A Comparison of Joseph Greenberg’s “Language Universals” as Shown in the
Palestinian Arabic, Spanish, and Korean Languages

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Abstract

In 1963, Joseph Greenberg presented a way of describing the world’s languages by means of universal tendencies. This thesis will examine three languages representative of the three main language typologies—Palestinian Arabic, Spanish, and Korean. It will compare each of the languages to applicable language universals in order to understand the languages’ syntactical systems and prove the validity of Greenberg’s work.
A Comparison of Joseph Greenberg’s “Language Universals” as Shown in the
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The world contains more than seven thousand languages within over one hundred
language families; yet these languages share much in common with one another. In fact,
most can be organized into three main typologies (Greenberg 60). In 1963, Joseph
Greenberg presented a way of describing languages by way of universal tendencies based
upon typologies. Since that time, only one of those tendencies has been shown to be
(partially) incorrect (Pericliev 44). The tendencies that Greenberg describes are not clear-
cut rules; they allow for exceptions to generalities. Language, by nature, is a tool
manipulated by humans in very creative ways, and it can never be completely reduced to
a science. However, Greenberg came up with a total of forty-five language universals that
can be used to classify languages and predict languages’ syntactical and morphological
structures (61-74). This paper will attempt to examine a language representative of each
of the typologies discussed in Greenberg’s article, namely Palestinian Arabic, Spanish,
and Korean. While doing so, it will compare each of the languages to applicable language
universals in order to both understand the languages’ syntactical systems and prove the
validity of Greenberg’s work.

Palestinian Arabic

Arabic is spoken in much of the Middle East, North Africa, and Muslim countries.
It is an Afro-Asiatic language classified among the Semitic languages (“Arabic
Language”). Arabic is considered to be a macrolanguage because it encompasses dozens
of different dialects; for this reason, it is difficult to estimate the true number of speakers.
The Palestinian Arabic dialect is considered to be a subgroup of the Levantine Arabic
dialect (Gordon, “Arabic, South Levantine” par. 3). The speakers of this subgroup live in Jordan, Israel, and Palestinian West Bank and Gaza, and, altogether, may number as many as 6,145,000 (Gordon, “Arabic, South Levantine” par. 1). Palestinian Arabic differs greatly from many of the other Arabic dialects, especially in the area of phonology. Its grammar is similar to that of other Arabic dialects.

Spanish

Spanish is the official language of Spain as well as of many Central and South American countries. At least twenty-eight countries have significant numbers of Spanish speakers, including the United States (Gordon, “Spanish” par. 2). Although the Spanish language varies a bit from country to country, all the variations are mutually intelligible. Few differences in the language’s phonology and grammar can be detected (in Spanish varieties), although some diversity exist. According to the 2008 version of World Almanac & Book of Facts, Spanish is spoken by 322 million people worldwide (“Languages Spoken by the Most People” par. 1). This is a number second only to the number of people speaking Mandarin Chinese (873 million)—surpassing even English speakers (309 million) (“Languages Spoken by the Most People” par. 1)! Spanish is classified as an Indo-European language in the Italic family, and it emerged from the Latino-Faliscan subbranch (of the Italic family) as a linguistic descendent of Latin (Fortson IV 259). In other words, it is one of the Romance languages. The earliest Spanish texts date back to the mid-eleventh century (Fortson IV 259). The modern Spanish language used today was formulated, for the most part, by the end of the 1400s (Garry and Rubino 681).
Korean

Korean is the official language of North and South Korea. Many Korean speakers also live in China, Japan, and Thailand, as well as in other countries around the world (“Korean Language” par. 2). According to the 2008 version of World Almanac & Book of Facts, Korean is spoken by sixty-seven million people (“Languages Spoken by the Most People” par. 1). Korean is generally classified as a language isolate; however, some scholars believe that it may be related to Japanese or Turkish (Gordon, “Korean” par. 4). Other scholars have suggested that Korean is actually a member of the Altaic family (Lee 1). No one knows when the language truly emerged. However, according to Hansol H. B. Lee, Professor of Phonetics and Linguistics and Director of the Language Research Institute at Seoul National University, “…the Koreans tried to express themselves by Chinese characters as early as some time between the first and fourth century A.D” (1).

Language Typology and Greenberg’s Universals

Greenberg divides languages into the three main typologies, and he then demonstrates common syntactic patterns found within these typologies. Greenberg’s first seven language universals have to do with basic orders, which are VSO, SVO, and SOV (Greenberg 60). The type is referred to by the position of the verb within the sentence—if sentence initial, it is regarded as Type One (I), if medial, then Type Two (II), and if final, Type Three (III). While other word orders, such as OVS, OSV, and VOS, do exist among the world’s languages, they are exceedingly rare (Greenberg 62). Greenberg’s universals eight through twelve consider the syntax of questions (63-65). In this paper, these universals will not be discussed as the language recordings, transcriptions, and morpheme glosses (found in Appendices I, II, and III) do not contain questions. Greenberg’s
universals thirteen through sixteen consider verbal subordination in verb phrases (66-67). Unfortunately, these universals will not be discussed in this paper either, again due to limited first-hand data. Greenberg’s universals seventeen through twenty consider the position of adjectives in relation to the nouns that they modify (67-69). Universal twenty-one considers the relationship of adverbial modifiers to the adjectives with which they correlate (not expounded in this paper) (69). Universal twenty-two considers the order of adjectives to express comparisons of superiority (again, not expounded in this paper) (70). Universal twenty-three and twenty-four both deal with nominal construction and placement of clauses or apposition that modifies the noun (neither universal is discussed in this paper) (71). Universal twenty-five has to do with pronominal object placement (not discussed in this paper) (72). Universals twenty-six through twenty-nine speak of inflection and derivation, which include tendencies regarding affixation (73). Universals thirty through thirty-seven discuss gender, number, and case, which, according to Greenberg, are “the three most common nominal inflectional categories” (73-74). Universals thirty-eight through forty-one deal with case systems (75). Universals forty-two through forty-five deal with pronominal categories (75-76). Such detail for each universal is only necessary to point out the extent to which language default word order (thus, typology) affects a language’s syntax.

