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PERSON RESOLUTION AGREEMENT IN L2 COMPOSITIONS: NATIVE ARABIC WRITERS IN AN L2 ENGLISH

JON COTNER

ABSTRACT

Resolution rules are syntactic parameters that regulate the proper agreement of phi-features (person, number, and gender) between a noun/noun phrase and a verb phrase within a grammatical language system. One of the facets of the primary study, of which this paper is an excerpt, examines L2 English compositions written by native Arabic speakers and investigates whether students transfer person phi-feature agreement patterns from their L1 to their L2. The findings discussed in this paper reveal agreement errors in the application of person resolution rules, and the majority of these person agreement errors are found in indefinite pronoun constructions.

1.0 Introduction

Fluency is the goal of every second language learner. The early lessons in L2 acquisition address correct syntactic agreement between a subject noun and its verb. That seems simple enough, but a language, any language, is an extremely complex and dynamic organism that seems to defy *simple* at every turn. In most languages, even basic agreement between a subject noun and a verb often entails knowledge of advanced linguistic factors and application of idiosyncracies of grammar that are beyond the scope of the beginner. If the learner's L1 and L2 are linguistically remote, those difficulties are amplified. It is hoped that calling attention to extenuating grammatical issues between the languages in play may prove helpful. The original study (Cotner, 2016) addresses agreement of the phi-features¹ (person, number, and gender) between a noun (including noun phrases and conjoined noun phrases) and a verb phrase, and how the differing systems of agreement in the English and Arabic languages impact native Arabic writers writing in an L2 English.

This paper will discuss specifically the person agreement issues in both Arabic and English, analyze the rules that are employed to resolve these agreement issues, and examine, from a performance perspective, the application of these resolution rules in L2 English compositions written by native Arabic speakers. The agreement issue is one of the foremost

¹ The term 'phi-feature' for person, number, and gender agreement features is found in Government and Binding (GB) and Minimalism, among other systems (Corbett, 2009, p. 125). I use this term as well for these three agreement features (person, number, and gender).

stumbling blocks to proficiency in any language, and, according to Koffi “ESL/EFL teachers can expect negative transfer in the person and number agreement system from their students, especially where agreement is not controlled by the same hierarchy patterns” (Koffi, 2010, p. 419). The number of native Arabic speakers acquiring the English language is surging, and it is my hope that this work will identify common misapplications of agreement rules and areas of agreement confusion, as well as help transition those second language acquisition students to better English usage.

2.0 Syntactic Agreement of Person

Within the grammar of each language, when a noun and/or noun phrase is combined with a verb phrase, syntactic factors require agreement in person, number, and/or gender between the noun and the verb components. The person phi-feature is often, but not always, the agent of the action in the clause. From a linguistic perspective, person is a morphosyntactic feature that represents the semantic notion of *subject* in a language. In most languages, the subject must agree with the verb within the clause, although the form of this agreement may differ between languages.

Despite the agreement differences between language systems, there are associated “universal correspondence principles” that determine proper agreement within the person category (Zwicky, 1977, p. 715). In terms of language as a communication tool, Carnie posits that person “refers to the perspective of the speaker with respect to the other participants in the speech act” (2013, p. 11). Person agreement in a language system entails the combination of an appropriate referent pronoun or lexical nominal with inflectional markers to create a cogent and grammatically correct verb phrase. Lyons (1968) spells out the idea of person with “[t]he category of person is clearly definable with reference to the notion of participant-roles” (cited in Zwicky, 1977, p. 715), and these participant-roles are determined by reference made in the discourse. Thus participant-roles are determined by the pragmatic referent which is reflected by a semantic identifier and corresponds to an element in the linguistic person category. It should be noted that in the literature on resolution rules, discussions on person most commonly include the pragmatic notions of first, second, and third persons in singular, dual (where applicable), and plural number.

Within all language systems there are three universal participant-roles, which are ‘first’ person, the speaker of the discourse; ‘second’ person, the person or persons that are addressed and present with the speaker; and ‘third’ person, the person or persons that are not the speaker or present addressee. The third person category is also used commonly in reference to [-human] things and animals. The singular person elements can be summarized as follows:

Person	Singular Designations
1SG	speaker
2SG	addressee
3SG	person, not speaker or addressee

Table 1: Singular Person Elements

These participant-roles also have plural forms and the plural sets are created by combining differing proportions of the person categories. For instance in English, a speaker plus a person from any other category makes a first person plural; a present addressee plus another second person(s) or third person(s) makes a second person plural; and a non-present third person plus any number of additional third person(s) makes a third person plural. In Arabic, dual verb forms are used in the second and third persons when two similar entities are joint referents; plural verb forms are employed in instances with three or more referents (Vaglieri, 1959, p. 67; Ryding, 2011, pp. 298-299). The applicable plural person elements for English and Arabic can be summarized as follows:

Person	Singular Designations
1PL	speaker + addressee and/or + third person(s)
2DL	addressee + addressee or third person (Arabic only)
2PL	addressee + addressee and/or + third person(s) (Arabic: three or more)
3DL	person, not speaker or addressee + third person (Arabic only)
3PL	person, not speaker or addressee + third person(s) (Arabic: three or more)

Table 2: Plural Person Elements

Having established the general nature of linguistic participant roles and how they apply to person phi-feature agreement in the English and Arabic languages, the onus now is to provide a glimpse at the breadth of possible implementations of these person agreement features. The dynamics of person phi-feature agreement form the basis of one of the few binary language categorizations: morphosyntactic alignment. The core of this distinction is the handling of agreement in transitive and intransitive verb constructions, namely how the subject and direct object are dealt with, relative to the agent of the action. In an ergative-absolutive language, such

as Tsakhur and Greenlandic, the direct object of a transitive verb construction is handled the same as the subject of an intransitive verb construction, whereas the agent (subject) of a transitive verb construction is handled differently (Corbett, 2009, pp. 36, 56-58; Sadock, p. 37). In this system, person agreement of the agent/subject with the verb differs between transitive and intransitive verb constructions. A nominative-accusative language, which includes the majority of the world's languages, handles the agent (subject) of both a transitive and an intransitive verb construction the same; and the direct object of a transitive verb construction uses a different form than the agent/subject. English and Arabic are both nominative-accusative languages that share subject-verb agreement forms in transitive and intransitive verb constructions.

