
| RESEARCH ARTICLE

Lexical Shortening and Blending: An Innovative Word Formation Process in Arabic

Prof. Reima Al-Jarf

Full Professor of English and Translation Studies, Riyadh, Saudi Arabia

Corresponding Author: Prof. Reima Al-Jarf, E-mail: reima.al.jarf@gmail.com

| ABSTRACT

A corpus of 170 partial Arabic blends in which the first and/or second constituents are shortened was collected from several Arabic resources and subjected to further analysis to explore the structure of Arabic partial blends; blend types (attributive/headed); which constituents and which part is shortened; the kind of relation that exists between the constituents of Arabic blends; and the contexts or registers which favour the formation of lexical blends. Blends consist of two or more words merged into one new word. Blending involves shortening of one constituent or both. It involves creating new words by omitting part of the original word but retaining its original meaning. Partial blends consist of a splinter, i.e. shortened constituent (تركو Turbo; انجلو Ango; افرو Afro; قطر Qatar; ايبرو Iberian; أورو Euro; يهو Jewish; أحيو biology; أمنو security; سعودي Saudi; جمهوري republic) and a head (full constituent) that combines with it. Data analysis showed the following: (i) compounds with multiple blends with different splinters from the same lexical items (سكر + سكر carbon+sugar > فُكَّر , فُحْسِك , فُسْكِر , فُحْمَس); (ii) blends with a final reduction in the first constituent (كهرمغنيطيسي electromagnetic); (iii) blends with a splinter as a first constituent+the combining vowel /o/ (تركوليجي Turkish+Gulf; هندو إيراني Indo-Iranian); (iv) three-and four-constituent blends (الأنجلو-صهيو-فارسي-أمريكي Anglo+Zio+ Persian+American); (v) Blends with prefixes that are shortened particles/adverbs (قبتاريخ pre-historic; بيسطري interlinear; فونفسجي ultraviolet; غيلوغ post puberty; تحجري undersea); (vi) blends with initial reduction in the second constituent resulting in the suffix {el} (امريكائيل America+el last syllable in Israel); (vii) splinters with initial reduction in the second constituent (بيروتشياما Beirut +Hiroshima; عبقريشتاين genius+Einstein); (viii) imperfect blends with final reduction of first constituent + initial reduction of second constituent (متشائل pessimist+optimist; جزائسطينية Algeria+Palestinian); (ix) technical blends (برمجاني freeware; حمضتون acid+vinegar); and (ix) blends with overlapping consonants (عربيزي Arabic+English; قبل+بلوغ pre-puberty; سوداناس Sudan people). Syntactically and semantically, the relation between constituents of a blend containing a prefix/suffix is exocentric and syntagmatic but it is endocentric and paradigmatic in blends in most of the categories. Recommendations for testing the Arabic blend recognition, comprehension and interpretation by translation students are given.

| KEYWORDS

Partial blends, full blends, initial reduction, final reduction, back reduction, overlapping consonants, combining vowel, Arabic compounds, complex reduction, word formation processes

| ARTICLE INFORMATION

ACCEPTED: 15 November 2023

PUBLISHED: 17 December 2023

DOI: 10.32996/ijls.2023.3.3.7

1. Introduction

Blending¹ is a word formation process in which two or more words are merged into one new word. Blends are a subtype of compounds because they are formed of two (or sometimes more) content words. The word "camcorder" combines parts of "camera"+"recorder", joining a full word with a portion of another word (called a splinter) as in "motorcade" which combines "motor"+a portion of "cavalcade." The blended constituents are either shortened as in *brunch* > *breakfast+lunch*, *motel* > *motor+hotel* or *blizzaster* > *blizzard+disaster*, or partially overlap or combine phonemes at segments that are phonologically

¹ Blending in Morphology

or graphically identical as in *stoption* > *stop+option* and *Spanglish*, which is an informal mix of spoken *English+Spanish*. Blends can also be formed through the omission of phonemes as in *Eurasia*, that combines *Europe* and *Asia*. This blend is formed by taking the first syllable of "Europe" and merging it with the word *Asia*.

More exotic examples of blends include formations like *Thankshallowistmas* (*Thanksgiving+Halloween+Christmas*). The visual and auidial amalgamation in blends is reflected at the semantic level. It is common to form blends that combine the meaning of two objects or phenomena, such as an animal breed (*zorse* > *zebra* and *horse*), an interlanguage variety as in (*franglais* > *français+anglaise*) meaning a mixture of *French* and *English*, or (*shress* > *shirt+dress*), a type of clothes having features of both (Beliaeva, 2019a)

Blend involves shortening of one constituent or both. Shortening² of words in a lexical blend involves omitting part of the original word, but retaining its original meaning. There are 4 types of shortening: (i) cutting the beginning of the word (*telephone* > *phone*; *alligator* > *gator*; *parachute* > *chute*; *turnpike* > *pike*); (ii) cutting the end of the word (*rehabilitation* > *rehab*; *university* > *uni*; *professor* > *prof*; *application* > *app*; *introduction* > *intro*; *laboratory* > *lab*, *continued* > *cont*); (iii) cutting the beginning and end (*influenza* > *flu*, *pajamas* > *jams*, *Apollinaris* > *Polly*; *detective* > *tec*); (iv) changing the spelling of the word (*vegetable/vegetarian* > *veggie*, *Christmas* > *Xmas*, *bicycle* > *bike*).

Morphologically, one of the constituents in the blend is the head and the other is the attributive³. The head is the dominant constituent, and the attributive modifies it as in the word "*porta-light*" in which "*portable*" is the attributive and "*light*" is the head. The attributive may display an endocentric relation with its head, as in *rockumentary* > *rock+documentary*) and *Clintonomics* > *Clinton+economics*). In *rockumentary* > *rock+documentary*, and *Clintonomics* > *Clinton+economics*, the second splinters *-umentary* and *-(o)nomics* are potential combining forms or secreted affixes for novel formations (Elisa, 2019). Beliaeva (2016) added that blends such as *predictionary* > *prediction+dictionary* and clipped compounds as *finlit* > *financial+literacy* demonstrate a more general morphological phenomenon, mainly, a continuum of word formations driven by two counteracting processes: clipping and compounding.

Blends tend to be formed from semantically and phonetically similar words in such a way that the source words remain recognizable (Gries, 2006). The semantic similarity between the two constituents reflects a conjunction of their concepts. The two constituents are either hyponyms of one of their constituents or exhibit some kind of paradigmatic relationships between the constituents, i.e., they hold the constituents of the same category but can be substituted for each other. They are nonlinear and non-simultaneous (Beliaeva, 2019b; Beliaeva, 2016; Filonik, 2014; Cook, & Stevenson, 2007). The two constituents are the split of a source word into a prefix/suffix as it contributes to the blend and the remainder of the word occurs at a syllable boundary or immediately after the onset of the syllable (Def Pasari, 2015). Syntactically, the two constituents are content words such as Noun+Noun or Adjective+Noun.

Moreover, lexical blending is a highly productive word-formation process by which new words enter a language (Mierzwińska-Hajnos, 2017). Every year, hundreds of new lexical items are coined or borrowed. They express various concepts and phenomena in the fields of politics, science, technology, healthcare, space research, agriculture, aviation, transport, language and linguistics, art, social phenomena, everyday life, finance and economics sports, education, etc. Due to their unusualness and expressiveness, they are widely used in the media.

In English, lexical blending is a highly predictable and productive process. It is an important source of neologisms, although derivation and compounding are probably much more frequent processes. In English, (Def Pasari, 2015; DiGirolamo, 2012; Al-Jarf, 2010b).

