Issues In Translating English and Arabic Plurals

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abstract

This study explores undergraduate college students' difficulties in translating English and Arabic plurals. Results of an English and Arabic plural translation test showed that cases where Arabic plurals match those of English in English were translated correctly. However, the students had difficulty translating the following: (i) Arabic plurals that have a singular English equivalent مجوهرات *jewellery;* (ii) Arabic duals with two different singular stems: الرافدان *the Tigris and Euphrates;* (iii) multiple Arabic plurals, i.e. plurals of paucity and multiplicity: دجاج *chicken,* دجاجات *a number of hens*; (iv) stems with two plurals and different usages: *economics* (معالجات الصور); (vi) plural compound: *image processors* إقتصاديات *economies* إقتصادات; (v) plural compound: *image processors* معالجات الصور); (vi) English nouns ending in -ies that have the same singular and plural form: *series, species;* (vii) distinguishing singular and plural forms of the same base when it has two part of speech such as a noun and adjective as in: *rich & riches; wood & woods*; (viii) foreign/Latin singular and plural forms: *indices, larvae, tempi, oases;* (ix) names of tools and articles of dress consisting of two parts ending in -s: *scissors* مقصات, مقص مقصات *scales* ميزان موازي and others. Error data analysis showed that students made more errors in translating Arabic than English plurals, and made more interlanguage than interlangauge errors. Their responses to the Arabic-English plural translation test reflected more morphological than semantic difficulties, but their responses to the English-Arabic plural translation test reflected more semantic problems. They tended to translate imitatively rather than discriminately and literal translation was the most common strategy. When they could not access the meaning of a noun on the test, they gave an equivalent that is phonologically close, gave a paraphrase, an explanation, or an extraneous equivalent. In translating English and Arabic plurals, transfer is bidirectional, i.e., students transfer the noun morphology from the source language to the target language whether the source language is Arabic (L1) or English (L2). Implications for plural translation instruction are given.

Keywords: Plural acquisition; plural morphology; English plurals; Arabic plurals; translation of plurals; translation errors; translation problems.

1. Introduction

The acquisition of different aspects of plural forms by children and adults in the first (L1) and second languages (L2) has been the focus of research for a very long time. For example, Luk & Shirai (2009) reviewed morpheme studies conducted with native speakers of Japanese, Korean, Chinese, and Spanish to test the effect of L1 on the acquisition of grammatical morphemes. Hwang & Lardiere (2013) and Hwang (2013) investigated L2 acquisition of intrinsic and extrinsic plural-marking in Korean (plural marker -tul) by college native speakers of English and native speakers of Korean. Few more studies focused on the acquisition of count/mass plural marking as in *furniture*, and mass non-atomic nouns such as *water* by L1 Korean- and L1 Mandarin-speaking students with a focus on the semantics of atomicity by Choi, Ionin & Zhu (2018); on judgements of countability and plural marking in English by

native and non-native English Speakers by Tsang (2017); and on singular-plural distinction processes in Izon and the difficulties they might pose for teaching and learning of plural formation in English by Okunrinmeta (2013).

Another issue of interest to researchers is transfer and the role of L1 in L2 plural acquisition. For example, Song (2015) enquired whether late L2 learners can attain native-like knowledge of English plural inflections even when their L1 lacks equivalent forms, and whether they construct hierarchically structured representations like native speakers. His findings suggested that learners can acquire target-like L2 inflectional knowledge, even if those inflections do not exist in their L1. Moreover, Snape, García-Mayo & Gurel (2013) studied the role of L1 in L2 acquisition of definite NP-level generics and indefinite sentence-level generics with singular, bare plural, and mass generic nouns by Spanish, Turkish and Japanese learners. Ionin & Montrul (2010) and Mahdavi Emamy (2017) also examined the role of interlanguage and transfer in the production of the English plural noun marker -s by Puerto Rican college students in their classroom writing and the role of L1 transfer in the interpretation of articles with definite plurals in L2 English.

Furthermore, studies by Lucas (2020) and Shintani & Ellis (2011) tested the effects of explicit instruction and computer-assisted language learning (CALL) on plural marking error reduction in Japanese EFL learners, and the effects of comprehension-based and production-based instruction on young Japanese learners' incidental acquisition of English plural -s.

As far as the Arabic language is concerned, several studies investigated the acquisition of plural morphemes by native and non-native-speaking children and adults. For instance, Albirini (2015) explored the role of the frequency, transparency, predictability, and productivity of different plural forms in determining the process that children follow in acquiring Arabic plural forms. He found that the Feminine Sound plural is acquired early and is generalized to other plural forms. Frequency and productivity seemed to shape the acquisition patterns among younger children, but predictability becomes more critical at a later age. Predictability became more apparent at an older age. Younger children used the most productive plural as the default plural form, but older children tended to use two default forms based on their frequency distributions in adult language. Similarly, Saiegh-Haddad, Hadieh & Ravid (2012) found that Sound Feminine plural was acquired earlier by children and had a shorter developmental process than Broken plurals. Also, Sound Feminine plural was a dominant default procedure and was affected by familiarity with the singular noun stem, whereas Broken plural nouns were acquired early by children and were affected by familiarity with the noun stem and frequency of the plural pattern. In general, Broken plurals took longer to acquire and did not reach comparable levels to Sound Feminine plural in the three age groups tested.