Another feature that differentiates person agreement among world languages is clusivity, which recognizes the distinction between inclusive and exclusive first person designators. Most languages employ an inclusive first person plural application, in which 'we' includes the addressee as well as the speaker. However, the Blackfoot language distinguishes between second person plural pronouns that include or exclude the addressee (Frantz, 2009, pp. 17-18; Taylor, 1969, p. 163). Blackfoot "*requires* a speaker to indicate whether or not the person to whom one is speaking (the **addressee**) is included in the 'action'" (Frantz, 2009, p. 17). Although the distinction in Blackfoot is primarily pronomial from a syntax perspective, Blackfoot is an amalgamating (polysynthetic) language and it is immediately apparent that *nitáakitapoohpinnaan* (we, not you, will go) differs substantially in form from *áakitapaoopa* (we, including you, will go) (Frantz, p. 18). Another indigenous Algonquian amalgamating language, Nishnaabemwin (Ojibwe) also makes a clusive distinction in the second person plural (Valentine, 2001, p. 122). In addition, Blackfoot also utilizes a distinction between major (proximate) and minor (obviative) third person agents with animate nouns (Frantz, p. 13), which Taylor designates as third person (proximate) and fourth or subordinate person (obviative) (pp. 160, 263). While indigenous languages of the Americas often provide elegantly divergent grammatical solutions, they are not the only outliers in person agreement resolution.

Second person singular references also differ in some language contexts. In Hindi, three distinct second person singular pronouns are used to distinguish a "politeness hierarchy" which ranges from impolite through intermediate neutral to most polite (Agnihotri, 2007, p. 12). While the verbal distinctions between the forms are not as substantive as in Blackfoot, "[i]n terms of grammatical agreement, *tuu* [impolite] is singular and *tum* [neutral] and *aap* [polite] plural" (Agnihotri, p. 131). Constructions utilizing these pronouns are quite dynamic and can change within a conversation if one of the participants becomes vexed with another participant. Like Blackfoot, Hindi also employs proximate and obviative third person pronouns in verbal constructions (Agnihotri, p. 133). While person agreement between noun and verb is not the most complex linguistic construction, it can be fraught with danger.

The foremost authority on phi-feature agreement, Corbett, is typically understated in his analysis: "[p]erson resolution is often seen as unproblematic, but it has been known for some time that there are complications" (2009, p. 241). Corbett proceeds to document person agreement issues in Czech, Slovene, and German and, in reference to the person resolution rules, says that "[t]hey apply generally, but it is important to remember that person resolution may well

not be obligatory” (p. 241). With these caveats in mind, the general resolution rules for person agreement that apply to most nominative-accusative languages, including English and Arabic, can be summarized as follows:

Person Resolution Rules

- I. If the elements include a first person, first person agreement forms will be used;
- II. If the elements include a second person, second person agreement forms will be used;
- III. The default condition is that third person agreement forms are used.

(Corbett, 1983, p. 176)

To illustrate implementation of these rules, consider these examples from English:

- (1) My wife and I are learning Zulu
my wife 3SG.FEM. and I 1SG.MASC. are learning PRES.1PL. Zulu SG.
- (2) Ahmed always wears green
Ahmed 3SG.MASC. always wears PRES.3SG. green SG.

The sentence in example (1) contains a first person element (‘I’) so the first person resolution rule applies for verb agreement in this case and since two persons, ‘my wife’ and ‘I,’ are joined in the subject noun phrase, resolution of number will also be necessary; in this case the plural will be used. The noun phrase ‘my wife and I’ is a conjunct coordination structure, defined “as two or more nouns or pronouns conjoined by a coordinating conjunction, or two or more nouns or pronouns separated by a pause or comma” (E. Koffi, personal communication, 2016). The sentence in example (2) contains a third person element (assuming that Ahmed is not present at the conversation) so the default third person resolution rule applies for verb agreement in this case, in the singular since the element refers to only one person. By applying these rules when creating noun/verb constructions, the person component of the construction will be correct for most nominative-accusative languages. These two examples demonstrate person agreement only, which is the only agreement issue discussed in this paper; number and gender resolution rules also need to be considered when creating grammatically correct noun/verb constructions.

The dearth of discussions on resolution rule applications in the Arabic language within the available literature reveals a distinct gap in the linguistics corpus. Among the more salient characteristics of Arabic person phi-feature agreement, occasional references are found regarding the effect that precedence has on agreement in Arabic (Corbett, 2003b; Corbett, 2009), but the critical interplay of humanness/non-humanness on Arabic plural forms is outside of the main body of resolution rule research. Although the data from this portion of the literature review deals generally with resolution rules and the application of agreement parameters, the detail is

largely representative of conclusions concerning languages other than Arabic. However, this information will prove helpful in understanding the general nature of syntactic agreement, and more specifically the nature of person resolution rules and their development and application.

3.0 Linguistic Agreement

Within the field of linguistics, agreement is a grammatical process in which the rules of morphology and syntax, and to a lesser extent semantics, are matched to fit the needs of a particular language construction. Although the terms *agreement* and *concord* are used interchangeably in some academic circles (Ibrahim, 1973, p. 26; Corbett, 2003a, p. 159; Corbett, 2009, pp. 5-7; Ryding, 2011, p. 57), for this study I will employ the strict use of the term *agreement*. Ryding provides a clear summation of the two terms, “the term **concord** is used to refer to matching between nouns and their dependents (typically adjectives, other nouns, or pronouns), whereas **agreement** refers to matching between the verb and its subject” (2011, p. 57). Matching between the verb and its subject is “a complex phenomenon” (Corbett, 1983, p. 205). The noun phrase that makes up the subject can have attributes that lead to the confusion of agreement with the verb, such as mixed gender, differing categorical imperatives (humanness/non-humanness, animate/inanimate), and number discord. These agreement issues can be prominent between languages, but such is the domain of this study.

