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The problematic issue of grammatical gender in Arabic as a foreign language

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Abstract

Many languages of the world have a grammatical gender system that divides all nouns into gendered categories. The gender assigned to a given noun requires gender agreement with associated items in the sentence, such as: determiners, adjectives, and demonstrative pronouns. Research in the area of grammatical gender acquisition has found that this grammatical category poses considerable difficulty for L2 learners. However, rarely was this area of difficulty the focus of L2 studies in Arabic. The present study focuses on the problematic issue of grammatical gender in Arabic as a foreign language. It examines advanced Arabic L2 learners' written errors of gender assignment and agreement in the Arabic Learner Corpus (ALC) v2, compiled by Alfaifi, Atwel, and Hedaya (2014). Based on the classification and analysis of the errors, possible factors of the difficulty facing L2 learners in assigning the correct gender are discussed, and recommendations to reduce their effects are suggested.

Key words: gender assignment, gender agreement, Arabic L2 errors

Introduction

Grammatical gender is a noun classification system that is found in many languages throughout the world. It divides all nouns, including inanimate ones, into gendered categories, and marks associated elements in the sentence for gender agreement (Comrie, 1999; Corbett, 1991). The grammatical gender of a noun is both a lexical and a syntactic property of this noun. "The assignment of gender to nouns," Sabourin (2003, p. 15) explains, "is considered a lexical property while gender agreement is considered to be part of syntax". Grammatical gender should be distinguished from natural gender, i.e. gender based on biological sex feature. Though the two concepts sometimes correspond, they do not always match. For example, in Dutch the noun *meisje* 'girl' has neuter gender and not feminine gender (Comrie, 1999).

This system is considered one of the significant areas in which languages differ. Some languages do not have grammatical gender system such as Chinese and Malay whereas others have a very complex ones such as German and Arabic. Within gendered languages, there is a considerable variety of possible gender systems. There are languages that classify nouns into two gender categories, and others that display three or more grammatical gender distinctions (Corbett, 1999). Languages also vary in elements that are marked for gender agreement. These elements could be verbs, adjectives, pronouns, determiners, among others.

Gender classification of nouns can be specified based on semantic criteria or formal properties. Nouns are assigned to a gender either by their animate/inanimate, human/non-human, or male/female features, or by their morphological or phonological features (Comrie, 1999; Corbett, 2006). When semantic cues are not available, the relation between a noun and its gender is arbitrary; thus, the same noun can have a different gender in different languages. For example, 'moon' is masculine in German, feminine in French, and neuter in Greek (Holmes & Segui, 2006).

Grammatical gender is considered one of the most challenging structures for L2 learners. Research in the area of L2 acquisition has found that this grammatical category poses serious difficulty even for advanced learners (Scherag, et al., 2004). Yet, rarely was this problematic area in L2 acquisition the focus of Arabic L2 studies. The goal of the present study is to investigate the problematic issue of grammatical gender in Arabic as a foreign language. It examines the errors of gender assignment and gender agreement in the written production of advanced L2 learners in the Arabic Learner Corpus (ALC) v2, compiled by Alfaifi, Atwel, and Hedaya (2014). In what follows, the study starts with a review of previous research on L2 grammatical gender acquisition in general, and on Arabic L2 grammatical gender research in particular. Then, the main features of the Arabic grammatical gender are introduced. This is followed by a description of the data and methodology used in the study. Finally, the results of the analysis and a discussion of these results are presented. This will be summed up in the conclusion at the final section.

Grammatical gender and L2 acquisition

Grammatical gender is one of the earliest properties to be mastered in first language acquisition (Franceschina, 2005). When acquiring the gender system of their native language, children rely on the different types of gender cues that their language provide, i.e. formal (phonological and morphological), semantic (natural gender), and syntactic (agreement) cues. At the early stages of their

language development, they seem to rely mostly on phonological and morphological cues and to a lesser extent on semantic and syntactic cues. As children grow older, however, their awareness of semantic and syntactic cues increases. This means that they begin to pay more attention to the meaning of the gendered nouns and the grammatical categories involved in the gender system of their language, such as articles, adjectives, and verbs (Berman, 1986; Franceschina, 2005; Koehn, 1994; Levy, 1983; Mills, 1986).

