial intuition regarding the existence of inherently singular quantifier expressions was only partially supported by the results of our experiment. The data below provide evidence that certain expressions are inherently treated by these subjects as singular in ES, but with some tolerance for plural. But when these same expressions appeared in non-ES, the results were mixed.

<table>
<thead>
<tr>
<th>Expression</th>
<th>Acceptability Level</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>115) There is a flock of birds flying by.</td>
<td>4.62</td>
<td>( \alpha \leq 0.01 ) (N=23)</td>
</tr>
<tr>
<td>116) There are a flock of birds flying by.</td>
<td>3.22</td>
<td>( \alpha \leq 0.01 ) (N=28)</td>
</tr>
<tr>
<td>111) There was a group of protestors standing on the corner.</td>
<td>4.45</td>
<td>( \alpha \leq 0.01 ) (N=19)</td>
</tr>
<tr>
<td>112) There were a group of protestors standing on the corner.</td>
<td>3.37</td>
<td>( \alpha \leq 0.01 ) (N=19)</td>
</tr>
<tr>
<td>131) There was a bushel of apples put on the truck.</td>
<td>4.11</td>
<td>( \alpha \leq 0.01 ) (N=27)</td>
</tr>
<tr>
<td>132) There were a bushel of apples put on the truck.</td>
<td>2.48</td>
<td>( \alpha \leq 0.01 ) (N=27)</td>
</tr>
</tbody>
</table>

As seen below, in a present tense non-ES, the subjects accepted both singular and plural agreement, even favoring plural agreement slightly more. However, the Wilcoxon test showed that this difference was not significant at either \( \alpha \leq 0.01 \) nor at \( \alpha \leq 0.05 \).
In the past tense, the results were actually the opposite of the investigators’ initial intuitions. Instead of favoring singular agreement, the subjects favored plural agreement.

113) A group of protestors was standing on the corner. 2.31
114) A group of protestors were standing on the corner. 4.65 $\alpha \leq 0.01$ (N=25)

In a passive construction, the subjects did favor singular agreement, but a large number of them also accepted plural agreement. The difference was calculated by the Wilcoxon test to be not significant at $\alpha \leq 0.01$, but significant at $\alpha \leq 0.05$.

133) A bushel of apples was put on the truck. 4.45
134) A bushel of apples were put on the truck. 3.45 $\alpha \leq 0.05$ (N=21)

Finally, a high rate of acceptance of contracted ES (there’s) was shown for both types of complex quantifier expressions (eg. There’s a number of questions coming out of this project/There’s a flock of birds flying by).

### 3.3 General Conclusions

Our analysis of the preceding data provide strong evidence supporting the conclusion that contrary to Chomsky’s (2000, 2001, 2008) assertion that subject-verb agreement in ES is the same phenomenon as subject-verb agreement in non-ES, in fact, there exists not one but two different systems of agreement with respect to ES and non-ES. In addition, returning to our examination of inherently plural quantifier expressions, Wilcoxon tests results confirmed that the acceptance of plural agreement was indeed higher than singular agreement in both ES and non-ES. However, as seen below, Wilcoxon test results comparing S81 and S79 revealed that the acceptance of singular agreement was higher in ES than in non-ES.

<table>
<thead>
<tr>
<th>Sentence</th>
<th>Avg Level of Acceptability</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>81) A number of questions is coming out of this project.</td>
<td>2</td>
<td>$\alpha \leq 0.01$ (N=24)</td>
</tr>
<tr>
<td>79) There is a number of questions coming out of this project.</td>
<td>3.6</td>
<td></td>
</tr>
</tbody>
</table>

The above results indicate that agreement in ES facilitates or allows uncontracted singular agreement significantly more than agreement in non-ES.

Finally, all of the above test results raise questions that merit further study. For example, it would be interesting to test in a future experiment whether the Contractability Hypothesis would apply to complex quantifier expressions which include a modifier (e.g. S100) There have been a large number of crows flying by). The question for such a study could be whether subjects would give a different average level of acceptability to “There’s been a large number of crows flying by,” vs. “There have been a large number of crows flying by.” An additional
question that could be examined as a sub-part of the same study is whether the insertion of other modifiers such as “huge”, or “surprising” instead of “large” would produce the same results.
4 Patterns of Agreement in Native vs Non-Native Speakers 1

L. Pamela Lopez-Cobos

As mentioned earlier, Left Conjunct Agreement and evidence supporting the Contractibility Hypothesis (CH) are abundantly present in NS data. The question explored here is whether agreement patterns for NNS1 are similar to or different from those of NS along the dimension of preferring past singular agreement in ES to present singular agreement, data supporting the CH. The subjects for this study section, from a total of 86 subjects, 28 participants were selected (14 native speakers and 14 non-native speakers). Furthermore, based on preliminary questions, the non-native speakers group (NNS1) pointed out that (1) they considered themselves native speakers of English, although (2) English was not their first-primary language. In addition, all of the NNS1 participants stated that their exposure to English was in an early age, and no later than age 5.

