Investigating Iraqi EFL Undergraduates' Performance in the Production of Number Forms in English

Adnan Z. Mkhelif

Abstract—The production of number forms in English tends to be problematic for Iraqi learners of English as a foreign language (EFL), even at the undergraduate level. To help better understand and consequently address this problem, it is important to identify its sources. This study aims at: (1) statistically analysing Iraqi EFL undergraduates' performance in the production of number forms in English; (2) classifying learners' errors in terms of their possible major causes; and (3) outlining some pedagogical recommendations relevant to the teaching of number forms in English. It is hypothesized in this study that (1) Iraqi EFL undergraduates still face problems in the production of number forms in English and (2) errors pertaining to the context of learning are more numerous than those attributable to the other possible causes. After reviewing the literature available on the topic, a written test comprising 50 items has been constructed and administered to a randomly chosen sample of 50 second-year college students from the Department of English, College of Education, Wasit University. The findings of the study showed that Iraqi EFL undergraduates still face problems in the production of number forms in English and that the possible major sources of learners' errors can be arranged hierarchically in terms of the percentages of errors to which they can be ascribed as follows: (1) context of learning (50%), (2) intralingual transfer (37%), and (3) interlingual transfer (13%). It is hoped that the implications of the study findings will be beneficial to researchers, syllabus designers, as well as teachers of English as a foreign/second language.

Keywords—L2 morphology, L2 number forms, L2 vocabulary learning, productive knowledge.

I. INTRODUCTION

"NUMBER" is the name of the system comprising two contrasting terms: singular and plural. It applies, in the first instance, to noun inflection and denotes whether the speaker is referring to one (singular) or more than one (plural) [1, p.111], [2, p.85], [3, p.321]. With respect to these two terms, English nouns can be classified into two main groups: variable nouns and invariable nouns.

A. Variable Nouns

Variable nouns (or countables) have a singular form and a plural form. Such nouns must be preceded by a/an to indicate a single instance. For more than one a plural form is used [4, p.68]. Thus, we say:

   1. a. He bought a book and an apple.
      b. He bought two books and three apples.

The plurals of variable nouns are classified into two types: regular plurals and irregular ones.

■ Regular Plurals: As stated by [1, p113], regular plurals are

Adnan Z. Mkhelif is with the Department of English Language and Literature, Wasit University, Iraq (e-mail: amkhelif@uowasit.edu.iq).

predictable. The plurals of nouns in English are formed by adding the suffix (-s) or (-es) to the singular form of the noun. Most plurals are formed by adding (-s) to the singular form, e.g. shop: shops; pen: pens. But when the singular form ends in (y) proceeded by a consonant, the letter (y) is changed into (i) and (-es) is added (except proper nouns), e.g. spy: spies. When a vowel sound precedes the final (y), only (-s) is added, e.g. boy: boys. When the simple form ends in s, z, ch, sh, or x, (-es) is added, e.g. glass: glasses, quiz: quizzes, church: churches, wish: wishes, box: boxes. Also, when the singular form ends in (o) preceded by a consonant, (-es) is added, e.g. hero: heroes [5, p.73].

■ Irregular Plurals: As [6, p.85] states, "Irregular plurals are unpredictable and have to be mentioned as individual items". They can be divided into five subclasses (see [1, pp.113-14]):

1. Voicing + s: Here, the voiceless sound ending the singular form of the noun is changed to a voiced sound and (s) is added. There are three types of voicing:

/O/----- /t/: path: paths
/f/----- /v/: wife: wives
/s/----- /z/: house: houses (only one example is found).

2. Mutation: The plural form is made by changing the medial vowel of the singular form, e.g. foot: feet.

3. En plurals: The plural is formed by adding (-en) to the singular form of the noun, e.g. child: children.

4. Zero plurals, e.g. deer: deer

5. Foreign plurals
   The most common ones are:

	Sing. Pl.
-us---------- -i	radius: radii
-um--------- -a	datum: data
-ex,-ix---- -ices	codex: codices
-is---------- -es	thesis: theses
-on--------- -a	phenomenon: phenomena
-eau------ -eaux	bureau: bureaux
-o----------- -i	solo: soli
Base + -m	kibbutz: kibbutzim

B. Invariable Nouns

Unlike variable nouns, the invariable ones (or uncountables) have only one form. They are divided by grammarians including [6, p.81] into two classes: singular invariables and plural invariables.

1. Singular Invariables

Singular invariables include, as [5, p.71] states, some things which are uncountable by their very nature, which makes the

words that name them uncountable, also. They have no plural forms, and they cannot be preceded by a/an. Singular plurals can be divided into five subtypes [1, p.112]:

1. Abstract mass nouns: e.g. advice, help.
2. Concrete mass nouns: e.g. meat, oil.
3. Singular nouns ending in –s: e.g. economics, measles.
4. Proper nouns: e.g. London, Tigris.
5. Non-personal adjective heads: e.g. the beautiful, the true.