When L1, L2, and heritage speakers were compared, both L2 learners and heritage speakers had several problems with Arabic nonconcatenative (broken) plural formation particularly those with geminated and defective roots. The difficulties that heritage speakers had were restricted to forms acquired late by L1 children. By contrast, L2 learners displayed a sharp performance dichotomy between concatenative (sound) and nonconcatenative (broken) plurals forms. Heritage speakers resorted to the the Sound Feminine plural, whereas L2 learners resorted to the Sound Masculine plural (Albirini & Benmamoun, 2014).

Compared with the acquisition of Arabic plurals by children, L1, L2, and heritage adult speakers, the acquisition of English plurals by Arabic-speaking learners of English is especially interesting. Results of a study by Altarawneh & Hajjo (2018) revealed little awareness of English plural morphemes among Arabic-speaking EFL college students at Al Ain University of Science and Technology in the UAE. The students' English proficiency level had a little effect on their use of English plural morphemes. Furthermore, the acquisition of English generics (NP-level vs. sentence-level) by L1 Arabic speakers compared to English native

speakers was investigated by Alzamil (2019). Since generics in Arabic are always definite, the study focused on whether L1 Arabic native speakers perform similarly in both NP and sentence-level types. Five types of nouns were tested: Definite singulars and plurals, indefinite singulars and plurals, and bare singulars. The results revealed that Arabic native-speakers were significantly less accurate than English native speakers. They rated the non-target definite plurals highly in both types of genericity, and rated the target indefinite singulars low with sentence-level genericity. These findings reflected Arabic native speakers' sensitivity to genericity type, and that their selections cannot be explained solely based on their L1.

In English writing, the transfer of L1 forms to L2 was investigated by Diab (2097). Analysis of English essays written by Lebanese sophomore students at the American University of Beirut showed transfer of grammatical, lexical, semantic, and syntactic errors transferred from Arabic (L1) to English (L2). They could not determine whether a certain English word is singular or plural based on its form alone. They resorted to literal translation from Arabic in determining whether a certain English word is singular or plural. For example, *statistics, homework* and *information* are singular in English but have plural equivalents in Arabic. Likewise, Azaz (2019) found that beginners heavily transferred their English (L1) generic bare plurals in the production of Arabic (L2) generic definite plurals. Low-advanced students fluctuated between bare and definite plurals. Only students in the high-advanced group, who had studied Arabic in a combination of very structured classroom instruction and an immersion setting were considerably stable in their production of target-like definite plurals. Analysis of the textbooks used by beginning and low-advanced students showed that the semantics of plural nouns and the definite article were not explicitly taught in the textbooks. The researcher concluded that the effect of L1 in mapping definite and bare plural nouns to their meanings is more visible in the absence of explicit instruction.

In conclusion, the above literature review shows that prior studies focused on the acquisition of plural morphology and the difficulties that children, L1, L2 and heritage learners have in a specific aspect of plural morphology in L1 and L2 such as concatenative and non-concatenative plurals, intrinsic and extrinsic plural-marking, countability and plural marking, L2 inflectional knowledge, singular-plural distinctions, attainment of native-like knowledge of English plural inflection, definite NP-level generics and indefinite sentence-level generics with singular, bare plural, and mass generic nouns; the effect of predictability, transparency, productivity, and frequency of different plural forms on determining the process that children follow in acquiring Arabic plural forms, the production of target-like definite plurals, and plural errors in English and Arabic writing. However, the English and Arabic plural literature showed a lack of studies that investigate the translation of a full spectrum of English and Arabic plural morphology by students majoring in translation, and the difficulties that they have in transferring English singular and plural forms into Arabic and vice versa. Therefore the present studies aims to analyze and classify errors in translating singular and plurals forms from English to Arabic and Arabic to English by advanced undergraduate college students majoring in translation at the College of Languages and Translation (COLT), at King Saud University, in Riyadh, Saudi Arabia. Specifically, the study aims to: (i) Compare and contrast English and Arabic plural morphology; (ii) explore translation students' difficulties in translating specific aspects of English and Arabic plural morphology and their order of difficulty; (iii) identify the strategies that student translators utilize in translating English singular and plural forms to Arabic and vice versa; and (iv) identify students' plural translation error sources by classifying error sources into interlingual errors due to insufficient mastery of plural forms in English (L2), and intralingual errors due to lack of proficiency in Arabic (L1), and report their percentages.

The present study is an application-oriented translation research. It reveals areas of English and Arabic plural morphology that need to be studied exhaustively through the

assessment of L2 students' ability to produce correct forms of English and Arabic plurals and get an idea about their transfer competence; to identify the difficulties that they face in the final stage of their training as translators, and to describe their system of plural translation errors. Translation instructors will gain valuable information about students' difficulties at different stages in the translation program. Since the purpose of the translation program is to train students to produce translations that are grammatically, lexically and semantically correct, the present study will shed light on translation-students' performance, and will give implications for translation pedagogy.