4.1 Left-Conjunct Agreement – (Verb-first Agreement)

Left conjunct agreement in ES is comparable between NS and NNS1 regardless of the tense, as it can be seen in the following sample data. There is a tendency for NNS1 to answer roughly the same as Native Speakers when using left conjunct agreement, showing minor variations in the average responses.

<table>
<thead>
<tr>
<th>NS</th>
<th>17) There is a cup and a pencil on the desk. 4.35</th>
<th>18) There are a cup and a pencil on the desk. 2.28 $ (\alpha \leq 0.01 (N = 13))$</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNS1</td>
<td>17) There is a cup and a pencil on the desk. 4.51</td>
<td>18) There are a cup and a pencil on the desk. 2.57 $ (\alpha \leq 0.01 (N = 9))$</td>
</tr>
<tr>
<td>NS</td>
<td>21) There was a cup and a pencil on the desk. 4.54</td>
<td>22) There were a cup and a pencil on the desk. 1.22 $ (\alpha \leq 0.01 (N = 14))$</td>
</tr>
<tr>
<td>NNS1</td>
<td>21) There was a cup and a pencil on the desk. 4.66</td>
<td>22) There were a cup and a pencil on the desk. 2.56 $ (\alpha \leq 0.01 (N = 10))$</td>
</tr>
<tr>
<td>NS</td>
<td>25) There is a cup and some pencils on the desk. 4.2</td>
<td>26) There are a cup and some pencils on the desk. 1.88 $ (\alpha \leq 0.05$ is 21 $ (N = 13))$</td>
</tr>
</tbody>
</table>
NNS1
25) There is a cup and some pencils on the desk. 4.68
26) There are a cup and some pencils on the desk. 2.5 \( (\alpha \leq 0.01 \text{ is } 7 \ (N = 11)) \)

NS
29) There was a cup and some pencils on the desk. 4.37
30) There were a cup and some pencils on the desk. 2.31 \( (\alpha \leq 0.05 \text{ is } 10 \ (N = 10)) \)

NNS1
29) There was a cup and some pencils on the desk. 4.66
30) There were a cup and some pencils on the desk. 3.06 \( (\alpha \leq 0.01 \text{ is } 7 \ (N = 11)) \)

NS
33) There is some cups and a pencil on the desk. 1.77
34) There are some cups and a pencil on the desk. 4.31 \( (\alpha \leq 0.01 \text{ is } 12 \ (N = 13)) \)

NNS1
33) There is some cups and a pencil on the desk. 3.12
34) There are some cups and a pencil on the desk. 4.54 not significant

NS
37) There was some cups and a pencil on the desk. 2.85
38) There were some cups and a pencil on the desk. 4.6 \( (\alpha \leq 0.01 \text{ is } 9 \ (N = 12)) \)

NNS1
37) There was some cups and a pencil on the desk. 2.93
38) There were some cups and a pencil on the desk. 4.5 not significant

NS
41) There is some cups and 5 pencils on the desk. 2.34
42) There are some cups and 5 pencils on the desk. 4.4 \( (\alpha \leq 0.01 \text{ is } 12 \ (N = 13)) \)

NNS1
41) There is some cups and 5 pencils on the desk. 2.70
42) There are some cups and 5 pencils on the desk. 4.4 not significant

NS
45) There was some cups and 5 pencils on the desk. 3.11
46) There were some cups and 5 pencils on the desk. 4.42 \( (\alpha \leq 0.01 \text{ is } 3 \ (N = 9)) \)

NNS1
45) There was some cups and 5 pencils on the desk. 3.04
46) There were some cups and 5 pencils on the desk. 4.31 not significant
Both NS and NNS1 show LCA in ES. And for both NS and NNS1, the pattern of agreement in ES is different from the pattern of agreement in corresponding non-ES. There is no non-ES analog to LCA. Verb-first agreement is apparently ‘blind’ to the dominating coordinate constituent, resulting in LCA, but subject-first agreement is not, as the following data show.

NS
19) A cup and a pencil is on the desk  2.48
20) A cup and a pencil are on the desk  4.74  \((\alpha \leq 0.01 \ (N = 11))\)

NNS1
19) A cup and a pencil is on the desk  2.02
20) A cup and a pencil are on the desk  4.47  \((\alpha \leq 0.05 \ is \ 8 \ (N = 9))\)

23) A cup and a pencil was on the desk. 2.51
24) A cup and a pencil were on the desk. 4.25  \((\alpha \leq 0.01 \ (N = 10))\)

NNS1
23) A cup and a pencil was on the desk. 1.93
24) cup and a pencil were on the desk. 4.83  \((\alpha \leq 0.01 \ is \ 3 \ (N = 9))\)

NS
27) A cup and some pencils is on the desk. 1.71
28) A cup and some pencils are on the desk. 4.57  \((\alpha \leq 0.01 \ is \ 12 \ (N = 13))\)