The statements in this thesis are founded upon first-hand language data. Three native language speakers from Israel, Chile, and South Korea were asked to provide an oral sample of their native language. They were invited to speak on the topic of their choice, and they were not prompted or coached in any way that would compromise the authenticity of their language data. For this type of research, it was essential that the
language input be offered in context so that the paper’s conclusions could be based upon the purest sources possible. Once recorded, the language data was transcribed using the International Phonetic Alphabet. Then, the native language speakers were consulted about the transcriptions (using the recordings for reference back to the original language sample). Working with the native language speakers, the transcriptions were used to create morpheme glosses for each sample and, ultimately, free translations into English. Each of the language samples can be found included at the end of this paper as Appendices I-III. As this thesis refers to Greenberg’s universals, it depends upon this authentic language data to evaluate each statement. Because the language data is a sample of the native languages, it is not comprehensive and cannot be used to discuss all of the universal tendencies. A select number of universals, therefore, are discussed—only those which can use the authentic language data to evaluate Greenberg’s assertions.

Other, more contemporary linguists have done research on Greenberg’s universals and have found them very credible. One such linguist is Vladimir Pericliev, who in 1999 published an article entitled “Further Implicational Universals in Greenberg’s Data (A Computer-Generated Article).” In this article, Pericliev states that only one part of one universal (universal twenty-three, which deals with appostition) is proven false (44). Apart from confirming the validity of Greenberg’s work, Pericliev is able to add fifty-eight new universals to those previously discovered by Greenberg (40). These new discoveries were, in part, made possible by computer programs and technology capable of processing huge amounts of data. Although Greenberg wrote his article in 1963, the information it contains has stood the test of time, the test of other linguists, and the test of technology.
Greenberg’s first universal tendency is reflected in Palestinian Arabic, Spanish and Korean. This universal states that “in declarative sentences with nominal subject and object, the dominant order is almost always one in which the subject precedes the object” (Greenberg 61). Palestinian Arabic is a type I language, or a VSO language, where subject precedes object in normal or default word order. Occasionally, this order will vary, as some sentences do not require verbs and others may take SVO word order. This flexibility in word order is partially attributed to the fact that Arabic is heavily-inflected. However, whatever word order Arabic utilizes, the subject does precede the object, as stated in Greenberg’s first universals. This is seen in the following example:

(1) ẹnə am batəos [əm] “ẹm.ə.ə.ə.” u
1.SG.PRO do.1.SG study.1 [verbal pause] M.I.S [English] and

I am studying [verbal pause] M.I.S. and

məhəsəbə
accounting.F.SG (I, I-J)

accounting.

Here, the subject ẹnə (I) precedes the objects “ẹm.ə.ə.ə.” (M.I.S.) and məhəsəbə (accounting). (In this paper, most words will be represented using the International Phonetic Alphabet, or IPA) (Parker & Riley 108, 111).

Spanish is a type II language, or SVO, in which the default word order does place the subject before the object (with the verb generally in the middle). Lines A through C of appendix two, the Spanish morpheme gloss, illustrate this default word order.

(2) voi a leə p̪imeə a de pedəo kəkipitulə
ətes
go.1.SG to read.V first.F.SG of Peter chapter.M.SG three

I am going to read first Peter chapter three
This clause, in example 1, partially exemplifies a SVO structure, where the subject is understood to be yo (the first person singular pronoun—I), the verb is *voi a le* (going to read), and the object is *pimeca de ped* (I Peter). However, an implied subject (indicated by verb conjugation) is not enough to establish that Spanish is truly a SVO language. The subject must be explicitly stated in order to establish a Type II identity.

The following sentence (example 3) contains an explicit subject:

(3) ohelio estudia poıtuges i aleman
Rogelio study.2.SG Portuguese.M.SG and German.M.SG

Rogelio studies Portuguese and German  (Zayas-Bazán and Bacon 54)

The explicit subject ohelio is followed by the verb *estudia* (studies). The objects, poıtuges (Portuguese) and aleman (German), are sentence-final. This SVO world order for Spanish, a Type II language, appears to follow Greenberg’s theory.

Korean is a type II language, or SOV, in which the default word order again places the subject before the object (with the verb sentence-final). In line G of appendix three, the Korean morpheme-by-morpheme gloss, one reads the following clause:

(4) kiigo wui məni-nen tib-əs abədi-u
and 1.PL.PRO mother-NOM home-at.ACC father-ACC

and my mother helps my father at home

tobsənnida (III, G)
help.HON
The subject in example 4 is "m̩ini-nen" (mother), the object is "aβ̥d̥i-ə-u̥" (father), and the verb is "tobsennida" (help). This word order follows Greenberg’s first language universal.

Greenberg’s second universal tendency is only applicable to Palestinian Arabic and Korean, as Spanish does not have the genitive case. This universal states that “In languages with prepositions, the genitive almost always follows the governing noun, while in languages with postpositions it almost always precedes” (Greenberg 62). Palestinian Arabic is a prepositional language, and as such, one would expect to see the genitive case follow its governing noun. The prepositional nature of Palestinian Arabic is illustrated in the following excerpt from Appendix I:

(5) oxt-i ṭowizet ụdid [ən] fi
    sister.1 GEN marry.F PST new [verbal pause] in

    My sister recently got married [verbal pause]
    s̩fiə hae
    summer.F.SG this (I, E-F)

    this summer.