2. Arabic and English Plural Morphology

Arabic has four types of plurals: (i) Masculine Sound regular plural : معلمون *teachers* (nominative), معلمين *teachers* (accusative); (ii) Feminine Sound regular plural معلمات women teachers, (iii) Broken irregular plural: أقلام *pens,* كتب *books,* كراسي *chairs*; and (iv) Dual, i.e. plural of two whether the base form is feminine or masculine: كتابان *two books* (nominative), كتابين *two books* (accusative). Some Arabic nouns have a plural form that is different from its singular form: نساء *women,* نسوة *women*; some feminine plurals have no singular form: قوم *people,* لغويات *linguistics,* مجوهرات *jewellery;* some are invariable broken plural forms that have no singular: تباشير *tidings,* سكر *sugar,* ذهب *gold,* أنعام *camels,* آلاء *blessings,* تعاجيب *wonders,* أبابيل *birds in flocks;* some have several plurals: A plural of paucity, multiplicity and genus أبيات:*lines of verse,* بيوت *houses,* بيوتات *houses;* a Sound Feminine and a Broken plural تمرينات *a number of exercises,* تمارين *exercises;* or a masculine and a broken plural as in some proper nouns محمدون *Mohammads,* محامد *Mohammads* . Some dual nouns do not refer to two singular nouns that are identical in form and meaning, but have two singular nouns that are different in form and meaningالنجدان: طريق الخير والشر:*the two pathways: The pathway of good and pathway of evil;* الابيضان: اللبن والماء *the two whites: Milk and water.* Some plural forms have several meanings : مرئيات *views on something, objects that we see, visuals.* Some nouns have tow plurals, each having a different usage: اقتصاديات *economics,* اقتصادات، *economies;* سلوكات *behaviors,* سلوكيات *behavior, conduct.* Some singular nouns are polysemous and thus has different plural forms for each meaning: عامل *worker, factor;* عوامل *factors;* عمال *workers;* عمالة *labor;* عاملون *laborers.* Some collective and non-count nouns have no singular stem form but can be pluralized: تراب *dirt,* اتربة *dust;* شعب *people,* شعوب *peoples;* فريق *team,* فرق *teams;* but others are singular and have no plural forms: أثاث *furniture;* دقيق *flour;* أرز *rice;* but some can be pluralized: ماء *water,* مياه *water,* أمواه *waters.* Loan words always take a feminine sound plural: *hormones;* استوديوهات *studios;* راديوهات *radios (Al-Jarf, 2015; Al-Jarf, 19940; Al-Jarf, 1994B; Al-Jurf, 1994).*

In English there is no such classification, i.e., the four plural types of Arabic. In most cases, nouns form their plural by suffixation. The plural suffix -s or any of its variants is added to the singular stem form: *cats, dogs, bridges, branches, wishes, buses;* some words end in -s but are singular: *news,* some nouns have a plural invariable form ending in /-s/ but have no singular form: *scissors, trousers;* some plural nouns have no suffix: *cattle;* nouns ending in -f take an -s and/or an -es: *roofs, halves, dwarfs, dwarves;* words ending in *o,* form their plural by adding an -os or -oes: *hero, heroes; cargo, cargoes or cargos; veto, vetoes;* some plural forms involve mutation: *man, men; woman, women; foot, feet, mouse, mice; goose, geese;* adding the suffix -en: *child, children, ox, oxen;* some nouns have the same singular and plural form: *fish, sheep, buffalo, cod, deer, moose, Cherokee, Navajo;* some nouns ending in -ies: *series; species* are not plural; nouns ending in -s are singular: *means, headquarters;* subject names ending in -ics are singular: *linguistics, mathematics, paediatrics;* nouns describing the people of a country ending in -*ese* or -*ss* are plural: *Chinese, Swiss;* singular loan words from foreign languages especially Latin and their plural forms end in foreign and Latin suffixes: *stimulus, stimuli; larva,*

larvae; stratum, strata; matrix, matrices; phenomenon, phenomena; curriculum, curricula; thesis, theses; analysis, analyses; tempo, tempi; *cello, celli; samurai, samurai;* some foreign plurals occur along with English regular plurals: *appendix, appendices, appendixes; bureau, bureaux, bureaus; dogma, dogmata, dogmas; cherub, cherubim, cherubs; formula, formulae, formulas;* plural of compounds take an -s in the first element, second element or both elements of the compound: *attorney general, attorneys general; coat-of-arms, coats-of-arms; court martial, courts martial; manservant, menservants; woman doctor, women doctors; major general, major generals; man-of-war, men-of-war; jack-in-the-box, jacks-in-the-box/jack-in-the-boxes; head of state, heads of states/heads of state* (Al-Jarf, 2015; Al-Jarf, 2011; Al-Jarf, 19940; Al-Jarf, 1994B; Al-Jurf, 1994).

3.   Methodology

3.1 Subjects

Subjects of the present study consisted of 38 junior students studying translation at the College of Languages and Translation, King Saud University, in Riyadh, Saudi Arabia. They were enrolled in a contrastive analysis course (3 hours) that the author taught. All of the participants had completed 28 hours of English language course, 34 required hours and 10 elective hours in Translation and interpreting, and 20 hours of Arabic language courses (syntax, morphology, rhetoric). They were all native speakers of Arabic with English as their L2. In addition, the students had studied singular and plural morphology in the English and in the Arabic Grammar courses that they take.

3.2 In-class instruction

The contrastive analysis course that the students took focused on comparing and contrasting the English and Arabic phonological, morphological, syntactic, semantic, pragmatic, writing and cultural systems. In the contrastive morphology part, the English and Arabic inflectional, derivational, compounding and word formation systems were compared. English and Arabic number, gender, person, case, tense, mood, transitivity, voice and comparison were compared and contrasted in detail. Specifically, English and Arabic plural formation rules were presented separately. English singular and plural forms were illustrated with examples, followed by translation into Arabic, and Arabic singular and plural forms were illustrated with examples, followed by translation into English. The students were given additional plural formation and translation exercises for practice.