NNS1
27) A cup and some pencils is on the desk. 1.57
28) A cup and some pencils are on the desk. 4.07  \((\alpha \leq 0.01 \ is \ 12 \ (N = 13))\)

NS
31) A cup and some pencils was on the desk. 1.92
32) A cup and some pencils were on the desk. 4.57  \((\alpha \leq 0.01 \ is \ 9 \ (N = 12))\)

NNS1
31) A cup and some pencils was on the desk. 1.5
32) A cup and some pencils were on the desk. 4.07  \((\alpha \leq 0.01 \ is \ 12 \ (N = 13))\)
35) Some cups and a pencil is on the desk. 1.42
36) Some cups and a pencil are on the desk. 4.42 $\ (\alpha \leq 0.01 \text{ is } 15 \ (N = 14))$

NNS1
35) Some cups and a pencil is on the desk. 2
36) Some cups and a pencil are on the desk. 3.78 $\ (\alpha \leq 0.01 \text{ is } 9 \ (N = 12))$

39) Some cups and a pencil was on the desk. 1.42
40) Some cups and a pencil were on the desk. 4.07 $\ (\alpha \leq 0.01 \text{ is } 9 \ (N = 12))$

NNS1
39) Some cups and a pencil was on the desk. 2
40) Some cups and a pencil were on the desk. 3.71 $\ (\alpha \leq 0.05 \text{ is } 17 \ (N = 12))$

43) Some cups and 5 pencils is on the desk. 0.85
44) Some cups and 5 pencils are on the desk. 4.14 $\ (\alpha \leq 0.01 \text{ is } 12 \ (N = 13))$

NNS1
43) Some cups and 5 pencils is on the desk. 1.05
44) Some cups and 5 pencils are on the desk. 4.28 $\ (\alpha \leq 0.01 \text{ is } 9 \ (N = 12))$

47) Some cups and 5 pencils was on the desk. 1.07
48) Some cups and 5 pencils were on the desk. 4 $\ (\alpha \leq 0.01 \text{ is } 12 \ (N = 13))$

NNS1
47) Some cups and 5 pencils was on the desk. 1.14
48) Some cups and 5 pencils were on the desk. 3.71 $\ (\alpha \leq 0.01 \text{ is } 12 \ (N = 13))$

11) Some cups is on the desk. 0.57
12) Some cups are on the desk. 4.85 $\ (\alpha \leq 0.01 \text{ is } 15 \ (N = 14))$

NNS1
11) Some cups is on the desk. 1.42
12) Some cups are on the desk. 4.71 $\ (\alpha \leq 0.01 \text{ is } 12 \ (N = 13))$

15) Some cups was on the desk. 0.64
16) Some cups were on the desk. 4.85 $\ (\alpha \leq 0.01 \text{ is } 15 \ (N = 14))$
NNS1
15) Some cups was on the desk. 1.28
16) Some cups were on the desk. 4.57  \( \alpha \leq 0.01 \) is 12 \((N = 13)\)

It is evident that both NS and NNS1 prefer the plural verb forms with any coordinated subject. Hence, the patterns of agreement shown for non-existential sentences are dramatically different from the ES results.

4.2 Past singular vs present singular with plural associations in ES

As for past vs present singular verb form with a plural associate, NS for the most part significantly prefer the past form, but NNS1 do not, as the following data show. For NNS1, the lack of difference is due to the elevated acceptance of the present singular ‘be’ with a plural associate.

NS
9) There is some cups on the desk. 1.45
13) There was some cups on the desk. 2.45  \( \alpha \leq 0.01 \) is 3 \((N = 9)\)

NNS1
9) There is some cups on the desk. 2.77
13) There was some cups on the desk. 2.64  not significant

---------------------------------------------------------------------------------------------------------------

NS
33) There is some cups and a pencil on the desk. 1.77
37) There was some cups and a pencil on the desk. 2.85  \( \alpha \leq 0.05 \) is 5 \((N = 8)\)

NNS1
33) There is some cups and a pencil on the desk. 3.12
37) There was some cups and a pencil on the desk. 2.93  not significant

---------------------------------------------------------------------------------------------------------------

NS
41) There is some cups and 5 pencils on the desk. 2.34
45) There was some cups and 5 pencils on the desk. 3.11  not significant

NNS1
41) There is some cups and 5 pencils on the desk. 2.71
45) There was some cups and 5 pencils on the desk. 3.04  not significant

4.3 The Contractibility Hypothesis: NS vs NNS1

The following data show that contracted ‘is’ is highly acceptable for both NS and NNS1.
The Contractibility Hypothesis (CH) is based on the observation in NS data that the combination singular verb-plural associate is significantly better when the verb is not contractible (‘was’ and ‘has to’). So the theory of agreement proposed here (Sobin) says that while singular verb form is always available in ES, use of an uncontracted but contractible verb form is disfavored. The following data shows that in sentences (WS11)-(WS12), the singular, uncontracted verb form ‘has’ is significantly favored over the plural verb form, confirming the availability of singular agreement in ES.
NS
WS11) There has to be hundreds if not thousands of pictures of that place. 4.63
WS12) There have to be hundreds if not thousands of pictures of that place. 3.27

