Word Formation with Foreign Lexemes: The Case of Hybrid Compounds in Arabic

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ABSTRACT
Arabic compounds consist of a group of two or three words joined together into one vocabulary unit. Syntactically, Arabic compounds consist of a Noun + adjective; Noun + apposited noun; Noun + apposited noun + adjective; Noun + apposited N. + apposited N; Noun + the negative particle ئ no/non; compound adverbs; and compound particles. Orthographically, the lexical items in most Arabic compounds are separated by a blank, few are agglutinated (spelled together) and few more are hyphenated. This study aimed to explore the status of hybrid compounds in Arabic within its terminological structure; their denotative and connotative meanings; how productive they are; whether they are used in Standard or Colloquial Arabic; whether they are permanent or transient; in which domains they are used; and why hybrid compounds are coined by Arabic-speakers. To achieve those purposes, a corpus of hybrid compounds containing the foreign lexemes/affixes Arabia, book, café, cast, center, co, com, expo extra, for, gate, hyper, leaks, link, mania, mart, media, meter; mini, mobile, net, pal, pedia, petro, pharma, phone, press, pro, sat, show, soft, super, talk, tech, tic, times, top, tube, ultra, web, and wiki combined with Arabic lexemes was collected. Data analysis showed that specialized hybrid compounds, those used for names of satellite T.V. station, names of electronic newspapers, news agencies and companies are more permanent than those used during the Arab Spring or those used in names of forums, blogs, T.V. shows or newspaper articles which appeared for a short time then disappeared. The former set of hybrid compounds are used in Standard Arabic and formal contexts, whereas the latter set is used in Colloquial Arabic. The former constitutes a small set of hybrid compounds coined by specialists and Arabic language academies, whereas the latter is more prolific as those compounds were created by activists, political analysts, journalists, and social media users. The study revealed promotion, linguistic, globalization and sociocultural factors for coining hybrid compounds, and lack of a business naming policy. Hybrid compounds constitute a threat to Arabic and hinder the linguistic development of the young generation.

KEYWORDS
Hybrid compounds, lexical hybridization, lexical hybrids, hybridized lexical items, lexical innovations, word formation processes, foreign lexemes, borrowed lexemes, Arabic language

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1. Introduction
In the age of social media, new forms of language have appeared. Arab users extensively use their local dialect written in Arabic script or transliterated in Roman script. Standard Arabic is less commonly used. Some use English to communicate with friends. Some use invented spelling with stretches of long vowels and punctuation marks. Arabic numerals such as 2, 3, 6, 7, 8, 9 are used to replace Arabic phonemes for which English script has no equivalent graphemes. Some make spelling mistakes in Arabic. Others use foreign words (English or French), although Arabic equivalents exist. Foreign names are even more dominant in shop names. Many educated Arabs prefer to mix English or French words with Arabic in their daily conversation and on T.V. shows. One would hear mobile, brochure, laptop, chat, comment, like, share, hashtag, break, coffee shop, project, in spoken Arabic although Arabic equivalents to those foreign words exist. In addition, some lexical innovations in Arabic have appeared such as derivation from foreign words and acronyms and lexical hybrids that consist of a native lexeme and a borrowed affix (Al-Jarf, 2011a; Al-Jarf, 2011c; Al-Jarf, 2016; Al-Jarf, 2018; Al-Jarf, 2021a; Al-Jarf, 2022a; Al-Jarf, 2023d; Al-Jarf, 2023a; Al-Jarf, 2023b; Al-Jarf, 2023c).

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The influence of English over Arabic in Arab countries has been the focus of many research studies in the literature, such as Al-Jarf (2018); Al-Jarf (2008a); Al-Jarf (2008b); Al-Jarf (2004a); Al-Jarf (2004b) who investigated college students’ views of the status of English and Arabic in Saudi Arabia in the 21st century, and their attitudes towards using English and Arabic as a medium of instruction at the university level. Findings showed that 96% of the college students in Saudi Arabia consider English a superior language, being an international language, and the language of science and technology, research, electronic databases, and technical terminology. 82% of the participants believe that Arabic is more appropriate for teaching Arabic literature, religion, history, and education majors, whereas English is more appropriate for teaching science, engineering, computer science, medicine, pharmacy, and nursing. They gave many technological, educational, social, and labor market reasons for preferring the English language. In another survey study, undergraduate Jordanian students indicated that English is the dominant language used online. SA in Arabic Script was rarely used by any of the participants in their Facebook chatting. Rather, online communication on Facebook featured a new and unusual diglossia between a foreign language, English, and CA (Al-Saleem, 2011). Regarding the dominance of English in shop names, Al-Jarf (2022a) reported that 64% of the shops are international franchised foreign names and local English names; 24% have pure Arabic names and 12% have mixed names (English + Arabic). In some shop names, Arabic descriptor which is a translation of the foreign name is added to foreign name (Perfume عطورات بارفيوم). Foreign names are used in some shop and mall names although Arabic equivalents for those exist.