Although Arabic is mainly a derivational language, it has other word formation processes such as blending, which is a subtype of compounds. Arabic has total blends and partial blends. Total blends may be (i) fully Arabic (بيرزيت *Birzeit*; الجوفضائية *Aerospace*; حَضْرَموت *Hadhramaut*; خان يونس *Khan Younis*; الرأسمالية *capitalism*; طولكرم *Tulkarm*; قائمقام *a person who acts on behalf of another in his position*; قولفعلية *words and actions*; ماهية *the nature of*; معديكرب *Maadi-Karib*; الماوارء *metaphysics*); or (ii) fully borrowed (*social media*; *coffee shop*) or (iii) hybrid (حمض الهيدروكلويك). Similarly, partial blends can be (1) fully Arabic (نفسجسمي بخلوي); (2) fully borrowed (بتروودلار *Anglosaxon*, *Russophobia*, *Francophonie*); or (3) hybrid (جيوسياسي، اسلاموفوبيا، *Islamophobia*). Different

² Shortening

³ en.wikipedia.org/wiki/Blend_word

parts of speech can be blended such as (A) particles and adverbs: إلا *except*; ألا *not to*; إلام *until when, to what*; إما *either*; حينما *whenever*; طالما *as long as*; كَمَاَنْ *if*; لَنْنا *as not*; يومئذ *then*; (B) compound proper nouns: أبأحسین *Abahussein*; ابأنمی *Abanmi*; بوالحرث *Balhareth*; بلعید *Baleid*; بلقاسم *Balqasem*; بنصالح *Binsaleh*; بنقردان *Binqirdan*; بنکیران *BinKiran*; البوعزیز *Bou-azizi*; بوعلی *Bou-Ali*; کیری-لافروف *Kerry-Lavrov*; بوتین-المالکی *Putin-Maliki*; (C) Noun+noun or noun+adjective سنی-شیعی *Sunni-Siite*; داعش *ISIS-Picot*; یسوی *Middle Eastern*; شرق اوسطی *Ramallah*; رام الله *Gulf-Iranian*; خلیجی-ایرانی *amphibian*; برمائی *metal organic*; (D) pre-Islamic blends as in names of some tribes بهشمی *Bahshami* (from *Bani Hashem*); عبقسی *Abqasi* (from *Abd Qays*); عبداری *Abdari* (from *Abduddar*); عبدلی *Abdali* (from *Abdullah*); عبشمی *Abd Shams*; (E) ancient Islamic expression; some of which are still used: استرجع الاسترجاع *to say to Allah we belong and to Him we shall return*; بِسْمَلَةِ سَمَلَةِ *to say in the name of Allah*; حوَقَل *to say Allahu Akbar*; حَسْبُ الحَسْبَةِ *Allah is sufficient for us and He is the best trustee*; حَمْدَةُ حمد *to say Thank God*; حوَقَل *to say Allah hears who praises Him*; حَوْلَقَةَ حَوْلَقِ حَوْلَقِ *There is no might or power except with Allah*; سَبِحَلَةَ سَبِحَلِ *to say Glory be to God*; سَمَعَلَةَ سَمَعَلِ *to say Allah*; هَلَلِ هَلَلِ *to say there is no god but Allah*; مَشَأَلَةَ مَشَأَلِ *to say ma shaa Allah* (this is granted by Allah); مشکن *to say what Allah wills, will be, i.e., will happen*; (F) shortening and blending common in Colloquial spoken Arabic nouns and phrases as in مساء الخیر > مسأالخیر *Good Evening*; سفندی>یوسف افندی *tangerines*; عبد العزیز > عبعزیز *Ab-Aziz*; عبد السمیع *Ab-Samme*; عبد المجید > عبمجید *ab-Majeed*; عبسلام *Absalam*; فحیاتی *in my life*; (G) blends used in Standard and colloquial Arabic, and general and technical language which are the focus of the current study (Nasser, 2008; Al-Jarf, 2015b; Al Jarf, 2011b; Al-Jarf, 2010a; Al-Jarf, 2004; Al-Jarf, 1996; Al-Jarf, 1994a; Al-Jarf, 1994b; Al-Jarf, 1994c; Al-Jarf, 1990).

2. Literature Review

Numerous studies in the literature explored lexical blending in a variety of languages such as Italian lexical blends: From language play to innovation (Cacchiani (2015; Renner, 2015); unfamiliar Italian lexical blends from names and nouns (Cacchiani, (2011); borrowings, hybridity, adaptations, and native word formations in Italian lexical blends (Cacchiani, 2016); lexical blending from zero to hero in Romanian (Vasileanu, Niculescu-Gorpin, & Radu-Bejenaru (2022); blend formation in Modern Greek (Ralli & Xydopoulos, 2012); an optimality-theoretic analysis of lexical blends in Korean (강은경 Eunkyung Kang (2013); evidence from German, Farsi, and Chinese for blending grammar and universal cognitive principles (Ronneberger-Sibold, 2012); an elicitation paradigm and a structural analysis of Ukrainian blends (Borgwaldt, Kulish& Bose, 2012); lexical blending in Ukrainian: System or sport (Winters, 2017); borrowing word-formation: -ing suffixation and blending in Bulgarian (Stamenov, 2015); lexical blending in Polish as a result of the internationalization of Slavic languages (Konieczna, 2012), a combinatory logic and formal-semantic account of lexical blending and others (Bassac, 2012), Word formation of blends (Čolić, 2015) blending words found in social media (Giyatmi, Wijayava & Arumi, 2017) and others.

Another line of research focused on lexical blending in English such as new lexical blends in English (Hosseinzadeh, 2014; Šomanová & Vogel, 2017); the innovation and adoption of English lexical blends (Connolly, 2013); merging as a way of forming lexical units in the modern English language (Orazbekova & Muldagalyieva (2017); a corpus-based analysis of new English blends such as *glamma* (*glamour+grandma*), *eatertainment*, *irritainment*, *shoppertainment*, from the splinter *-tainment* in *entertainment* (Elisa, 2019); English lexical blends on social media as *crasins* > *cranberries+raisins*, *mocial* > *mobile+social*, *neature* (*neat+nature*), *Piloga* > *pilates+yoga*, *perthontology* > *personality+Perth* (Cook, 2012); cognitive constraints in English lexical blending with a data collection methodology and an explanatory model (Kjellander, 2018); lexical blends and a reanalysis of morphemization (Frat & Hamm (2005); the automatic identification of source words in English lexical blends (Cook & Stevenson, 2010); a contrastive study of English and Thai compounding and lexical blending (Charernwivatthanasri (2022); a contrastive analysis of French and English lexical blends (Renner, 2019; the phonological and orthographic constraints that shape blended words, such as preference for complex onsets, maintenance of stress placement, phonological and orthographic overlap and comparison with lexical neighbors to evaluate their phonotactic acceptability, orthographic transparency and interaction of many layers of representation (DiGirolamo, 2012) and others.

Unlike English, Italian, Ukrainian, Polish, German, Farsi, Chinese, Modern Greek, Korean and others, studies that explore blending as a word formation process in Arabic are very few. A study by Khasara (1998) gave a detailed historical review of lexical lending as a word formation process and its impact on terminology development. He discussed blending as a spontaneous activity, standardization of blends, contemporary blending, and blending rules and conditions. He gave many ancient as well as new lexical blends created until the 1990's. He gave example and set rules for acceptable and unacceptable Arabic blends and some Arab lexicographers' position of newly-created blends before the 1990's.