NNS1
WS11) There has to be hundreds if not thousands of pictures of that place. 4.34
WS12) There have to be hundreds if not thousands of pictures of that place. 3.30

(α ≤ 0.05 is 2 (N = 6))

(α ≤ 0.01 is 9 (N = 12))

However, as opposed to NS data, NNS1 results seen above suggest that the contractibility is not a factor when using singular verb forms in ES with a plural associate--singular ‘is’ with a plural associate is more acceptable for NNS1 than for NS. Thus, for NNS1, the CH does not appear to work as a filter/restriction on singular verb-plural associate combinations in ES.

For both NS and NNS1, the corresponding pattern, plural subject-singular verb, is not seen in non-ES (subject-first agreement), as the following data show.

NS
11) Some cups is on the desk. 0.57
15) Some cups was on the desk. 0.64

NNS1
11) Some cups is on the desk. 1.42
15) Some cups was on the desk. 1.28

--------------------------------------------------------------------------------------------------------------

NS
27) A cup and some pencils is on the desk. 1.71
31) A cup and some pencils was on the desk. 1.92

NNS1
27) A cup and some pencils is on the desk. 1.57
31) A cup and some pencils was on the desk. 1.5

--------------------------------------------------------------------------------------------------------------

NS
35) Some cups and a pencil is on the desk. 1.42
39) Some cups and a pencil was on the desk. 1.42

NNS1
35) Some cups and a pencil is on the desk. 2
39) Some cups and a pencil was on the desk. 2

--------------------------------------------------------------------------------------------------------------

NS
43) Some cups and 5 pencils is on the desk. 0.85
47) Some cups and 5 pencils was on the desk. 1.07
Conclusions:

The results from the data analyzed reveal significant differences in agreement patterns between existential and non-existential sentences for both NS and NNS1. First, the data suggest that both NS and NNS1 do this verb-first left conjunct agreement (regardless of the verb tense) in ES. Further, the data suggest that singular verb forms are generally available in ES, and not in non-ES for both NS and NNS1. Finally, it turns out that separating the subjects who claim to be native speakers into (i) those whose first/primary language is English (NS) and (ii) those for whom English is not their first/primary language (NNS1) reveals an interesting difference in employment of the CH, which apparently is only operative among NS.
5 Left-Conjunct-like Agreement in Quantified Expressions

Karen Morales

This section explores the question of whether agreement in existential sentences with quantity expressions (e.g. *a group of*, *a number of*) might be said to behave similarly to left-conjunct agreement (LCA). To address this question we analyzed the data of the 35 individuals who claimed to be native speakers of English and who identified English as their first/primary language. As mentioned previously by Hernandez, the investigators’ intuitions were that certain of these expressions are inherently plural while others are inherently singular. The following data were analyzed to determine whether agreement in ES with quantified expressions functions in parallel to LCA in which the verb would be agreeing with the superficially singular first DP in a coordination (e.g. *a number*) rather than the whole expression (e.g. *a number of questions*).

5.1 Singular Quantified Expressions: A flock/ A group

In sentences with quantified expressions that trigger singular agreement, ‘*a flock*’ and ‘*a group*’, subjects showed preference for single verbs. However, these results do not necessarily demonstrate LCA-like behavior. It is not apparent whether the verb is agreeing with the first DP ‘*a group*’, with the whole expression ‘*a group of protesters*’, or with *there*[3/sg] as any of these possibilities result in singular agreement. Also, a striking feature of the data below is the degree to which plural agreement was seen as possible. Here, it looks like the plural object of the PP may influence agreement toward plural. Such access to a rightward DP looks very non-LCA-like.

111) There was a group of protesters standing on the corner. 4.45
112) There were a group of protesters standing on the corner. 3.37 \( \alpha \leq 0.01 \) (N=19)

115) There is a flock of birds flying by. 4.62
116) There are a flock of birds flying by. 3.22 \( \alpha \leq 0.01 \) (N=23)

LCA

21) There was a cup and a pencil on the desk. 4.54
22) There were a cup and a pencil on the desk. 1.22 \( \alpha \leq 0.01 \) (N=34)

17) There is a cup and a pencil on the desk. 4.51
18) There are a cup and a pencil on the desk. 1.54 \( \alpha \leq 0.01 \) (N=33)

29) There was a cup and some pencils on the desk. 4.37
30) There were a cup and some pencils on the desk. 2.31 \( \alpha \leq 0.01 \) (N=27)

25) There is a cup and some pencils on the desk. 4.2
26) There are a cup and some pencils on the desk. 1.88 \( \alpha \leq 0.01 \) (N=31)
5.2 Plural Quantified Expressions: A Number/ A Lot

Possible LCA-like behavior was observed in ES with quantified expressions (a number, a lot) that appear to be inherently plural. Subjects showed a preference for a plural verb which could indicate that the verb may be agreeing with the first DP like it does in LCA. However, this result too is ambiguous, since it is unclear whether the agreement target is the left-most DP itself, or the entire expression, whose number is dictated by the leftmost DP. Also, there is here a fairly high acceptance of the singular agreement form. This is compatible with the analysis proposed in Section 1 which claims that singular agreement in ES is always available.