In this sentence, fi (in) is the preposition and s̩fiə (summer) is the object of the preposition. In order for Greenberg’s second universal to be true, then, the genitive must be shown to follow its governing noun. Another example from Appendix I seems to confirm this order:

(6) mḁhaba ụsms-i saləm kopti
    hello name-1.SG.GEN Salem Copty (I, A)

    Hello, my name is Salem Copty.

In this example, the apparently genitive -i is attached to the end of the noun ụsms-i (name) to show possession (my name), thus confirming Greenberg’s second universal at least
morphologically, not syntactically. In Arabic, however, the ending –i is not truly a
genitive ending because it represents an elided preposition and pronoun that are attached
to the noun (truly meaning “of me,” not “my”). Therefore, this example cannot offer
support to Greenberg’s second universal.

Korean is a postpositional language, like most SOV languages. This can be shown
by looking at any of the case markers in the Korean morpheme gloss (Appendix III).
They follow the nouns that they modify, at least morphologically.

(7) d$n ɛn ha$nɡuk-ɛsaυ wasImnida,
1.SG.PRO-NOM Korea -from came.FOR (III, B)

I came from Korea

Here, in the seventh example, -ɛsaυ (from) is a morphological postposition attached to
ha$nɡuk (Korea). Therefore, according to this second universal, the genitive should
probably precede the noun that it modifies (because Korean is a postpositional language).

In the Korean morpheme gloss, line A, one finds the following phrase:

(8) d$ui i$ɛm-ɛn
1.SG.POSS.PRO-GEN name-NOM (III, A)

My name

The first word, d$ui, is a first person (singular) possessive pronoun with the genitive
case (ui) attached to the end of the pronoun. This pronoun acts in the place of the
governing noun. Therefore, one sees that the genitive case within this specific example
(“my name”) does not follow Greenberg’s second universal tendency by preceding its
governing noun; in fact, it follows its governing pronoun. This example cannot be used to
prove Greenberg’s second universal.
Greenberg’s third universal tendency is specific in its application to type I languages. It declares that “Languages with dominant VSO order are always prepositional” (Greenberg 62). Thus Arabic, as the sample type I language in this study, must be prepositional in order to confirm Greenberg’s assertion. This is the case, as shown in the previous Arabic example (example 5) as well as the following example:

(9) ənə a-t aktaḥit haiæt-i b-l kuts
1.SG.PRO live-1.PST most life-1.SG.GEN in-DEF.ART-Jerusalem

I lived most of my life in Jerusalem (I,A-B)

Here, the preposition bi (in) is attached as a prefix to the governing noun, which is kuts (Jerusalem). Whether Arabic prepositions are separate or attached to the governing noun, they always precede said noun. This supports Greenberg’s statement that most type I languages are prepositional.

Greenberg’s fourth universal tendency is also only applicable to Korean, as it is the only type III language in this analysis. This universal states that “With overwhelmingly greater than chance frequency, languages with normal SOV order are postpositional” (62). In the previous paragraph, the postpositional nature of Korean was already established. However, to reinforce the postpositional nature of Korean, one may find more examples in Appendix III on almost every line. On line J, the Korean speaker said that her brother would graduate from high school in March.

(10) d-u-ui namdoŋ-eŋ -eŋ samo-e kodŋ hakio-ŋ
1.SG.POSS.PRO-GEN younger.brother-NOM March-in high.school-ACC

My younger brother will graduate from high school in March.
In this example, she used the word *samo-e*, which literally transcribed would mean “March-in.” This is one of many examples of the use of postpositions in the Korean language.

Greenberg’s universal number nineteen says that “When the general rule is that the descriptive adjective follows, there may be a minority of adjectives which usually precede, but when the general rule is that the descriptive adjectives precede, there are no exceptions” (68). In Palestinian Arabic, the descriptive adjective generally follows the noun and demonstrative adjectives may precede the noun (Ghali 19). However, the language sample of Appendix I does not provide a contextual example for these adjectives.

Spanish is an N language, which means that the default adjective placement follows the noun. According to this universal, this would mean that some adjectives in Spanish can precede the noun, but the default for most adjectives is the noun-adjective word order. Considering lines G and H of the Spanish morpheme gloss (Appendix II), one sees that this is indeed the case:

(11) vuestña kondukta kasta i
   2.F.SG.FAM.POSS conduct.F.SG chaste.F.SG and
   your chaste and respectful conduct

tíespetuosa
respectful.F.SG (II, G-H)

Example 11 shows a noun, *kondukta* (conduct), followed by two descriptive adjectives, *kasta* (chaste) and *respectuosa* (respectful). In English, such a phrase would be translated “chaste and respectful conduct”—however, in Spanish the adjectives follow the noun. This would mean, according to universal nineteen, that there remains a possibility for
some adjectives to precede the noun. Looking at the same phrase (example 7), one sees that \textit{vuest\~a kondukt\~a kasta i \=espetuosa} includes one more modifier, \textit{vuest\~a}, which is the second person (plural), singular, familiar, possessive pronoun—which acts as an adjective in that it modifies “conduct.” One clearly sees that \textit{vuest\~a} modifies \textit{kondukt\~a} because the adjective is taking on the feminine and singular nature of the noun.

