Akademika 87(1), April 2017:153-163

http://doi.org/10.17576/akad-2017-8701-11

Application of Binomials in English and Persian

Aplikasi Binomial dalam Bahasa Inggeris dan Parsi

Mohammad Abdollahi-Guilani & Tan Kim Hua

ABSTRACT

Binomials or word pairs can present themselves differently in languages and cultures and this may result in difficulty in learning and teaching a foreign language. Binomials are formed both linguistically and non-linguistically. A thorough study indicates there are many factors involved in the ordering of words in a pair. The ordering preferences can range from the frequency of words, to semantic features, and to phonological principles. In addition, the significant role of gender should not be downplayed in arranging the components of a binomial. This study has taken advantage of a self-designed questionnaire to support the findings. The participants, aged 18-20, included 179 Iranian i.e. 95 male and 84 female undergraduate students who were asked to read a short paragraph about a couple and choose names not only for the couple but also for their siblings and children. In addition, in some cases, the respondents had to write names for some characters in the made-up story and determine what type of responsibility the children of the family should take up. The results of the study indicated that in addition to the phonological rules which greatly contributed to the precedency of a certain word in a nominal pair, there were other factors that could determine which element should stand first. These parameters are further discussed in the article. The findings of this research can target language teachers in general and English-Persian language teachers/ learners in particular. Curriculum designers and lexicographers can also benefit from the findings when designing course materials and writing dictionaries, respectively.

Keywords: binomials; culture; markedness theory; Persian; word pair

ABSTRAK

Binomial atau perkataan berpasang boleh dizahirkan dalam pelbagai cara bergantung kepada bahasa dan budaya. Perbezaan ini mungkin menjadi salah satu halangan dalam pengajaran dan pembelajaran bahasa asing. Binomial boleh terbentuk secara linguistik dan sebaliknya. Kajian menyeluruh telah menunjukkan bahawa terdapat banyak faktor yang mempengaruhi susun atur setiap pasang binomial. Keutamaan susun atur boleh ditentukan berdasarkan kekerapan frekuensi, semantik dan prinsip-prinsip fonologi. Selain itu, peranan jantina tidak patut dipandang remeh dalam menentukan susun atur komponen binomial. Kajian ini telah menggunakan soal selidik bagi menyokong dapatan kajian. 179 orang responden terdiri daripada pelajar sarjanamuda warganegara Iran berumur dalam lingkungan 18-20 tahun. Mereka terbahagi kepada 95 orang lelaki dan 84 orang wanita. Mereka telah diminta untuk membaca satu perenggan pendek (cerita rekaan) mengenai satu pasangan dan kemudian telah diminta untuk menamakan pasangan tersebut, adik-beradik, dan anak-anak mereka. Sebahagian responden juga diminta untuk menulis nama bagi sebahagian karakter dalam cerita rekaan itu dan seterusnya menetapkan peranan yang akan dimainkan oleh anak-anak pasangan tersebut. Hasil kajian mendapati bahawa terdapat faktor lain yang boleh menentukan susun atur elemen binomial selain peraturan fonologi yang merupakan penentu utama. Parameter-parameter ini dibincangkan lebih lanjut dalam artikel. Dapatan kajian ini boleh membantu guru bahasa secara amnya serta guru dan pelajar Parsi khususnya. Para ahli leksikografi dan penggubal kurikulum juga turut mendapat manafaat dalam aktiviti pengkamusan dan penulisan bahan kursus daripada hasil dapatan ini.

Kata kunci: binomial; budaya; teori 'markedness'; bahasa Parsi; kata berpasang

INTRODUCTION

People all over the world usually have their special way of thinking and presenting ideas. A certain group of aborigines in Australia, for instance, when dealing with spatial location make use of cardinal terms such as north, south, east, and west (Boroditsky 2009). As a result, when one is talking about the location of something in a place, instead of saying, "The pencil lies on the right side of the book", they may say, "The pen lies on the east of the book." Of course, this requires that one should always be orientated.