A second group of studies focused on the phenomenon of code-mixing (CM), i.e., mixing two or more languages in the same conversation or even the same sentence. Jaran and Al-Haq (2015) found that Jordanian college students mix Colloquial Arabic with English terms and expressions. Mixing Arabic and English was a prominent feature of science lectures at Jordanian universities (Mustafa & Al-Khatib, 1994). In Lebanon, faculty working at an American-style institution are unaware that they code-switch contrary to what non-participant observations showed. Instructors code-switch in class and students code-switch to learn better (Bahous, Nabhani & Bacha, 2014). Other studies explored code-switching in English and science classrooms (Then & Ting, 2011); use of English, Hebrew or Arabic based on issues of hegemony and social influences by tenth-grade Palestinian female students' and their language-switching, attitudes, and linguistic identity were influenced by current political, social, and ethnic conflicts (Olsen, Kristen; Olsen, Holly, 2010); mixing English and Arabic in social media posts (Al-Jarf, 2021c; Al-Jarf, 2019; Al-Jarf, 2018; Al-Jarf, 2011c).

A third group of studies investigated the phenomenon of hybridization (affix borrowing) in some languages such as Irish of Cape Clear (Urdail, 1995), Serbo-Croatian (Lazic, 1976), Russian (Kravchenko, 2012), Japanese (Kageura, 2010), Hindustani1, Urdu (Khan & Alward, 2011), Persian (Perry, 2002), Resigaro (Seifart, 2012); English loanwords in Spanish computer terminology (language De la Cruz Cabanillas, Martínez, Prados & Redondo, 2007); lexical innovation in Ghanaian English with examples from recent fiction (Barni, 1997) and others.

In English, a plethora of borrowed compounds as well as lexical hybrids exist such as ad nauseam, bon voyage, bon appétit, carte blanche, lingua franca, bona fide, hors d’oeuvre, déjà vu, café latte, alma mater, alter ego, puise judge, puis ne, estoppel fee, simple laches, en banc, voir dire, res judicata, null, de facto, de jure, de novo, pro se, pro tem, ab initio, actus reus, ad hoc, ad hominem, a mensa et thoro, a priori, a quo, ab extra, force majeure, guardian ad litem, habes corpus, caveat emptor, suo motu, inter alia. It also has hybrid compound consisting of an English lexeme and a borrowed morpheme as in cultural attaché, flower bouquet, photo collage, cheese croissant, cyber café, rainforest café, Free Style Libre.

As for Arabic, Thomason (2006) reviewed 48 articles that focus on Arabic in contact with other languages and Al-Qnai (2000) investigated borrowings of full words in Arabic. It is noteworthy to say that studies that investigated hybridization in Arabic are limited in number and scope. In part of one study, hybridization is evident in hotel names in Makkah, Madinah, and Riyadh where most hotel names in the three cities consist of two-word compounds where Islamic and spiritual words are combined with names of international (foreign) hotels as in Dar Al-Eman, Dar AlTaqw, Dar AlHijra Intercontinental. In Riyadh hotels, hybridization is reflected in retaining the names of international hotel chains such as “Hilton, Marriott, Sheraton”, or combining a local designation with English and French descriptors such as “Plaza, Palace Tower, Royale, Crowne, Coral” as in (AlFanar Palace, AlFahd Crown; Coral AlHamra (Al-Jarf, 2021c). Similarly, hybridization is evident in shop names in Saudi Arabia where 12% have mixed names consisting of an Arabic lexeme and a foreign lexeme. Some shops with a foreign name add an Arabic descriptor which is a translation of the foreign name (Perfume عطورات بارفيوم) (Al-Jarf, 2022a).

Moreover, Masliyah (1996) described the attachment of the Turkish suffixes -ci, -li, -lik, -siz to Arabic lexemes in Colloquial Iraqi Arabic. Few studies by the author partially focused on emerging lexemes and compounds in Arabic during the Arab Spring that