For the purpose of agreement within systematic grammatical structures, there are three primary methods that determine how agreement is resolved: the semantic/referential method, the syntactic method, and the mixed semantic/syntactic method (Corbett, 2003b, pp. 269-290). In the semantic/referential method, all features of agreement are semantic, with the controller/subject being equated with a referent and the agreement features being dependent on matching that referent exclusively by meaning (Corbett, 2003a, p. 160). Consider these example sentences:

- (3) Borg is a big dog.
Borg SG.MASC. is PRES.3SG. big SG. dog SG.
- (4) كبير كلب بورغ
kəbirə kalb bɔrɔq
big SG.MASC. dog SG.MASC. Borg SG.MASC.
'Borg is a big dog.'

NOTE: All Arabic sentence examples are read from right to left; the IPA glosses provided below each are read left to right at the word level, but the IPA word glosses are directly below each

Arabic word and thus follow the right to left word order of the Arabic sentences to which they correlate².

In the English example (3) above, the semantic referent (Borg the dog) is handled within the rather loose constraints of the English agreement system, where the semantic/referential method of agreement usually functions. The syntactic simplicity of the English agreement system makes it almost an anomaly. In reference to English, Corbett asserts that “[i]ts agreement system is at the typological extreme, particularly in the role of semantics...it will prove very useful as a familiar language which exhibits an exotic agreement system” (2006, p. 32). While viewing the English agreement system as ‘exotic’ seems hyperbolic, it does provide a valuable counterpoint to that of the Arabic language system.

In the Arabic example (4) above, the semantic referent ‘Borg,’ a male dog, is handled by a masculine form of the noun. This is possible by virtue of Arabic using natural gender nouns for living things, which have two gender forms (Ryding, 2011, pp. 124-125). In this example, the [+masc] form of the noun ‘dog’ is used with the [+masc] form of the adjective ‘big’ (the copulative verb is not used in the present tense in Arabic). However, the semantic/referential method of agreement, which functions well for the English language, can be confounded by the necessities of matching grammatical gender in the Arabic language and renders this method unpredictable and inaccurate in Arabic. The arbitrary interplay of grammatical gender and semantic/referential agreement is seen more clearly in the following example:

- (5) خضراء ظهرت الصغيرة السيارة
 χʔdərəʔ dəharθ əʔsəyira əʔsejara
 green SG.FEM. appeared PERF.3SG.FEM. the small SG.FEM. the car SG.FEM.
 ‘The small car appeared green.’

In example (5) above, the feminine gender of ‘car’ is purely a grammatical construct and carries no semantic information but must be matched to each of the other elements in the sentence including the adjectives ‘small’ and ‘green’ and the verb ‘appeared.’ The semantic/referential method of agreement is often unusable for languages that contain gender agreement features (Corbett, 2003a, p. 160), and contributes little meaning in English where the gender of the controller noun does not need to agree with either verbs or adjectives. However, in

² The IPA glosses are provided as an approximation of the pronunciation of the Arabic examples. The grammaticality of each of these Arabic examples was verified by a native Arabic speaker (Hejazi dialect) from Jeddah, in the western region of the Kingdom of Saudi Arabia.

English there are instances “such as ‘handsome’ and ‘pretty’ where semantic agreement is invoked” (E. Koffi, personal communication, 2016). Later in this study, it will be shown how the semantic/referential method of agreement finds limited application in the Arabic language.

The second method of agreement is based on syntax where all agreement is based on features that are grammatical (Corbett, 2003a, p. 161). The examples (3) through (5) above are all grammatically correct because they conform to the feature agreement matching parameters that are common to each respective language. Syntactic agreement is not consistent for all Englishes and American English often differs from British English, especially with the use of collective nouns (Koffi, 2010, pp. 142-143; Adger & Harbour, 2008, p. 18). An example of differing agreement by proximity is provided by the linguist Zwicky on his language blog. The example he uses is from the UK newspaper *The Economist* that demonstrates agreement parameters acceptable in terms of grammaticality for British English but parameters which are incorrect to an American English ear (Zwicky blog, 2014):

(6) “Then, when snow or rain wash them onto an ice floe...”

In this example (6), the conjunctive phrase ‘snow or rain’ is treated as a plural noun phrase in British English despite the fact that it is joined as a positive disjunction (Koffi, 2010, p. 342) which functions as a singular noun phrase in American English. This single instance cannot be taken as indicative of a widespread discrepancy between the syntactic methods of agreement within English dialects, but serves as a warning that neither the syntactic method nor the semantic/referential method should be given absolute authority in matters of grammatical agreement.

The mixed semantic/syntactic method of agreement is applicable to both the Arabic and English languages. Although agreement in the Arabic language is determined largely by syntactic features, semantic features do come into play in certain plural constructions, such as example (4) above; agreement in the English language is primarily semantic, but as was seen above in example (6) syntactic features can also apply. Despite the predominant agreement principles that drive resolution in the Arabic and English languages, they both exhibit exceptions which place them in the mixed resolution category.

An approach to agreement that allows the parameters to encompass both semantic and syntactic agreement is often necessary and, in the words of Steele (1978), “[t]he term **agreement** commonly refers to some systematic covariance between a semantic or formal property of one element and a formal property of another” (my emphasis, cited in Corbett, 2003a, p. 159; Corbett, 2003b, p. 105). Conflicting issues between semantic and formal properties can hamper agreement between a noun or conjoined noun phrase and a verb phrase, but language-specific resolution rules are applied in an ordered sequence to bridge the gap that can occur between the semantic/referential and the syntactical/formal methods of agreement. In the following two sections, I will broadly examine agreement features in the simpler and more familiar English followed by a discussion of the more complex and less familiar Arabic.