From one language to another, words may appear in a different order. Persian speakers, for example, write addresses starting from city to home while in English, it is vice versa. This is also true when announcing dates: in Persian, they say, "On Monday at eight o'clock" but in English, "At eight o'clock on Monday". In English, it is metaphorically common to deal with time on a horizontal cline as in "the worst" is behind and "the best" are ahead (Boroditsky 2009). This is, however, reverse in Mandarin, where the natives look at the concept of time vertically as they refer to the "last month" and "next month" with phrases "up month" and "down month", respectively. A question for preference for usage between "a cat and mouse" or "a mouse and cat" can be fulfilled by a simple Google search indicating 412,000 hits for the former and 53,700 hits for the latter.

Following the studies conducted on binomials or word pair, this research addresses the issue of word order from a pragmatic perspective. The theoretical study was also supplemented by a survey conducted among university students to find out how they approached the issue of binomials when they were asked to assign roles and identities to males and females in binomials. To the researchers' best knowledge, not only is this study the first comparative work in an English and Persian setting, but it can also distinguish itself in employing a novel methodology in collecting and assessing the collected data.

BACKGROUND OF THE STUDY

Words can appear either singly or in a pair. Some words most often go together commonly called collocations (as in *tell the truth*). Collocations fall at least into two major classes: grammatical and lexical. The former usually consists of parts of speech such as verbs, nouns, adjectives and adverbs followed by a preposition or an infinitive, while the latter involves the combination of these parts of speech with content words (Namvar et al. 2012). There are also groups of words called lexical bundles. These bundles consist of three words that statistically occur together more often (Biber & Conrad 1999: 183, cited in Kashiha & Chan 2014). For example, lexical bundles include phrases such as *it is necessary that*, *according to,* and *as far as it is concerned.* These bundles are usually common in non-written discourse to let the audience predict what is going to happen next (Biber et al. (2004). Similarly, there are some paired words that are called reduplications. They may consist of two elements one of which is a phonologically altered word containing a repeated syllable or speech sound as in *okey-dokey*. Still there is another group of paired words called binomials. Binomials refer to a string of two words which are of the same syntactic category being linked with a conjunction (Malkiel 1959). Gorgis and Al-Tamimi (2005) point out that binomials are variously termed as freezes, word pairs, and Siamese twins. In English, a binomial is a string of words collocationally occurring together intervened by linking words like 'and' (*come **and** see*) or 'or' (*put up **or** shut up*), 'to' (*start **to** finish*), or 'by' (*one **by** one*). One fact about a binomial pair is that it is not possible to reverse the order of the elements of such a word pair. In the binomial *bride and groom*, for example, the two constituent elements frequently occur together with no swap in position, making one independent meaningful word as a whole. On the contrary, if the constituents change place, the meaning of the whole pair will be markedly affected. Based on the internal structure, a binomial pair falls into various categories:

a) a synonymous pair:
   neat and tidy
b) Opposites:
   up and down
c) Similar alliteration:
   fast and furious
d) Rhymed elements:
   see-saw
e) Repeated word:
   on and on
f) Function words:
   Such and such
g) Abbreviations:
   B and B

According to Benor and Levy (2006), in the formation of binomials there are many factors involved, such as semantic features, frequency constraints, metrical qualities and phonological parameters. Other studies (e.g. Malkiel,1959; Müller, 1997) uncovered certain phonological and semantic principles for the arrangement of the constituents of a word pair. Metrical or phonological explanation was attributed by Bolinger (1962) as a leading factor in the formation of binomials. Cooper and Ross (1975: 70) believed that binomials followed the criteria of semantic and phonological patterns as 'Me First' and 'A is smaller than B', respectively, overemphasizing the semantics of words. The frequency rate of the first element in a binomial was also given prominence in determining which constituent should appear initially (Fenk-Oczlon 1989). Another criterion for the ordering of binomials was animacy of the first part of a pair which was highly noticed and credited in the studies conducted by McDonald, Bock and Kelly (1993). Finally, it was found that males were predominantly used as the first element in a word pair, namely 'first-position phonology' postulated by Wright and Hay (2002). Although there has been much study on the use and formation of binomials in English, it has not been seriously addressed in Persian context except for the work done by Khatibzadeh and Sameri (2013), who worked on the translation of binomials from English into Persian to arrive at the conclusion that these collocational pairs are not naturally translated.