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1 http://www.britannica.com/EBchecked/topic/266468/Hindustani-language
started in 2011. Those included many hybrids that contain borrowed prefixes and suffixes from English, Latin and Greek, Aramaic and other languages which have been used in general, political, and specialized contexts have emerged (Al-Jarf, 2022a; Al-Jarf, 2022d; Al-Jarf, 2015a). Hybrid lexemes containing the foreign affixes -abad, aire-, anthro-, -ate, - Turkish -dʒi, -cracy, -e, ethno-, -eme-, eine, el, Euro, hydro-, -ic, geo-, ism, -ide, -ite, -logy, li, -ous, -one, phobia, socio-, -stan, -topia -taria, attached to Arabic bases were fully investigated by Al-Jarf (2023b). Results showed that specialized hybrid lexemes/compounds are more permanent than those used in political contexts during the Arab Spring or those used in a humorous context which appeared for a short time then disappeared. Specialized hybrid lexemes used in Standard Arabic and formal contexts constitute a small set of lexical hybrids coined by specialists and Arabic language academies. In Colloquial Arabic, lexical hybrids used in political and humorous contexts are more prolific as they were created by activists, political analysts, journalists and social media users.

To the best of the author’s knowledge, no attempt has been made to fully examine or report on hybrid compounds in Arabic used in general, IT, business and political contexts. No studies that fully and extensively describe the hybrid formations and the process of ‘nativization’ of these hybrid compounds in present-day Arabic vocabulary are available. Therefore, the present study aims to explore hybrid compounds in Arabic, where a foreign lexeme is attached to a native Arabic lexeme (base form) whether used as a first element or a second element and whether they are spelled with a blank, a hyphen or together as one work. It aims to explore the structure of hybrid compounds i.e., which borrowed lexemes are used as a first or a second element in the compound; their denotative and connotative meanings; their orthographic form, i.e., which ones are spelled separately, hyphenated, spelled with or without a dot or hyphen, or agglutinated; how productive hybrid compounds are; whether they are used in Standard or Colloquial Arabic; whether they are permanent or transient; in which domains they are used and why hybrid compounds are coined by Arabic-speakers.

2. Significance of Study
Findings of the present study are significant for gaining a better understanding of the hybridization phenomenon in Standard and Colloquial Arabic and the impact of hybrid compounds on the overall word formation processes of Arabic and to provide new information based on the linguistic investigation done, and to provide an explanation for the driving force behind the occurring changes in the Arabic word formation process.

Moreover, this study is part of a series of studies on some innovative linguistic phenomena in Arabic such as hybridized lexical items that combine native Arabic lexemes and borrowed affixes; derivation from foreign words borrowed in Arabic, and derivation from native and foreign acronyms used in Arabic (Al-Jarf, 2023c; Al-Jarf, 2023a; Al-Jarf, 2023b). 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, the expressions and vocabulary used in describing the “other”, and those that are politically incorrect; the innovative word formation processes in Arabic such as neologisms, and derivation from loan word and acronyms from which no derived forms exist in the donor languages. Although examples of lexical hybrids were included in those studies, hybrid compounds were not extensively investigated as it is the case in this study (Al-Jarf, 2023e; Al-Jarf, 2022b; Al-Jarf, 2022d; Al-Jarf, 2015a Al-Jarf, 2023a; Al-Jarf, 2021a; Al-Jarf, 2010).

3. Compounds in Arabic
Arabic is a derivational language where new words and forms are derived from a root consisting of three or four consonants and a set of vowels that alternate with the root consonants. Different derivational paradigms are used to derive nouns, adjectives, agents, patients, nouns of time, place, diseases, appliances, occupation, tools, the diminutive and others. In addition, Arabic has loan (borrowed) words from some ancient, as well as modern languages. In addition, Arabic has compounds, loan words and others (Al-Jarf (2015b; Al-Jarf, 1994a; Al-Jarf, 1990).

A compound is a phrase that is formed by combining two or more words to create a new phrase with a new meaning. Compound words can have a different part of speech from its components. Orthographically, there are three types of compounds: closed, open, and hyphenated. Closed compounds are written as one word, like dozydream; open compounds are written as separate words, like civil war and hyphenated compounds are written with a hyphen, like well-informed.

In Arabic, compounds consist of a group of two or more words joined together into one vocabulary unit that functions as a single part of speech. Arabic compounds have the following structures: (i) Noun + adjective which are very productive in Arabic as in مكة المكرمة Makkah Al-Mukarramah; المملكة المتحدة United Kingdom; الولايات المتحدة الأمريكية United States of America; النائب العام Attorney General; ناطق رسمي spokesman; ناشئ نووي nuclear physics; علاج طبيعي physical therapy; طب شعبي folk medicine, المعدات الدقيقة small intestines; قلب طائر flying saucers; العصور الوسطى Middle Ages; بطاقات الصراع ATM card. (ii) Noun + appositive noun as in خط الشيخ خط Sheikh El Shaik; حملة الانتخابات elections campaign; كلاركتوم On Kulthoum; عبدالله Abu Bakr;
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A year later, the author searched again for the hybrid compounds collected earlier to find out which ones have disappeared, which ones are still used, and which ones have emerged.
5. Results and Discussion

5.1 Foreign Lexemes/Affixes Used in Hybrid Compounds

Numerous lexemes/affixes have been borrowed from English and used to create hybrid compounds used in information technology, politics, business, media, and common language. They are described in terms of frequency and number of examples containing each. Each compound is given in Arabic with its meaning in English and the context in which some are used. The given English translation is literal so that it matches the word order of the elements of the compound in Arabic. Word orders that are ungrammatical are marked with an asterisk *. The borrowed lexemes are presented in a descending order.