3.1 Agreement in American English

In the first decades of the twenty-first century, the English language is “the most widely spoken language in the world (as a first or second language) (Fromkin, Rodman, and Hyams, 2014, p. 284). Although it is currently the national language of only a few countries (the United States, Canada, the United Kingdom, Australia, and New Zealand), it has formidable roots in the former UK colonies in Africa and India and is a valuable medium of communication in many academic and scientific circles (Fromkin et al., 2014, p. 302). With a language that is spoken around the world, the presence of many dialects with varying degrees of divergence is unavoidable. However, despite the wide-ranging dialectical variation, “[a]ll speakers of English can talk to each other and pretty much understand each other” (Fromkin et al., 2014, p. 279). Although there are many recognized dialects of the English language, the primary dialects are British English and American English.

The mutually intelligible dialects of the English language, especially the British English and American English varieties, are differentiated primarily by accent, pronunciation, and vocabulary (Fromkin et al., 2014, p. 285). The accent and pronunciation variances in English are largely traceable to region and locale, but the American proclivity for vocabulary idiosyncrasies, that continues today unabated, was noted in Mencken’s copious study of the American tongue, *The American Language*: “The early Americans showed that spacious disregard for linguistic nicety which has characterized their descendants ever since. They reduced verb-phrases to simple verbs, turned verbs into nouns, nouns into verbs, and adjectives into either or both” (1937, p. 117). This propensity for stretching linguistic boundaries continues to this day and further contributes to the lugubrious grammar of a language in many ways poorly suited, or at least onerously Medusal, to fill the role of global tongue. More recently, Pullum also characterized English in this vein: “English has horrendous orthography, an extremely complicated inventory of vowels, a few hundred irregular verbs, a huge vocabulary, and other features that make it ill-equipped to be a global language used by millions of people who must learn it in adulthood” (cited in Lightfoot, 2016, p. 474). In light of minor vocabulary differences, and despite the reality of syntactic differences between British English and American English (that pose no intelligibility issues), it should be noted that this study is restricted to agreement parameters and the resolution rules that are in play for American English. Henceforth, references to ‘English’ in this study refer exclusively to the American English dialect.

The morphosyntactic details of agreement in the ubiquitous English language are simple relative to many world languages, and according to Corbett “[t]he readiness with which conjoining is employed varies dramatically across languages: English is at one end of the typological extreme in allowing coordination easily” (2009, p. 239). Despite this easy coordination, the word order that must be followed in the English language is very strict. In English, the agreement features, which must be matched, are primarily person and number, but gender differentiation is present in the third person singular (Koffi, 2010, pp. 418-420). In addition, English has a very limited number of inflectional morphemes (only four for verb forms) and, in turn, conformity to the SVO (Subject-Verb-Object) word order in normal constructions is vital for confusion-free understanding (Fromkin et al., 2014, p. 346). This lack of richness in inflection and the dependence on word order in English can prove vexing for students from L1s,

such as Arabic, where sentence word order is determined by emphasis. The few case endings that remain in use for English are restricted to the genitive and pronoun forms (Koffi, 2010, p. 418; Fromkin et al., 2014, p. 345), but the use of a subject (either in the form of noun, noun phrase, or pronoun) is mandatory. Fromkin, Rodman, and Hyams sum up the situation succinctly: “Modern English, with its rudimentary case system, defines grammatical relations structurally” (2014, p. 348). In English, agreement can be handled largely with the semantic/referential method, but deviations in word order are generally not acceptable.

3.2 Agreement in Modern Standard Arabic

As a language, Arabic is elegant both in the regularity of its verb constructions (despite their many forms) and the complexity of its morphological possibilities (possibilities that are used in all but function words). The Arabic language is spoken primarily in the Arab world, through the Middle East, and across North Africa, but the language is now heard regularly worldwide. Although the variations in dialect are great between regions, the “morphology and syntax of written Arabic are essentially the same in all Arab countries...[and t]hus the written language continues...to ensure the linguistic unity of the Arab world” (Wehr and Cowan, 1994, p. vii). This common written form of Arabic is referred to as Modern Standard Arabic (MSA), which is used in all Arab print media and written communication and is known by all educated Arabs, while the local spoken dialect that Arabs use in informal communication is particular to their locale (Ryding, 2011, pp. 5, 7).

The importance of Modern Standard Arabic within the Arab world cannot be understated: “it is noted that for communication to take place between Arabic-speakers from different dialect regions, usage of a considerable amount of MSA vocabulary is absolutely necessary. Furthermore, the dominance of MSA in formal written media and literature is undisputed, and it is certain that MSA will continue to occupy the center of most Arabic language curricula” (Buckwalter and Parkinson, 2011, p. 2). Although Modern Standard Arabic provides a cohesive voice for the media and the entertainment worlds, spoken Arabic in differing dialects reverberates through markets and cafés from the beaches of Morocco to the antiquities of Iraq. These dialects of Arabic are anything but cohesive, but they all share the rich linguistic legacy of MSA. While this diglossia³ hints at the complexity of the Arabic language experience, this study will be limited exclusively to the documented grammar of Modern Standard Arabic; references to ‘Arabic’ in this study refer exclusively to Modern Standard Arabic.

³ In fact, Google (2016) defines ‘diglossia’ as “a situation in which two languages (or two varieties of the same language) are used under different conditions within a community, often by the same speakers. The term is usually applied to languages with distinct “high” and “low” (colloquial) varieties, such as Arabic.”

In the widely-inflected Arabic language, resolution rule implementation is more complex than in American English and exhibits exceptions which could prove a hindrance to native Arabic writers writing in English. One exception to standard resolution rule agreement occurs with constructions containing non-human plural subjects. In Arabic constructions with non-human plural subjects, the verb always follows the form of third person singular feminine, regardless of subject/verb order (Ryding, 2011, pp. 125-126; Alhawary, 2011, p.79). These points of departure from standard agreement parameters highlight the negative transfer that is possible (or likely) when native Arabic speakers are attempting to master number and gender agreement in English.