In second language acquisition, however, grammatical gender has proved to be particularly difficult to learn. Many studies show that most L2 learners, adults and children, have serious difficulties with this grammatical category, and that the problem persists even at advance levels (Bruhn de Garavito & White, 2002; Carroll, 1989; Dewaele & Véronique, 2001; Franceschina, 2005; Hulk & Cornips, 2006a; Scherag, et al., 2004). L2 learners experience difficulties with both the lexical and syntactic properties of the gender system. Assigning the correct gender to nouns as well as applying gender agreement are problematic for L2 learners (Sabourin, 2003). Importantly, L2 learners show fossilisation, as they often fail to get past the overgeneralization stage (Franceschina, 2005; Hulk & Cornips, 2006a). Research concerning grammatical gender in L2 acquisition has examined different aspects of this issue. A number of studies have focused on the type of cue sensitivity demonstrated by L2 learners, comparing it to that of native speakers or other L2 learners with different language backgrounds. Others have examined the differences in the learning strategies employed by L1 and L2 learners, or analyzed L2 learners' speech or written production errors of gender agreement, or investigated the teaching practices that could improve L2 learners' performance with grammatical gender (Andersen, 1984; Cain et al., 1987; Delisle, 1985; Desrochers et al., 1989; Finneman, 1992; Hardison, 1992; Harley, 1979; Roger, 1987).

Several suggestions have been put forward to explain the difficulties adult L2 learners experience with grammatical gender. Some L2 researchers emphasize the effect of L1 transfer on acquiring L2 grammatical gender by adult learners. According to this view, the absence of a grammatical gender system, as well as the differences between this system in L1 and L2, negatively influence the acquisition of the L2 grammatical gender system (Carroll, 1989; Franceschina, 2005; Hawkins, 1998; Sabourin, 2001; Tsimpli & Mastropavlou, 2007). However, the findings of some studies challenge this explanation. They indicate that the problem with gender can also be found in adult L2 learners whose L1 does have a grammatical gender system. Moreover, other studies show that there are adult L2 learners with no gender system in their L1 who were able to acquire this

grammatical category (Bond et al., 2011; Bruhn de Garavito & White, 2002; Ellis et al., 2004, 2012). While the effect of L1 transfer may not be a key factor in acquiring L2 grammatical gender, some studies indicate its importance in facilitating the process, especially at the initial stages of language acquisition (Sabourin et al., 2006).

Other L2 researchers argue that the learning strategies that adult L2 learners use to acquire the grammatical gender may account for the difficulties they face with this grammatical category. While L1 learners rely on phonological and morphological cues for gender assignment at initial stages, some studies show that adult L2 learners take natural gender and syntactic cues into consideration to assign gender to nouns (Andersen, 1984; Cain et al., 1987; Finneman, 1992). Another view proposes that the difficulties with gender may be due to an underspecification of the gender feature. This happens when L2 learners are already aware of gender but do not have a complete knowledge and do not know the right gender specification yet, which may causes them to overgeneralize. This stage of overgeneralization is also common in L1 learners; however, whereas L1 learners progress beyond this stage and gain complete knowledge of the gender feature, L2 learners seem to fossilize in this developmental stage (Hulk & Cornips, 2006b; Brouwer et al., 2008).

While the problematic issue of grammatical gender in the field of L2 acquisition has been extensively studied in many languages, in Arabic, the acquisition of this grammatical category by L2 learners is relatively under-researched. Current research on the L2 acquisition of Arabic has reported persistent problem with Arabic grammatical gender. A number of studies that have been carried out to identify the type of errors L2 learners of Arabic make in their written production found grammatical gender to be one of the most challenging structures to L2 acquirers (Al-’axTaa’ l-lughawiyyah, 1982; Al-Faaori, 2009; Mann, 1992). In Mann's (1992) study, the findings indicated that errors in gender agreement formed 85% of the L2 learners witting errors. Yet, only few studies were devoted to investigating this problem in Arabic.