2. Plural Invariables

Plural invariable nouns can be divided into five types [6, pp.81-83]:

1. Summation plurals: These are "tools and articles of dress consisting of two equal parts which are joined" [6], e.g. shorts, glasses.
2. Plural nouns ending in -s: e.g. thanks, banns.
3. Some plural proper nouns: e.g. the Himalayas, the Alps.
4. Unmarked plural nouns: e.g. gentry, people.
5. Personal adjective heads: e.g. the sick, the rich.

II. THE TEST

To achieve the goals of the present study, a diagnostic test was constructed and administered to a randomly chosen sample of second-class college students from the Department of English/College of Education/Wasit University after they had filled in a consent form. The sample consisted of 50 undergraduates of both sexes, which is large enough to ensure reliability. The participants' L1 was Iraqi Arabic and bilinguals were excluded to eliminate any possible side-effects relevant to the differences in the participants' linguistic background. Their ages span from 20 to 22, with a mean age of 21 years. The sample can thus be regarded as a homogenous one.

The test consisted of 50 items (see Appendix I). The researcher did his best to ensure that the test was comprehensive enough to include all the different aspects relevant to number forms, which consequently contributes to the validity and reliability of the test. The students were instructed to fill in the blanks by providing the relevant number forms.

As far as scoring is concerned, each correct answer received one score. When two answers are provided or when no answer was provided, no score was given. The reliability for the test as a whole (50 items) was computed using Cronbach's alpha option in SPSS. For the participants as a whole (N = 50), reliability for the test = .91, which indicates that the test is highly reliable (see [7, p.679]).

A. The Results

Item facility (or item difficulty) is the assessment device used to assess learners' performance on the items of the test, and consequently to test the validity of the first hypothesis of this study. Item difficulty is an index which shows the proportion of learners who answer a test item correctly and indicates how difficult or easy a test item was for test-takers. The following formula is used to show the item difficulty for each test item:

TABLE I
STUDENTS' PERFORMANCE ON THE ITEMS OF THE TEST

Q/Item No.	No. of Correct Responses	No. of Incorrect Responses	Item Facility (IF)
Q1.			
1	50	0	1
2	33	17	0.66
3	49	1	0.98
4	35	15	0.7
5	34	16	0.68
6	35	15	0.7
7	48	2	0.96
8	47	3	0.94
9	3	47	0.06
10	3	47	0.06
11	35	15	0.7
12	36	14	0.72
13	35	15	0.7
14	36	14	0.72
15	44	6	0.88
16	43	7	0.86
17	33	17	0.66
18	35	15	0.7
19	15	35	0.3
20	14	36	0.28
21	9	41	0.18
22	18	32	0.36
23	22	28	0.44
24	21	29	0.42
25	4	46	0.08
26	7	43	0.14
27	7	43	0.14
28	45	5	0.9
29	5	45	0.1
30	3	47	0.06
31	4	46	0.08
32	6	44	0.12
33	9	41	0.18
34	16	34	0.32
35	10	40	0.2
36	16	34	0.32
37	15	35	0.3
38	12	38	0.24
39	11	39	0.22
40	1	49	0.02
Q2			
1	2	48	0.04
2	0	50	0
3	1	49	0.02
4	2	48	0.04
5	0	50	0
6	0	50	0
7	2	48	0.04
8	3	47	0.06
9	0	50	0
10	0	50	0
Total	914 (36.56%)	1586 (63.44%)	18.28
Average	18.28	31.72	0.3656

Item Facility (IF)=R/N

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where R = number of correct answers; N= number of test-takers [8, p.277]. This formula indicates that the lower the ratio of R/N is, the more difficult the test item tends to be [8]. If the facility value of an item is lower than 0.3, the item is too difficult; and if it is higher than 0.85, then the item is too easy (see [9]). Table I shows students' performance on the items of the test.

It is evident from Table I that the number and percentage of the incorrect responses in the test as a whole are 1586: 63.44% which overweigh that of the correct responses (914: 36.56%). In addition, the facility values of the majority of items (i.e. 26 items out of the 50 items of the test) were below 0.3, which indicates that they were too difficult for the participants. These results show that Iraqi EFL undergraduates still face difficulty in the production of number forms in English and this confirms the first hypothesis of the study.

B. Error Analysis

As highlighted by [10, p.1], one of the justifications why it is important to analyse and study learners' errors is a pedagogical one: a good understanding of the nature of learners' errors is necessary before a remedial means to overcome them could be specified. Reference [10, p.24] stresses that "we cannot make any principled use of the learner's idiosyncratic sentences to improve teaching unless we understand how and why they occur". In other words, in addition to identifying learners' errors, it is also important to identify the sources of the errors, which is the concern of the following section.