3.3 Resolution Rules Approach to Linguistic Agreement

Having discussed grammatical agreement in general and the general agreement issues pertinent to the English and Arabic languages, attention now turns to the resolution rules approach specifically. The term ‘resolution rules’ was first used by Givón to refer to the ‘rule-schema’ which resolve conflict in person, number, and gender agreement (1970, p. 250). Braidì suggests that the works of Givón ‘exemplify “[f]unctional approaches to language...that link grammatical form to grammatical function” (1999, p. 2). This approach of Givón, which differs fundamentally from the competence/performance model forwarded by Chomsky, focuses on the pragmatic nature of language and its role in lucid communication and this practical approach is also the approach of this study. Braidì goes on to mention that Givón “compares a grammar to a biological mechanism, whose anatomical structures adapt with evolution to the particular functions that they perform” (1999, p. 146). Heine calls the work of Givón “monumental” and credits him with being “the founder of modern grammaticalization studies...[which] marked the beginning of work on the rise and development of grammatical (or functional) categories as a distinct field of research”; he also shared Givón’s mantra: “today’s syntax is tomorrow’s morphology” (2016, p. 728). In this study, I will see how the interlanguages of native Arabic writers are influenced by the grammars of their native language and if application of the resolution rules that determine agreement between noun/noun phrase and verb phrase constructions in the target language are affected by the resolution rules of their L1.

The term ‘resolution rules,’ coined by Givón, has been further championed in the field of linguistic agreement by Greville Corbett, who has been working primarily in Slavic languages, although his works cover a dizzying array of at least 200 languages. Resolution rules have also been referred to as ‘feature computation rules’ (Corbett, 1983, p. 175), but this study will use Givón’s term ‘resolution rules’ exclusively. The preeminent discussion of resolution rules for phi-feature (person, number, and gender) agreement is Corbett’s “Resolution rules: agreement in person, number, and gender” (1983). In this chapter written by Corbett, he discusses circumstances under which resolution rules can be applied to best solve for agreement between person, number, and gender features. He opens the chapter with a description of the dilemma that resolution rules are employed to address: “[w]hen noun phrases are conjoined, they may carry feature combinations which create a problem for agreement rules as, for example, when a verb agrees with coordinated noun phrases which differ in gender” (1983, p. 175). Problems in applying agreement rules and deviations in their implementation are of particular interest for this study.

4.0 Study Methodology

While the thirty compositions examined in this study were written to assess English fluency for college placement, this study will use the compositions to assess whether or not the student writers transfer agreement patterns from their native L1 Arabic into their L2 written English. The compositions were written in a timed, topic-writing classroom setting to satisfy the following topic: “Compare: choose to follow customs of new country, or keep customs of original country. Which do you prefer? Why?” The thirty compositions that are included in this study were written to address this topic and determine if the writer’s English fluency was sufficient to enter university classes or if lack of fluency necessitated enrollment in the university’s intensive English program. The financial and social impact of performance on this composition task cannot be understated so the likelihood of a student sloughing off on this assignment, through either inattention or poor attitude, is minimal. Although it is curious that the topic assignment is grammatically deficient in article usage, I surmise that this was a test device the institution intended to foil imitators. The repeated use of this particular topic at the institution and its role in accurate student placement speaks to its instrument reliability and internal consistency. The student compositions, based on this topic instrument, were obtained more than one year after they were written by the students, and this study was not done in conjunction with, nor was ever associated with, the original fluency assessment. Since the compositions were completed independently of this study, there is no impact from students knowing that they are part of a study (the Hawthorne effect) or from students trying to provide content that they feel is expected (the halo effect) (Mackey and Gass, 2011, p. 114; Bergen, 2016, p. 195). This study performs error correction, data analysis, and supplemental grammatical correlations on thirty compositions written in an L2 English by native Arabic writers, which were written to fulfill the above referenced university fluency assessment.

The composition sampling that populates this study was done randomly within the L2 English fluency assessment setting with a stipulated participant characteristic of native Arabic writer from Saudi Arabia. Despite the fact that biometric information is not available for these writers, the thirty compositions exhibit concrete references to locale and culture that support the writers’ link to the Arabic language and having lived the Saudi experience. Although the sample group is small, their random sampling from the highly specified cluster of native Arabic speakers from the Kingdom of Saudi Arabia makes the results of this study generalizable to similar language/cultural groups (Mackey and Gass, 2011, pp. 119-120). In addition, the results may be generalizable to the larger group of native Arabic speakers/writers as a whole, a group that has become globally significant.

In the data analysis phase of this study, where verbs are examined for agreement errors, the accuracy of the corrections have been checked and commentary is provided where judgments are necessarily holistic. These grammaticality assessments are straight-forward and there is no attempt to be hyper-critical in enforcing syntax minutiae nor to be ultra-sensitive to native idiom constructions. In attention to a study on phi-feature resolution rule application by L2 English writers, the method of data analysis employed on these compositions “adequately captures the construct of interest” (Mackey and Gass, 2011, p. 108) for such research. In a similar vein, the use of archived compositions from the same source, written in fulfillment of the same function

on the same day, and administered according to the same parameters ensures the internal validity of this study (Mackey and Gass, 2011, p. 109). Research validity is integral to the production of a worthy study and I have paid attention to the necessary requirements to ensure that the instrument is valid and the project analysis is reliable.

The aim of the primary study was to assess person phi-feature agreement competence and record how this competence may be influenced by L1 syntactic resolution rules; this paper addresses only the person phi-feature. The measurement scales imposed upon the data are less important than the broader perspectives that the data sets themselves provide.

4.1 Participants

The composition samples used for data in this study were obtained from an intensive English language program at a university in the central United States. Because of restrictions associated with privacy issues, the biodata that is available about the writers is limited to their nationality, their native language, and what little can be gleaned from their compositions themselves. Among the most important participant characteristics for second language research are language background, language learning experience, and proficiency level (Mackey and Gass, 2011, p. 109). Of these three characteristics, only one is known for the writers used in this study, and that is that all the writers share a common language background. Nothing is known of the specific schooling past of these writers, but all are from the Kingdom of Saudi Arabia (KSA) and received their secondary education within the Kingdom. While it is also not known if they are from Jeddah, Riyadh, or Dammam, all writers are citizens of the KSA, form a homogeneous sample set of native Arabic writers, and attend the same US university. These thirty writers are the participants used for this study. The compositions that they wrote and that are used in this study were written at least one year prior to this study.

