
RESEARCH ARTICLE

Lexical Hybridization in Arabic: The Case of Word Formation with Borrowed Affixes

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ABSTRACT

Arabic is a derivational language where words are formed from a root consisting of three or four consonants and a set of vowels that alternate with the root consonants. Different derivational patterns are used to derive agents, patients, nouns of place, time, occupation, appliances, tools, diseases, the diminutive and so on. In addition, Arabic has loan words from ancient, as well as modern languages. Not only has Arabic borrowed lexical items but has also borrowed few foreign affixes. A sample of hybrid lexemes containing the following foreign affixes -abad, aire-, anthropo-, -ate, Turkish -d̤zi-, -cracy قراطية, -e, ethno-, -eme-, eine, el, Euro, geo, hydro-, -ic, -ide, ism, -ite, li, -logy, -one, -ous, phobia, -stan, socio-, -taria, -topia combined with Arabic bases was collected and examined to find out the following: (i) The status of borrowed affixes in Arabic and their status within the terminological structure; (ii) their denotative and connotative meanings; (iii) how productive they are; (iv) whether they are used in Standard or Colloquial Arabic; and (v) whether they are permanent or transient. Structural analysis of the corpus 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/compounds are used in Standard Arabic and formal contexts, whereas those used in political and humorous contexts are used in Colloquial Arabic. The former constitute a small set of lexical hybrids coined by specialists and Arabic language academies, whereas the latter are more prolific as they are created by activists, political analysts, journalists and social media users. Examples of hybrid lexemes/compounds containing borrowed affixes, results of the analysis and recommendations for translation are reported in detail.

KEYWORDS

Lexical hybridization, lexical hybrids, hybridized lexical items, lexical innovations, word formation processes, foreign affixes, borrowed affixes, Arabic language.

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1. Introduction

Lexical borrowing of whole words is a common phenomenon in all languages. For example, Arabic has borrowed full words from Turkish, English, Farsi, Greek, English and others such as *television* تلفزيون, *cinema* سينما, *film* فيلم, *technocrat* تكنوقراط, *strategy* الاستراتيجية, *hormone* هرمون, *insulin* إنسولين, *oxygen* أكسجين, *parliament* برلمان, *orchestra* أوركسترا, *NASA* ناسا, *UNESCO* اليونسكو, *Liberal* ليبرالي, and *program* برنامج. In addition to full words, some languages have borrowed prefixes, suffixes and/or infixes which are added to native bases. This phenomenon is called hybridization, a process of forming words by combining elements from two or more languages (Carey, 2011). The evolution of hybridization, or affix borrowing Hybridization is the result of the sociocultural contact between languages. Sanchez-Stockhammer (2012) added that hybridization is possible on all levels of a language, from the most basic to the most abstract, namely formal, semantic, functional, etymological, and communicative hybridity.

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A review of the literature has yielded several studies that investigated the phenomenon of hybridization (affix borrowing) in some languages such as English, Irish of Cape Clear, Serbo-Croatian, Russian, Hebrew, Japanese, Hindustani, Urdu, Persian, Bahasa, Malay, Resígaro and Arabic. The most common form of lexical hybrids in English¹ are those that combine etymologically Latin and Greek parts. Since many prefixes and suffixes in English are of Latin or Greek origins, a prefix or suffix from one language is added to an English root that comes from a different language, thus creating a hybrid word as in *aquaphobia* – from Latin *aqua* "water" and Greek (*phobia*) "fear"; *genocide* – From the Greek (*genos*) meaning "race, people" and Latin *cidere* meaning "to kill".

In the Irish of Cape Clear, Urdail (1995) examined the language contact phenomenon in which a native morpheme combines with a borrowed morpheme that has become fully assimilated over time. One variety of this blending in Gaeltacht Irish is the substitution of "-eir" for the English-bound morphemes "-ar/-er/-or" which are combined with nativized borrowed morphemes such as "draidhbh" (from English "drive") to form "draidhbheir" ("driver"). The researcher reported that the productivity of the morphemic blending process allows a form of rule-governed lexeme creation in language contact situations. Gaeltacht Irish continued a lexical enrichment process that has been going on for centuries.

In Serbo-Croatian, the use of prefixes with borrowed verbs commonly used in speech and journalism was investigated by Lazic (1976), who concluded that the adaptation of borrowed verbs in the native aspectual system is almost exclusively through prefixation.