79) There is a number of questions coming out of this project. 3.6
80) There are a number of questions coming out of this project. 4.48 \( \alpha \leq 0.01 \) (N=19)

83) There is a lot of crows flying by. 3.54
84) There are a lot of crows flying by. 4.8 \( \alpha \leq 0.01 \) (N=21)

87) There was a number of pencils taken from the desk. 3.94
88) There were a number of pencils taken from the desk. 4.65 \( \alpha \leq 0.01 \) (N=22)

91) There was a lot of questions asked about pollution. 3.97
92) There were a lot of questions asked about pollution. 4.65 \( \alpha \leq 0.05 \) (N=18)

123) There was a few protestors standing on the corner. 2.45
124) There were a few protestors standing on the corner. 4.68 \( \alpha \leq 0.01 \) (N=27)

LCA
41) There is some cups and 5 pencils on the desk. 2.34
42) There are some cups and 5 pencils on the desk. 4.4 \( \alpha \leq 0.01 \) (N=30)

33) There is some cups and a pencil on the desk. 1.77
34) There are some cups and a pencil on the desk. 4.31 \( \alpha \leq 0.01 \) (N=30)

45) There was some cups and 5 pencils on the desk. 3.11
46) There were some cups and 5 pencils on the desk. 4.42 \( \alpha \leq 0.01 \) (N=23)

37) There was some cups and a pencil on the desk. 2.85
38) There were some cups and a pencil on the desk. 4.6 \( \alpha \leq 0.01 \) (N=27)

\( ^4 \) Note that the head DP in these constructions appears to be plural in its own right, despite its singular morphology, e.g. ‘A number (of people) have/*has left’, and ‘A lot have/*has arrived’.
5.3 Exceptions/Consistency

The LCA-like behavior of ES with inherently plural quantified expressions was not consistent. Sentences (107/108), and (99/100) showed no significant preference between the plural and singular verb. Sentences (107/108) do not use the verb ‘be’ and have very low acceptance with no significant preference over the plural or singular. Sentences (99/100) use ‘be’ and are much more acceptable, but subjects did not significantly prefer one over the other. Sentences (95/96), and (103/104) also use ‘be’, yet the verb agrees with the first DP. Note, however, that ‘have’ here is contractible, which may account for the somewhat reduced acceptability of these singulars. (Refer to earlier discussion of the Contractibility Hypothesis.)

107) There has arrived a lot of trains. 0.85
108) There have arrived a lot of trains. 1.08 not significant

99) There has been a large number of crows flying by. 4.08
100) There have been a large number of crows flying by. 4.17 not significant

95) There has been a lot of questions asked about this idea. 3.97
96) There have been a lot of questions asked about this idea. 4.82 $\alpha \leq 0.01$ (N=18)

103) There has been a lot of trains arriving this morning. 3.8
104) There have been a lot of trains arriving this morning. 4.65 $\alpha \leq 0.01$ (N=21)

5.4 Conclusion

Existential sentences with quantified expressions appear possibly to behave similarly to LCA in some cases. This is evident in ES with inherently plural expressions with the exception of sentences (99/100) which include the modifier ‘large’ and sentences (107/108). Because not all sentences exhibited LCA-like behavior, this may suggest that a different strategy for agreement is taking place. Since the initial DP appears to determine the number of the entire phrase, it is difficult to determine from these data alone which DP verb-first agreement is driven by here. Finally, it is worth noting that the singular verb form has a high rate of acceptability even with the plural associate, suggesting that singular is a consistently available agreement form in ES.
6 Left-Conjunct Agreement in NNS1 and NNS2

Anna Rahymov

This paper investigates LCA in two groups of non-native speakers, early acquisition non-native English speakers (NNS1) and late acquisition non-native English speakers (NNS2). The research question is this: Do both NNS1 and NNS2 show LCA in ES? The data below suggest that they do.

6.1 Subject Groups

The subjects in NNS1 were those who answered background question 1 (‘Are you a native speaker of English?’) ‘yes’, but who answered background question 3 (‘Is English your first/primary language?’) ‘no’. The subjects in NNS2 were those who answered background question 1 (‘Are you a native speaker of English?’) ‘no’, and also who answered background question 3 (‘Is English your first/primary language?’) ‘no’. There were 12 subjects in the NNS2 group, and 12 subjects in the NNS1 group. The first exposure to English for NNS1 was from ages 0 to 5 and for NNS2, the late exposure age group, from ages 11 to 43.