     After finishing each topic such as number, gender, case, voice or tense, a quiz was given to assess students' mastery of the material.

3.3 Data collection

At the end of the semester, the students took a singular and plural translation test in which they translated 25 Arabic singular and plural nouns to English, and 25 English singular and plural nouns to Arabic. The test items consisted of a random sample of English and Arabic singular and plural nouns that cover different kinds of plurals, and multiple plural forms derived from the same stem. The test items were presented to the students in isolation as presenting them in context might help them infer their form and hence give a clue to the translation. The subjects were required to translate each English noun or phrase into Arabic and vice versa. The instructions specified that all of the words are nouns as some forms can be both nouns and

adjectives. The students were not allowed to use a dictionary or any other reference. No time limit was imposed on the test session.

Arabic test:

ـ خلافات دجاجات ـ دجاج ـ ـ كشافة ـ مقص ـ حسابات ـ مفردات ـ مجوهرات – ميزان ـ حلويات ـ برمائيات

ـ الهولنديون – مطبوعات ـ سمعيات ـ النكاف ـ الشباب وسيلة مواصلات ـ اقتصاديات ـ النجدان ـ اقتصاد مفردات

خردوات ـ عملات – حُمر -20 مليار

English Test:

Woods - stimuli - oases - economics - crew - calves - larvae – tempi - riches - nation - measles - species - specimen - campus - indices - bureaus - public - series - minority - image processors sheep - flock of geese - parentheses –lady doctor -

3.4 Scoring the Responses

The students' written responses to the singular and plural translation test were marked by the author who was also the instructor of the course. To be marked as correct, each English or Arabic singular or plural noun had to be translated correctly. Responses that were left blank, were partially translated or paraphrased were considered incorrect. Percentages of students who could translate each English or Arabic noun correctly and incorrectly were calculated separately.

To identify the strategies that the subjects used in translating each English and Arabic singular and plural noun, all incorrect responses were compiled and subjected to further analysis. There was a total of 590 anomalies. Translation strategies were classified into: (i) Avoidance (leaving the answer blank); (ii) literal translation where a singular noun was translated with a singular equivalent, and a plural noun which was translated with a plural equivalent without taking semantic and morphosyntactic differences into consideration; (iii) confusing words that are phonetically similar; (v) use of a regular English plural instead of a foreign or Latin plural; (iv) use of a synonym when an exact equivalent is unfamiliar; (v) giving an explanation or paraphrase instead of a single-word equivalent; and (vi) giving both a singular and a plural equivalent where either should be used only; and (vii) giving an equivalent that is morphologically correct, but semantically incorrect.

To identify the error source, each translation error was classified into interlingual, intralingual, or performance error. Interlingual errors are those due to insufficient mastery of plural forms in English (L2), as in: (i) inability to discriminate foreign/Latin singular and plural forms; (ii) inability to give the exact meaning of an English word; and (iii) inability to discriminate English nous that are singular and those that are plural. On the other hand, intralingual errors are those due to lack of proficiency in Arabic (L1), as in: (a) Confusing singular feminine adjective forms with broken plural form of a noun derived from the same stem, having the same ending as in كشافة; (b) The subjects did not know the different meanings of multiple plurals and what the equivalent of each is: اقتصاديات اقتصادات; (c) inability to distinguish plurals of paucity and multiplicity derived from the same singular stem as in: دجاج دجاجات. Performance errors cover instances of occasional lapses in performance due to memory limitations, fatigue and the like. Performance errors were excluded. Quantitative and qualitative data analyses of the plural translation error data are reported.

3.5 Test Reliability

Reliability of the test scores was calculated using the Kuder-Richardson 21' formula as it estimates the internal-consistency of the test items. The reliability coefficient of the plural translation test scores was .83. Inter-scorer reliability was also calculated by having a colleague who taught contrastive analysis mark a sample of answer sheets, then comparing marked answers for each student by both scorers. Inter-scorer reliability was a 95% agreement between the two scorers. Disagreements were solved by discussion.

4. Results

4.1 Students' Difficulties in Translating English and Arabic Plurals

Analysis of the students' responses to the English and Arabic plural translation test showed that the students made more errors in translating Arabic plurals into English (35%) than English plurals into Arabic (28%). 15% of the total responses were left blank with more English items left blank (13%) as opposed to 2% of the Arabic items left blank (see Table 1). This is probably due to the students' lack of proficiency in Arabic and unfamiliarity with the English plural forms.