Another study by Mohsin (2020) examined Arabic blends in the light of three blend formation tendencies in English: (i) the cut-off point in the source words, (ii) the proportional contribution of source words to the blend, and (iii) the stress pattern in the blend. Mohsin (2020) added that blends in Classical Arabic are generally formed by joining the first two root consonants of each source word and imposing the prosodic pattern CaCCaC on them as /ʕabdɑr(ij)/ 'someone from the family of Abdul Dār' < /ʕabd/ 'slave'+/da:r/ 'house', /ʕabqɑs(ij)/ 'someone from the family of Abdul Qays' < /ʕabd/ 'slave'+/qɑjs/ 'a male name', and /ʕabʃɑm(ij)/ 'someone from the family of Abdi Shams' < /ʕabd/ 'slave'+/ʃɑms/ 'sun'. Such names of Arab tribes appeared the 6th Century AD. Mohsin identified 3 main tendencies in Arabic blend formation: (1) the general tendency for the cut-off points in source words that occurs at syllabic joints with the majority occurring between syllabic constituents; (2) the tendency for the greater proportional contribution to come from the shorter source word, and for source words of equal phonemic lengths to contribute equal proportions to the blend; and (3) the general tendency for the stress pattern of the blend to be identical to that of the source word that has identical syllabic size as that of the blend.

Recent blends coined in the past decade or so and other aspects of lexical blending in Arabic have not been the focus of any study in the Arabic word formation literature as lexical blending in Arabic is a rather novel but fast-growing word-formation process especially in the political field. Therefore, the purpose of this study is to explore (i) the formation of lexical blends in Arabic, i.e., the structure of blends in Arabic; (ii) blending types (attributive/headed); (iii) Which of the two constituents of the blend and which part is shortened; (iv) whether there are any formal, semantic, and syntactic regularities in the formation of Arabic blends; (v) identifying the contexts/registers which favour the formation of lexical blends, ranging from slang/colloquial registers to specialized domains; (vi) the kind of relation that exists between the constituents of Arabic blends semantically and/or morphologically. This study will focus on partial blends in Arabic, where one or both constituents of a compound is/are shortened and then blended. Total blends, i.e., full compounds will not be included in the current study as they were investigated by other studies by Al-Jarf (2023c), Al-Jarf (2023g), and Al-Jarf (2022b). The stress pattern in partial blends in the sample is not the focus of the current study. The stress pattern of Arabic blend will not be the focus of the current study,

3. Significance of Study

Findings of the present study are significant for gaining a better understanding of the latest innovative word formation processes in Arabic with a focus on lexical blends to provide new information based on the linguistic investigation done, and to provide an explanation for the driving force behind the occurring changes in this Arabic word formation process.

Moreover, this study is part of a series of studies on some innovative linguistic phenomena in Arabic such as clipping of borrowings in spoken Arabic (Al-Jarf, 2023a); hybrid compounds consisting of a foreign lexeme and a native Arabic lexeme (Al-Jarf, 2023g); hybridized lexical items that combine native Arabic lexemes and borrowed affixes (Al-Jarf, 2023d); Arabic word formation with borrowed affixes (Al-Jarf, 2014); derivation from foreign words borrowed in Arabic for which no derivatives exist in the source language (Al-Jarf, 2021); derivation from native and loan acronyms used in Arabic (Al-Jarf, 2023b) English spelling of Arabic compound personal names by educated Arabs on Facebook (Al-Jarf (2023c); the semantic and syntactic anomalies of Arabic-transliterated compound shop names in Saudi Arabia (Al-Jarf, 2023f); translating English and Arabic common names of chemical compounds by student translators (Al-Jarf, 2022); and neologisms (Al-Jarf, 2010b); It is also part of a series of studies about innovative word formation processes that appeared during the Arab Spring such as emerging political expressions (Al-Jarf, 2022a; Al-Jarf, 2014); the expressions and vocabulary used in sectarian language that describe the "other" (Al-Jarf, 2022c), and those that are politically incorrect (Al-Jarf, 2023e).

4. Data Collection & Analysis

A corpus of 170 Arabic partial blends in which the first constituent, second constituent or both are shortened was collected from social media. Technical blends were collected from the Arabic Language Academy publications, some Arabic references such as Khasara (1998) and the author's own collection. The sample includes general and technical blends, and those used in Standard and Colloquial Arabic. All the partial blends in the sample are used in Standard and/or colloquial Arabic, and all have Arabic constituents. All the partial blends in the sample were subjected to further analysis.

Total blends that are colloquial, compounds consisting of two full words, compound proper nouns, borrowed compounds that consist of two full words, compounds consisting of an Arabic word+a borrowed suffix, compound particles and adverbs, pre-Islamic blends and ancient Islamic expressions were excluded.

In each blend, the *head* which is the full word or full constituent and the *splinter*, i.e., the shortened word or constituent, were identified. Then all partial blends were categorized as follows: Technical blends; blends with final reduction in the first constituent; blends with final reduction in the first constituent + the combining vowel /o/; adverb + noun blends with a final reduction in the first constituent; blends with initial reduction in second constituent; second constituent with Initial reduction; blends with initial reduction in the second constituent with; 3-and-4 constituent blends with 2 combining vowels; complex blends with a final reduction in first constituent and initial reduction in the second constituent, i.e., reduction in both constituents; blends in which the two constituents overlap at segments that are phonologically or graphically identical; and () blends where both constituents retain their form as a result of the overlap; blends with a split of a source word into a prefix/suffix; blends with a semantic or a syntactic relation between its constituents; blends with a paradigmatic and syntagmatic relationships between its constituents; and blends with an endocentric or exocentric relation between the head and the attributive.

Partial blends and their classification were verified by 2 colleagues with a Ph.D. in linguistics. The percentage of partial blends in each category was calculated. In addition, the data were analyzed and described qualitatively.

5. Results and Discussion

5.1 Blends with multiple splinters from the same lexical items

Some compounds (سَمُّ الْقَارِ، قلم الحبر، قَحْمُ السُّكَّرِ) have multiple blends depending on which vowel, consonant or syllable is deleted from the first or second constituent. In these cases, each word in the compound consists of 3 consonants. The head can be the first or second constituent of the compound and splinter can be the first or second constituent as in:

- قَحْمُ السُّكَّرِ (carbon+sugar, i.e., carbohydrate): (i) قَحْمَس (فحم+س) full first constituent+first consonant of the second constituent; (ii) قَسُّكْر (ف+سك) first consonant of the first constituent+full second constituent; (iii) قَحْكُر (فح+كر) first 2 consonants of the first constituent+last 2 consonants of the second constituent; (iv) قَحْسَك (فح+سك) first two consonants of the first constituent+first 2 consonants of the second constituent.
- قلم الحبر (pen+ink, i.e., fountain pen) : (i) قَلْمَح (قلم+ح) full word in the first constituent + first consonant of the second constituent; (ii) قَمَبْر (قم+بر) middle consonant deletion in the first constituent + first consonant deletion in the second constituent; (iii) قَلْحَب (قل+حب) final consonant deletion in the first constituent and in the second constituent ; (iv) قَلْبْر (قل+بر) final consonant deletion in the first constituent+first consonant deletion in the second constituent.
- سَمُّ الْقَارِ (poison+mouse): (i) سَمْفَر (سم+فر) the final consonant deletion in the first constituent +middle consonant deletion in the second constituent ; (ii) سَمْفَار (س+فار) first consonant is retained in the first constituent+full word in the second constituent; (iii) سَمْفَار (سم+فار) final consonant deletion in the first constituent + ; (iv) سَمْف (سم+ف).