Universal nineteen is also applicable to the Korean language. However, it is an A language, which means that the descriptive adjectives should precede the noun. Therefore, according to this universal, no adjectives can follow the noun—“when the general rule is that the descriptive adjectives precede, there are no exceptions” (Greenberg 68). In line L of the Korean morpheme gloss (Appendix III), one sees that the Korean speaker describes herself as a university student.

\begin{verbatim}
(12) d\=en \-nen lib\=ti dehakio hak\=en imnida
  1.SG.PRO-NOM Liberty university student be (III, L)
\end{verbatim}

I am a Liberty University student.

The noun in this phrase (example 12) is \textit{hak\=en} (student), and two adjectives modify this noun—\textit{lib\=ti} (Liberty) and \textit{dehakio} (university). No adjectives in Appendix III are found to follow nouns.

Greenberg’s universal twenty applies to Palestinian Arabic, Spanish and Korean; however, only the Spanish language sample in Appendix II contains examples of this tendency. This specific universal states that “When any or all of the items (demonstrative, numeral, and descriptive adjective) precede the noun, they are always found in that order. If they follow, the order is either the same or its exact opposite” (Greenberg 68-69). In Spanish, the descriptive adjective generally follows the noun. However, the
demonstrative and numeral almost always precede it—and they precede it in that stated order. Lines L and M of Appendix II show a partial example of this word order.

(13) un espiitu afable i apasible ke es a.M.SG spirit.M.SG affable.SG and calm.SG that be.3.SG

a pleasing and calm spirit that is
dele gande estima
of big.SG esteem.F.SG (II, L-M)
of great worth

This phrase (example 13) is ordered in the following way: un (article “an”), espiitu (noun “spirit”), afable (descriptive adjective “affable”), i (conjunction “and”), and apasible (second descriptive adjective “calm”). This phrase omits the demonstrative adjective and does not show a numeral, but an example on line O of Appendix II contains both a demonstrative adjective and a descriptive adjective modifying the noun. The following phrase (example 14),

(14) akeyas tantas muhees ke espeaban 3.F.PL.PRO.PROX many woman.PL that waited.PL.CONT

They (those many women that) waited

en dios
on God (I, O-P)

on God

is ordered in the following way: akeyas (demonstrative “those”), tantas (descriptive “many”), and muhees (noun “women”). The ordering may only be a partial example of universal twenty, but it does support the tendency.
Greenberg’s universal twenty-nine applies to Palestinian Arabic, Spanish and Korean. It states that “If a language has inflection, it always has derivation” (Greenberg 73). In Arabic, words are inflected for number, gender, case, and tense. Looking back to example 5, one sees that the noun oxti (my sister) has the first person singular genitive marker –i which changes the word oxt (sister) to a possessive “my sister.” Also in the same example, the verb √owizet (got married) has the common feminine ending –et. These are just a few illustrations of inflection. Thus, according to Greenberg’s universal, one should also find derivation in the Palestinian Arabic language. Indeed, both of the nouns “marriage” zawa and “wife” zawo appear to have been derived from a similar root as was √owizet (Gaafar and Wightwick 52, 76).

In Spanish, many words are inflected for number, gender, and more.

(15) vosotisas μuhees estad sujetas
2.F.PL.FAM woman.F.PL be.2.PL.FAM.IMP subject.F.PL
wives be submissive

a vuesto maido
2.M.SG.FAM.POSS.PRO husband.M.SG (II, C-D)
to your husbands

In example 15 (in lines C and D of Appendix II), one sees that the adjective suhetas (subject) is inflected for the word it modifies, μuhe res. Muhe res (women) is a feminine, plural noun, which means that suhetas must also be made feminine and plural (thus, the –a and the –s). Also, the adjective vuestro is inflected for the masculine, singular noun maido that it modifies. For more examples, see ganados in line F of Appendix II, which is inflected for the masculine, plural pronoun los in line E; or luhosos in line J, which is inflected for the masculine, plural noun vestidos. Spanish is clearly an inflected language.
Therefore, if Spanish has inflection, it should also have derivation (according to Greenberg). In line L of the Spanish morpheme gloss (Appendix II), one sees the adjective *inkoruptible*, which means “incorruptible” in English. This word is derived, as becomes obvious when compared to other Spanish words such as *koruptible* (corruptible), and *koromper* (to corrupt-verb). Another word in line W also shows derivation. The noun *koeɾedeɾas* means “co-heirs” in English. This word is related to other Spanish words such as *edeɾa* (heir) and *edeɾa* (to inherit—verb). Therefore, looking at Spanish, Greenberg’s assertion in universal twenty-nine seems to be correct.

Korean, while it has inflection, only has inflection in verbs. Hansol H. B. Lee says (of the Korean language), “Of the six word classes [verb, noun, adjective, adverb, particle, and interjection], only verbs are the inflected words and the rest are the uninflected words” (39). Korean verbs are described as either processive or descriptive; processive verbs are inflected for either imperative (including commands) or propositive (including suggestions) moods (42). Appendix III, however, gives no examples of inflected verbs. Therefore, while the Korean morpheme-by-morpheme gloss can offer no “proof” for universal twenty-nine, the universal would suggest that Korean has derivation as well as inflection.

Greenberg’s universal thirty says that “If the verb has categories of person-number or if it has categories of gender, it always has tense-mode categories” (73). This applies to Palestinian Arabic and Spanish, both languages inflected for person and number, but not to Korean, which does not inflect verbs for person, number, or gender (Lee 42). In the following examples, one can see inflections for both person and number in Palestinian Arabic verbs.
My brother studies in Australia.