Two issues concerning gender acquisition have been investigated in Arabic L2 acquisition studies; the order in which L2 learners of Arabic acquire certain grammatical features of the gender system, and the effect of the L1 on the acquisition of some grammatical features of the L2 grammatical gender. Both Nielsen (1997) and Alhaway (2003) explored the acquisition order of two gender agreement structures, i.e. noun-adjective agreement and subject-verb agreement, in adult L2 learners. Nielsen's (1997) study showed both structures to emerge at the same time in some participants while neither of them was

present in other participants. However, the majority of the participants in Alhawary's (2003) study acquired the subject-verb gender agreement structure before the noun-adjective one. In two later studies, Alhawary (2005, 2009) examined the acquisition of nominal gender agreement and verbal gender agreement by L2 adult learners of different L1 backgrounds to explore the effect of the presence or absence of the gender system in the L1 on acquiring the L2 grammatical gender agreement. The results of both studies indicated that with subject-verb gender agreement there was no significant difference between participants whose L1 language has a grammatical gender system and participants with no gender system in their L1. However, a significant difference was found between the two groups in the case of noun-adjective gender agreement. The results also showed that although the former group outperformed the later in the nominal gender agreement structure, the performance of some advanced participants of the second group was relatively comparable to that of the first. A recent study that has been carried out to investigate the effect of L1 transfer is Al-Amry's (2014). In his study, he examined the acquisition of the subject-verb gender agreement structure in Arabic by adult L2 learners who have different L1 backgrounds that vary in their gender system. The results of the study were in line with Alhawary's (2005, 2009) findings. No significant difference in acquiring the verbal gender agreement structure was found between learners who have a grammatical gender system in their L1 language and learners who do not.

Arabic grammatical gender

Arabic has a two-gender system that classifies all noun, animate and inanimate, as either masculine or feminine. Verbs, nouns, adjectives, personal, demonstrative, and relative pronouns that are related to the noun in the syntactic structure of the sentence show gender agreement. The assignment of gender is usually based on semantic criteria, i.e. natural gender, as well as formal properties, i.e. morphological form. The gender category assigned to a given noun is semantically arbitrary, e.g. *baab* 'door' (m.), *shajar-ah* 'tree' (f.), except when it conforms with natural gender, e.g. *walad* 'boy' (m.), *ʾumm* 'mother' (f.).

The masculine is the default unmarked form whereas the feminine is usually the marked one. Most feminine nouns are morphologically marked for gender by one of the three feminine suffixes: *-ah/ -at*, e.g. *shajar-ah* 'tree' (f.), *-aa'*, e.g. *SaHr-aa'* 'desert' (f.), and *–aa*, e.g. *dhikr-aa* 'remembrance' (f.). The *taa' marbuuTah* suffix *-ah/ -at*, pronounced *-ah* in pausal form and, for the sake of simplicity will henceforth be referred to in its pausal form, is the most common feminine

marker. Less often feminine nouns are suffixed by *ʾalif mamduudah -aaʾ* or *ʾalif maqSuurah -aa*.

As a general rule, an Arabic noun that does not have a feminine suffix is masculine. However, a number of masculine words are suffixed with the feminine suffix –*ah*, e.g. *Hamz-ah* 'a male name' (m.), *ʿallaam-ah* 'great scholar' (m.). These Cryptomasculine nouns, as referred to in the literature (Ryding, 2005), are few and low frequent words in the language.

On the other hand, the feminine gender of a noun is generally overtly marked by a feminine suffix. However, there are feminine nouns that have no marked endings. These nouns are semantically marked when they refer to natural gender, e.g. *zaynab* 'a female name' (f.), *bint* 'daughter' (f.), so their feminine gender is realized through the semantic meaning. But when the referent of the unmarked feminine noun is inanimate, e.g. *naar* 'fire' (f.), *shams* 'sun' (f.), which is referred to as Cryptofeminine nouns, neither the form nor the meaning of the noun indicates its gender. The gender for each noun in this group has to be acquired individually. An observation that is useful for language acquirers in identifying the gender of some words in this group is that all cities, most countries, and most body parts that come in pairs are feminine.

Non-human plural nouns, be they living creatures or inanimate things, are also treated like singular feminine nouns although they are not suffixed with a feminine marker. Elements that are related to these nouns in the sentence structure, i.e. verbs, nouns, adjectives, and pronouns, display feminine singular agreement, e.g. *al-funuun* (n.) *l-muʿaaSir-ah* (adj.) 'contemporary (f.sg.adj.) arts (f.pl.n.).'