1. Sources of Errors

As identified by [11, pp.263-66], sources of error include (1) interlingual transfer, (2) intralingual transfer, (3) context of learning, and (4) communication strategies. The following sections briefly present these sources and classify errors in terms of the sources to which they can be ascribed.

Interlingual Transfer

Many errors occur as a result of the influence of the mother tongue which takes place when the patterns of the native language differ from those of the target language (see [12, pp.31-54], [13, p.16]).

Items (29) and (33) can be regarded as examples of this type of transfer.
- Item (29) deer: *deers
- Item (33) information: *informations

The percentage of errors of this kind is 12.6% of the total errors in the whole test.

Intralingual Transfer

Intralingual transfer refers to the learners' use of already acquired knowledge of the target language in the process of learning. As a result, the learners produce erroneous forms of the target language. Such errors may be attributed to certain factors, one of which is **overgeneralization** which refers to the inappropriate application of the previously learned material to a present foreign language context. Other types include processes like ignorance of rule restrictions where the

student applies some rule to a category to which it is not applicable, incomplete applications of rules which involve a failure to learn more complex types of structure because the learners find that they can achieve effective communication by using simple rules, and false concepts hypothesized which may derive from faulty comprehension of a distinction in the target language (see [14, p.171]).

Items (11), (21) can illustrate this type of transfer:
- Item (11) church: *churchs
- Item (21) chief: *chieves

The percentage of such errors is 37% of the total errors.

Context of Learning

Errors may also be caused as a result of the situation in the classroom with its teacher and teaching materials, the misleading explanation by the teacher, or the textbook writer who focuses on some aspects of the target language and neglects others [11, p.266]. Items (9) and (35) can be ascribed to this type:
- Item (9): quiz: *quizzes
- Item (35): babysitter: *babiessitters

The percentage of this type of errors in the students' performance is 50.4% of the total errors. This confirms the second hypothesis of the study which states that errors pertaining to the context of learning are more numerous than those attributable to the other possible sources.

III. CONCLUSIONS

1. The statistical analysis of students' performance has shown that the total number and percentage of students' errors in the production of number forms is higher than that of their correct responses. This has confirmed the research hypothesis which states that Iraqi EFL undergraduates still face problems in the production of number forms in English.

2. It has been found out that students' poor performance on the items of the test can be attributed to the following major sources, which can be arranged in terms of their effect on students' performance as follows:
a. Context of learning to which 50.4% of errors may be attributed.
b. Intralingual transfer which accounts for 37% of students' errors.
c. Interlingual transfer to which 12.6% of students' errors may be ascribed.

3. In the light of the findings arrived at, the following pedagogical recommendations may be outlined:
a. Teachers of English and textbook writers are recommended to present and integrate all the types of number forms into the students' textbooks in their appropriate contexts.
b. It is also recommended that textbook writers and teachers should do their best to provide students with intensive drills, activities, and exercises that help students better practice the different types of number forms, especially the ones that proved to be the most difficult.

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APPENDIX 1

The Test

Q1 Write the plural form, if any, of the following words:
1. shop -------
2. desk -------
3. boy -------
4. valley -------
5. spy -------
6. army -------
7. boss -------
8. bus -------
9. quiz -------
10. fez -------
11. church -------
12. branch -------
13. dish -------
14. wish -------
15. box -------
16. fax -------
17. radio -------
18. photo -------
19. hero -------
20. potato -------
21. chief -------
22. roof -------
23. loaf -------
24. leaf -------
25. goose -------
26. mouse -------
27. ox -------
28. child -------
29. deer -------
30. grouse -------
31. criterion -------
32. thesis -------
33. information -------
34. advice -------
35. babysitter -------
36. breakdown -------
37. passer-by -------
38. commander-in-chief -------
39. woman doctor -------
40. gentleman farmer -------

Q2 Write the singular form, if any, of the following words:
1. stimuli -------
2. shop -------
3. desk -------
4. boy -------
5. valley -------
6. spy -------
7. army -------
8. boss -------
9. bus -------
10. quiz -------
11. fez -------
12. church -------
13. branch -------

14. dish -------
15. wish -------
16. box -------
17. fax -------
18. radio -------
19. photo -------
20. hero -------
21. potato -------
22. chief -------
23. roof -------
24. loaf -------
25. leaf -------
26. goose -------
27. mouse -------
28. ox -------
29. child -------
30. deer -------
31. grouse -------
32. criterion -------
33. thesis -------
34. information -------
35. advice -------
36. babysitter -------
37. breakdown -------
38. passer-by -------
39. commander-in-chief -------
40. woman doctor -------
41. gentleman farmer -------
42. fungi -------
43. oases -------
44. indices -------
45. species -------
46. crossroads -------
47. athletics -------
48. measles -------
49. trousers -------
50. tweezers -------

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