The verb *bədəəs* (study) is inflected for third person singular, which shows number. An earlier example from Appendix I line E (example 5) uses the verb *owizet* (marry), which is inflected for feminine gender as well as the past tense. According to Greenberg, since Palestinian Arabic verbs have both number and gender, they should also have tense-mode inflections. The same example *owizet* (marry) confirms that verbs can have tense (in this case, past tense). Although Appendix I does not have a clear example of mode inflection, Palestinian Arabic does have both subjunctive and jussive moods (Wightwick and Gaafar 65). The jussive mood is used for the imperative as well for suggestions, negative commands, and the negative past (Wightwick and Gaafar 65). These modes do not always change the spelling or pronunciation of the verb, but they do so often enough to determine that Palestinian Arabic does have mode inflections (Wightwick and Gaafar 65).

The Spanish language also has a great deal of inflection in its verbs. Taking the first line (example 17) of the Spanish morpheme gloss in Appendix II, one sees several verbs that are inflected for person and number:

(17) ola soi patisio guera vivo en espa `a i
hello be.1SG Patricio Guerra live.1SG in Spain and

Hello, I am Patricio Guerra. I live in Spain and

voi a le `a
go.1.SG to read.V (II, A)
I am going to read

For example, *soi* (IPA) is the first person singular “to be” verb. *Vivo* is the first person singular verb “to live”; *voi* is the first person singular verb “to go.” In line M (shown in example 13), the “to be” verb is inflected differently for the third person singular, and it becomes *es*. Therefore, since Spanish verbs are inflected for person-number, Greenberg would assert that these verbs will also have tense-mode categories. The verb *soi* (IPA) in example 17 is in the present tense. However, *espeaban* (IPA) in line P (example 14) is in the imperfect past tense—a tense that demonstrates that something has occurred numerous times. The verb *obedesia* in line Q of Appendix II is also in the imperfect past tense, showing that Sarah had a habit of obeying her husband (it was not a one-time occurrence). Finally, the following example shows the use of the subjunctive mode.

(18) paña ke vuesteñas ocasiones no
    for that 2.F.PL.FAM.POSS.PRO prayer.F.PL no

    so that your prayers may have no

tengan estoños
have.3.PL.IRR obstacle.M.PL (II, X-Y)

impediments.

In this example, the verb *teigan* (have) is inflected for the subjunctive mode in order to express possibility rather than something sure or inevitable. Spanish also has other tenses and modes not exemplified in the Appendix II language sample, but from these verbs mentioned above one can conclude that this universal does apply.

Greenberg’s universal thirty-six says that “If a language has the category of gender, it always has the category of number” (74). This universal does not apply to Korean because the Korean language does not have gender or number. However, in
previous discussions of universals twenty-nine and thirty, it has already been established
that both Palestinian Arabic and Spanish have the category of gender—in nouns,
pronouns, adjectives, verbs, etc. Therefore, this universal tendency would assert that
Palestinian Arabic and Spanish must also have the category of number. Again, referring
back to previous discussions of universals twenty-nine and thirty, one realizes that nouns,
pronouns, adjectives, verbs, etc. are all also inflected for number in both of these
languages. For a quick review, səfiə (summer, see example 5) is a Palestinian Arabic
noun that is feminine and singular in number. Also, muheəes (women), (example 15), is a
Spanish noun both feminine in gender and plural in number. Many other examples can be
found in the language samples.

Greenberg’s universal thirty-seven states that “A language never has more gender
categories in nonsingular numbers than in the singular” (75). This, again, applies to
Palestinian Arabic and Spanish but not to Korean, because Korean does not have gender
or number categories at all. In Palestinian Arabic, the singular noun səfiə (summer, see
example 5) is feminine, while the singular noun axo-i (brother, see example 16) is
grammatically masculine. No other genders exist for singular categories. Therefore, no
other genders can exist in nonsingular categories. The following example lends support to
this statement:

(19) ba-haləs kəmən sehtən
     1-fin  another year.F.DUAL (I, K)

I will finish in two more years

Palestinian Arabic makes use of a dual number (a nonsingular category) ending for the
noun sehtən (year) which is used here to mean “two years.” This noun has feminine
gender. While appendix I does not give an explicit example of the masculine gender with
nonsingular number, such words may be found in Palestinian Arabic. For example, the noun *kitabani* (book) has dual number and masculine gender (Bouchentouf 71). No other genders can be found in the nonsingular categories, thus supporting Greenberg’s universal thirty-seven.

In Spanish, the singular number category has both feminine, as in *estima* in example 13, and masculine, as in *maño* in example 15. In the plural number category, Spanish again has feminine, as in *muhe* in example 15, and masculine, as in *peinados* in the following phrase (example 20):

(20) el ekste no de peinados ostentosos

the external, that of ostentatious hairstyles

The language does not have any additional genders for the plural that it does not have in the singular, therefore following Greenberg’s assertion.

Greenberg’s universal forty maintains that “When the adjective follows the noun, the adjective expresses all the inflectional categories of the noun. In such cases the noun may lack overt expression of one or all of these categories” (75). This would once more apply to Palestinian Arabic and Spanish but not to Korean, for the same reason as previously stated as well as because Korean is an A language (where the adjective precedes the noun). Palestinian Arabic and Spanish are both N languages, in which the adjective follows the noun. Unfortunately, the Palestinian Arabic language sample provides no examples of adjective usage. Looking at example 20 of the Spanish morpheme gloss (in Appendix II, line I), one sees the noun phrase *peinados ostentosos* (ostentatious hairstyles) in which the noun, *peinados*, is both masculine and plural. The adjective, *ostentosos*, follows and modifies the noun. It is also both masculine and plural.
More noun phrases including adjectives can be found in almost every line of the morpheme gloss. However, in Appendix II, one cannot find a satisfactory example of the noun phrase where the inflected adjective follows a noun that does not overtly express inflectional categories. In Spanish, though, this does occur. Take, for example, such words as modelo (model), dentista (dentist), periodista (journalist), which have no inherent gender. Instead, their gender is revealed by the preceding article (el or la) and by the following adjective, which reflects the noun’s gender. However, even this example falls short because these nouns can still be inflected in regard to number—they are not completely lacking in categories of inflection.