Data & methodology

The data used in the present study was extracted from the Arabic Learner Corpus (ALC) v2, a freely available open-source of data that was developed at Leeds University by Alfaifi, Atwel, and Hedaya (2014). The corpus includes 282,732 words produced by 942 male and female students between the age of 16 and 42, who were studying at pre-university and university levels in 2012 and 2013. The participants come from 67 different nationalities and 66 different L1 background. The ALC contains Arabic written and spoken data, i.e. essays and recordings, collected from native and non-native learners of Arabic in Saudi Arabia. To serve different research interests, the learner corpus consists of a number of sub-corpora designed according to the following criteria: native vs. non-native speakers, males vs. females, pre-university vs. university, and written vs. spoken (Alfaifi, Atewl, & Hedaya, 2014). The corpus site, however, provides its

users with a searching tool that enables them to select the data they need according to a number of specifications.

The data extracted from the ALC to be examined in the present study is the written production of advanced, adult L2 learners of Arabic with diverse L1 backgrounds, who were studying the Arabic language in Saudi Arabia. In order for the data to serve the goal of the present study, it was selected based on three specifications for the participants, i.e. non-native speakers, learning Arabic for four years or more, and have spent two years or more in Arabic countries, and two specifications for the texts, i.e. written texts, produced in class. The proficiency level of the participants was not determined according to the level or semester of study because the different language programs in which the participants are enrolled organize the levels of proficiency differently. Instead, the learners' level of proficiency was based on the number of years of learning the Arabic language as well as the number of years spent in Arabic countries. The criteria set in the present study to define the advanced level learners are: four years or more of learning Arabic and two years or more of staying in Arabic countries. The data was restricted to the written texts produced in class to ensure that it represents the learners' actual competency since they do not have the option of consulting grammar books or language dictionaries.

The specifications used to select the data rendered a corpus of 18,152 words, produced by 110 male and female adult, advanced non-native Arabic learners between the age of 20 and 35, who were studying Arabic as a foreign language in Saudi Arabia. The participants are from 38 different nationalities with 42 different L1 backgrounds. The corpus contains a collection of 127 narrative and discussion essays written in class. The language used in the texts is MSA, which is the form of the Arabic language taught to the corpus producers.

The goal of this study is to analyze the errors of grammatical gender in the written production of advanced, adult L2 learners in the Arabic Learner Corpus v2 (ALC). To this end, the study starts by identifying the gender errors in the data, then the errors are classified and described. Two aspects of the grammatical gender errors are examined: the gender assignment to the noun, and the gender agreement patterns between the noun and related elements. Errors other than the ones in the grammatical gender are ignored. Errors concerning gender agreement between numbers and their referents, e.g. *thalaath-ah kutub* 'three' (f.) 'books' (f.pl.), are not taken into consideration because this grammatical structure does not follow the rules of the grammatical gender system. It follows a different complicated system that is problematic even for native speakers.

Results

Analyzing the grammatical gender errors in the present study involves two steps: identifying the errors in the data, then classifying and describing them. The number of the grammatical gender errors found in the 18,152 word corpus that consists of 127 texts is 453. This means that the average text of 143 words in the data contains about four gender errors. The gender errors identified in the data are classified and described in terms of two properties of the grammatical gender system: gender assignment to the noun, and gender agreement with the noun.

442 errors in assigning gender to nouns are found in the data of this study. These errors are classified into three types based on the gender features of the noun, i.e. errors in nouns marked by a feminine suffix, errors in nouns with no gender suffix, and errors in assigning the feminine gender to non-human plural nouns. The three types of the gender assignment errors are illustrated in the following examples.

(1) *al- san-**ah**[1] l-maaDii**
    the year (f.n.) the last (m.adj.)
    'The last year'
(2) *makaan-**Φ** xaTiir-ah**
    place (m.n.) dangerous (f.adj.)
    'Dangerous place'
(3) *haadha l-ʾamaakin**
    this (m.sg.demons.) places (f.pl.n.)
    'these places'

Gender assignment errors in the above examples are realized through gender agreement with related elements. Examples (1) and (2) show no agreement between the nouns and the adjectives. In example (1), the feminine noun with the gender suffix *al-san-ah* 'year' (f.) is modified by a masculine adjective *al-maaDii* 'last' (m.), which indicates that the noun is assigned masculine gender. However, the feminine adjective *xaTiir-ah* 'dangerous' (f) in example (2) that modifies the unmarked masculine noun *makaan* 'place' (m.) is an indicator that the noun is assigned feminine gender. Example (3), on the other hand, demonstrates error in assigning the feminine gender to non-human plural nouns. The non-human plural noun *al-ʾamaakin* 'places' (f.pl.) is referred to by the masculine singular demonstrative *haadha* 'this' (m.sg.demons) instead of the feminine singular one

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[1] For the sake of simplicity the *taa' marbuuTah* suffix -*ah*/ -*at*, will be referred to only in its pausal form-*ah* in pausal form.

haadhihi 'this' (f.sg.demons.) which means that the noun is assigned masculine gender.