Compounds with multiple blends are very few in Arabic. Semantically, the relation between the splinter and head in each is syntagmatic as both are collocations. Syntactically, the relationship between both constituents is exocentric as the splinters and heads have a different function. Each blend consists of a noun + an appositive. Both constituents cannot be reversed as changing their order would result in a meaningless structure.

5.2 Blends with a final reduction in the first constituent

In 7% of the examples in the sample, the first constituent in the blend is shortened and the second remains intact. Several splinters (shortened forms) are used as a first constituent. The following is a description of each:

- 1) The splinter **أورو** (Euro/Eur) is the shortened form of **أوروبي** *European*, where the second half of the words is deleted and the first one is retained. It is used as the first constituent of blends as **أوروبي+متوسطي** > **أورومتوسطي** (Euro-Mediterranean); and **أوراسيا** > **أوراسيا** > **أوراسيا** (*Eurasia*).
- 2) The splinter **كهر** (*electric*) is the shortened form of electricity/electric, where the second half of the word is deleted and the first one is retained as in **كهرذرية** > **كهربائي+ذرية** > **كهرذرية** (*electro+atomic*); **كهربائي+ضوئي** > **كهربائي+ضوئي** (*electro+light, i.e., phoelectric*); **كهربائي+مغناطيسي** > **كهربائي+مغناطيسي** (*electro+magnetic*); **كهربائي+مائي** > **كهربائي+مائي** (*hydro+electric*); **كهربائي+مغناطيسي** > **كهربائي+مغناطيسي** (*electro-magnetic*). The splinter combines with numerous types of power such as magnetic, light/photo, water and so on. *magnetic* has splinter forms in Arabic: **مغناطيسي** and **مغناطيسي**.

- **انجلو** *Ango* (Anglo-American) أنجلو+أمريكي انجلو أمريكي; *Anglo-Saxon* انجلو+سكسوني > انجلوسكسوني *Ango* انجلو
- **افرو** *Afro* (Afro-Asian) إفريقي+آسيوي افروآسيوي/أفرو آسيوي (*Afro+Arab*); إفريقية + عربية > افروعربية > *Afro* افرو
- **قطرو** *Qatari+Muslim Brothers* قطري+اخواني > القطرواخواني > *Qatar* قطر
- **ايبرو** *Iberian* ايبيريا+امريكا اللاتينية > ايبيرولاتينية > *Iberian* ايبرو
- **سعو** *Saudi+American* سعودي+أمريكي > سعو أمريكي > *Saudi* سعو
- **أورو** *Euro+mediterranean* أوروبي+متوسطي > أورو متوسطي > *Euro* أورو
- **جمهو** *Republic+Sultanate* جمهورية+سلطنة جمهوسلطنة > *republic* جمهو
- **يهو** *Jewish+Christian* يهود+مسيحية > اليهودمسيحية > *Jewish* يهو
- **أحيو** *biology+water* احياء+مائية > الاحيومائية > *biology* أحيو
- **أمنو** *Security+TV* أمن+تلفزيون الأمنوتلفزيونية > *security* أمنو

The combining vowel /o/ is added to connect the splinter and the head that begins with a consonant and facilitate pronunciation.

In all of the above examples, the splinters (combining forms) *صهيو* *zio*, *هندو* *India/Indian*, *كهرو* *electro*, *أمريكو* *Americo*, *تركو* *Turko*, *انجلو* *Ango*, *افرو* *Afro*, *أحيو* *biology*, *قطر* *Qatar*, *قرو* *Ages*, *أمنو* *Security*, *ايبرو* *Iberian*, *أورو* *Euro*, *سعو* *Saudi*, *جمهو* *republic*, and *يهو* *Jewish*, *أورو* *Euro* serve as roots which can be combined with full lexemes to form blends. All the roots herein are the attributive and the second constituents that follow them are the head. Syntactically, those attributives display an endocentric relation with the heads that combine with them. In each example, the blend has the same function and the same part of speech as the head, i.e., a noun or an adjective. Both constituents have the same part of speech as the full blends. The order of the two constituents in each blend can be substituted for each other (reversed) without any change in the meaning of the blends. However, the full form, not the shortened form, should be used.

Semantically, the relationship between these attributives and the heads that follow them is paradigmatic as the first and second constituents are hyponyms that belong to the same semantic category such as countries or type of energy.

The splinters (roots) mentioned above (*تركو* *Turko*, *انجلو* *Ango*, *افرو* *Afro*, *قطر* *Qatar*, *ايبرو* *Iberian*, *أورو* *Euro*, *يهو* *Jewish*, *صهيو* *Zio* and others) are widely used in the media and on social media. They can be used to coin new partial blends in Arabic.

5.4 Three-and four-constituent blends

Five percent of the blends in the data consist of three and four constituent blends with one or two splinters with the combining vowel /o/ as in *انجلو سكسوني صهيوني* (*Anglo+ Saxon +Zionist*); *صهيوأمريكو جنديرية* (*Zio+Americo+gender*); *صهيوانجلو أمريكي* (*Zio-nist+anglo+American*); *انجلو صهيو أمريكية* (*Anglo + Zio + American*); *انجلو صهيو سكسوني* (*Anglo+Zio+Saxon*); *أمريكو صهيو امبريالي* (*America+Zio+Imperial*); *أفرو-أوراسيا* (*Afro-Eurasian*); *انجلو-صهيو-فارسي-أمريكي* (*Anglo+ Zio+ Persian+ American*); *فارسي-أمريكي-أنجلو-صهيوني* (*Persian + American + Anglo + Zionist*).

Unlike the majority of partial blends described in the previous sections, some of the three-and-four constituent blends here are hyphenated, others are agglutinated, and one is spelled with blanks in between the constituents.

Syntactically, the words in each complex blend can be rearranged without affecting the meaning of the whole blend. The acceptable word order in each blend is not necessarily the same as the English equivalent of each blend owing to the differences in word order between English and Arabic in which the modifier follows the modified noun whereas in English it precedes it.

Semantically, the relation between the three or four constituents of the blend is paradigmatic as they are all names of countries (Proper Nouns) or attributive adjectives derived from the names of those countries. Syntactically, the relation among the constituents is endocentric as all the constituents are the same part of speech as the the whole blend, i.e., all are either nouns or adjectives.

All of the blends are used in political contexts, in Standard as well as Colloquial Arabic on social media.

5.5 Blends with prefixes as splinters

In blends containing adverbs/particles functioning as a prefix in each blend, the final consonant is deleted and the second constituent which is a noun, or an adjective, remains intact. Thus, the adverb/particle is the splinter and the noun/adjective in the second constituent is the head. This kind of prefixation in Arabic is a transfer from English. However, they are not as prolific as prefixes and prefixed lexical items in English. The Arabic adverbs/particles used as prefixes are *قبل* *pre*, *بين* *inter*, *فوق* *ultra/extra*, *ب* *post*; *تحت* *sub/under* as in the following are examples of each.

The relationship between the constituents is paradigmatic and endocentric as the constituents in each are hyponyms or co-hyponyms. They belong to the same semantic category (names of countries or cities and chemical. In their full form, the two constituents in each blend have the same part of speech as the whole blend. In their full form, the 2 constituents are interchangeable and reversible. Most of blends are political and are used on social media.