Greenberg’s universal forty-one states that “If in a language the verb follows both the nominal subject and nominal object as the dominant order, the language almost always has a case system” (75). This universal would apply to Type III languages, as these are the only languages which have the default SOV word-order. Palestinian Arabic and Spanish, as Type I and Type II languages, would be excluded from the application of this tendency. The Korean language is a Type III language and meets the first condition in the universal. Therefore, according to the universal, it will probably have a case system. Looking at example 8, (Appendix III, line A), one sees evidence to support this claim. The word d-ʊ-ɪ (IPA transcription) uses the genitive case morpheme -ui to show possession and the word i-ɛm-en (IPA) uses the nominative case morpheme –en to show that the word is the subject of the sentence. The Korean language is not limited to the use of the genitive and nominative case, however. Occurrences of the accusative case system can be observed on lines D, E, G, and J of Korean morpheme gloss as well. Other cases may exist in the Korean language but cannot be shown in Appendix III.
Greenberg’s universal forty-two states that “All languages have pronominal categories involving at least three persons and two numbers” (75). “All languages” would include Palestinian Arabic, Spanish, and Korean. In example 9, taken from appendix I, line A, one finds the first person singular pronoun enə. However, the Palestinian Arabic appendix does not provide definitive examples of second or third person pronouns or of dual or plural pronouns. Therefore, the Arabic pronoun chart in Appendix IV (chart I) is necessary to show that Greenberg’s universal is correct. Not only does Palestinian Arabic have three persons and two numbers, it in fact has three numbers.

For Spanish, looking at example 15, one may find the second person plural (familiar) pronoun vosotːas. In example 21, one sees an example of a third person plural pronoun los. In example 22, one can find an example of the third person pronoun le, which is singular:

(21) los ke no kən en la palabəa
3.M.PL.PRO that no believe.3.PL in the.F.SG word.F.SG (I,E)

those who do not believe in the Word

(22) yamando -le señor
calling.CONT-3.SG.PRO Lord.SG (I, R)

calling him Lord

The appendix, thus, conclusively demonstrates that the Spanish pronouns include two numbers (singular and plural). These examples cannot prove the complete veracity of universal forty-two, though, as there are no first person pronouns to be found in Appendix II. However, a basic Spanish textbook can fill in the gaps. In Appendix IV, a list of Spanish pronouns (Chart II), is taken from ¡Arriba!, a introductory college-level Spanish textbook (Zayas-Bazán and Bacon 44). Looking at this information, one sees that
Spanish has pronoun categories with at least three persons and two numbers, therefore providing support to Greenberg’s universal number forty-two.

In the Korean morpheme gloss (Appendix III), one finds only examples of the first person pronouns. Example 7 contains the pronoun d⁻n⁻n, which is the first person singular pronoun with the added nominative-case morpheme n. The pronoun wu⁻i, in example 4, is the first person plural pronoun. An apparent lack of second and third person pronouns in appendix III can be explained by the text’s context—the Korean speaker who participated in the language recording and transcription was giving biographical information about herself and therefore speaking almost entirely in the first person.

However, according to Hansol H. B. Lee, the Professor of Phonetics and Linguistics at Seoul National University (in Korea), Korean has first, second, and third person pronouns as well as singular and plural pronouns (see Chart III of Appendix IV for a complete list) (53). From this information, one sees that Korean has pronoun categories with at least three persons and two numbers, therefore providing support to Greenberg’s universal number forty-two.

Greenberg’s universal forty-three states that “If a language has gender categories in the noun, it has gender categories in the pronoun” (75). The Korean language has no gender categories in the noun. Instead, it shows differentiation for “animate” and “inanimate” nouns or for “honorific” and “plain” nouns (Lee 50). Therefore universal forty-three cannot apply to Korean. However, Palestinian Arabic and Spanish do have gender categories in the noun and therefore can be examined in light of Greenberg’s forty-third universal tendency. For instance, the Palestinian Arabic noun moḥæsa (accounting) in example 1 has feminine gender. The noun axo⁻i (brother) in example
sixteen has masculine gender. Therefore, because Palestinian Arabic has gender in nouns, its pronouns should also have gender. Looking at the Arabic pronoun chart in Appendix IV, one sees that this is the case.

In Spanish, the noun *marido* (husband) in example 15 is a singular noun with masculine gender. The noun *palabra* (word) in example 21 is a singular noun with feminine gender. Therefore, in order to demonstrate Greenberg’s tendency, the language must also have gender categories in the pronoun. Looking back at the Spanish pronoun chart (Chart II), one sees that Spanish does indeed make use of gender categories. For example, the first person plural *nosotros* has masculine gender while the corresponding pronoun *nosotras* has feminine gender. This confirms, therefore, that Spanish does indeed follow Greenberg’s universal tendency number forty-three.

Greenberg’s universal forty-four maintains that “If a language has gender distinctions in the first person, it always has gender distinctions in the second or third person, or in both” (76). Looking at the pronoun charts in Appendix IV, one finds that the Spanish language has gender distinctions in the first person while Arabic and Korean do not. Therefore, this universal can only apply to the Spanish language. The Spanish first person plural pronouns are *nosotros* (masculine) and *nosotras* (feminine); this shows clear gender distinction. Referring back to chart II again, one sees that the second person plural familiar pronouns also show gender distinction—*vosotros* (masculine) and *vosotras* (feminine). Finally, gender distinction extends to the third person pronouns: *él* (masculine) and *ella* (feminine) as third person singular pronouns and *ellos* (masculine) and *ellas* (feminine) as third person plural pronouns. Therefore, Spanish confirms
universal forty-four—it not only makes gender distinction in the first person but also in the second and third person.