The data analysis indicates that almost all errors in gender assignment involve inanimate nouns that refer to things or concepts, e.g. *madiin-ah* 'city' (f.) and *makaan* 'place' (m.). While no error was found in the data in assigning gender to natural gender nouns with a gender marker, e.g. *baqar-ah* 'cow' (f.), only three errors were found in assigning gender to natural gender nouns with no gender marker, i.e. *Taalib* 'student' (m.), and four errors in assigning feminine gender to non-human plural nouns that refer to natural gender, e.g. *Tuyuur* 'birds' (f.pl.).

The analysis also shows that all errors in assigning gender to nouns marked by a feminine suffix in the data involve feminine nouns assigned masculine gender, as in example (1). Errors in assigning the feminine gender to non-human plural nouns show also a similar pattern, i.e. feminine nouns assigned masculine gender, as in example (3). However, errors in gender assignment to nouns with no gender marker found in the data are all in assigning feminine gender to unmarked masculine nouns, as example (2) demonstrates. The number of errors occurred in the data in each type of the gender assignment is indicated in table 1.

Type of error	Number of errors	Percentage of errors in each type
a- Errors in nouns marked by a feminine sufix	134	30%
b- Errors in nouns with no gender sufix	214	49%
c- Errors in assigning the feminine gender to non-human plural nouns	94	21%

Table 1: Errors in gender assignment to the noun in the data

While the gender assignment errors identified in the data are 442 errors, errors in gender agreement reached 453 error. This is because different agreement structures are related to the same noun in the sentence. Gender agreement errors are classified into six types according to the grammatical agreement categories involved in the Arabic gender system. The six gender agreement structures are: subject-verb, subject-noun, noun-adjective, noun-demonstrative pronoun, noun-pronoun, and noun-relative pronoun. The following examples illustrate these six types of gender agreement errors.

(4) *ta'axxara l-Haafil-**ah****
    is late (m.v.) the bus (f.subj.)
    'The bus is late'

(5) *al-jaami'-**ah** jamiil**
    the university (f.subj.) is wonderful (m.n.)
    'The university is wonderful'

(6) *madiin-**ah** raa'i'**
    city (f.n.) beautiful (m.adj.)
    'A beautiful city'

(7) *hadhaa l-manTiq-**ah****
    this (m.sg.demons.) the region (f.n.)
    'This region'

(8) *al-masjid fii-**haa****
    the mosque (m.n.) in-**it** (f.pron.)
    'In the mosque'

(9) *al-'ilm l-atii ta'allamtu-ha**
    the knowledge (m.n.) that (f.sg.rel.pron.) I learnt
    'The knowledge that I have learnt'

The above examles show all the types of gender agreement errors occurred in the data. They demonstrate the mismatch between the gender of the noun and the gender of the related elements. In example (4) the masculine form of the verb *ta'axxara* 'is late' (m.v.) does not agree in gender with the feminine subject *l-Haafil-ah* 'the bus' (f.subj.). There is also no agreement in example (5) between the masculine predicate *jamiil* 'is wonderful' (m.n.) and its feminine subject *al-jaami'-ah* 'the university' (f.subj.). Likewise, the masculine form of the adjective *raa'i* 'beautiful' (m.adj.) in example (6) does not agree in gender with the feminine noun *madiin-ah* 'city' (f.n.). Examples (7), (8), and (9) also demonstrate mismatch in gender between the feminine noun *l-manTiq-ah* 'the region' (f.n.) and the masculine demonstrative noun *hadhaa* 'this' (m.sg.demons.), the masculine noun *al-masjid* 'the mosque' (m.n.) and the feminine pronoun *–haa* 'it' (f.pron.), and the masculine noun *al-'ilm* 'knowledge' (m.n) and the feminine relative pronoun *al-atii* 'that' (f.sg.re.pron.).