In the post-Soviet era, the influence of Anglo-Saxon culture on everyday life in Russia has rapidly grown, and the number of borrowings from English greatly increased. This status quo was especially exhibited in the process of language hybridization. Kravchenko (2012) identified and described different types of hybrids in public texts and, in the biology of language and cognition and the driving force behind the occurring changes in the Russian written culture.

Moreover, morphological borrowing in the Northwest Amazonian language Resígaro (Arawakan) was described by Seifart (2012) as a case of non-lexical borrowing which has borrowed entire paradigms of noun class, gender, and number markers, as well as associated bound grammatical roots, from the unrelated Bora language while all other morphosyntactic subsystems of Resígaro are virtually unaffected. This massive morphological borrowing tends to be morphosyntactically interrelated, rather than being random collections of forms or sets of forms that are best described by lexical before grammatical morphemes or derivational before inflectional markers, i.e., well-known borrowability hierarchies.

In Modern Hebrew², examples of hybrid words consisting of a Hebrew-descent word and a non-Semitic descent suffix exist, i.e., hybrid words containing international prefixes as in *anti-hitnatkút* (אנטי-התנתקות) 'anti-disengagement'; *post-milkhamti* (פוסט-מלחמתי) 'postwar'; and *pro-aravi* (פרו-ערבי) 'pro-Arab' (Zuckermann, 2009).

Likewise, Asian languages such as Japanese³ have hybrid words that are common in Kango – words formed from Kanji characters – where some of the characters are pronounced using Chinese pronunciation (*on'yomi*), and others in the same word pronounced using Japanese pronunciations (*kun'yomi*, from Japanese morphemes). These are known as *jūbako* (重箱) or *yutō* (湯桶) words, which are examples of this kind of compounds which are autological words in which the first character of *jūbako* is read using *on'yomi*, and the second *kun'yomi*, while it is the other way around with *yutō*. Other examples include 金色 *kin'iro* "golden" (*on-kun*), 場所 *basho* "place" (*kun-on*), and 合気道 *aikidō* "the martial art Aikido" (*kun-on-on*). In another study, Kageura (2010) analyzed the status of borrowed morphemes in the terminological structure of Japanese. The author found that borrowed morphemes are used not only less frequently typewise and tokenwise, but also have less conceptual versatility and conceptual prestige in comparison with native morphemes. He confirmed that the borrowed and native morphemes that are less mixed would be expected if randomness was assumed.

In Hindustani⁴ (the lingua franca of India), Persian prefixes were borrowed to create new words. The process of hybridization led to the formation of words in which the first element of the compound was from Khari Boli and the second from Persian, such as *rajmahal* 'palace' (*raja* 'royal/king' + *mahal* 'house/place') and *rangmahal* 'fashion house' (*rang* 'colour/dye' + *mahal* 'house/place').

¹ http://en.wikipedia.org/wiki/Hybrid_word

² http://en.wikipedia.org/wiki/Hybrid_word.

³ http://en.wikipedia.org/wiki/Hybrid_word.

⁴ <http://www.britannica.com/EBchecked/topic/266468/Hindustani-language>

In Urdu, lexical items as well as affixes from Arabic and Persian have been borrowed (Khan and Alward (2011)). For example, the Prefix /la- and bila-/ "no, without" are used with Urdu words as in *la + vāris* 'without + claim' = 'unclaimed luggage, body, etc'; *la + vālad* 'without children' = 'issueless'; *la + jāva:b* 'without + equal' = 'unique'; *la + sani* 'without + equal' = 'unparallel'; *la + pāva:h* 'without + care' = 'careless'. The prefix na- (a variant of la-) is also used before Arabic loan words in Urdu as in *na-mumkin* not + possible 'impossible'; *na-layāq* without + worth 'worthless', non-deserving; and *na-balīx* without + adolescence, 'not adult'. The prefixes /ba-, be-, bad-/ of Persian origin meaning 'bad, wrong, without' are used with Arabic loan words in Urdu as in: *ba:- izzat* with + respect, honor; *ba:- ādāb* with + respect, manner, 'with regards'; *be-hāya* without + shame, shameless, having no sense of shame; *be-sābāb* without + cause; *be-fāyida* without + profit 'profitless'. The suffix -i /i:/ of Arabic origin can be added to place or country names referring to nationalities, place of living and sometimes language as in -/pakistani/ 'a citizen of Pakistan', /haydr abadi/ 'a person living in Hyderabad', /pānjabi/ 'person from Punjab as well as his language'. In certain cases, the suffix -i is added to words meaning 'related to' as in /sənət/ 'industry, airmanship' - /sənəti/ 'industrial'. The Arabic suffix (-i) is also attached to Indic words as well as in /asman/ 'sky, heaven/asmani/ 'related to sky, heavenly/. In addition, Perry (2002) described the Arabic elements in Persian in terms of phonology, orthography, loanword classes, grammatical elements, semantics, history, and evolution.