BINOMIALS

There are different arguments as to which element in a binomial pair should come first.

Size

To begin with, the constituents of a binomial can be ordered in terms of size. That is to say, the element which is bigger precedes the smaller one. As given by Boers and Lindstromberg (2005), in the phrase *cloak and dagger*, the first word is large and has a dominating role to cover the second item. This can also be realized in *bread and cheese/ butter*, and *milk and honey* as bread covers cheese or butter, and honey is dissolved in milk and becomes part of it. One example can be found in Boers and Lindstromberg (2005), who worked on 106 binomial idioms and found that 35.85% of the items followed this pattern. Similarly, Persian also has such an inclusive feature as in *NAAN VA PANIR* 'bread and cheese', and *KOT VA SHALVAR* 'coat and pants' where bread and coat are more representative and entailing than their partners, cheese and pants, respectively.

Actual events can also speak of priority of appearance of the elements in a binomial. To illustrate, the phrase "*touch and go*" follows the logical pattern of occurrence; that is, first we touch the magnetic pad and then we can enter a bus, for example. Therefore, the order of the acts governs which one should appear first as in *spit and polish*: First, it is necessary to make the shoes wet and then start polishing them. This also applies for numerical binomials which come as they are in the list: *six and seven*. Likewise, Persian follows the order of events as in BEZAN VA BORO 'Hit and run away', as one first hits someone and then runs away.

Markedness theory

Another factor that determines the arrangement of binomial parts is with respect to markedness theory. This concept has been typically applied to cases where a group of languages display grammatical property p, and a smaller group of languages displays not only p but also a related property q. Because property q is rarer and additional to p, it is said to be 'marked', whereas p is unmarked. For example, French and English can both form questions on direct objects: *Who did she see?/Qui a-telle vu?*, but only English can form questions on the object of prepositions: *Who did she speak to?/*Qui a-t-elle parlé à?* Hence, question formation on the objects of prepositions would be held to be more 'marked' than question formation on direct objects (Johnson & Johnson 1999).

Accordingly, less marked words are more frequent than those that are unmarked. Mayenthaler (1988 cited in Abdollahi-Guilani, Yasin et al. 2012) believed that words that denote a permanently less marked concept take an initial position in a word pair. Hence in the binomial *hen and rooster*, the word hen is unmarked while rooster is marked. This is also true in Persian as in the binomial *AROOSS VA DAAMAAD* 'bride and groom' the word *AROOSS* 'bride' is unmarked and hence, the word *AROOSSI* 'wedding' is derived from *AROOSS* 'bride' To restate his stance, Mayenthaler

(1988 cited in Abdollahi-Guilani, Yasin et al. 2012) proposes that being animate is less marked than being inanimate, and singular is less marked than plural and so are the relations between right and left, positive and negative, concrete and abstract, front and back, above and below and finally vertical and horizontal.

These postulations are not perpetual as there are cases where in certain circumstances there exist deviations from the above-mentioned criteria. Here are some of them:

a) Although concrete items are less marked as in *physical and mental* and *body and soul*, there are cases violating this concept: *move heaven and earth*? As most people are right-handed*, the word right* can be less marked than *left*. However, the phrase *left, right and center* breaks the rule.
b) Easily accessible things are usually in front, above, vertical and within vision (e.g. *head and tail*, and *above and below)* so they have a lower level of markedness although some exceptions *(e.g. root and branch*) may break the rule.
c) The powerful objects are often less marked as in *cat and mouse*; however, this is not true for *cat and dog.*

Reiterating the characteristics and violations, Mayerthaler (1981) postulates that distal features (e.g. there) is less marked than proximal qualities (e.g. here) "*you and I*" or "*I'll be there whenever you need me.*" or *"Public and International*" To support this, an example by Cooper and Ross (1975) illustrates that in a game between the students of two universities, each side will cite their own university first. This position, however, does not hold true for Persian where first person and proximal features stand prior to the others:

Social Cultural Criteria

Finally, cultural and social hierarchy can also contribute to how the binomial parts co-occur. For example, if a person has an important role in society in terms of power, it is more likely that they stand first in the binomial pair as is true for the male gender (e.g. *boys and girls* and *men and women*). As Junaidi, Mohd Fuad and Novel (2012: 46) put it, "domination of the people in certain areas make them more powerful in terms of geopolitics" and this can make them take up high-status roles. Based on the principle that in any society there are priorities (Malkiel 1959), one who is stronger precedes the weaker one in a binomial pair as the dominant gender commands for *son and daughter*, *husband and wife* and *Mr. and Mrs*. Similarly, physical power is more dominant as in *mother and child* and *cat and mouse* so are positions in the government *prince and pauper* or in wealth like *rich and poor*. And finally, the noun which is animate precedes an inanimate one like *horse and carriage*. In all of these instances, power is the main factor, but this is determined by the values differently established in different cultures.

Likewise, Cooper and Ross (1975) talk of complementary pairs and state that what is more complementary in society is the first element in a binomial pair. For instance, salt, eating and gold enjoy higher importance than pepper, drinking and silver; therefore, there are *salt and pepper*, *eating and drinking* and *gold and silver*.

As an illustration of gender and power priority in the Iranian culture, males eat earlier; they stand in front of the women in congregational prayers; and they rush to encounter dangers. All of these can be related to the fact that males dominate the society and so their names stand first in the binomial pair. In English literature, Shakespeare speaks of *Anthony and Cleopatra* and *Juliet* follows *Romeo.* This stream of thought also affects the formation of binomial pairs for the characters of TV programs, movies, and animations. Referring to historical pairs of *Adam and Eve*, Wright, Hay and Bent (2005) speak of *Ozzie and Harriett*, *Rhett and Scarlett, Dagwood and Blondie* and *Mickey and Minnie*, which are television shows, movies, comics and animations, respectively. To reinforce the findings, a Google search shows that male names provide more hits. For example, Wright and Hay (2002) found that the name pair "Sarah and Michael'' had 3,350 hits, whereas it was 5,490 hits for ''Michael and Sarah'' A more recent search in 2016 revealed that priorities changed stance as 447,000,000 and 442,000,000 hits for the "Sarah and Michael" and "Michael and Sarah" pairs, respectively. It is worth mentioning that some events or even movies (such as *Prison Break,* an American television serial drama created by Paul Scheuring, 2005-2009) could contribute to the preference of one constituent element to the other in a binomial pair.

Similarly, the color black precedes white in the phrase *black and white*, but this cannot be related to the number of black people on the earth. There are other factors involved:

a) Dominance can be seen in the color black which affects other colors when mixed. So it earns a high hierarchal status.
b) Alphabetical order is another reason for the ordering of the elements of a binomial pair as "b" precedes "w" in the phrase *black and white*.
c) The precedence of one word to the other can also be attested to the physiological strength used for pronunciation. Vowel length and the number of syllables in each word can determine which word can go first. Those words that require less energy or take a lesser time for utterance usually appear earlier in this pair (Pinker & Birdsong 1979).
d) Phonologically, there are fewer syllables in men's names. In addition, their names more likely start and end with consonants especially obstruent, harder sounding ones (Hegarty et al. 2011). In one study on the prevalence of popular names, female names were found to contain 2.4 syllables on average, whereas this figure was 2.1 syllables on average for men's names. Furthermore, just 4.4% of the names for women were monosyllabic, while 18% of the names used for men were monosyllabic (Oakeshott-Taylor 1984).

In this regard, Cooper and Ross (1975) put forward the following criteria:

1) Single-syllable words precede multi-syllable ones: *salt and pepper*.
2) Words with short vowel qualities appear earlier in the pair: *hands and feet*.
3) Words that start with consonant clusters are second in the pair: *fair and square.*
4) Words that have more final consonants stand before those with fewer consonants at the end: *betwixt and between*.
5) Initial sonorant consonants help words take precedence over those words that start with initial obstruent consonant: *higgledy- piggledy*.
6) Words that have closed and front vowels stand first in the binomial pair: *flip-flap*.