The data analysis in this study shows that out of the 453 gender agreement errors in the data, 121 are in the noun-adjective structure. This indicates that this structure is the most problematic gender agreement structure for adult L2 learners. This is consistent with Alhawary's (2003) study that found the noun-adjective gender agreement structure to pose serious difficulties for adult L2

acquirers. No significant effect of the distance between the noun and the elements involved in the gender agreement process was realized in the data. Gender agreement errors occurred in the data in long-distance dependency structures such as: **ma'had** *ya'tii l-Tullaab li yata'allamuu fii-**haa*** 'an institute where students come to learn,' where there is no gender agreement between the masculine noun *ma'had* 'institute' (m.n.) and the pronoun *–haa* 'it' (f.pron.), as well as in local dependency structures as the examples (1) - (9) demonstrate. What was noticed from the analysis, however, is that in some gender agreement structures the noun agreed with some elements while disagreed with others. The following example illustrates this situation.

(10) *haadhihi l-fikr-**ah** jaa'anii mundhu l-Sighar**
    this (f.sg.demons.) idea (f.subj.) occurred (m.v.) to me in my childhood
    'I had this idea since my childhood'

In example (10), two elements in the sentence should agree in gender with the feminine noun *fikr-ah* 'idea' (f.n.); the demonstrative and the verb. However, only the feminine demonstrative pronoun *haadhihi* 'this' (f.sg.demon.) shows agreement in gender with the feminine noun. The verb with its masculine form *jaa'anii* 'occurred to me' (m.v.) shows no gender agreement with its subject, i.e. the feminine noun *fikr-ah* 'idea' (f.n.). The number of errors occurred in the data in each of the six gender agreement structures is indicated in table 2.

Type of error	Number of errors	Percentage of errors in each type
a- Errors in subject-verb agreement structure	97	21%
b- Errors in subject-noun agreement structure	82	18%
c- Errors in noun-adjective agreement structure	121	27%
d- Errors in noun-demonstrative pronoun agreement structure	41	9%
e- Errors in noun-pronoun agreement structure	90	20%
f- Errors in noun-relative pronoun agreement structure	22	5%

Table 2. Errors in gender assignment structures in the data

Discussion

The analysis of the data in the present study shows that grammatical gender is problematic for advanced adult L2 learners of Arabic. Most of these learners have been learning Arabic for an average of seven years; nevertheless, they do not seem to have overcome their difficulties with this grammatical category. Arabic L2 learners experience difficulties with the grammatical gender system in both assigning the correct gender to the noun and producing the correct agreement form of the associated elements. The data analysis in this study suggests that the complexity of the Arabic grammatical gender system as well as the strategies employed by L2 acquirers in learning this system are two possible factors that seem to be contributing to the L2 learners' difficulties with grammatical gender.

The grammatical gender system in the Arabic language is a very rich and complex one. This complexity is evident in the many exceptions that the general rules of gender assignment display. Masculine nouns are sometimes suffixed with feminine markers, and feminine nouns are sometimes unmarked just like the masculine nouns. The analysis of the data shows that assigning gender to unmarked nouns is very problematic for adult L2 learners unless the noun has a natural gender referent. 48% of the noun gender assignment errors are of this type. The absence of morphological and semantic gender cues renders the noun ambiguous and confusing for learners. In such cases, learners tend to overgeneralize the feminine gender to both masculine and feminine nouns. The fact that many grammatical structures are involved in the gender agreement process in Arabic is also a major cause of the complexity of the Arabic gender system. As mentioned previously, there are six gender agreement structures: subject-verb, subject-noun, noun-adjective, noun-demonstrative pronoun, noun-pronoun, and noun-relative pronoun. The learners not only need to recognize these structures, but they also have to choose the correct gender agreement form in each structure.

On the other hand, the learning strategies that adult L2 learners employ in acquiring the Arabic grammatical system could also be contributing to the complications that these learners experience with the grammatical gender system. The analysis of the data show that the number of errors in assigning gender to nouns with feminine suffix is high. 30% of the errors found in gender assignment are of this type. This is an indication that the learners fail to activate the morphological gender cue in the noun. The data analysis also demonstrates that nouns with natural gender, marked or unmarked, do not pose any difficulty to L2 learners in gender assignment. Errors in gender assignment involve only

formal gender nouns, i.e. nouns with inanimate referent, whether marked or unmarked.