Although Bahasa Malaysia has borrowed two prefixes and three suffixes, all the affixes only occur with other loanwords from Arabic. Examples of Arabic affixes used in Malay are *al-kitab*, *almarhum*, *alkisah*, *almaklum*, *alhasil*; *Darussalam*, *darulbaqa*, *darulakhirat*, *daruljalal*, *darulfana*, *darulharab*; *Muslimin*, *muslimun*, *hadirin*, *hadirun*, *salihin*, *salihun*; *Muslimah*, *muslimat*, *hadirah*, *hadirat*, *mukminah*, *mukminat*; *Amali*, *asli*, *ilmiah*, *duniawi*, *ukhrawi*, *Rohani*, *islamiyah*, *resmi*, *Ilahi*. Although the morpheme {-al} is the definite article in Arabic, in Malay it is mostly used as style, i.e., to give the context a touch of Arabic. The morpheme *darul* does not undergo any changes in meaning in Malay. Borrowed suffixes are only used with other loanwords from Arabic. No Arabic morphemes are used with Malay lexemes (Al-Jarf, 2021b; Al-Jarf, 2009; Safarwan, 2002; Karim, 1996; Beg, 1979).

As far as Arabic is concerned, Thomason (2006) reviewed 48 articles that concern Arabic in contact with other languages and Al-Qinai investigated borrowings of full words in Arabic. However, studies that investigated hybridization in Arabic are very limited in number and scope. For example, Masliyah (1996) described the usage of four Turkish suffixes (-ci, -li, -lik, -siz) in colloquial Iraqi Arabic that combine with Arabic lexemes.

The flux of hybrid lexemes/compounds in Arabic during the Arab Spring that started in 2011 was unprecedented. Many lexical hybrids which contain borrowed prefixes and suffixes from English, Latin and Greek, Aramaic and other languages and used in general, political, and specialized contexts have emerged especially old Turkish suffixes borrowed in the past but used in new coinages (Al-Jarf, 2023b; Al-Jarf, 2022a; Al-Jarf, 2022b; Al-Jarf, 2015a). To the best of the author's knowledge, no attempt has been made to investigate this specific area of hybridization in Arabic, i.e., borrowed (loan or foreign) prefixes and suffixes attached to native Arabic bases, discussing hybrid formations and the process of 'nativization' of these words in present-day Arabic vocabulary. Therefore, the present study aims to explore the phenomenon of hybridization in Arabic, i.e., the process of 'hybrid formation, where a foreign prefix or suffix is attached to a native Arabic lexeme (base form). It aims to explore the following: (i) their structure, i.e., hybrid morphology (individual lexemes and compounds), the derivational and inflectional processes; (ii) how productive the hybridization process is, i.e., number of hybrids that have been coined; (iii) their denotative and connotative meanings and whether they have the same meaning as the donor language; (iv) whether they are used in Standard or Colloquial Arabic; (v) in which domains they are used; and (vi) whether those borrowed affixes are diachronic.

2. Significance of Study

Findings of the present study are useful in gaining a better understanding of the hybridization phenomenon and the impact of borrowed affixes on the overall morphological system of Arabic and provide new information based on the linguistic investigation done. An explanation of the driving force behind the occurring changes in the Arabic word formation process is currently needed.

Moreover, this study is part of a series of studies on some linguistic issues during the Arab Spring such as emerging political expressions, the expressions and vocabulary used in describing the "other", and those that are politically incorrect (Al-Jarf, 2023b; Al-Jarf, 2022a; Al-Jarf, 2022b; Al-Jarf, 2015a). Those studies included some examples of lexical hybrids, but hybridization was not extensively investigated as it is the case in this study.

Furthermore, this study is part of a series of studies conducted and published by the author about neologisms and innovative word formation processes in Arabic such as derivation from loan word and acronyms from which no derived forms exist in the donor languages (Al-Jarf, 2023a; Al-Jarf, 2021a; Al-Jarf, 2010).