As already explained, the pronunciation of the word *white* requires more energy than that of *black*, and so *white* stands second. This is also true for its Persian equivalent Siah va Sefid (i.e black and white) in which Sefid (i.e. white) needs more energy to be produced. A related issue is the number of syllables in *man and woman,* where the first word has a single syllable but the second one has two. Following the length of the syllable, the Persian equivalent for man and woman, *ZAN VA MARD* 'woman and man', but regarding the energy consumed for the utterance of the words, *MARD* is tenser and takes more energy and length. A Google search for the Persian ordering gives a record of 2070000 hits for "woman" coming before "man" with 948000 hits.

Similarly, the equivalent for *mouse and cat* in Persian has one syllable for mouse and two syllables for cat (*MOOSH* and *GORBEH*). Hence, cat appears second in Persian to follow the syllable length principle. Likewise, for the English trinomial *ear, nose and throat*, (seemingly following the alphabetical order), in Persian the word *nose* comes at the end for its multi-syllabic feature (*GOOSH*, *HALGH VA BINI* 'ear, throat, and nose').

Rhythm can also determine which word to stand first in a binomial pair. McDonald, Bock and Kelly (1993) referred to rhythmic alternation between stressed and unstressed syllables. For example, ***salt and pepper*** indicates a trochaic structure (i.e. stressed, unstressed, stressed, unstressed), while this is not true for ***pepper and salt*** where there is a medial sequence of two weak syllables (i.e. stressed, unstressed, unstressed, stressed).

Generally speaking, there does not seem to be a universal rule for the arrangement of the elements in a binomial pair and there are different arguments in this respect. Nevertheless, there are cases where a single binomial seems to abide by different rules. The pair ***head and shoulder*** is a case in point. It can be elaborated on in terms of a) markedness, b) frequency, c) semantics, d) phonology, e) hierarchy and f) alphabetical order. The word head:

a) is less marked;
b) is more frequently used;
c) contains a wider range of meanings;
d) has one syllable;
e) is the top part of the body and so it is more important and
f) has an "H" which alphabetically precedes the "S" in shoulder.

Just partly different from English, Persian uses SAR VA GARDAN, i.e. ***'head and neck***'; however, like English, Persian applies the same criteria. For Persian, SAR (i.e. head) is less marked, has a

higher frequency, has a wider range of meanings, has one syllable, is the top part of the body and so more important and finally the letter "S" in SAR alphabetically precedes the "G" in GARDAN in the Persian Alphabet.

TABLE 1. Binominals in English and Persian

English	Persian	Single order	Reverse
aches and pains	clutch and tooth	an arm and a leg	hot and cold
alive and kicking	far and dear	bride and groom	law and order
ball and chain	head and neck	far and near bag	pen and paper
bed and breakfast		and baggage	loss and gain
big and tall		black and blue	sick and tired man
bits and pieces		black and white	and wife
bow and scrape		body and soul	mom and dad
bright and early		come and go	man and woman
bump and grind		bread and butter	cats and dogs
life and soul		bread and cheese	husband and wife
sixes and sevens		brother and sister	cat and mouse
skin and bone		do's and don'ts	fun and games

As Table 1 indicates some pairs in columns one and two are specifically used in one language while the words in the third are shared by English and Persian. The fourth column shows that English and Persian use reverse orders in their employment of binomial pairs.

METHODOLOGY

To find out how a binomial pair might be formed in Persian, the researcher designed a questionnaire in Persian, the mother tongue of the respondents (the English version of th questionnaire is given in the Appendix). The respondents included 179 freshers (mechanical, computer software, and urbanism students) at Booin-Zahra Technical University, Iran. There were 84 females and 95 males.

The questionnaire with 13 multiple-choice and written questions aimed to reveal how the sample study population would arrange male and female names or characters in their mental classifications for words and assign them gender roles. To illustrate, the questionnaire shows a new couple without names and the respondents are to select on their own names for them based on the six-alternative pairs given. In another part, the respondents should choose names for the brothers and sisters of the couple as well as their two children. The items were mainly arranged on a phonological and alphabetical basis.

RESULTS

Based on the answers given to the items in the questionnaire, the results are summarised and tabulated in Table 2.