Table 1: Percentages of Plurals Translation Errors from Arabic-English and English-Arabic

Tests	Correct	Errors	Blank	Total
Arabic-English (25 items)	63%	35%	2%	933
English-Arabic (25 items)	59%	28%	13%	893

Data analysis also showed that cases where Arabic plurals match those of English in number were translated correctly, whereas cases where English and Arabic equivalents differ in number were translated incorrectly as in: مصيدة *trap,* مجهر *microscope & nation, economics.* It also showed that the students had the following semantic and morphological difficulties:

- When to translate an Arabic plural into a singular English equivalent: مجوهرات *jewellery,* مفردات *vocabulary*, or an Arabic singular into an invariable English equivalent ending with -s or -es: ميزان *scales,* مقص *scissors.*
- Translating Arabic duals with two different singular stems: النجدان *the two pathways: The pathway of good and pathway of evil.*
- Translating Arabic plurals with no singular form: مجوهرات *jewellery,* برمائيات *amphibia.*
- Translating Arabic plurals of paucity and multiplicity derived from the same stem: دجاج *chicken,* دجاجات *a number of hens.*
- Translating Arabic stems with two plurals and different usages: *economics* إقتصاديات, *economies* اقتصادات
- When to translate an English singular noun into an Arabic plural: الثروة، الثروات *riches.*
- Translating plural compounds: *image processors* معالجات الصور
- Translating English nouns that have the same singular and plural form: *means* وسيلة، وسائل
- Translating English invariable singular nouns ending in -s or -ies, such as: *series* سلسلة, *species* فصيلة فصائل سلاسل;
- Translating foreign words: يرقات *larvae,* فهارس *indices,* واحات *oases* إيقاعات *tempi*
- Confusing foreign singular and plural forms: *tempi* إيقاعات, *oases* واحات, *stimuli* مثيرات.
- Giving both a singular and a plural Arabic faulty equivalents to plural English/foreign nouns: *woods* غابة غابات, *stimuli* مثيرات, *oases* واحات, *larvae* يرقات, *tempi* ايقاعات or to an English singular noun: *campus* حرم جامعي.

Findings of the present study are consistent with findings of other prior studies in the literature such as Salim's (2013) study in which he compared and contrasted English and Arabic noun morphology, and found that differences between English and Arabic are the main cause of difficulty in L2 plural acquisition. Current findings are also consistent with Hwang & Lardiere's (2013) study on the acquisition of intrinsic and extrinsic plural-marking in Korean by college native speakers of English and native speakers of Korean. Their results suggested that knowledge of intrinsic and extrinsic plural-marking developed gradually with increasing proficiency. However, features associated with the intrinsic plural such as *people, police, cattle* which is similar to the English plural in its grammatical function were acquired more easily than extrinsic (distributive) plurals which require the copying of features of a completely distinct morpholexical item from L1.

4.2 English and Arabic Plural Translation Order of Difficulty

Classification of the English and Arabic plural translation errors in the present study revealed the order of plural translation difficulties in English and Arabic (See Tables 2 and 3). The most difficult Arabic nouns to translate were: كشافة *scales,* ميزان *dessert,* حلويات *amphibia,* برمائيات *boy scouts,* دجاج *chicken,* مجوهرات *jewellery,* مفردات *vocabulary,* حسابات *accounts,* دجاجات *a number of hens* in that order. Students' responses to the Arabic-English test reflected more morphological than semantic difficulties (77% and 23% of the Arabic test items respectively). Students' translations showed the following morphological and semantic weaknesses:

- Inability to match the correct number of the English equivalent to the Arabic singular or plural noun in cases where they are not identical in number. مجوهرات is an invariable Sound Feminine plural with no singular stem in Arabic, but the English equivalent *jewellery* is a non-count singular.
- When the students could not decide on the exact number of an English equivalent, they gave both singular and plural English equivalents as in: حلويات: *candy, candy, sweet, sweet, sweet, desserts, desserts, desserts*.
- Giving both a singular and a plural English equivalent even to Arabic nouns that are clearly plural: دجاجات *chicken, chickens, chicken hen, number of chicken, a number of hen, female chicken.*
- Giving an English equivalent with no -s to names of tools. They gave the following faulty words *scale, scalle, weight, equilizer* as equivalents to ميزان instead of *scales* which is a singular count noun in Arabic with a Broken plural.
- A faulty English singular equivalent such as *secount, discoverer, scout, scouts boy, boys scout, boy scot, girl scout, scouting* was given to Arabic broken plurals such as كشافة as the students thought it is a Singular Feminine noun, not a Masculine Broken plural.
- Some students did not know the exact equivalents of plurals of paucity and multiplicity: دجاج دجاجات

Table 2: Percentages of Arabic-English Plural Translation Errors in Order of Difficulty

Arabic Nouns	Error %	Arabic Nouns	Error %
(f. pl.) amphibia برمائيات	97%	(f. pl.) accounts حسابات	27%
(f. pl.) dessert حلويات	64%	(f. pl.) a number of hens دجاجات	26%
(sing.) scales ميزان	55%	(sing.) scissors مقص	26%
(b. pl) boy scouts كشافة	54%	(sing.) trap مصيدة	18%
(b. pl) chicken دجاج	53%	(sing.) microscope مجهر	18%

خلافات (f. pl.) conflicts	45%	نشاطات (f. pl.) activities	18%
مصفاة (sing.) refinery	34%	مجالات (f. pl.) fields	18%
مجوهرات (f. pl.) jewellery	27%	مروحة (sing.) fan	10.5%
مفردات (f. pl.) vocabulary	27%		

Similarly, Table 3 shows that the most difficult English words to translate are *tempi, oases, specimen, calves, woods, campus, public, indices, riches* in that order; and the easiest are: *crew, economics, nation, series* respectively. Examination of the errors showed that the subjects had semantic problems with 52% of items on the English translation test, and morphological problems with 48% of the items on the test, probably because:

- Some students do not know the denotative meaning of these words.
- They confuse singular and plural foreign/Latin forms.
- They cannot distinguish English and Latin nouns with the same ending as in *campus.*
- They do not know the semantic differences between singular and plural forms of the same noun or noun and adjective: *rich & riches; wood & woods.* They interpreted *riches* as *rich people,* not as *wealth,* because adjectives can be pluralized in Arabic. They also could not tell the difference between *woods* and *wood* as a material, which can be pluralized in Arabic as well.
- They do not recognize word boundaries in words consisting of two pseudo-parts as in *specimen.* Since the ending *-men* looks plural, they gave plural Arabic equivalents.