Despite not being privy to the graded proficiency level of the writers used in this study, or the rubrics used by the institution to score them, the native Arabic authors of these compositions are at differing levels of English language proficiency on a rough continuum from low intermediate to advanced. Writers of this range provide a workable sample group of native Arabic writers writing in an L2 English.

4.2 Identification and Judgment of Composition Elements

For the initial phase of this project, I performed an extensive numerical analysis of each composition. I first established a total word count for each composition, and then I focused my attention exclusively on verbal elements. I highlighted all verb usages in each of the compositions. I made a distinction between isolated main verb usage and auxiliary verb/main verb usage. This distinction allowed closer analysis of the more complex constructions that auxiliary verb/main verb phrases are comprised of. Compositions that contain a greater number of these auxiliary verb/main verb phrases in proportion to the total number of verbs used in the composition often indicate that the writer has more proficiency with the language. Phrase constructions containing gerunds and infinitives were not identified as verb forms as those forms “fulfill the function of noun without being formally nouns” (Koffi, 2010, p. 212). Likewise,

verbal participles were also not examined in this study since they usually serve an adjectival function (Koffi, 2010, p. 213) and were therefore outside the parameters of this study.

Once the main verb and auxiliary verb/main verb constructions were identified, I performed error detection and correction of phi-feature agreement on each of the compositions. In phrase constructions that contain both an auxiliary verb and a main verb, although the auxiliary verb handles phi-feature agreement between the verb and subject (Koffi, 2010, p. 168), I also examined the main verb for construction problems. Although auxiliary verbs are carriers of tense, mood, and aspect information, this information was not pertinent to a study of phi-feature agreement. Once the pertinent verbs were identified, I then determined if they were used correctly or if they were used incorrectly. In order to error-correct the compositions, I used what Braidı refers to as ‘native-speaker competence rules’ (1999, p. 3) and verified their validity against English grammars listed in References.

If the verbs were used incorrectly, I determined if the error was related to phi-feature agreement or was due to another usage mistake. If an incorrect verb was used in the composition (e.g., “be” should have been used instead of “have”), the correct verb usage was indicated but the incorrect verb was used in the error analysis. The results of these findings were then parsed and processed.

4.3 Cataloging and Analysis of Data Points

Once all phi-feature errors were identified, I then distributed the errors that were found on the compositions into six groups depending on if the errors reflect person, number, gender, subject omission, copulative verb omission, or auxiliary verb agreement/resolution rule mistakes. Of these six error groups, only the first three (person, number, and gender) pertain to resolution rule usage by the composition writers. The subject omission and copulative verb omission error groups reflect mistakes that are endemic to L2 writers from L1 languages that are pro-drop and zero copula. The final error group, auxiliary/main verb, covers the more complex verb phrase constructions that are troublesome for L2 writers in English. These six groups of errors account for all of the mistakes that were made by the composition writers in agreement instances between a noun/noun phrase and a verb phrase.

Once all phi-feature errors were identified and cataloged, I examined the error data statistically to determine any trends and/or anomalies in the findings between error groups and among verb misusages. This analysis also allowed me to identify how these composition writers fared against other writers in the group. This statistical analysis provides a glimpse of the verb errors commonly made by native Arabic writers writing in an L2 English.

4.4 Determining Resolution Rule Correlations

After parsing the data statistically, I then turned my attention to the primary phase of the study, determining if verb errors made in English by native Arabic writers showed any correlation to Arabic verb resolution rules that may be contributing to verb errors in English. As was discussed earlier (in Agreement in the American English Language and in Agreement in Modern Standard Arabic), in syntactic terms Arabic and English exhibit vastly divergent

grammatical parameters and these differences could be readily evident in English compositions written by native Arabic writers.

An examination of the agreement problems that Arabic L1 writers displayed in their English L2 provide valuable pedagogical insights into L2 English learning issues that could be addressed in the classroom. I found with this small sample size, realizing any far-ranging conclusions is not possible, but these compositions provide a valuable glimpse at how resolution rules and other verb agreement issues are dealt with by native Arabic writers when writing in an L2 English.

4.5 Identification, Judgment, and Cataloging of Composition Components

The first construct of this study is conducting error analysis on compositions written in English by native Arabic writers and examining them for statistically significant data. Using error analysis for positive reinforcement was first postulated by Corder and refined with his distinction between systemic errors (or ‘transitional competence’ which reveals an L2 student’s “underlying knowledge of the language to date”) and non-systemic errors (self-correctable mistakes which are made in performance) (Corder, 1981, p. 10). The examination of classroom topic compositions, which are written in a looser and more creative medium, targets content that is representative of this “underlying knowledge” that is systemic. Schachter supplies a summation of this method, “The main assumption is that error analysis will reveal to the investigator just what difficulties the learners in fact have, that difficulties in the target language will show up as errors in production. The second assumption is that the frequency of occurrence of specific errors will give evidence of their relative difficulty” (cited in Braidi, 1999, p. 12). This method is not without fault, but it will serve the purpose of the study concerning subject/verb agreement.

Unfortunately, the study of anonymous compositions does not allow for direct positive reinforcement. However, the findings may provide insight for other writers from the same linguistic background or for teachers instructing students who are native to this linguistic background. This study will examine systemic errors that are produced on creative compositions written in an L2 English by Arabic L1 speakers/writers, a method also used by Diab (1996) and AbiSamra (2003).

In the effort to perform a valid compilation of errors within the student compositions, I have made every attempt to be both consistent and accurate in my assessments and keep holistic judgments to the minimum. Although in most cases errors were straightforward and left little room for interpretation, there were instances where this was not the case. While I never tried to be overtly dogmatic when there were error judgment issues between compositions, I was clear and comprehensive in my distinction between correct and incorrect.