In the questionnaire, Question One asks the respondents to choose two names between the six pairs as names for the couple. The alternatives were made based on syllable length and Persian or Arabic origins. The findings indicate that the respondents have shown different behaviors:

As Table 2 shows for Item One, the female respondents (32 out of 73 people) chose (C) as their first priority and the second scored item was choice (E) with one point. The male respondents, however, made a different choice. Their first preference was alternative (D) (34 out of 92 answers) and the lowest score was for choice (F) with 2 points. This may show that the respondents were biased toward their own genders. A second idea could be related to the difference in syllable length of the choices; choices with shorter syllables are more preferred by the respondents. This could be seen how options (C) and (D) which are both made of 5 syllables are chosen more frequently than choices (A) and (B) which have 6 syllables and choices (E) and (F) which have 7 syllables.

Like the first priority for Item One, the second preference showed more tendency toward choices (C) and (D) for both groups of the respondents

TABLE 2. Responses to the Questionnaire

Questions	Male Score	Female score	% M	% F	Male Respondents	Female Respondents
1st partner: Gender bias (Question 2)	57	57	78.1	79.2	79	77
Bride's brother: Choice B (Question 3)	55	42	75.3	58.3	94	83
Groom's brother: Choice A (Question 4)	53	55	72.6	76.4	94	83
Bride's sister: Choice A (Question 5)	60	49	82.2	68.1	94	83
Groom's sister Choice A (Question 6)	58	46	79.5	63.9	94	83
1st child: boy (Question 7)	68	52	93.2	72.2	94	83
2nd child: girl (Question 8)	26	31	35.6	43.1	94	83
Child priority: boy (Question 9)	91	75	96.8	90.4	94	83
Parent Priority: Father (Question 10)	55	45	91.7	83.3	60	54
Stereotyped roles (Questions 11 & 12)	82	71	100.0	98.6	82	72

with 18 and 25 ticks, while the other alternatives for the males were (A), (E), (B), (F) and (C) and for the female respondents were (D), (B), (E), (F) and (A). The respondents apparently preferred gender-based names again.

Question Two required the respondents to write names for the couple. From the 79 male respondents, 57 wrote a male name as the first partner and from the 77 females, 57 wrote a female name as the first partner. This may as well indicate that the females preferred their own sex to stand first and the males preferred their own as the first partner in the married couple.

These findings not only indicate the preference of the respondents based on gender, they may also be observed as a reflection of the Iranian women's fight for gender equality to establish their rights in the Iranian social cultural setting that prioritizes men and diminishes women. This represents a cultural setting which is often viewed as a patriarchal society with men taking up the higher status role and as Junaidi, Mohd Fuad and Novel (2012: 46) put it the domination of the people in certain areas makes them more powerful. Thus, this is why the female respondents' preferences could be inferred as a defense mechanism.

Statement Three asked for names of the bride's brothers. From the 83 females and 94 males, there was almost the same number of votes for the alternatives, which were (A) Reza and Bahamn and (B) Bahman and Reza. However, in the female group there was one and in the male group there were six votes for choice (B) which may be attributed to the Persian origin of the word. This can be congruent with the suggestion made by Cooper and Ross (1975) stating that the first conjuncts refer to those factors which describe the prototypical speaker; in this situation is the name Bahman which originates in the Persian language compared to Reza which comes from Arabic. Although both names are used widely among Iranians, the fact that the name Bahman is closer to their understanding affects their preferences.

Item Four called for names of the brothers of the groom. The alternatives were (A) Kayvaan and Moraad and (B) Moraad and Kayvaan. In this question, the respondents had the same number of votes for choice (A). Nevertheless, the number of votes given by the females was higher (i.e. 55 out 83) than that by the males (i.e. 53 out of 94). As for the choices, despite the fact that they both had two syllables, the pronunciation of the last syllable of Moraad used more energy and time.

In Item Five, the respondents were going to select names for the bride's sisters. The choices were (A) Mehnoosh and Behnoosh and (B) Behnoosh and Mehnoosh. The responses reveal that 49 out of 83 females chose alternative (B) and 60 out of 94 males responses selected alternative (B) again. This shows that there was a general agreement among the respondents on choosing Behnoosh as the first name in the binomial despite the boys' own genders in particular. This may technically be related to the priority of the sound /b/ in the alphabetical order on one hand and supported by its easiness in articulation on the other. The findings in Items Four and Five reflect the stands of some linguists (e.g. Cooper & Ross 1975; Pinker & Birdsong 1979) on how the formation of binomials are affected by the alphabetical order and vowel length of the conjuncts in which the conjunct which requires longer time and energy to be uttered will be placed as the latter member in the binomial.