5.8 Imperfect blends with final reduction in the first constituent + initial reduction in the second constituent

In 16% of the blends in the sample, parts of the first constituent and the second constituent are deleted as in:

- 1) The deletion of the final syllable /el/ in the first constituent and the deletion of first syllables in the second constituent (إسرائيل + فلسطين إسرائيل > إسرائيل + فلسطين إسرائيل) *(Israel+Palestine)*, then combining both splinters. The last syllable is deleted in *Israel* and the first two syllable are deleted in *Palestine* and the final syllable is retained.
- 2) In إسرائيل + إيران إسرائيل > إسرائيل + إيران إسرائيل *(Iran+Israel)*, the first syllable in *Emirates* and Iran (first constituent) is retained and the last part is deleted, but the first syllable in the second constituent Israel is deleted.
- 3) In سعودي + بريطانيا سعودي + بريطانيا > سعودي + بريطانيا سعودي *(Saudi+Britain)*, the first syllable in *Algeria* and Saudi is retained, whereas the initial syllable of the second constituent *Britain* and *Palestine* is deleted.
- 4) In سوري + سوريا سوري + سوريا > سوري + سوريا سوري *(Syrian+Iraqi)* and سوري + سوريا سوري *(Surian+Iranian)*, the first syllable in the first constituent Syria is retained whereas the initial syllable in the second constituent is deleted.
- 5) In فلسطين + سوريا فلسطين + سوريا > فلسطين + سوريا فلسطين *(Palestinian+Syrian)*: after deleting the final syllable in the first constituents + the first consonant of the second constituent, both are merged.
- 6) In مغربي + الجزائر مغربي + الجزائر > مغربي + الجزائر مغربي *(Morrocan+Algerian)*: A final reduction in the first constituents + initial reduction in the second constituent have taken place.
- 7) In سعودي + برس سعودي + برس > سعودي + برس سعودي *(Saudi+Press)*: the final syllable in the first element is deleted + the initial consonant in the second constituent.
- 8) In عربي + إنجليزي عربي + إنجليزي > عربي + إنجليزي عربي *(Arabic+English)*, deletion of the final vowel in the first constituent + deletion of the initial syllable in the second constituent.
- 9) In زمان + مكان زمان + مكان > زمان + مكان زمان *(space+time)*, the words زمان & مكان are the same length and rhyme. Here the last syllable is deleted in the first constituent زمان and the initial syllable is deleted from the second constituent مكان. Several derived forms have been derived from the new blended such as زَمَكَنَّ (transitive past verb); يَزْمِكُنْ (transitive present verb); مَزْمَكِن (past participle); تَزْمَكَنَّ (intransitive past verb); يَتَزْمَكُنْ (intransitive present verb); تَزْمَكُنْ (action noun derived from the intransitive verb); الرِّمَكَنَة (action noun derived from the transitive verb); زَمَكَانِي (adjective).
- 10) Historically, سامراء from سامراء + سامراء > سامراء من رأى > سامراء من رأى *(Samarra from Please+viewer)*, the name of the city of Samarra was up made up of merging consonant taken from each word and inserting vowels.
- 11) In سرنم + نوم سرنم + نوم > سرنم + نوم سرنم *(walk+sleep)*: the middle vowel deletion in both constituents as in walk+sleep and the derived action noun سرنمة *(sleepwalking)*.
- 12) In الشبكاتية which is an equivalent for the *World Wide Web* was created from شبكة + إنكوتية > شبكة + إنكوتية *(net+web)*, t
- 13) In متشابه + جهة متشابه + جهة > متشابه + جهة متشابه *(similar+direction/side)*: the final syllable is deleted in both constituents.
- 14) In متشائل + متشائل متشائل + متشائل > متشائل + متشائل متشائل *(pessimist+optimist)* : both words have the same length. The final syllable is deleted in first constituent and the first 3 initial syllables are deleted from the second constituent. The blend is the same length as the first and second constituents and rhymes with them.
- 15) In جوقل + جوقل جوقل + جوقل > جوقل + جوقل جوقل *(air+bear)* as a verb is a combination of the first constituent with the last part of the second constituents. The two elements have the same length. Other forms were derived form it as مجوقل *(air-borne)*. All forms are used in the military.
- 16) In نقحر + نقحر نقحر + نقحر > نقحر + نقحر نقحر *(trans+literation)* and the derived action noun نقحرة *(transliteration)*: the two constituents نقحر + نقحر are verbs of the same length with the same number of consonants. The final consonant was deleted from both constituents. Other forms were derived from it such as نقحرة transliteration.
- 17) In هندرة + هندرة هندرة + هندرة > هندرة + هندرة هندرة *(engineering+management)*, the two constituents have the same length (5 consonants). The first syllable was retained from هندرة (engineering) and another was created from the consonants d+r in إدارة administration. After the merging process and the creation of an action noun, the verb هندر *(engineering+manage)* was derived .
- 18) In كهريسي + كهريسي كهريسي + كهريسي > كهريسي + كهريسي كهريسي *(electr +magnetic)*: Here the root كهريسي *electr* was created by deleting the last part of *electrical* and the initial part of *magnetic*.

- 19) **برماجى** (land+sea+air): the three constituents are similar in length as each consists of 3 consonants. The first constituent is retained in full, the second is shortened by deleting the final glottal stop, and the third constituents is shortened by deleting the middle consonant.
- 20) **ركمجة** (follow the crowd): Here the final consonant is deleted from the first constituent and the middle consonant is deleted from the second constituent.
- 21) **حيثومة** (animal+germ, i.e., sporozoan), the final syllable is deleted in the first constituent and the first syllable is deleted from the second constituent. The initial syllable in the first constituent is combined with the final part of the second constituent.
- 22) **أنركزي** (I +center, i.e., egocentrism). In the first constituent the final vowel in the pronoun is shortened.
- 23) **مسلم+حيية** (Muslim+Christian) was created by deleting the final part of the first constituent + and the initial part of the second constituents. Although both words contain the same consonant /s/ it was retained in the first constituents and deleted in the second.

In each example in this category, there are two splinters, one in the first constituent and another is in the second.. Semantically, the relationship between the constituents in imperfect blends is paradigmatic and endocentric as both constituents are hyponyms: countries in examples 1, 2, 3, 4, 5 & 6; languages in 8 with rhyming constituents; news agencies in 7; religions in 24; antonyms in 15; areas of study in 18; ways of transportation in 16, 20, verb+noun in 11; dimensions in 9 and so on. Syntactically, both constituents in 1 to 9, 12 to 20, 22 are the same part of speech (noun or adjective) as the whole blend. In 10, 11 & 21 the constituents consist of verbs and nouns and the whole blend is a noun. In 13, the whole blend is a noun made up of a noun + adjective.

Syntactically, the two constituents are irreversible and the relation between them is syntagmatic and exocentric as the whole blend has a different part of speech from the constituents have 2 parts of speech such as V + N or N + V in 16, 17, & 21; Pro + Adj in 23. The constituents in 14, 16 & 17 are not hyponyms and do not belong to the same semantic categories.

Examples in 1 to 6 are political and are used on social media. The rest are from a variety of fields (military, linguistics, psychology, biology, transportation, physics, history, computer science and journalism and are Standard Arabic blends.

5.9 Technical blends

This category includes examples of some computer, chemistry, biology, literature technical terms and others. In some terms, the initial syllable of the first constituent is merged with the head in the second constituent as in the following:

- I. **برمجاني** (freeware); (analyze water); **مكزماني** (space+time); **حِينَات** (animal+plant); **حل+مأ** > **خَلَّل+ماء** > **خَلَّمَا**
- II. In a third set, the second constituent is reduced by deleting the final syllable and merging it with the head in the first constituent as in **حمض+مائي** > **حمض+غوليد** (acid + golide) Aldehyde acid); **حمض+مائي** > **حمض+مائي** (acid + myalyzer) Alcoholic acid.
- III. **حيثومة** (animal+germ, i.e., sporozoan).
- IV. In another set, the second constituent is reduced to the initial syllable which merges with the head in the first constituent as in **بريدال** (acid+vinegar); **عشر** > **عشر+غرام** > **عشرغ** (10+grams); **عشر** > **عشر+لتر** > **عشرل** (10+liters); **عشر** > **عشر+متر** > **عشرم** (10 meters).
- V. **أنركزي** (egocentrism).