Table 3: Percentages of English-Arabic Plural Translation Errors in Order of Difficulty

English Nouns	Error %	English Nouns	Error %
tempi	89%	Flock of geese	37%
oases	81%	species	31.5%
specimen	76%	stimuli	29%
calves	74%	larvae	26%
woods	71%	measles	26%
campus	63%	parentheses	16%
public	55%	series	10.5%
indices	55%	nation	8%
minority	47%	economics	8%
riches	47%	crew	8%
bureaux	45%		

Here again, difficulties that subjects in the present study have in translating plural forms that are morphologically and semantically complex and different are similar to those in prior studies. For instance, Mahdavi Emamy (2017) found that morphemes which are more grammatically complex and different were acquired last. The English plural noun marker -s which is often omitted in Puerto Rican college students' writing caused interference (negative transfer) due to the inherent grammatical structures of Spanish.

Moreover, student translators had difficulty recognizing nonconcatenative (broken) plurals such as: دجاجات *a number of hens &* كشافة *boy scouts* and confused Broken plurals that have the same ending as Singular Feminine adjectives كشافة They overgeneralized and regularized equivalents to Sound Feminine plural forms. They could not decide which Sound Feminine plurals have singular equivalents and which ones do not as in: مجوهرات *jewellery,* مفردات *vocabulary.* Similarly they overgeneralized and regularized equivalents to English nouns

ending with an -s assuming that their equivalents are always plural as in *species, measles.* These findings are consistent with findings of Albirini & Benmamoun (2014) and Clahsen's (1992) studies on L1 and L2 acquisition. When Albirini & Benmamoun compared L1, L2, and heritage speakers, they found that both L2 learners and heritage speakers had consistent problems with Arabic nonconcatenative plural formation, especially those with geminated and defective roots. The difficulties that heritage speakers displayed were mainly restricted to forms acquired late by L1 children. Heritage speakers resorted to language-specific default form, namely the Sound Feminine plural, whereas L2 learners resorted to the sound masculine plural. Clahsen's (1992) also found that children made inflectional errors by using regular patterns for irregular forms. Results of another study by Albirini (2015) revealed that the Feminine Sound plural is acquired before and is extended to other plural forms. Frequency and productivity seemed to influence the acquisition patterns among younger children, but predictability became more critical at an older age. Younger children used the most productive plural as the default form, whereas older children tended to use two default forms based on their frequency distributions in adult language.

On the other hand, this study is partially consistent with Saiegh-Haddad, Hadieh & Ravid's (2012) study which found that Broken plurals took longer to acquire and did not reach comparable levels to Sound Feminine plural in the three age groups tested and that Sound Feminine plural was acquired earlier by children and had a shorter developmental trajectory than Broken plurals. Also, Sound Feminine plural was a dominant default procedure and was affected by familiarity with the singular noun stem, whereas Broken plural nouns were acquired early by children and were affected by familiarity with the noun stem and frequency of the plural pattern. In the present study, the subjects made more translation errors with Sound Feminine plurals than Broken plurals, probably because of unfamiliarity with the variety of usage of Arabic Sound Feminine plurals and inadequate exposure to English plurals.

As for the effect of L1 on the acquisition of L2 grammatical morphemes, a review of studies conducted with native speakers of Chinese, Korean, Japanese, and Spanish by Luk & Shirai (2009) showed that Spanish L1 learners' acquisition order generally conforms to Krashen's (1977) natural order. On the other hand, native speakers of Chinese, Japanese and Korean mostly acquired plural –s and articles later than predicted by Krashen's natural order. The researchers concluded that L2 learners can acquire a grammatical morpheme later or earlier than predicted by the natural order, depending on the presence or absence of the equivalent category in their L1. This suggests that transfer from L1 is much stronger than is portrayed in many second language acquisition (SLA) textbooks. Unlike SLA, results of the present study showed that in translating plural forms, there is an inverse relationship between the source language (SL) and target language (TL), i.e., plural forms are usually transferred from the SL to the TL, whether the SL is L1 (Arabic) or L2 (English).

Variations in the translation accuracy of English plurals by subjects in the present study seem to be influenced by some factors, some of which are similar to those mentioned by Young (1988) above. Young indicated that the stage of acquisition, linguistic environment, and communicative redundancy influence the acquisition of English plural formation rules by native speakers of Chinese. Young's findings confirmed the hypothesis that there is a degree of systematicity in interlanguage which is best described in terms of probabilistic rules. The stage of acquisition is the only factor that applies to the results of the present study, whereas linguistic environment, and communicative redundancy do not, as the subjects translated the English and Arabic nouns in isolation. Probabilistic rules also apply to the findings of the present study in cases where the subjects were not decisive and gave both singular and plural equivalents to the same noun.