In Statement Six, the respondents had to choose names for the sisters of the groom. The choices were (A) Mehri and Mahtab and (B) Mahtab and Mehri. The responses reveal that there was a higher preference for choice (A): the girls with 46 out of 83 ticks and the boys with 58 out of 94 ticks. Despite there being no hard and fast rule for such preference, this choice may be related to the women's tendency to pronounce certain sounds longer than men do (Simpson & Ericsdotter, 2003). For instance, the word Mahtab would take a longer time to be uttered and so they preferred Mehri as a short-sounding candidate. Choice (A) can also be supported due to the high frequency of the name Mehri. Although both names contain two syllables, the name Mehri is easier to pronounce than the other one. Based on a Google search, the English transliterated name "Mehri" returns 1,480,000 hits while the search on "Mahtaab" or an alternative spelling, "Mahtab" returns a lower number of hits of 71,500 and 652,000 hits, respectively. Besides, in a binomial pair of Persian orthographic search, Mehri and Mahtab had 87,000 return hits while Mahtab and Mehri had only 7 hits.

Statements Seven and Eight introduce the couple's children. Here, the respondents were supposed to write names for the new-born babies. In fact, it was going to find out what was the sex of the child the respondents preferred the couple should have first. The responses show that from the 83 female respondents and the 94 male respondents, 52 and 68 votes, respectively, were given for a boy as the first child of the family.

To obtain an indirect confirmation for questions Seven and Eight, the researcher designed Statement Nine in which the respondents had to rewrite the names in a single sentential context. This could also show which name they would prefer to stand first. According to the findings, except for 3 responses by the males and 8 responses by the females, all of the other replies indicated that a boy was their first preference. These statements can clearly prove that boys are generally preferred to be the first child, reinforcing gender domination in binomials.

Likewise, Item Ten required the respondents to place each parent in a contextualized slot. Question Ten seemed to be a little unclear because there were many wild responses and only 54 females and 60 males answered this question. The findings show that 45 out of 54 females and 55 out of 60 males chose father as the first parent to appear in the context provided. This question represents the priority of the male gender to the female one in the respondents' mental ordering for names or roles.

Similarly, Questions 11 and 12 challenged the predefined roles for girls as working in the kitchen and lending a hand to mom and the boys doing manual jobs and helping dad. It shows that 71 out of the 72 female responses and all the 82 male answers confirmed the stereotyped gender defined for sons and daughters.

And finally, the respondents were asked to write their own parents' names. From the 89 answers given by the male respondents and the 80 responses coming from the female respondents, 75 and 42 votes were given to the father, respectively. Although 48% of the female respondents chose their mother as the first parent, the highest total score goes to the father to confirm the dominant role of males as one of the most significant factors in the construction of binomials.

At the end of the survey, the respondents were asked to explain on what criteria they had answered the questions in the questionnaire. Although not many of them answered this question, the findings indicate that different factors were taken into account: (a) Adult females stand first, but baby boys are preferred to baby girls, (b) Religious names should take precedence in choosing names; (c) Shorter names should precede longer ones; (d) Musicality and the alphabetical ordering should count in selecting names, and finally (e) Names with Persian origin are mostly preferred. These responses and the aforementioned arguments can partially answer the research question: What are the major criteria for the formation of binomials in English and Persian?

To sum up, the research show that males precede females and that phonology alone is not responsible for the tendency to place male names before female names; when phonology is controlled (i.e. when two names are ‘‘phonologically equal’’), an independent gender bias still exists: subjects prefer male names before female names.