- **.net:** This is the most prolific borrowed lexeme in the corpus with 140 examples. It stands for network. It was borrowed from English. It is frequently used at the end of Internet site names. It is used in Arabic in the names of news sites, forums, company names and newspapers. Different orthographic variants exist in the sample. The most common are compounds containing "net" without dot as in موجز نت (important.net) مؤتمر نت (conference.net) مؤسسة نت (encyclopedia.net) الميثاق نت (pact.net) etc. Besides, start.net (training courses); الاحترافية نت (investment.net); الاسلام نت (economics.net) etc. It was borrowed from My games.net; Mone.net (a stocks website); Alsuqailiyya.net (an organization); Alarabiya.net;文化建设.net; Economic news website etc. They are described in terms of frequency and common language orthographic variations.

- **.com:** This is the second most prolific foreign lexeme with 121 compounds. In Internet terminology, it stands for "commercial" and is used by businesses, organizations, and individuals and so on. It can also be used by anyone. It was borrowed from English and is used in coining names of companies, institutions, forums, organizations, advertisements, blogs, and specialized websites. The data collected showed 4 groups of hybrid compounds containing "com". In the first group "com" is used as in Mawadda.net; My games.net; Alarabiya.net; مواقعنا.net; etc. As examples, الربع.net معلومات نت. In another example, "net" was spelled out Dr dot.net.

- **-dot:** This is the third most prolific hybrid compound with 51 examples. In Internet terminology, it stands for "on the web" and is used by businesses, organizations, and individuals and so on. It can also be used by anyone. It was borrowed from English and is used in coining names of companies, institutions, forums, organizations, advertisements, blogs, and specialized websites. The data collected showed 4 groups of hybrid compounds containing "dot". In the second group "dot" as in Play dot.com; جهاز dot.kom; etc. As examples, Play dot.com; جهاز dot.kom etc.
Some hybrid compounds containing “.com” have abstract concepts with a negative connotation as in: com fraud; com your destiny/share com; com PHobia.com.

- **press** is the third most prolific borrowed lexeme with 76 compounds. It was borrowed from English and is used in the names of electronic newspapers, news sites and news agencies. In most hybrid compounds herein, city, country and personal names are used in names of news sites, news agencies and newspapers as in: Ab Press; Aqsa press; Aden press; Gaza press (a news network); Alhurra press (an electronic newspaper); جزيرة ليكس press (a media agency); Aljazeera press (an electronic newspaper); Al-Morsi leaks (a T.V. documentary show); Al-Ghadeer press (an Iraqi press agency); Al-Anbar press.

- **soft** is used as “software”. It was borrowed from English and is used in the formulation of names of forums, websites and companies specialized in programming and software. In most compounds, soft is used as a second element as in: Soft Egypt (a forum); Soft Fann (an art blog); Soft Arab (a website) - *Soft satellite (a forum)*;

- **sat** is borrowed from English and used in the names of Arab satellites, television stations and websites related to satellite programs as in: Noot sat; Sohail sat; Salt sat; أخوان ليكس. In these examples, the word of the Arabic hybrid compound is English.

- **Tube** is used in names of satellite channels, television programs, electronic newspapers, networks, news sites, movie and song sites on the Internet as in: Tube Old Islam; Muslim Brothers tube; Tube Ethiopia; Freedom tube; Life tube; Chat tube; Peace tube. Some hybrid compounds containing “Tube” are used in some religious and political contexts as in: Tube Old Islam; Muslim Brothers tube; Tube Ethiopia; Freedom tube; Life tube; Chat tube; Peace tube. These elements of the compound are agglutinated. All of these hybrid compounds are used in a political context. They are used in Standard as well as Colloquial Arabic.

- **leaks** is in hybrid compounds in Arabic that refer to an intentional disclosure of something secret or private as in: Wafa leaks; Truth leaks; Aljazeera leaks (a T.V. documentary show); Al-Morsi leaks; Al-Ghadeer leaks; Al-Qaida leaks. The two elements of the compound in Israel and Lebanon are agglutinated. All of these hybrid compounds are used in a political context.