Another factor that contributes to translation accuracy of plural forms is the subjects' morphosyntactic knowledge of L2 plurals and whether they can reconfigure the formal features assembled in functional categories and lexical items in L1 to those of L2. Hwang (2013) and Lardiere (2009) confirmed that the ability to identify the relevant features and reassembling them into language-specific lexical items was difficult for English-speaking students learning Korean plural marking, but were eventually acquired by some learners. Assembling the particular lexical items of L2 requires that the learner reconfigure features from the way those features are represented in L1 into new formal configurations on quite different types of lexical items in L2.

4.3 English and Arabic Plural Translation Strategies

Analysis of the error data in the present study demonstrated that student translators tended to translate English and Arabic plurals imitatively rather than discriminately (Al-Jarf, 2000). Although the English and Arabic plural systems contrast in some ways, the students did not bring those differences together while translating. Literal translation was the most common strategy. A singular equivalent was given to a singular source word and a plural equivalent was given to a plural source word, even when equivalents were semantically faulty. This means that the subjects seemed to transfer the SL forms to the TL regardless of whether the SL is English or Arabic as in the following examples:

SL	Translation
برمائيات (pl)	sea and land animals - amphibians
خلافات (pl)	discords problems disagreements arguments conflict
مجوهرات (pl)	jowlaries jewels jewels jewlererys diamonds
مفردات (pl)	vocabularies - items
كشافة (pl)	secount - discoverer - scout - scouts boy – boy scot – girl
دجاج (pl)	chickens– hens
دجاجات (pl)	chickens
ميزان (sin)	scale– scalle – weight – equilizer
مقص (sin)	cissor

A second strategy was resorting to phonological similarity. When students failed to access the meaning of a lexical item on the test, they resorted to a word in their lexicon that is phonologically similar. Some subjects thought *calves* was *caves* and/or *caliphs; larvae* was *lava; tempi* was *temperature; measles* was *missiles* or *muscles; campus* was *camp* or *compass; specimen* was *spacemen; species* was *spices; series* was *serious;* and *crew* was *crowd. Tempi* was translated as a singular and a plural.

A third strategy was a faulty paraphrase or an explanatory equivalent as in the following examples: *specimen* was translated as *kind of men; campus* as مجمع as a *compound* or *meeting place* and *tempi* as ألحان موسيقية instead of ايقاعات. برمائيات was paraphrased as: *Sea land fish, water and land, land and water, land and sea, water-land, land-water, sea and land animals* instead of *amphibia.* كشافة was paraphrased as *discoverer* instead of *boy scouts;* دجاجات was paraphrased as *female chicken* instead of *hens;* and ميزان was paraphrased as *weight & equilizer* instead of *scales*.

A fourth strategy was giving an extraneous translation, as in the following examples: *Larvae* was translated as طبقة *layer;* الرئتين *lungs;* كشافة was translated as *secount & scouting; Indices* was translated as اتهامات مداخل *approaches, accusations; calves* was translated as: أثريات *relics;* فجوات *gaps;* قمم *summits;* مخالب *claws;* صخرية *rocky;* حواف *edges.*

Translating English and Arabic plurals imitatively rather than discriminately is a strategy that students resorted to in other prior studies regardless of the grammatical structure. For example, Wilss (1974) found that interference occurred from the second to first language as exhibited by German students learning English. In translating literary works from English to Chinese and from Chinese to English, He (1996) indicated that translators used the same word order, sentence order and structure as the original. They transferred L2 word order and structures into L1 translations. Moreover, Farghal and Al-Shorafat (1996) found that Arab student translators tended to translate English passive structures into Arabic passive structures and used strategies that resulted in structural equivalence between English (L2) and Arabic (L1). Similarly, interference was found to be a major cause of errors in translating German structures containing prepositions into Arabic (Goldmann, 1989).

As in the present study, Diab (1997) found that when Lebanese college students could not determine whether a certain English noun is singular or plural based on its form alone, they resorted to literal translation from Arabic. This was evident in English essays written by Lebanese students. The students made grammatical, lexical, semantic, and syntactic transfer errors from Arabic (L1) while writing their essays in English (L2). For example, *statistics, homework* and *information* are singular in English but have plural equivalents in Arabic. In addition, the students made more errors in areas where English and Arabic were rather similar (articles, prepositions, choice of diction). Unlike translation, students in the present study transferred plural form from the source language whether they are translating English (L2) plural forms to Arabic (L1), or Arabic plural forms to English.

One explanation for transferring the English plural forms to Arabic is students' inability to account for differences in plural formation and plural equivalence between English and Arabic. In English-Arabic translation, students need to develop an awareness of the relationship between the morphosyntactic form of Arabic plurals and its semantic context. In this respect, Olohan and Zahner (1996) indicated that translation students who are aware that languages differ conceptually are better prepared to recognize differences and provide more accurate translations. Failure to account for the structural differences between Dutch (a V-oriented language) and Italian (an N-oriented language) was found to be a major source of errors made by Dutch-Italian translators (Ross, 1987).

Student translators might become more accurate in translating English and Arabic singular and plural forms when they become highly proficient in both languages. This was shown by Azaz (2019) who found that beginners heavily transferred their English (L1) generic bare plurals in the production of Arabic (L2) generic definite plurals, whereas low-advanced students fluctuated between bare and definite plurals. Only high-advanced students, who had studied Arabic in an immersion setting together with a very structured classroom setting, demonstrated considerable stability in their production of target-like definite plurals. Moreover, Ionin & Montrul's (2010) study which found that Spanish-speaking learners of English transferred the interpretation of definite plurals from their native language. However with advanced proficiency and increased immersion in the target language, Spanish-speaking learners of English were as target-like as Korean-speaking learners of English on the interpretation of definite plurals, which suggests that recovery from L1 language transfer is possible.