6.2 Analysis

As the following data show, LCA is evident in the agreement patterns in ES for both NNS1 and NNS2. These subjects favor plural agreement in ES only when the left conjunct of a coordinated associate DP is plural. Nonetheless, there is a consistent high tolerance for singular agreement in the same instances.

Sentences:

NSS1
17) There is a cup and a pencil on the desk. 4.75
18) There are a cup and a pencil on the desk. 3.08 \((\alpha \leq 0.01 (N = 9))\)

NSS2
17) There is a cup and a pencil on the desk. 4.66
18) There are a cup and a pencil on the desk. 2.91 \((\alpha \leq 0.01 (N = 7))\)

NSS1
21) There was a cup and a pencil on the desk. 4.58
22) There were a cup and a pencil on the desk. 3.5 \((\alpha \leq 0.01 (N = 8))\)
21) There was a cup and a pencil on the desk. 4.58
22) There were a cup and a pencil on the desk. 2.58 \( (\alpha \leq 0.01 (N = 7)) \)

25) There is a cup and some pencils on the desk. 4.91
26) There are a cup and some pencils on the desk. 2.66 \( (\alpha \leq 0.01 (N = 8)) \)

25) There is a cup and some pencils on the desk. 4.83
26) There are a cup and some pencils on the desk. 2.25 \( (\alpha \leq 0.01 (N = 10)) \)

29) There was a cup and some pencils on the desk. 4.91
30) There were a cup and some pencils on the desk. 4.25 (Not significant)

29) There was a cup and some pencils on the desk. 4.66
30) There were a cup and some pencils on the desk. 2.66 \( (\alpha \leq 0.01 (N = 9)) \)

33) There is some cups and a pencil on the desk. 2.41
34) There are some cups and a pencil on the desk. 4.75 \( (\alpha \leq 0.01 (N = 9)) \)

33) There is some cups and a pencil on the desk. 3.83
34) There are some cups and a pencil on the desk. 4.08 (Not significant)

37) There was some cups and a pencil on the desk. 2.16
38) There were some cups and a pencil on the desk. 4.91 \( (\alpha \leq 0.01 (N = 8)) \)

37) There was some cups and a pencil on the desk. 3.75
38) There were some cups and a pencil on the desk. 4.33 (Not significant)

41) There is some cups and 5 pencils on the desk. 2.5
42) There are some cups and 5 pencils on the desk. 4.91 \( (\alpha \leq 0.01 (N = 9)) \)

41) There is some cups and 5 pencils on the desk. 3.58
42) There are some cups and 5 pencils on the desk. 4.33 (Not significant)
NSS1
45) There was some cups and 5 pencils on the desk. 2.75
46) There were some cups and 5 pencils on the desk 4.75 \( (\alpha \leq 0.01 (N = 8)) \)

NSS2
45) There was some cups and 5 pencils on the desk. 3.41
46) There were some cups and 5 pencils on the desk. 4.00 \( (\alpha \leq 0.01 (N = 7)) \)

NNS1
W8) Were there a book and a pen on the table? 3.63
W15) Was there a book and a pen on the table? 4.18 \( (\alpha \leq 0.01 (N = 7)) \)

NNS2
W8) Were there a book and a pen on the table? 2.25
W15) Was there a book and a pen on the table? 4.66 \( (\alpha \leq 0.01 (N = 10)) \)

6.3 Conclusion

Overall, in compliance with LCA as a verb-first agreement strategy, both NNS1 and NNS2 preferred singular ‘be’ to plural ‘be’ when the left conjunct of a coordinated associate DP was singular regardless of tense, even though NNS1 showed a slightly higher tendency to do so than NNS2, as seen in 17, 25, 29, and W15. In a like manner, all the subjects preferred plural ‘be’ to singular ‘be’ when the left conjunct was plural in both tenses. Again, NNS1 did this more frequently than NNS2 as in 34, 38, 42, and 46.

Regarding past tense vs. present tense, there is no significant difference in usage of LCA between NNS1 and NNS2; they all tend to apply LCA in both tenses.

Even though the frequencies are different, the results from both early and late acquisition speakers of English showed that there is a universal tendency to apply LCA as a verb-first agreement strategy.
Appendix A: Instructions

The question:

In English and in many other languages, subjects and verbs ‘agree’. That is, the verb form depends on what the subject is. A singular subject triggers a singular verb form (e.g. *Mary is at the party*) and a plural subject triggers a plural verb form (e.g. *The girls are at the party*). This experiment is a part of an investigation into how subject-verb agreement works in normal, spoken English. Speakers of a language have very good instincts about when an utterance sounds ‘natural’—like something that a speaker would easily say or expect to hear. The question here is this: how ‘natural’ is each agreement combination? Is each agreement combination one that you might expect to say or hear, or is it just impossible? There are no ‘right’ or ‘wrong’ answers here.