The fact that L2 learners of Arabic do not use the morphological gender cue but they use the semantic gender cue demonstrates a semantic approach to gender assignment. It suggests that the strategy that guides the L2 learners' choice of gender is based on the meaning of the noun and not its form. This learning strategy that is common among L2 learners may account for the difficulties these learners face with grammatical gender. Some grammatical gender studies in L1 acquisition found that L1 learners use an opposite strategy that relies on phonological and morphological cues for gender assignment at initial stages rather than semantic cues. These learners end up acquiring the system perfectly (Andersen, 1984; Cain et al., 1987; Finneman, 1992).

On the other hand, the data analysis demonstrates two different patterns of gender assignment errors. Feminine nouns that are marked by feminine suffix are assigned masculine gender while masculine nouns with no gender marker are assigned feminine gender. The learners overgeneralize the masculine gender in the former and the feminine gender in the later. Treating the two types of nouns, i.e. the marked and the unmarked, differently suggests that the learners are aware of the marker's presence. However, although they do realize the presence of the marker, they do not seem to be able to activate it as the analysis suggested above. This indicates that their knowledge of the gender marker's function is still not specified. The learners' awareness of the gender marker, i.e. the morphological cue, did not develop until later stages, and it still did not reach the stage of complete knowledge. For those of them who have been learning the language for more than ten years, this seems to suggests fossilisation in an incomplete stage of acquisition

Hulk and Cornips (2006b) and Brouwer et al. (2008) suggest that the underspecification of the gender feature is what causes L2 learners to overgeneralize. Learners are aware of gender and gender cues but do not have complete knowledge of the gender system rules. This is a normal developmental stage that even L1 learners go through. However, while L1 learners progress beyond this stage and attain complete knowledge of the grammatical gender system rules, L2 learners don't. Their knowledge of the gender system remains incomplete. This incomplete knowledge of the grammatical gender system that L2 learners have is evident in the data in some gender agreement structures where the noun shows agreement with some elements while disagree with others.

It is possible that applying simple strategies in teaching the Arabic grammatical gender system may reduce some of the difficulties L2 learners experience with this grammatical category. The complexity of the Arabic gender system may be simplified by introducing the learners at the beginning level only to the general rules of assigning gender to nouns. At this initial stage, moreover, it is important to increase the learners' awareness of the gender morphological cues. Once the learners are able to assign gender to nouns according to the general rules, exceptions to these rules may be presented to them gradually. On the other hand, when teaching the grammatical system, the emphasis should be on the noun and its gender features. Gender agreement structures should not be introduced in details until the learners attain good knowledge of assigning gender to nouns.

Conclusion

Research in the area of L2 acquisition attests that grammatical gender is one of the most challenging structures for L2 acquirers even at advance levels. The present study explores this problematic issue of grammatical gender in Arabic L2 acquisition; an area that did not receive enough attention in Arabic L2 studies. Its goal is to examine grammatical gender errors in the written production of advanced, adult L2 learners of Arabic. The 18,152 word corpus analyzed in the study was extracted from the Arabic Learner Corpus (ALC) v2 developed at Leeds University by Alfaifi, Atwel, & Hedaya (2014). The 453 gender errors identified in the data were classified and described according to the two aspects of the grammatical gender system: gender assignment to the noun, and gender agreement with the noun. The data analysis shows that advanced L2 learners have no difficulty in assigning gender to natural gender nouns. However, nouns with formal gender, i.e. inanimate nouns, proved to be challenging for them, especially when no morphological gender cues are available. On the other hand, the most problematic gender agreement structure for advanced L2 learners is found to be the noun-adjective gender agreement structure.

To sum up, the findings of this study indicate that grammatical gender is a challenging grammatical category for advanced, adult L2 learners of Arabic. These learners experience difficulties with both gender assignment and gender agreement. Although most of the text producers have been learning Arabic for an average of seven years, they are still struggling with this complex system. It seems that the grammatical gender system that these learners have developed did not progress beyond the developmental stage of overgeneralization. Some of them seem to have fossilized in this incomplete stage of acquisition. The

complexity of the Arabic grammatical system as well as the learning strategies that L2 learners use in acquiring this system are possible causes of the difficulties facing L2 learners with the grammatical gender in Arabic. Further research in this problematic area of Arabic L2 acquisition is needed to explore the factors creating this difficulty and finding ways to reduce its effect.

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