- **Mobile** is used in hybrid compounds in Arabic to mean a measure or indicator of performance. Some of these hybrid compounds are used in critical, satirical contexts. During the Arab Spring, it was used to mean monitoring and documenting performance as in: Al-Meter; Al-Meter (a newspaper); Al-Meter (a tv network); Al-Meter (a newspaper); Al-Meter (a tv network); Al-Meter (a newspaper).
program title); Treasury meter (a personal blog); Morsy meter (a song title); Morsi meter (for documenting and watching over President Morsi’s performance); Egypt meter (Rohany meter); Sissy meter (documenting the crimes of the military coup); Al-Eissa meter (an index for evaluating the accomplishments of a minister); hotels meter (a hotels website with special offers); suppression meter; Wheat meter (an article title); Disaster meter (evaluating disasters under President Morsi’s rule); electricity meter; Dr. Daniel gate; Cheney gate; Bandar gate (a report); Ofer gate; Sherman gate; 12th grade gate; silk gate; Daniel gate; Ruby gate; Sheraton gate; Granada gate (a Spanish report); Sidon gate; DAESH gate; Bandar gate (a report); Sadr gate; Mar basket (a chat program title); Amnesty basket (a website for Al-Ahli Football club), super is used as a second element.
In some hybrid compounds, Super Takfir (accusing everybody and everything as rulers, armies, Sunnis, Shites of being non-believers); سوبر تتغير Super Takfiri (calling everybody and everything as rulers, armies, Sunnis, Shites of being non-believers); سوبر مستفز Super extremist; سوبر رئيس Super president are used in a political context; سوبر أيراني Super Iranian.

- **Web** stands for “network” and is used as a first and second element in Arabic hybrid compounds to refer to the names of sites that provide programming and hosting services, specialized sites or forums as in إسلام ويب الإسلامية Islam web (an Islamic website directory); جزائر ويب and programs web; Wordpress; خوازو ويب and Web; المبتكرين web; Web; Arab web (a forum); مصطفى ويب; Quran web (a computer software); وبث ويب webinar; and developer web (a website for programming and website development); وبث طب WebEd (a medical website).

In one example, web is used as a first element of the compound (web of images).

- **Wiki** means “fast”. In Arabic hybrid compounds, it is used as a first or a second element to refer to encyclopedias, news groups or mailing lists interested in a particular field as in *Wiki Health; وكي صحة Wiki resource; وكي مصادر Wiki* citation; وكي كتاب Wiki* books; وكي كتاب wiki* books; وكي كتاب* books; وكي كتاب* books; وكي كتاب* books. In those examples, the hybrid compounds have the Arabic word order.

On the contrary, in *Orthodox wiki*, wiki is used as a second element in the compound which has an English word order.

- **Expo** is short for “exhibition”. It is used in names of exhibitions. Some compounds containing expo have an Arabic word order, i.e., noun + appositive noun as in إكسبو السيارات Expo cars; إكسبو الشارقة Expo Sharjah; إكسبو عمان Expo Al-Mubarakiyya; إكسبو الرياض Expo Dubai (a recruitment ad); إكسبو تايلاند Expo Turkey; إكسبو خليفة Expo Creativity. Few other compounds have the English word order (noun + modified noun) as in إكسبو الأوسط Middle Expo (a company specialized in exhibits and even management for all sectors); ناس web *ويب Expo Iran*. It was borrowed from *Iraqi* Expo Middle East.

- **Petro** is short for “petroleum” or “oil”. It is used in the names of gas stations and petroleum companies as in *Petro Lub; بترول الشرق الأوسط Petro Aviation; بترول بلاتيك Petro Plastic (a company); بترول دولار; بترول رابغ Petro Rabigh (an oil refinery/company); بترول ساحاب Petro Sahab ( a gas station); بترول ماسيله Petro Massilah; بترول كيماويات Petrochemicals; بتروليوان petroyuan.

- **Hyper** means “huge”. It is used in a number of Arabic hybrid compounds that refer to large shops in the style of hypermarket and hypermarket as in *Hyper Al-Baha; Hyper Al-Sadhan; Hyper Al-Faisalyya; Hyper Al-Madina*.

- **Pharma**: It is mostly used in coinages of pharmaceutical companies or websites specialized in pharmacological issues as in *Aviceena pharma; Eva pharma; ديتا فارما Deta pharma; إيفا فارما Eva pharma*; أسئلة فارما Questions pharma; شرح فارما *explanation pharma* (lecture notes by an instructor). In *فارما تيوب Pharma tube*, it is used as a first element.

- **Mania** means “madness”, “obsession” or “exaggeration of a certain behavior as in English kleptomania. It was borrowed from English and appeared in new Arabic terms as in أوما مانيا Obama mania; ناسك مانيا Sissi mania; مرض مانيا sickness mania; وكي مكة Hyper Makkah.