Instructions:

You will be given a questionnaire containing a series of sentences. Please read each sentence one at a time and rate the sentence with a number in the range of 0 to 5 as follows:

i. Good (5): It sounds quite natural, like something that you might easily say or expect to hear;

ii. Impossible (0): Even if it can be understood, there is something about it that just sounds wrong—on one who speaks English natively would say it this way.

iii. A rating of less than 5 and more than 0 indicates where the sentence falls between the best and worst ratings.

IMPORTANT NOTES:

Different ways of saying the same thing may be equally good or they may not be. So your judgment of one item should not affect how you judge another. Each item should be judged on its own merits.

‘Natural’ is not the same thing as ‘meaningful’ or ‘interpretable’. A particular utterance might have what a native speaker perceives as an error, something that a normal native speaker of these languages would not say, and yet be understandable, e.g. ‘What do you like pickles and?’ Such a sentence may be ‘interpretable’, but still very ‘unnatural’.
Appendix B: Subject Information

Subject information:

Age: _____

Sex: _____

Are you a native English speaker?(Y/N) _____

What is the age at which you started speaking/learning English _____

Is English your ‘first language’?(Y/N) _____

What area of the country do you think that your English is most representative of?

........................................................................................................

Do you speak another language or languages? If so, please list them and indicate how fluent you are in each of them (native, very fluent, conversational, only basic knowledge).

Language:                              Fluency level:

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Appendix C: Questionnaire items with levels of acceptability of test sentences for NS

Warm-up items (N = 33~35):

1) There’s a bird in the tree. 4.828571429
2) There were a bird in the tree. 0.371428571
3) Two birds are in the tree. 4.771428571
4) Are two birds sitting in that tree? 3.914285714
5) Two birds has flown away. 0.428571429
6) There am only I in that picture. 0.057142857
7) There is a number of questions that we could ask. 3.514285714
8) Were there a book and a pen on the table? 1.484848485
9) Was there books on the table? 2.939393939
10) There is only me in that picture. 3.03030303
11) There has to be hundreds if not thousands of pictures of that place. 4.636363636
12) There have to be hundreds if not thousands of pictures of that place. 3.272727273
13) But there WAS a lot of books on the floor. 3.636363636
14) But a lot of books WAS on the floor. 0.818181818
15) Was there a book and a pen on the table? 4.393939394

Main Questionnaire (N = 35):

Part A

1) There is a cup on the desk. 4.914285714
2) There are a cup on the desk. 0.371428571
3) A cup is on the desk. 4.885714286
4) A cup are on the desk. 0.114285714
5) There was a cup on the desk. 5
6) There were a cup on the desk. 0.314285714
7) A cup was on the desk. 4.057142857
8) A cup were on the desk. 0.285714286
9) There is some cups on the desk. 1.457142857
10) There are some cups on the desk. 4.714285714
11) Some cups is on the desk. 0.571428571
12) Some cups are on the desk. 4.8
13) There was some cups on the desk. 2.457142857
14) There were some cups on the desk. 4.8
15) Some cups was on the desk. 0.457142857
16) Some cups were on the desk. 4.685714286
17) There is a cup and a pencil on the desk. 4.514285714
18) There are a cup and a pencil on the desk. 1.542857143
19) A cup and a pencil is on the desk. 2.485714286
20) A cup and a pencil are on the desk. 4.742857143
21) There was a cup and a pencil on the desk. 4.542857143
22) There were a cup and a pencil on the desk. 1.228571429
23) A cup and a pencil was on the desk. 2.514285714
24) A cup and a pencil were on the desk. 4.257142857
25) There is a cup and some pencils on the desk. 4.2
26) There are a cup and some pencils on the desk. 1.885714286
27) A cup and some pencils is on the desk. 1.485714286
28) A cup and some pencils are on the desk. 4.485714286
29) There was a cup and some pencils on the desk. 4.371428571
30) There were a cup and some pencils on the desk. 2.314285714
31) A cup and some pencils was on the desk. 1.685714286
32) A cup and some pencils were on the desk. 4.542857143
33) There is some cups and a pencil on the desk. 1.771428571
34) There are some cups and a pencil on the desk. 4.314285714
35) Some cups and a pencil is on the desk. 1.628571429
36) Some cups and a pencil are on the desk. 4.314285714
37) There was some cups and a pencil on the desk. 2.857142857
38) There were some cups and a pencil on the desk. 4.6
39) Some cups and a pencil was on the desk. 1.2
40) Some cups and a pencil were on the desk. 4.057142857
41) There is some cups and 5 pencils on the desk. 2.342857143
42) There are some cups and 5 pencils on the desk. 4.4
43) Some cups and 5 pencils is on the desk. 0.542857143
44) Some cups and 5 pencils are on the desk. 4.314285714
45) There was some cups and 5 pencils on the desk. 3.114285714
46) There were some cups and 5 pencils on the desk. 4.428571429
47) Some cups and 5 pencils was on the desk. 1.2
48) Some cups and 5 pencils were on the desk. 3.8
49) There’s a cup on the desk. 4.857142857
50) There’s some cups on the desk. 4
51) There’s a cup and a pencil on the desk. 4.8
52) There’s a cup and some pencils on the desk. 4.285714286
53) There’s some cups and a pencil on the desk. 4.257142857
54) There’s some cups and 5 pencils on the desk. 3.771428571