5.0 Examining Person Resolution Rule Errors

The verb usage errors that have been discovered and cataloged in these thirty compositions provide a small, yet valuable, window into the verb agreement and resolution rule issues that native Arabic writers must contend with when writing in an L2 English. As was

discussed in the Participants section, no data is available on the English fluency or writing experience of the writers of the compositions, but the analysis reveals problem areas in English verb usage for most of these native Arabic writers. The statistical functions that were performed on this data set highlight the difficulty of English person agreement in noun/verb constructions and allow me to draw pedagogical implications regarding writing fluency in an L2 English. Table 3 provides a detail of the person resolution rule error data by composition number, and Table 4 provides a detail of the overall person resolution rule error data.

comp	word use	total V use	main V use	aux V use	main V use	total V err	PERSON
1	231	40	22	9	9	8	3
2	327	52	40	6	6	4	0
3	191	27	19	4	4	6	0
4	349	64	42	11	11	6	1
5	274	52	36	8	8	5	2
6	329	59	37	11	11	12	1
7	233	45	33	6	6	6	0
8	190	27	19	4	4	2	0
9	257	48	36	6	6	0	0
10	312	62	36	13	13	9	0
11	181	35	19	8	8	7	0
12	256	47	19	14	14	9	0
13	199	31	13	9	9	4	0
14	387	67	41	13	13	11	0
15	240	46	10	18	18	3	0
16	217	41	25	8	8	2	1
17	154	32	14	9	9	7	0
18	275	35	27	4	4	9	1
19	294	62	23	20	19	9	1
20	186	39	9	15	15	5	0
21	186	30	18	6	6	9	3
22	425	72	34	19	19	16	5
23	365	60	30	15	15	5	0
24	292	49	27	11	11	7	0
25	244	38	18	10	10	2	1
26	250	48	24	12	12	8	0
27	193	31	21	5	5	7	0
28	274	43	33	5	5	2	0
29	226	25	21	2	2	4	0
30	232	56	34	11	11	40	10
TOTALS	7769	1363	780	292	291	224	29

Table 3: Error Analysis, Person Resolution Rule

Total person RR errors	1 st instead of 3 rd	Incorrect infinitive	Error follows indefinite pronoun
29	28	1	7

Table 4: Summary of Person Resolution Rule Errors

The resolution rules for person are identical for both Arabic and English, and so expectations of grievous and/or copious errors were not anticipated. The resolution rule person errors that were identified in the thirty compositions lived up to that expectation and were in fact virtually all of the same kind. Of the 1072 verb usages where person errors could have possibly been committed (main V use + aux V use; main V use within auxiliary verb constructions are not included as they do not require resolution rule agreement), only 29 errors were made on 11 compositions (2.7% of the total number of verb errors). Statistically this is not significant across all of the verb uses in the compositions, but the fact that all but one of the errors were of the same type is noteworthy. In all, 28 person agreement errors occurred in which a third person construction should have been employed but was not. Examples of these person agreement errors include * “so sometimes it depend[s] on you and it’s your choice” (comp 4), * “In fact, my religion [sic] teach[es] my about how to care about that” (comp 16), and * “...but the one thing that make[s] me comfuio[s] [sic] little bit some time...” (comp 22). These examples are representative of third person construction errors that were found in the compositions. Although Arabic does make a distinction between [+human] and [-human] in terms of agreement parameters, the subjects in these examples are all [-human] [-plural] and the agreement anomalies in Arabic constructions are always [-human] [+plural]. In light of this, these errors are most likely not due to negative transfer but due to confusion with English usage.

The 1 person agreement error that did not exhibit a first instead of a third person agreement mistake wrongly used an infinitive form of the verb *be*, and I cataloged/catalogued this error against the person designation. This singular instance of a person agreement error in the infinitive was written as * “The American people can drink alcohol when they be[are] 21 years old, but the muslims [sic] cannot...” (comp 25). Although the writer could have been mistaken in their use of the [+collective] ‘American people,’ the difficult inflectional nature of the English verb *be* still eluded this writer, which was unusual with this group of writers.

With the exception of the verb *be*, English has a simple verb conjugation schema. Nevertheless, eleven of the thirty composition writers made person resolution rule/verb agreement errors. But English also has pronoun constructions that can be baffling for L2 learners. Of the 29 documented person resolution rule agreement errors, 7 (24%) were verb agreement mistakes that followed an indefinite pronoun subject. Koffi characterizes the indefinite nature of these elements succinctly: “Indefinite pronouns refer to people, objects, or things whose nature or identity is not clear, or is not intended to be clear” (2010, p. 416). Koffi goes on to describe how they are formed “...by compounding indeterminate quantity terms such as <some>, <any>, <no> and <every> with the words <body>, <one>, <thing>” (2010, p. 425). Warriner asserts that “[t]he words *each, either, neither, one, everyone, everybody, no one, nobody, anyone, anybody,*

someone, somebody are referred to by a singular pronoun—he, him, his, she, her, hers, it, its” (1988, p. 524). The indefinite pronouns are designated as third person elements in terms of verb agreement.

In the person error instances of the compositions that included an indefinite pronoun (i.e., *everyone, nobody, anyone, someone, anybody, and everybody*), in all cases the writer failed to use a third person verb when one should have been used. Examples of this improper agreement with indefinite pronouns include * “that what I thing[think] and anyone in the world have[has] a differnt [sic] answer” (comp 6), * “everyone like[s] his or her customs, and I prefer my customs...” (comp 18), and * “...before fife[five] years age everybody move[s] to my country you should [be] used the rouls[rules]” (comp 21). Person agreement following indefinite pronouns appears to be a struggle for many of these L2 English writers, but the primary issue for these writers appears to be the [+collective] nature of these indefinite pronouns.