Other examples of technical terms are given in Sections 5.2, 5.3. 5.4 and 5.5.

The relationship between the shortened constituent + head that co-occur in each blend is exocentric. They are irreversible and the words used are not interchangeable except for **مكزماني** (space+time). Semantically, the heads

and splinters in I, II, III, & IV have a paradigmatic relationship as the constituents in each blend belong to the same semantic category and the last 3 examples in IV are units of measurement.

The blends mentioned in this section belong to the biology, chemistry, mathematics, physics, computer science and psychology fields. They are all Standard Arabic blends.

5.10 Blends with overlapping consonants

Overlaps are combined phonemes at segments in a blend that are phonologically or graphically identical. Data analysis has shown that 7% of the blends in the sample have overlapping consonants as in the following examples:

- In أنفمي > انف+فمي > أنفمي (nose+mouth), the final consonant /f/ in the first constituent and the initial consonant f in the second constituent are overlapping. The final consonant in the first constituent is deleted as /an/ is a syllable and at the same time, it is phonologically similar to the Arabic particle /ʔan/. Similarly, /fami/ (relative adjective) is an intact word and thus both conform to the phonotactics of Arabic.
- In سوداناس > سودان+ناس > سوداناس (Sudan+nas, i.e., Sudan people), the final consonant /n/ in the first constituent and the initial consonant /n/ in the second constituent are overlapping. The /n/ in Sudan is deleted, and /na:/ remains intact to conform with the phonotactics of Arabic. If the /n/ sound is geminated in pronunciation, the blend will be more comprehensible. But if it is pronounced with a single /n/ it will be less or not comprehensible. In both cases the phoneme /n/ is spelled as a single letter.
- In قبيل pre : قبيلوغ > قبيل+بلوغ > قبيلوغ (pre-puberty), after deleting the final consonant from the first constituent and retaining the second constituent, the overlapping consonant /b/ is geminated. Gemination of the b is mandatory to make comprehensible. But if the blend is pronounced with a single b, it will be meaningless. The same applies to غبيلوغ post puberty, which is pronounced with a geminated b.
- In كربلاء > كرب+بلاء > كربلاء (distress+infliction), the first constituents end with consonant b and the second begins with the same consonant, so /b/ in the first constituent is deleted in the blend due to Arabic phonotactics. Here, the overlapping /b/ is not geminated due to the syllable structure of the blend and its constituents.
- In حماسرائيل > حماس+اسرائيل > حماسرائيل (HAMAS+rael), there is an overlap of the consonant /s/ in HAMAS and the shortened form rael, which is the splinter. This overlap is a result of retaining the first constituent intact (HAMAS) which ends with an /s/ as the word is one syllable and deleting the initial syllable in اسرائيل, thus both constituents have the overlapping consonant /s/. Here no gemination of the /s/ sound occurs due to the syllable structure of the constituents and whole blend.
- In ليبراليرياني > ليبرالي+يرياني > ليبراليرياني (Liberal +Iranian), the final syllable /al/ in ليبرالي was deleted rather than the last consonant as deleting the initial glottal stop in يرياني Iranian will result in a word that does not conform to the Arabic phonotactics. The long vowel in between the two constituents is doubled in pronunciation, but is only represented by a single letter as dounble ll (aa) do not exist in the Arabic orthographic system.
- In مصريكاني > مصري+أمريكاني > مصريكاني (Egyptian+American), the second constituent was reduced by deleting the first two syllables in America, thus the initial vowel /iy/ in "icani" is the same in Arabic as the final vowel in the first constituent (مصري) which is /iy/.
- In أمراييلي > أم+راييلي > أمراييلي (Emirates+Israel): Here the first syllable is retained but the final part is deleted in the first constituent and the first syllable is deleted in the second constituent Israel and reduced to /el/.
- In إيرايل > ايران+إسرائيل > إيرايل (Iran+Israel), after deleting the final consonant in the first constituent (Iran) and deleting first 2 syllables in the second constituents (Israel), one of the overlapping long vowel /a:/ is deleted from Israel.

- In *عربي+انجليزي* (Arabic+English), there is an overlap of the /iy/ sound in *عربي* Arabic and the shortened form /iyzi/ in *انجليزي* English. As a result, the full word *عربي* Arabic and the final syllable in *انجليزي* English are retained.
- In *مس+رواية* (*play+novel*), the retained part in the first constituent is the consonant /r/ which overlaps with the initial consonant of the second constituent.
- In *قر+وسطى/وسطية* (*Middle+Ages*), the two constituents are graphically blended at their word boundary as the overlapping grapheme *و* is a glide with 2 pronunciations. The shortened first constituent *قرو* merges with the full word *وسطى* in the second constituent.

In the above examples, the cut-off points in the first and/or second constituents in a blend result in an overlap of consonants across the word boundary. This cut-off point, and the deletion of one of the overlapping sounds is determined by the phonotactics of Arabic and the syllable structure after deletion.

Regarding the context in which these blends are used, *Liberal + Iranian*, *Egyptian + American*, *حماسرائيل* *Hamas + Israel & ايرانيل* *Iran + Israel* (political); *nose + mouth* (medical); *قبيلوغ* *pre-puberty (psychology)*; *عربي* *Arabic + English* (linguistics); *مسرواية* *play + novel* (literature, art), most of them are political blends which are mostly used in informal colloquial context whereas the rest of the blends are used in Standard Arabic.

6. Conclusion

Partial blending in Arabic, as displayed by the examples in the current study, is an emerging word formation process. Political partial blends, in particular, are spontaneously coined by journalists, activists and even common people. They are used in numerous disciplines and contexts, particularly politics. Scientific blends are often created by linguistics and subject-area specialist and are standardized by Arabic language Academies. Some partial blends are very creative as *Beirutshima*, *عقريشتاين*, *follow the crowd*, *الزمنان* *time +space*, *عربي* *Arabic+English*, *عربي* *Arabic+Latin*, *برمجاني* *freeware* and so on.

The influence of English on the formation of Arabic partial blends is very noticeable especially in the case of adding a combining vowel between the splinter and head that starts with a consonant to facilitate pronunciation as in English blends with a combining vowel as in *Islamophobia*, *petrodollar*, *genocide*, *technophile*, *anthropology*, *democracy*, *endocrinology*, *gastrointestinal*, *cardiovascular*, *endoscope*, and others. The transfer of English blend formation to Arabic is a result of lexical borrowing and translation.

Despite the transfer of the concept of partial blending from English to Arabic, being a derivational language, Arabic extends the derivational process to some partial blends as *زمنان* where numerous forms have been derived from it as *زَمَّنَ* (transitive past verb); *زَمِّنُ* (transitive present verb); *مَزْمَنَ* (past participle); *تَزَمَّنَ* (intransitive past verb); *يَتَزَمَّنُ* (intransitive present verb); *تَزَمَّنًا* (action noun derived from the intransitive verb); *الزَمَّنَة* (action noun derived from the transitive verb); *زمناني* (adjective).

Another interesting blending issue is that some partial blends in Arabic have no equivalents and are neither used in English. Examples of these are shown in the results section, where the two constituents are joined with +.