Part B

55) There has arrived a train. 0.942857143
56) There have arrived a train. 0.428571429
57) A train has arrived. 4.685714286
58) A train have arrived. 0.571428571
59) There has arrived two trains. 0.857142857
60) There have arrived two trains. 1.228571429
61) Two trains has arrived. 0.771428571
62) Two trains have arrived. 5
63) There has arrived a bus and a train. 0.742857143
64) There have arrived a bus and a train. 0.428571429
65) A bus and a train has arrived. 1.257142857
66) A bus and a train have arrived. 4.571428571
67) There has arrived a bus and two trains. 1.257142857
68) There have arrived a bus and two trains. 0.942857143
69) A bus and two trains has arrived. 2.028571429
70) A bus and two trains have arrived.                        4.857142857
71) There has arrived two buses and a train.                0.885714286
72) There have arrived two buses and a train.               1.2
73) Two buses and a train has arrived.                      1.942857143
74) Two buses and a train have arrived.                     4.742857143
75) There has arrived three buses and two trains.           1.228571429
76) There have arrived three buses and two trains.          1.371428571
77) Three buses and two trains has arrived.                 1.371428571
78) Three buses and two trains have arrived.                4.057142857

Part C

79) There is a number of questions coming out of this project. 3.6
80) There are a number of questions coming out of this project. 4.485714286
81) A number of questions is coming out of this project.      2
82) A number of questions are coming out of this project.     4.657142857
83) There is a lot of crows flying by.                      3.542857143
84) There are a lot of crows flying by.                      4.8
85) A lot of crows is flying by.                             0.514285714
86) A lot of crows are flying by.                            4.771428571
87) There was a number of pencils taken from the desk.       3.942857143
88) There were a number of pencils taken from the desk.       4.657142857
89) A number of pencils was taken from the desk.              2.314285714
90) A number of pencils were taken from the desk.             4.8
91) There was a lot of questions asked about pollution. 3.971428571
92) There were a lot of questions asked about pollution. 4.657142857
93) A lot of questions was asked about pollution. 1.657142857
94) A lot of questions were asked about pollution. 4.885714286
95) There has been a lot of questions asked about this idea. 3.571428571
96) There have been a lot of questions asked about this idea. 4.828571429
97) A lot of questions has been asked about this idea. 1.742857143
98) A lot of questions have been asked about this idea. 4.885714286
99) There has been a large number of crows flying by. 4.085714286
100) There have been a large number of crows flying by. 4.171428571
101) A large number of crows has been flying by. 2.342857143
102) A large number of crows have been flying by. 4.771428571
103) There has been a lot of trains arriving this morning. 3.8
104) There have been a lot of trains arriving this morning. 4.657142857
105) A lot of trains has been arriving this morning. 1.142857143
106) A lot of trains have been arriving this morning. 4.971428571
107) There has arrived a lot of trains. 0.857142857
108) There have arrived a lot of trains. 1.085714286
109) A lot of trains has arrived. 0.8
110) A lot of trains have arrived. 4.914285714
111) There was a group of protesters standing on the corner. 4.457142857
112) There were a group of protesters standing on the corner. 3.371428571
113) A group of protestors was standing on the corner. 2.314285714
114) A group of protestors were standing on the corner. 4.657142857
115) There is a flock of birds flying by. 4.628571429
116) There are a flock of birds flying by. 3.228571429
117) A flock of birds is flying by. 3.742857143
118) A flock of birds are flying by. 4.285714286
119) There has arrived a squad of police. 1.685714286
120) There have arrived a squad of police. 0.4
121) A squad of police has arrived. 2.628571429
122) A squad of police have arrived. 3.828571429
123) There was a few protestors standing on the corner. 2.457142857
124) There were a few protestors standing on the corner. 4.685714286
125) A few protestors was standing on the corner. 0.914285714
126) A few protestors were standing on the corner. 4.771428571
127) There was a quantity of grapes thrown at the window. 4.257142857
128) There were a quantity of grapes thrown at the window. 3.285714286
129) A quantity of grapes was thrown at the window. 3.657142857
130) A quantity of grapes were thrown at the window. 4.314285714
131) There was a bushel of apples put on the truck. 4.114285714
132) There were a bushel of apples put on the truck. 2.485714286
133) A bushel of apples was put on the truck. 4.457142857
134) A bushel of apples were put on the truck. 3.457142857
135) There’s a number of questions coming out of this project. 4.342857143
136) There’s a lot of crows flying by. 4.514285714

137) There’s a flock of birds flying by. 4.971428571
REFERENCES & RELATED WORKS


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