Unfortunately, making a concrete correlation between collective noun/verb agreement in Arabic and English is troublesome. In *Resolution Rules Approach to Linguistic Agreement*, the irregular agreement parameters in Arabic of several collective [+human] and genus nouns was discussed, but irregular agreement with [+collective] nouns is more widespread. In Arabic, the parameters of agreement between quantifiers ([+collective] elements) and verb are muddled, at best. Ryding states that “[p]atterns of agreement with quantified construct states can vary in MSA and...a verb may agree in number and gender with either the quantifier (invariably masculine singular) or with its complement” (2011, p. 235). The quantifier agreement patterns that are acceptable in Arabic show a wide variance, as is communicated well by Ryding in a footnote about an especially anomalous usage: “[a]s my colleague Amin Bonnah states, the usage here depends on ‘a mix of grammar, style, logic, and meaning’” (2011, p. 236). Fassi Fehri also grabbles for a clear accounting of quantifier agreement:

The feminine singular marker on the verb occurs with collective nouns, which suggests that it can be seen as a form of collective agreement. In fact, collectives vary as to whether they are associated with this form of agreement (a) obligatorily, (b) optionally, or (c) whether they are incompatible with it...That is, not all lexically collective nouns trigger collective (or ‘feminine singular’) agreement, although this state of affairs would have been semantically motivated. (2012, pp. 299-300)

To add to the confusion, “collective agreement is not sensitive to VSO/SVO order alterations, but the non-collective is” (Fassi Fehri, 2012, p. 302). Verb agreement with [+collective] nouns in Arabic is seldom straightforward.

The resolution rule errors in these thirty compositions that entailed person agreement were restricted to a narrow band. The fact that the resolution rules that apply to the person phi-feature are identical for both Arabic and English would indicate that the isolated errors in person agreement would not be due to confusion with the resolution rules themselves or their application, but perhaps with English usage and with the [+/-collective] element. Although the [+/-human] element could be an issue, agreement with [+/-human] nouns is not applicable to

English so I find the [+/-collective] element more suspect in most instances. In these compositions, 28 out of the 29 person agreement errors chose a first person verb in instances where a third person verb was required. Of these 28 errors, 24% of them were due to confusion with the person designation of an indefinite pronoun, pronouns which carry [+/-collective] agreement issues. It would appear from this data that person resolution rule errors with native Arabic writers in an L2 English follow a pattern and could be addressed pedagogically.

6.0 Summary of Results and Implications

My hope is that the results of this study on subject/verb agreement will have positive implications in the L2 classroom. While many see a chasm of uncertainty between the findings of a research project and benefits in the classroom, if research findings are understood as a useful identifier of probable trouble areas in the acquisition of an L2, this research study may prove to have worth. In the words of Braidı, “No research finding will or can address all of these potential learning factors...[however,] L2-research findings can form one body of information from which teachers re-evaluate what they do in the classroom and why they do it” (1999, pp. 183, 184). Although this study was with native Arabic writers in an English L2, other researchers have found in their studies that “learners of different native languages made similar errors” (Braidı, 1999, p. 11) and the findings of this study may also prove useful to a wider audience of L2 English learners. I find the research itself fruitful and challenging, but I would be greatly pleased if the results could realize pedagogical dividends. To that end, this section will discuss the results of this study and the possible classroom implications for its findings.

6.1 Pedagogical Implications of Person Resolution Rule Findings

This study found that the disparity between the resolution rules that apply for the Arabic and English languages was somewhat troublesome for this group of thirty composition writers. Of the three phi-features that resolution rules govern (person, number, and gender), person and number exhibited larger error volumes, volumes that were not mirrored by gender; only the person phi-feature is covered in this paper. With only one error in these thirty compositions (and that error exhibited a number issue as well), the simplistic gender parameters of the English language can be dismissed as a feature worthy of greater attention in the classroom. Both person and number resolutions rules presented more problems for these native Arabic writers, and could be aided by more attention in the classroom. Both person and number resolutions rules presented more problems for these native Arabic writers, and could be aided by more attention in the classroom. However, a large proportion of the errors committed in resolution rule usage with these features were committed in indefinite pronoun constructions.

6.2 Pedagogical Implications of Indefinite Pronoun Usage Findings

As was noted in Examining Person Resolution Rule Errors, the usage of indefinite pronouns proved quite difficult for many of these thirty composition writers. Indefinite pronouns are especially hard to parse for L2 English learners because of the ‘every,’ ‘one,’ ‘any,’ and ‘body’ [+/-collective] elements that often pose contrary agreement parameters. It may prove helpful to focus more attention for the second language learner on these [+collective] quantifier elements of the English tongue, as well as isolated referent conditions, since both are commonly used and can be difficult to master, especially in complex indefinite pronoun constructions.

6.3 Limitations of the Study

In the final analysis, the findings of this study demonstrate that despite the limited verb inflection requirements and rudimentary resolution rules that determine subject/verb agreement in the English language, these writers did demonstrate that performance of basic linguistic agreement by the application of resolution rules on phi-features is challenging in an L2 English.

Not only did basic linguistic agreement in an L2 English prove troublesome for these native Arabic writers, but by examining all phi-feature agreement in the compositions I demonstrated that there are other agreement parameters and syntactic components in English that are also challenging. By allowing the noun phrase/verb phrase agreement conversation to encompass issues beyond the resolution rule focus of this study, I fear that I may have stretched the constraints of thesis protocol. However, I feel that the value-add of this deeper error analysis made that scope slip worthwhile. In fact, the limitations of this study now revolve around my inability because of time and focus to pursue each of these valuable L2 English agreement topics in depth. There are limits when studying a small, single L1 sample set of writers, but the subject/verb agreement results uncovered here carry well beyond the Arabic L1 of these thirty writers as they exhibit learning difficulties in English that are also exhibited by a wider L2 audience.

7.0 Conclusion

The goal of this study was to identify the resolution rules that govern noun phrase/verb phrase agreement in both the Arabic and English languages, use student compositions to determine how well those resolution rules are applied by native Arabic writers in an L2 English, and ascertain whether agreement errors detected were due to negative transfer from L1 resolution rules. It was discovered that the simplicity of the resolution rules that apply for subject/verb agreement in English present some difficulty for the writers in this study. Errors were made in resolution rule application, to be sure, but there were also noun phrase/verb phrase agreement errors uncovered that fell outside of the strict resolution rule application arena.

It was discovered from deeper analysis of the data that there were indeed agreement constructions that presented greater difficulties for these native Arabic writers. The proper use of indefinite pronouns was a stumbling block for many of the writers in this study, but these difficulties were usually rooted in isolated referent and quantification issues. It is the hope of this writer that these findings provide tangible evidence for increased attention to these English agreement constructions in the L2 English classroom.

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