Greenberg’s universal forty-five says that “If there are any gender distinctions in the plural of the pronoun, there are some gender distinctions in the singular also” (76). Once more, this universal is not demonstrated in the Korean language as Korean has no gender distinctions in pronouns (see Chart III in Appendix IV showing Korean pronouns). However, in Arabic and Spanish, one sees gender distinctions in pronouns. In the Arabic, the second and third person plural pronouns (as shown in Chart I in Appendix IV) have either masculine or feminine gender. The second person plural pronouns are antum (masculine) and antuna (feminine), while the third person plural pronouns are hum (masculine) and huna (feminine). Thus, according to Greenberg, at least some of the singular pronouns should also have gender as well. Looking once more to the Arabic pronoun chart (Chart I), one sees that this is the case. The second person singular pronouns are anta (masculine) and anti (feminine), while the third person singular pronouns are huwa (masculine) and hiya (feminine). This confirms Greenberg’s universal forty-five.

Referring back to the Spanish pronoun chart (Chart II in Appendix IV), one sees multiple masculine and feminine pronouns in the plural. The first person plural nosotros is masculine and nosotras is feminine; the second person plural vosotros is masculine while vosotras is feminine; and the third person plural ellos is masculine while ellas is feminine. Therefore, in order to demonstrate adherence to Greenberg’s universal, Spanish must also have gender distinctions in the singular. Looking back at the Spanish pronoun chart, one sees third person singular pronouns él and ella which carry masculine and
feminine gender respectively. Therefore, universal forty-five is indeed supported by
evidence from the Spanish language.

Joseph Greenberg’s language universals are useful for classifying language types
as well as analyzing syntactical structure. First, the universals reveal three main default
word orders in the world’s languages. Using these default word orders (or typologies),
one may determine the likelihood of a language being prepositional or postpositional, the
possible adjective and noun head order, the probability of that language containing a case
system, and much more. Greenberg’s study, upheld in this thesis by an examination of
Palestinian Arabic, Spanish, and Korean morpheme glosses, is a useful tool for all
linguists.
Works Cited


Appendix I- Palestinian Arabic Morpheme Gloss

A. maḥaba ɪm -i  ᵇaːləm kɔpti. ɛnə a-t
hello  nᵃmᵉ-1.SG.GEN Salem Copty 1.SG.PRO live-1.PST

Hello, my name is Salem Copty. I lived

B. akta-ix haiæt-i b-ʃl -kuts mon²æ ɛsm -ha
ɛm[^afat
most  li(fr-1.SG.GEN in-DEF.ART-Jerusalem  aʳa.F.SG  nᵃmᵉ-3.F.SG Shafat
most of my life in Jerusalem, in the area called Shafat.

C. a: [ɔm]  amb-ɪ hala tisat-a ænə bə ɛm[^um [verbal pause]
age-1.SG.GEN now nine-ten  yea(F.SG  1.SG-be

[verbal pause] I am nineteen now and will be

D. æɛ in kɔm:n ɛh[^ə] [ə]  ænd -i əx u oxt
twenty another  month. [verbal pause] have-1.SG  bʳøther.M and  sʳis[F.
 twenty in a few months. [verbal pause] I have a brother and sister.

E. [ə]  axo -i b̥adäəs bi-aștəlia oxt -i
[verbal pause] bʳøther-M-1.GEN study.3.SG  iₙ-australia sʳis[F.-1.GEN

[verbal pause] My brother studies in Australia. My sister

F. ðowiz-ɛt ʃu did [ɔn]  fi s̅fiə  hae [ɔm]
marrυ -F.PST new [verbal pause]  iₙ summer.F.SG  tˢis [verbal pause]

recently got married [verbal pause] this summer. [verbal pause]

G. æhäl -i æê -in ləsəthəm b-ʃl -kuts u [ɔm]
parent.PL-1.SG.GEN live-PL  stiₙ.3.PL  iₙ-DEF.ART-Jerusalem  and [verbal pause]
My parents still live in Jerusalem and [verbal pause]

I go visit them every summer when

I have vacation. [verbal pause] I am studying

M.I.S. and accounting and, God-willing,

I will finish in two more years, in the year two thousand and

I do not know what I want to do after

I finish at the university. God-willing, I will find a job

Jerusalem, which is my nation and town, and
O. [əm] hædə huwə æn -ni
[verbal pause] this 3.M.SG.PRO about-1.SG

[verbal pause] that is it about me.
Appendix II- Spanish Morpheme Gloss

A.  ola soi patrisio guera vivo en españa i voi a ler
hello be.1.SG Patricio Guerra live.1.SG in Spain and go.1.SG to read.V

Hello, I am Patricio Guerra. I live in Spain and I am going to read

B.  primera de pedro kapitulo tres del uno
first.F.SG of Peter chapter.M.SG three of.the.M.SG one.M.SG

first Peter chapter three from one

C.  al siete. asi mismo vosotras muñeres estad
to.the.M.SG seven this.way same 2.F.PL.FAM woman.F.PL be.2.PL.FAM.IMP

to seven. In the same way, wives be

D.  sujetas a vuestro marido para ke tambien
subject.F.PL to 2.M.SG.FAM.POSS.PRO husband.M.SG for that also

submissive to your husbands so that

E.  los ke no kren en la palabra sean
3.M.PL.PRO that no believe.3.PL in the.F.SG word.F.SG be.3.PL.IRR

those who do not believe in the Word may be

F.  ganados sin palabras por la konduka de
won.M.PL.P.Part without word.F.PL for the.F.SG conduct.F.SG of

won without words by the conduct of their wives—
considering your chaste and respectful conduct.