4.4 Interlingual vs Interlingual Plural Translation Errors

Results of the present study revealed that 60% of the errors were interlingual, i.e. Errors due to insufficient mastery of plural forms in English (L2) as in the following weaknesses:

- Inability to discriminate singular and plural forms of foreign/Latin as well as some English nouns: *oases, larvae, tempi, scales.*
- Inability to identify the exact meaning of some English words such as *specimen, calves, tempi, indices, species, campus.*
- They gave both singular and plural equivalent to the same noun which means that in principle, they knew that some plural nouns in SL have a singular equivalent in the TL, but did not know in which conditions under which this rule applies.

Data analysis also showed that 40% of the translation errors were intralingual, i.e., errors due to lack of proficiency in L1 (Arabic) as in the following:
- Some students did not know that كشافة is a Masculine Broken plural. They thought it is a Singular Feminine adjective as it has the same endings as feminine nouns and adjectives ending such as قصيرة فاطمة. They should have excluded the feminine features of the noun on cultural grounds as in Saudi Arabia, *scouts* refers only to male, not female students. No girls scouts are available in the Saudi educational system.
- Some did not know the difference between multiple as in: اقتصادات اقتصاديات دجاج دجاجات

The above findings are consistent with findings of a study by Altarawneh & Hajjo (2018) in which they found that Arabic-speaking EFL college students at Al Ain University of Science and Technology in the UAE showed little awareness of English plural morphemes. Their proficiency level in English had a little effect on their use of English plural morphemes.

Unlike the numerous errors that the subjects made in translating English and Arabic plurals presented by the test in isolation, results of a study by Song (2015) demonstrated that despite the difference between L1 and L2, both English-native speakers and advanced Korean learners of English were sensitive to plural errors in both structures in a self-paced reading task. Korean learners' sensitivity to the errors was affected by the structural distance of the feature-checking dependency that affected plural inflection, similar to English-native speakers' sensitivity. Their findings suggest that L2 learners can acquire target-like L2 inflection knowledge, even if such inflection is not present in their L1.

Furthermore, the acquisition of English generics (NP-level vs. sentence-level) by L1 Arabic speakers and English native speakers was investigated by Alzamil (2019). Native-Arabic speakers were significantly less accurate than native-English speakers. They rated non-target definite plurals highly in both types of genericity, and rated the target indefinite singulars low with sentence-level genericity. These findings show that Arabic native speakers were sensitive to genericity type, and that their selections cannot be explained solely in terms of their L1.

Contrary to the results of the current study, Choi, Ionin & Zhu's (2018) found that Korean and Mandarin Chinese learners overused plural marking with mass atomic nouns such as *furniture* more than mass non-atomic nouns such as *water,* although plural marking is associated with atomicity in Korean, but not in Mandarin. The researchers attributed learners' performance to the role of the semantic universal of atomicity in L2-acquisition, not L1-transfer. In the present study, the subjects' difficulty in translating atomic nouns such as *public, riches, nation, crew* varied due to role of the semantic universal of atomicity in L2 (English).

5. Recommendations and Conclusion

Results of a translation test showed the English-Arabic student translators in the present study have many difficulties in translating singular and plural form from English (L2) to Arabic (L1) and Arabic to English. To enhance student-translators' ability to translate English and Arabic

plural forms, several teaching and learning strategies may be applied. First student translators need to discern the similarities and differences between English and Arabic plural morphology by teaching and learning the English and Arabic plural rules side by side. Focus should be on the Sound Feminine plural as the subjects tended to regularize Sound Feminine plural forms despite the fact that several exceptional cases exist. Since some irregular plurals are unpredictable, the students have to learn them as individual items. They need to examine the syntactic and semantic contexts as the choice between the singular and the plural equivalent depends on context. They also need to apply metacognitive skills while analyzing the morphosyntactic form and assigning the meaning and number before translating it to the target language.

Second, this study recommends raising student translators' contrastive awareness of cross-linguistic and conceptual features by using explicit instruction, computer-assisted language learning (CALL) and tasks that focus on recognizing plural omission errors while reading texts in L2, and producing obligatory plural forms while writing in L2, as those were found to be effective in reducing plural marking errors by Japanese EFL learners (Lucas (2020). Results of the experiment in Lucas' study revealed positive learning outcomes with regard to both error recognition and plural production, and that web-based instruction was effective in this regard.

Second, that grammar textbooks used by students, as Azaz (2019) indicated, may not teach the semantics of plural nouns explicitly, therefore this study recommends that English and Arabic grammar textbooks used by translation students be supplemented by material that teaches the semantics of plural nouns explicitly and show the differences between English and Arabic plurals and how they are translated.

Finally, difficulties that Arab student translators have in translating English and Arabic plural nouns in context, in translating concatenative and non-concatenative plurals, intrinsic and extrinsic plurals, definiteness, countability and plural marking, and definite NP-level generics and indefinite sentence-level generics with singular, bare plural, and mass generic nouns are still open for further investigation by future studies.

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