- **Media**: It is used to refer to names of electronic newspapers, production, design, and art companies and/or sites as in الأزرق Al-Azaaq Media; داعية Media (a production company); تَحَصين ميديا Design Media; ضياء ميديا Desert media (an electronic newspaper); جهينة Media (a book title).

In *media art and cinema* (art and cinema media), media is used as a first element of the compound, thus the compound has an Arabic word order.

- **Book** is used in names of general or niche news websites as in Encyclopedia book; people book; people book; football book; Egypt book; Smir book Sameer book (a news website).
• **Mini** means “small” as in “mini bus”. It is used in colloquial Arabic such as mini civil war; Mini civil war, Mini atomic bomb; Mini عضو, Mini perfume (perfume in a small bottle); Mini فرع, Mini branch (small branch); Mini داعش; Mini داليا; a small DAESH; small book.

• **Phone** is short for telephone. It is used to create website names, phone directories, Internet service providers and banking by phone as in creativity phone; أبادع فون, إبداع فون (creative phone); iPhone islam; iPhone and iPad applications and news; ألمانيا فون, الجزيرة فون (German phone; Aljazeera phone (a bank service)); SAMBA phone; Seba phone; Yemen phone (a phone directory).

• **Tic** is a bound morpheme (suffix) as in analytic, septic and dramatic. In Arabic it is used as a free morpheme and is added to some names to denote the attributive form of the noun in a foreign formulation as in the dramatic plastic automatic pattern. Examples are *literary tic;* *Affairs tic;* *math tic;* *sameerastic;* *leaves tic;* *physical tic.

• **Arabia:** in its English form, it is used in some hybrid compounds as in Arabia Kora; ارابيا كورة; Arabia sat; ارابيا سات (name of a satellite communication provider); Arab link; Arab Cast; Arab link (a software); Arab Cast; Arab link (name of a software company); Arab sat; ارابيا سات (a satellite communication provider); Mac Arabia; Mac ارابيا (name of a website); Mac ارابيا (a social media website).

• **Co:** It stands for company. It is used in hybrid compound as in افلام كورا; Aflamco; Ejarco (name of a rental company); سيف كور; Saeed co (a chicken farm); وسط اسلام; Egypt pro (a company); Hijab pro (a uniform for female Muslim athletes); Hijab pro (name of a Shoe shop).

• **Pro,** an abbreviation from professional. It is used in some hybrid compounds as in theبDESCENDENT; Al-Awsat pro (a software); مصر فون; Egypt pro (a company); Hijab pro (a uniform for female Muslim athletes); Hijab pro (name of a Shoe shop).

• **Café** as in Internet café. In Arabic, it is used to form compounds similar Internet café. It is used in names of websites or forums as inbanoota café; بانوطة كافيه (young girl cafe); صبايا كافيه; young ladies café; Arabic café; Arabic café. It is used in some hybrid compounds as in Arab café; Arabs café; Aloush café.

• **Mart** stands for "market". In Arabic, it is used in the names of some shops, commercial centers or the names of marketing and shopping sites such as Gulf mart; Gulf mart; قازوز مارت; Qazzouz Mart (a shopping website); اليمن مارت; Yemen mart.

• **Top** in Arabic is used in hybrid compounds to mean “top quality” as in clothes top; ملابس توب (high quality clothes); In some hybrid compounds, top is used as a first element as in top dress; توب (top dress); top blouse (high quality blouse).

• **Center** is used in names of shopping centers as in Center Kareem; سنتر كريم (Arabs center) Alkhaleejiah Center.

• **Cast** as in broadcast and webcast. It is used either as a first or second element in hybrid compounds as in Arab cast; عرب كاست; Arab cast; *cast Love;* كاست شوق; *cast longing/eagerness.

• **Link** refers to a URL. In Arabic it is used in compounds such as Smart Link, cyberlink, Starlink and Fastlink. It is used in spoken Arabic in hybrid compounds such as طيبة لينك; Taibah link (a software and web solutions company); Arab link (a tourism company); كتاب لينك; book link (a search engine for Arabic and Islamic books).

• **Show** is used in names of some TV shows as in Albasheer Show (a show on DW); هالة شو (show on DW); albashir шо (a media show); تابه link (a software and web solutions company); Arab link (a tourism company); كتاب لينك; book link (a search engine for Arabic and Islamic books).

• **Extra** means more than expected. It is used in very few Arabic compounds as in Egypt extra; مصر اكسترا (extra in Egypt)

• **For** as in few Arabic hybrid compounds as in for Shabab (name of a T.V. station and an organization); شباب 4 (a library).