Let your attire not be the external, that of ostentatious hairstyles and gold ornaments or of luxurious dresses, but instead the incorruptible beauty of a pleasing and calm spirit that is of great worth.
N. delante de dios porke así también se atavían
before God because this way also they were attired

before God. In this way also, many women of the past were attired.

O. entre otro tiempo akeyas tantas muñecas
between other time many women

They

P. ke esperaban en dios estando sujetas a
that waited on God being submissive to

waited on God, being submissive to

Q. su marido. como sara obedecía a abran
3.SG.POSS husband like Sarah obeyed to

their husbands. As Sarah obeyed Abraham,

R. yamando -le señor de la cual vosotras
calling him Lord, you

calling him Lord, you

S. abéis venido a ser ihas si aseis
have come to be if you do

may be called daughters if you do

T. el bien sin temer ninguna amenaza.
the good without fear

good without fear. In the same way,
live wisely with them,

giving honor to the wife as to

the more fragile vessel and as co-heir of

the grace of life, so that

your prayers may have no impediments.
Appendix III- Korean Morpheme Gloss

A. dʒɔ -ui iɾɛm-en yom hiyun imnida
   1.SG.POSS.PRO-GEN name-NOM Youm Heeyoon be.FOR

   My name is Heeyoon Youm.

B. dʒɔ -nɛn haŋguk-ɛsau wasImnida
   1.SG.PRO-NOM Korea -from came.FOR

   I came from Korea.

C. dʒɔ -ui gatʒok-un jɔsə-miun imnida
   1.SG.POSS.PRO-GEN family-ACC six-NUM.HUM be.FOR

   There are six people in my family.

D. abəʃ-i-wa ɔmɔni-wa na -wa jə-doŋʃeŋdli
   father-ACC mother-ACC 1.SG.PRO-ACC woman-young.PL.ACC

   I have a father, mother, two younger sisters

E. dul-miun kirigo nam-doŋʃeŋ -i han-miun imnida
   two-NUM.HUM and man.young.sibling-ACC one-NUM.HUM be.FOR

   and one younger brother.

F. wuri abəʃ-i-nən moksa-nim iʃimnida
   1.PL.PRO father-NOM pastor-HON be.FOR

   My father is a pastor.
and my mother helps my father at home.

I am a university student.

My two younger sisters are both university students.

My younger brother will graduate from high school in March.

I live in Suwon, Korea.

I am a Liberty University student.

I am twenty-four.
Appendix IV- Pronoun Charts

### I. Arabic Pronoun Chart

<table>
<thead>
<tr>
<th></th>
<th>singular</th>
<th>dual</th>
<th>plural (3+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>first person</td>
<td>⋆ηο</td>
<td>⋆ηη</td>
<td>na ⋆ηη</td>
</tr>
<tr>
<td>second person</td>
<td>⋆αηα (masculine)</td>
<td>⋆αηα</td>
<td>⋆αηη (masculine)</td>
</tr>
<tr>
<td></td>
<td>⋆αηη (feminine)</td>
<td>⋆αηη</td>
<td>⋆αηη (feminine)</td>
</tr>
<tr>
<td>third person</td>
<td>⋆υυα (masculine)</td>
<td>⋆υυα</td>
<td>⋆υυη (masculine)</td>
</tr>
<tr>
<td></td>
<td>⋆υυη (feminine)</td>
<td>⋆υυη</td>
<td>⋆υυη (feminine)</td>
</tr>
</tbody>
</table>

(Ghali 10)

### II. Spanish Pronoun Chart

<table>
<thead>
<tr>
<th></th>
<th>singular</th>
<th>plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>first person</td>
<td>⋆υο</td>
<td>⋆υο (masculine)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>⋆υο (feminine)</td>
</tr>
<tr>
<td>second person</td>
<td>⋆υυ (familiar)</td>
<td>⋆υυ (familiar-masc.)</td>
</tr>
<tr>
<td></td>
<td>⋆υυ (formal)</td>
<td>⋆υυ (familiar-fem.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>⋆υυ (formal)</td>
</tr>
<tr>
<td>third person</td>
<td>⋆ελ (masculine)</td>
<td>⋆ελ (masculine)</td>
</tr>
<tr>
<td></td>
<td>⋆ελ (feminine)</td>
<td>⋆ελ (feminine)</td>
</tr>
</tbody>
</table>

(Zayas-Bazán and Bacon 44)
### III. Korean Pronoun Chart

<table>
<thead>
<tr>
<th></th>
<th>singular</th>
<th>plural</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>first person</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>na/ne (plain)</td>
<td>uli(dŋl) (plain)</td>
</tr>
<tr>
<td></td>
<td>□□/e (formal)</td>
<td>□□hii(dŋl) (formal)</td>
</tr>
<tr>
<td><strong>second person</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>n□/ne (low plain)</td>
<td>n□hii(dŋl) (low plain)</td>
</tr>
<tr>
<td></td>
<td>ANE (high plain)</td>
<td>□ane(dŋl) (high plain)</td>
</tr>
<tr>
<td></td>
<td>daysin (low formal)</td>
<td>daysindl (low formal)</td>
</tr>
<tr>
<td><strong>third person</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>i (proximal)</td>
<td>idl (proximal)</td>
</tr>
<tr>
<td></td>
<td>g□ (distal)</td>
<td>g□dl (distal)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□□dl (distal-farthest)</td>
</tr>
</tbody>
</table>

(Lee 53)