Regarding the issue of recognizability and comprehensibility, the partial blends collected and analyzed in the current study were classified into 10 categories. Blends with final reduction in the first constituent and a full constituent that combines with it as in *Turko* (تركوي), *Ango* (انجلو), *Afro* (افرو), *Qatar* (قطر), *Iberian* (ايبرو), *Euro* (أورو), *Jewish* (يهو), *biology* (أحيو), *security* (أمنو), *Saudi* (سع), *republic* (جمهو), *electromagnetic* (كهرمغناطيسي), blends with a shortened first constituent + the combining vowel /o/ as *Turkish + Gulf* (تركوي خليجي), *Indo-Iranian* (هندو إيراني), three-and four-constituent blends *Anglo + Zio + Persian + American* (أنجلو-صهيو-فارسي-أمريكي), and blends with initial reduction in the second constituent resulting in suffixes /el/ from Israel as *America + el* (أمريكانيل) are believed to be easy to recognize and understand. On the contrary, imperfect blends with shortened prefixes as *pre-historic* (قبتاريخي), *interlinear* (بيسطري), *ultraviolet* (فونيفسجي), *post puberty* (غيبولوج), *undersea* (تبحري), blends with initial reduction in the second constituent *Beirut + Hiroshima* (بيروتشيمما), *Sudan people* (سوداناس), imperfect reduction with final reduction in first constituent+initial reduction in second constituent *pessimist+optimist* (متشائل), *Algeria+Palestinian* (جزائري+فلسطيني), technical blends *freeware* (برمجاني), *acid+vinegar* (خمضتون), blends with overlapping consonants *nose + mouth* (أنفمي), *pre-puberty* (قبل+بلوغ), *Sudan people* (سوداناس), and compounds with multiple blends with splinters from the same lexical items *carbon + sugar* (فحمسك، فحمسك، فحمسك) are more difficult to recognize college students majoring in translation.

Finally, more scientific blends need to be created using prefixes and suffixes from existing particles and adverbs to enrich the Arabic scientific and technical terminology repertoire instead of preferring to use English technical terms by professionals and students majoring in science and technology (Al-Jarf, 2011a). Future studies can be conducted on the recognition and comprehension of Arabic lexical blends, the factors that facilitate the recognition of source words, the interpretation of meanings of Arabic partial blends and the acceptability of unfamiliar blends by student-translators. Innovative full and partial Arabic blends on social media are still open for further investigation by future research.

Conflicts of Interest: The author declares no conflict of interest.

ORCID ID: <https://orcid.org/0000-0002-6255-1305>

Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, editors and reviewers.

References

- [1] Al-Jarf, R. (2023a). Clipping of borrowings in spoken Arabic. *International Journal of Linguistics, Literature and Translation*, 6(1), 68-76. <https://doi.org/10.32996/ijllt.2023.6.11.9>. [Google Scholar](#)
- [2] Al-Jarf, R. (2023b). Derivation from native and loan acronyms in Arabic. *International Journal of Linguistics Studies (IJLS)*, 5(4) (24-30). DOI: 10.32996/ijels.2023.3.3.3. [Google Scholar](#)
- [3] Al-Jarf, R. (2023c). English spelling of Arabic compound personal names by educated Arabs on Facebook. *Journal of Humanities and Social Sciences Studies (JHSCS)*, 5, 1, 53-64. DOI: 10.32996/jhss.2023.5.1.8. [Google Scholar](#)
- [4] Al-Jarf, R. (2023d). Lexical hybridization in Arabic: The case of word formation with foreign affixes. *International Journal of Linguistics, Literature and Translation*, 6(10), 61-70. DOI: 10.32996/ijllt.2023.6.10.9. [Google Scholar](#)
- [5] Al-Jarf, R. (2023e). Political (in)correctness and the cancel-culture attitude: The case of religious sectarian language after the Arab spring. *International Journal of Law and Politics Studies*, 5(5), 96-104. <https://doi.org/10.32996/ijlps.2023.5.5.11>. [Google Scholar](#)
- [6] Al-Jarf, R. (2023f). Semantic and syntactic anomalies of Arabic-transliterated compound shop names in Saudi Arabia. *International Journal of Arts and Humanities Studies (IJAHs)*, 3(1), 1-8. DOI: 10.32996/ijahs.2023.3.1.1. [Google Scholar](#)
- [7] Al-Jarf, R. (2023g). Word formation with foreign lexemes: The case of hybrid compounds in Arabic. *Journal of Humanities and Social Sciences Studies*, 5(11), 15-27. <https://doi.org/10.32996/jhss.2023.5.11.3>. [Google Scholar](#)
- [8] Al-Jarf, R. (2022a). Emerging political expressions in Arab Spring Media with implications for Translation Pedagogy. *International Journal of Linguistics, Literature and Translation*, 5(11), 126-133. DOI: 10.32996/ijllt.2022.5.11.15. [Google Scholar](#)
- [9] Al-Jarf, R. (2022b). Issues in translating English and Arabic common names of chemical compounds by student-translators in Saudi Arabia. In Kate Isaeva (Ed.). *Special Knowledge Mediation: Ontological & Metaphorical Modelling*. Springer. DOI: 10.1007/978-3-030-95104-7. [Google Scholar](#)
- [10] Al-Jarf, R. (2022c). Sectarian Language & Perception of the "Other" After the Arab Spring. *Bulletin of the Transilvania University of Braşov Series IV: Philology and Cultural Studies*, 15(64) No. 2, 29-46. DOI: 10.31926/but.pcs.2022.64.15.2.2. [Google Scholar](#)
- [11] Al-Jarf, R. (2021). Derivation from foreign words and acronyms borrowed in Arabic. *LINGUA, Language and Culture*, 20(3), 52-77. [Google Scholar](#)
- [12] Al-Jarf, R. (2016). Arab preference for foreign words over Arabic equivalents. *ALATOO Academic Studies*, 1, 158-162. ERIC ED613055. [Google Scholar](#)
- [13] Al Jarf, R. (2014). Arabic word formation with borrowed affixes. Word-Formation Conference. University of Bern, Switzerland. www.researchgate.net/profile/Reima-Al-Jarf/publication/365161529. [Google Scholar](#)
- [14] Al-Jarf, R. (2011a). *Dominance of foreign words over Arabic equivalents in educated Arab speech*. International Conference on Translation and Asian Studies. The Chinese University of Hong Kong, Hong Kong. April 28-29. ERIC ED614058. [Google Scholar](#)
- [15] Al Jarf, R. (2011b) Teaching English word-formation processes to translation students. *Komunikacija i kultura online: Godina II, broj 2*, 160-174. [Google Scholar](#)
- [16] Al-Jarf, R. (2010a). Semantics for translation students. <https://www.researchgate.net/publication/348447110> [Google Scholar](#)
- [17] Al-Jarf, R. (2010b). Translation students' difficulties with English neologisms. *Analele Universităţii "Dunărea De Jos" Din Galaţi Fascicula XXIV ANUL III (2)*. 431-437. Romania. ERIC ED613253. [Google Scholar](#)
- [18] Al-Jarf, R. (1996). Contrastive semantics for translation students. <https://www.researchgate.net/profile/Reima-Al-Jarf/publication/281003229>. [Google Scholar](#)
- [19] Al-Jarf, R. (2004). *English and Arabic compounds for translation students*. <https://www.researchgate.net/profile/Reima-Al-Jarf/publication/280931586>. [Google Scholar](#)
- [20] Al-Jarf, R. (1994a). *English and Arabic derivation for translation students*. <https://www.researchgate.net/publication/281003231>. [Google Scholar](#)
- [21] Al-Jarf, R. (1994b). *English and Arabic inflectional systems for translation students*. <https://www.researchgate.net/publication/281003416>. [Google Scholar](#)
- [22] Al-Jarf, R. (1994c). *English and Arabic word-formation processes for translation students*. King Saud University, KSA. <https://www.researchgate.net/publication/281003183>. [Google Scholar](#)
- [23] Al-Jarf, R. (1990). *A contrastive analysis of English and Arabic morphology for translation students*. King Saud University, KSA. [Google Scholar](#)
- [24] Bassac, C. (2012). A Combinatory Logic and formal-semantic account of lexical blending. *Cross-Disciplinary Perspectives on Lexical Blending*. Mouton de Gruyter, Berlin, 169-192.