CONCLUSION

Following the research question, it can be concluded that there is no single criterion to be taken accountable for the ordering of binomial constituents. Phonological, semantic, pragmatic, orthographic, and even paralinguistic factors are involved in the construction of binomials and on a small scale, this is mainly confirmed by the questionnaire which showed that several principles are applied in this process. Frequency seems to play a key role in ordering preferences. In binomial pairs, on the basis of the kind of the constituent parts in the pair, there are different reasons: Gender bias cannot be ruled out in determining which element should follow next. Another parameter is how frequent is a Certain Word. Certain words are used more often. As male names tend to be more stable and consistent over time, they are more frequently used; hence, frequency leads to male names being placed before female names. Phonology, culture, geographical locations, personal beliefs and many more factors are involved in the formation of binomials. Finally, the nature of language may not work universally alike in all situations and some principles may fail in certain cultures. However, it can be recapitulated that not only do Persian and English follow the features of their own language systems, but they also share some universality in terms of the arrangement of the elements in a binomial pair. The pedagogical implications that can be derived from this research study is that it is necessary to make both the learners and teachers of English as a foreign or second language aware of the fact that language learning or teaching is not just about grammar and vocabulary; they should also take into consideration what frames native speakers use to place their messages in. Thus, language learners are advised to take care of the concept of binomials as one important component of vocabulary learning so that they can sound more natural when writing, speaking, and even translating from one language into another.

The authors believe that the findings of this research can benefit both second or foreign language teachers and learners. On the one hand, the teachers can direct their students to pay attention to some pragmatic use of language. And on the other hand, the learners can be motivated to notice languages that are different not only in grammar and vocabulary but also in language use. In addition, course designers can allocate some parts of language textbooks to binomials and similar issues such as collocations so that the materials that students encounter will sound more natural and native-like. Above all, this study can give ideas to lexicographers to include word pairs in dictionaries so that language learners will not see just single words but junks and phrases as they are learned and retrieved more easily.

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Mohammad Abdollahi-Guilani (corresponding author)
Buein Zahra Technical University
Imam Khomeini Blvd
Buein Zahra
3451745346 Qazvin
Iran
E-mail: abdollahi@bzte.ac.ir

Tan Kim Hua
Sustainability of Language Sciences Research Centre
Faculty of Social Sciences and Humanities
Universiti Kebangsaan Malaysia
43600 UKM Bangi
Selangor
Malaysia
E-mail: kimmy@ukm.my

Received: 1 June 2016
Accepted: 14 March 2017

APPENDIX

Dear respondent,

This is part of an academic investigation. Your accurate responses can certainly help shape the research carefully.

Gender	M	F	Age: ____	Education: _____

In this questionnaire, there are several blank spaces and you need to place a check mark next to the alternative(s) you would like to choose. For some items, please be kind enough to write appropriate words as directed. Please go through the whole text before you begin to answer.

For Item One between the 6 alternatives given, please make 2 choices:

1. I was invited to a wedding party. It was the wedding of _____ and ____.

a) Ali and Saeedeh b) Saeedeh and Ali

c) Mina and Mehrdaad d) Mehrdaad and Mina

e) Kiyoomarss and Soraya f) Soraya and Kiyoomarss

Choice 1 …….Choice 2

A	B	C	D	E	F		A	B	C	D	E	F

2. Based on your own interest, write names for these partners:

_____ --------- and --------_____

3. The bride had two brothers named _____ and _____

A) Reza and Bahman B) Bahman and Reza

4. The groom had two brothers named _____ and _____

A) Kayvaan and Moraad B) Moraad and Kayvaan

5. The bride had two sisters named _____ and _____

A) Mehnoosh and Behnoosh B) Behnoosh and Mehnoosh

6. The groom had two sisters named _____ and _____

A) Mehri and Mahtaab B) Mahtaab and Mehri

7. After one year, this couple had a baby and named it _____

Write a name:_____

8. Two years later, they had another baby and named it _____

Write a name: _____

9. These two children, _____ and _____, liked and helped each other very much.

10. When the children turned 12 and 10, their roles for their _____ and _____ were very significant**.**

11. When mother needed help in the kitchen, she called _____

12. When father needed a hammer to hang a picture on the wall, he called _____.

Thank you very much for answering the questions. Please write your parents' first names: _____ and _____

In choosing or writing names, have you followed any pattern? If yes, please state.