• **Ultra** means extreme, immoderate or extremist. It is used in Arabic in hybrid compounds to show immoderate/extremist behavior such as Ultra Orthodox; التترا ارثودوكس; Ultra patriotic.
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- **Talk** means a conversation between two people, often about a particular subject. It was borrowed by some Arabic speakers and used to form hybrid compounds as in إستاد الدوحة نت *Doha Stadium net*; رقم موت سوبر *Super Yemen net*; وظائف مذكرة *Egypt News tube*; مركز حمدان سنتر *Hamdan Center*; بنك منتج *Arab web soft*; مركز حمدان سنتر *Center Hamdan Center*; and ويكي إسرائيليكس *wiki leaks*.

- **Pal** means friend. It is used in English compounds as *pen pal* and *PalTalk* and in banking as *PayPal*. In Arabic, it is used in the hybrid compound شادي بال *Shadi Pal*.

In addition, there are three-word hybrid compounds that contain two borrowed lexemes as in إستاد الدوحة نت *Doha Stadium net*; City center Deira *Arab web soft*; Arab web soft *Super Yemen net*; Arab web soft *City center Deira*; مركز حمدان سنتر *Center Hamdan Center*; and مركز حمدان سنتر *Hamdan Center*; and ويكي إسرائيليكس *wiki leaks*.

**5.2 Frequency of borrowed morphemes in hybrid compounds in Arabic**

Data analysis has revealed that some borrowed lexemes used in hybrid compounds in Arabic are more productive than others as in the following order: Net (140); com. (121); press (76); soft (44); sat (42); tube (36); leaks (33); mobile (29); meter (27); tech (26); times (23); pedia (21); gate (20); super (20); web (20); wiki (20); expo (13); petro (13); hyper (9); pharmacy (8); mania (8); media (8); book (7); mini (7); phone (7); tic (7); Arabia (6); co (6); pro (6). The following borrowed morphemes are not very productive: Café (5); mart (5); top (5); center (4); cast (3); link (3); show (3); extra (2); for (2); ultra (2); talk (2); pal (1).

**5.3 Reasons For Coining Hybrid Compounds Although Arabic Equivalents Exist**

Findings of prior studies conducted by the author reported several reasons for Arab preference to use foreign words over Arabic equivalents in common language, the transliteration of foreign names in English or the dominance of foreign shop names over Arabic names. In one study, the students, faculty, shop owners and workers gave promotional, linguistic, globalization and sociocultural factors and lack of a business naming policy. They indicated that foreign shop names are used as a marketing strategy to attract customers who prefer foreign merchandise to local ones. They think it is more glamorous to use a foreign name as the constituents of the compound are semantically incongruent. In مركز حمدان سنتر *Hamdan Center* is redundant as مركز *Center* means center, thus the compound has 2 words that mean center, which is semantically awkward.

In compounds such as *Saudi tech card*; مشهد مار ميتر *weather Mar meter*; *Poem relationship net*; تك بطاقة *Hyper food advantages*, the constituents of the compound are semantically incongruent. In مركز حمدان سنتر *Center Hamdan Center* is redundant as مركز *Center* means center, thus the compound has 2 words that mean center, which is semantically awkward.

In another study, participants added factors of brevity, and poor knowledge of Arabic equivalents, especially new coinages. They think it is more prestigious to use foreign words. They declared that "everybody is doing it" and "it's a habit". Foreign words attract customers' attention more than native words, and more customers can be reached worldwide (Al-Jarf, 2016).

In a third study, Arab users of the hybrid language on social media reported that hybrid forms are trendy in Internet communication which is informal and casual. Some have difficulty expressing themselves in Standard Arabic (Al-Jarf, 2011c; Al-Jarf, 2018).

Furthermore, the influx of hybrid compounds reported in the current study that consists of an Arabic lexeme and English lexeme reflects insufficient Arabization efforts and interest by individuals and stakeholders who have coined them. It also reflects the insufficient Arabization efforts at higher education institutions especially because English is the medium of instruction and most textbooks in most courses at science, engineering, computer science and medical colleges. The students do not study Arabic equivalents of English technical terms in their major area of study. They also have misconceptions about Arabization processes.
Most of them believe that borrowing and transliteration are the only ways available for transferring English terminology to Arabic. Most students never heard of the Saudi Arabic Terminology Databank hosted by KACST (Al-Jarf, 2018; Al-Jarf, 2005a; Al-Jarf, 2005b).