- [25] Beliaeva, N. (2016). Blends at the intersection of addition and subtraction: Evidence from processing. *SKASE Journal of Theoretical Linguistics*, 13(2).
- [26] Beliaeva, N. (2019a). Blending creativity and productivity: on the issue of delimiting the boundaries of blends as a type of word formation. *Lexis. Journal in English Lexicology*, (14).
- [27] Beliaeva, N. (2019b). Blending in morphology. In *Oxford Research Encyclopedia of Linguistics*. oxfordre.com <https://doi.org/10.1093/acrefore/9780199384655.013.511>.
- [28] Borgwaldt, S., Kulish, T., & Bose, A. (2012). Ukrainian blends: Elicitation paradigm and structural analysis. *Cross-disciplinary perspectives on lexical blending*, 75-92.
- [29] Cacchiani, S. (2011). On unfamiliar Italian lexical blends from names and nouns/O manj pogosti vrsti leksikaknih spojenk iz imen in samostalnikov. *Linguistica*, 2011, 105-120.
- [30] Cacchiani, S. (2015). On Italian lexical blends: From language play to innovation. *Neologica*, 2015(9), 169-185.
- [31] Cacchiani, S. (2016). On Italian lexical blends: Borrowings, hybridity, adaptations, and native word formations. *Crossing languages to play with words: Multidisciplinary perspectives*, 3, 305.
- [32] Charenwivatthanasri, P. (2022). *A Contrastive Study of English and Thai Compounding and Lexical Blending*. Doctoral Dissertation Université Lumière-Lyon II, France.
- [33] Čolić, A. (2015). Word formation of blends. *Mostariensia-časopis za društvene i humanističke znanosti*, 19(2), 21-36.
- [34] Connolly (2013). The innovation and adoption of English lexical blends. *JournalLIPP*, 2, 1-14.
- [35] Cook, P. (2012). Using social media to find English lexical blends. In *dalam Proceedings of the 15th EURALEX International Congress (EURALEX 2012)*, 846-854.
- [36] Cook, P. & Stevenson, S. (2007, September). Automagically inferring the source words of lexical blends. In *Proceedings of the Tenth Conference of the Pacific Association for Computational Linguistics (PACLING-2007)* (pp. 289-297).
- [37] Cook, P. & Stevenson, S. (2010). Automatically identifying the source words of lexical blends in English. *Computational Linguistics*, 36(1), 129-149.
- [38] Def Pasari, P. (2015). A Detailed Investigation and Perusal of Lexical Blends: Semantics in Blends and Types of Blends and Their Frequency. *International Journal Of Innovative Research & Development*. Indore, 23-25.
- [39] DiGirolamo, C. M. (2012). The fandom pairing name: Blends and the phonology-orthography interface. *Names*, 60(4), 231-243.
- [40] Elisa, M. (2019). A corpus-based analysis of new English blends. *Lexis. Journal in English Lexicology*, (14).
- [41] Filonik, S. Y. (2014). Towards a definition of lexical blending. *Наукові записки Національного університету Острозька академія. Серія: Філологічна*, 44, 3-7.
- [42] Frath, P. & Hamm, A. (2005). Why is there no ham in a hamburger? A study of lexical blends and reanalysed morphemisation. *Recherches anglaises et nord-américaines*, 38(1), 99-112.
- [43] Giyatmi, G., Wijayava, R., & Arumi, S. (2017). Blending words found in social media. *Jurnal Arbitrer*, 4(2), 65-75.
- [44] Hosseinzadeh, N. (2014). New blends in English language. *International Journal of English Language and Linguistics Research*, 271(2), 15-26.
- [45] Khasara, Mamdouh Mohamed (1998). Blending and its impact on terminology development. *Arab Heritage*, 18(71-72), 84-92. <https://search.emarefa.net/detail/BIM-175242>
- [46] Kjellander, D. (2018). Cognitive constraints in English lexical blending: A data collection methodology and an explanatory model. *Pragmatics & Cognition*, 25(1), 142-173.
- [47] Konieczna, E. (2012). Lexical blending in Polish: A result of the internationalisation of Slavic languages. *Cross-disciplinary perspectives on lexical blending*, 51-73.
- [48] Mierzińska-Hajnos, A. (2017). Lexical vs conceptual blends: How to reconcile the two? *Acta Neophilologica*, 1(XIX), 55-68.
- [49] Mohsin, E. (2020). *Blend formation tendencies, from English to Arabic: a comparative study* (Doctoral dissertation, School of English Literature, Language and Linguistics, Newcastle University, UK).
- [50] Nasser, M. (2008). Processes of word formation In English and Arabic. *Journal of the College of Education, Babylon University, Iraq* 2(3), 2008 (71-87).
- [51] Orazbekova I.G. & Muldagalyeva A.A. (2017). LEXICAL BLENDING IN THE MODERN ENGLISH LANGUAGE. *Вестник КазНУ. Серия филологическая*, 167(3), 155-159.
- [52] Ralli, A., & Xydopoulos, G. J. (2012). Blend formation in Modern Greek. *Cross-disciplinary perspectives on lexical blending*. Berlin: Mouton de Gruyter, 35-50.
- [53] Renner, V. (2015). Lexical blending as wordplay. *Wordplay and metalinguistic/metadiscursive reflection: Authors, contexts, techniques, and meta-reflection*, 119-133.
- [54] Renner, V. (2019). French and English lexical blends in contrast. *Languages in Contrast*, 19(1), 27-47.
- [55] Ronneberger-Sibold, E. (2012). Blending between grammar and universal cognitive principles: Evidence from German, Farsi, and Chinese Elke Ronneberger-Sibold. *Cross-disciplinary perspectives on lexical blending*, 252, 115.
- [56] Shaw, K., White, A., Moreton, E., & Monrose, F. (2014, March). Emergent faithfulness to morphological and semantic heads in lexical blends. In *Proceedings of the annual meetings on phonology*, (1)1.
- [57] Šomanová, M. & Vogel, M. (2017). *Words recently coined and blended: Analysis of new english lexical items*. <https://is.muni.cz/th/u9wo7/ANNOTATION.pdf>
- [58] Stamenov, C. (2015). Borrowing word-formation:-ing suffixation and blending in Bulgaria. *Съпоставително езикознание/Сопоставительное языкознание*, 3, 163-197.
- [59] Vasileanu, M., Niculescu-Gorpin, A. & Radu-Bejenaru, C. (2022). Romanian lexical blending: From zero to hero. *ExLing* 2022, 177.
- [60] Winters, S. (2017). *Lexical Blending in Ukrainian: System or Sport?* Doctoral dissertation, University of Calgary, Canada.
- [61] 강은경 (Eunkyung Kang) (2013). An optimality-theoretic analysis of lexical blends in Korean. *언어연구*, 28(4), 653-672.