Regarding the syntactic and semantic anomalies in the hybrid compounds in the current study, these are similar to the syntactic and semantic anomalies in shop and hotels names. Analysis of shop names indicated that 69% of the Arabic transliterations of the compound shop nouns have syntactic and/or semantic anomalies; 23% have both semantic and syntactic anomalies combined; 22% have syntactic anomalies only; and 14% semantic anomalies only. As in some hybrid compounds in the present study, some compound shop names are meaningless because the two elements of the compound are incongruous. Others have faulty word order; faulty use of the definite article; and use of constituents in the compound with the same meaning from two foreign languages (Al-Jarf, 2023f; Al-Jarf, 2021d).

5.4 Effect of the Hybridization Phenomenon on Arabic
As in previous studies by the author, hybridizing compounds that refer to names of companies, T.V. stations, T.V. satellites, news agencies, electronic newspapers, specialized websites, blogs and forums contribute to the marginalization and deterioration of the Arabic language although Arabic equivalents to many hybrid compounds exist and can be created even though they are not commonly used. These new hybrid forms of language may weaken the users’ linguistic competence and performance in SA, who might resist using and coining pure Arabic compounds in the future. Mixing foreign words with Arabic is a serious issue. It is annoying to the reader, and it distorts the Arabic language especially when users apply Arabic inflectional and derivational morphology to borrowed words in hybrid compounds. Sometimes, use of hybrid compounds hinders comprehension especially by readers who do not know English or those who are not familiar with some of the foreign lexemes. Young people exposed to any hybrid language will learn a distorted language that will affect their linguistic development. They will learn to write without acquiring important Arabic words. The young generation needs to build their lexical repertoire in Arabic. If they get into the habit of hybridization and code-mixing, the Arabic words substituted by foreign words will die (Al-Jarf 2020; Al-Jarf, 2019; Al-Jarf, 2018).

6. Recommendations and Conclusion
Hybrid compounds in Arabic are neologisms, i.e., newly coined phrases, identifying a new concept (Al-Jarf, 2010) through the process of lexical borrowing between Arabic and English. Structural analysis of the hybrid compounds in Arabic demonstrated that those that are technical terms, company names, names of electronic newspapers and satellite T.V. stations are used in Standard, formal and informal contexts. They are used less frequently both tokenwise and typewise. Many are limited in number and are more permanent as they were coined by specialists and Arabic Language Academies. On the contrary, hybrid compounds that appeared during the Arab Spring and refer to names of T.V. shows, newspaper articles, websites, forums, and blogs, were spontaneously created by some social media activists, journalists, and political analysts to express a specific meaning and purpose. They were used in informal, colloquial contexts. Many were popular for a while, then disappeared, and new ones emerged. The above findings are consistent with results of a study by Rioniheim0 (2002) who analyzed borrowed bound morphemes in Estonian-based patterns that are gaining an integrated status in immigrant Ingrian Finnish and the ways in which morphological borrowing may occur between languages. This pattern exemplifies a mixing of the two morphological systems during speech processing rather than representing a permanently borrowed feature.

Moreover, most hybrid compounds in Arabic have less conceptual versatility and conceptual prestige in comparison with native compounds or specialized hybrid compounds used in some domains such as politics, IT, business, and others. One of the most important factors responsible for the influx of IT and political hybrid compounds in Arabic during the Arab Spring is the feeling that it is more expressive and prestigious to use English lexemes combined with Arabic bases and that it is more innovative and effective to use foreign affixes or lexemes than pure Arabic words as reported by prior studies by Al-Jarf (2016) and Al-Jarf (2011a).

A third issue is that new hybrid compounds especially those that emerged during the Arab Spring are not listed in Arabic language dictionaries or mobile dictionary apps (Al-Jarf, 2022e). Therefore, raising college students’ awareness of these linguistic phenomena is a necessity. This can be achieved by setting new educational and linguistic policies for reinforcing the use of SA among the young generation. Student translators should not use hybrid compounds in formal translations. They should work on Arabizing the 41 borrowed lexemes and the hybrid compounds that contain them as in saying جوال rather than mobile, برمجيات instead of mania, سوفت instead of soft; متر instead of meter; برس instead of press; and so on. Explanatory equivalents can be given as well.

Finally, this study recommends that future research investigate other innovative word formation processes in Arabic such as clipping of borrowed words and phrases used in the spoken language as in كوالا Kuala for Kuala Lumpur; كازا Casa for Casablanca; والاباب super for supermarket; الإنترنت Inter for intercontinental; Facebook; اللاب lap for hyper for hypermarket; كلاب super for supermarket; الإنترنت Inter for intercontinental; Facebook; اللاب lap for...
laptop; الواتس; Whats for WhatsApp; الانستا; Insta for Instagram; سناب; Snap for Snapchat; كيلو; kilo for kilometer or kilogram; دوك; Dr for doctor; شفر; Cheffer for Chevrolet; رولز; Rolls for Rolls Royce and others.

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