(*alcohol addict*), محيلجي (*tricky person*), مصلحجي (*opportunistic/seek their interest*); فيسبوكجي (*Facebook addict/activist*); بلطجي (*a bully*); منحبكجي (*supporter of Bashar Al-Assad*); معارضجي (*opposition follower/supporter*); قومجي (*pretending to be nationalistic*), although pure equivalent Arabic adjectives exist such as قومي (*nationalistic/patriotic*); مثقف (*educated*), ثوري (*revolutionary*), إخواني (*a Muslim Brother*); and معارض (*oppositionist*). Other forms of plural and abstract noun forms are derived from lexical hybrids by adding Arabic plural suffixes and following Arabic derivational patterns.

Lexical hybrids that contain the Turkish suffixes {-dʒi} and {-li} are mostly used in spoken colloquial Arabic. Common people spontaneously create their own hybrids that contain {-dʒi} in particular. However, they are not equally common in all Arabic dialects. Some are common in one dialect (Iraqi or Syrian), others are common in another (Jordanian or Egyptian). Words ending in {-dʒi} and {-li} were more common in the 1940's and 1950's, before Arab countries gained their independence from the Ottoman Empire and became less widely used with the rise of Arab nationalism. Some have become very prevalent in the past few years after the Arab Spring, especially those with a negative or derogatory connotation such as بلطجي ثورجي قومجي إخوانجي which are sometimes heard on news T.V. networks.

5.2 Farsi suffixes

Arabic has borrowed two suffixes from Farsi as follows:

{-stan} means "location", "place", "land" or "country". It is derived from the word *shatana* in the Indo-Aryan languages. It is used in names of countries as *Pakistan, Afghanistan, Kazakhstan, Uzbekistan, Turkestan, Dagestan* and others. These are used in Standard Arabic and even in other languages. During the Arab Spring, {-stan} was borrowed and mostly added to political and religious/Islamic Arabic words to express negative and sarcastic meanings as in إخوانيستان /ixwanista:n/ (land of the Muslim Brothers), إرهابستان /irha:bsta:n/ (land of terrorism), إسلامستان /isla:msta:n/ (land of Islam), أمازيغستان /ama:zi:stan/ (land of Amazigh), جهادستان /jiha:dstan/ (land of Jihad), حماسستان /Hamas stan/ (land of Hamas), سننستان /sunni:stan/ (land of Sunnis), سورياستان /su:rya stan/ (land of Suria), سيناءستان /si:na stan/ (Sinae state), شرقستان /ʃarqistan/ (state/country of the east), شيعيستان /ʃi:ʔistan/ (State of Shiites), صهيونستان /Sahyu:n stan/ (state of Zionists), عربستان /arabstan/ (territory/state for Arabs), عرسالستان /ʔirsa:lstan/ (ʔirsa:l state), علويستان /alawistan/ (Alawite state), غازستان /ʔazstan/ (Country of Gas), غربستان /ʔarbistan/ (State of the West), غزستان /ʔazistan/ (State of Gaza), قمعستان /qam:stan/ (state of suppression), مصريةستان /ma:ʔrista:n/ (State of Egypt). In some hybrids, {-stan} is attached to the Arabic root, in others both components of the hybrid compound are spelled separately. Such hybrid lexemes and compounds were used in Colloquial Arabic and on social media and many disappeared after a while.

- **{-abad}** is a suffix meaning "city". It was borrowed from Persian and used in names of some cities in Pakistan, Afghanistan, and India and Turkmenistan, where the names of those cities consist of an Arabic proper noun added to {-abad} as in احمد آباد *Ahmedabad*; اسلام آباد *Islamabad*; جلال آباد *Jalalabad*; جوهر آباد *Joharabad*; حيدر آباد *Hyderabad*; اشغاباد *Ashgabat*; علي آباد *Aliabad*; غاري آباد *Ghaziabad*; فيصل آباد *Faisalabad*; فيض آباد *Faizabad*; مظفر آباد *Muzaffarabad*; مؤمن آباد *Momenabad*; نصير آباد *Naseerabad*; سلطان آباد *Sultanabad*; فايز آباد *Faizabad*. Hybrid city names containing the suffix "abad" are used in Standard Arabic and in other languages, but they are not used in names of cities in the Arab world. In all of these hybrids, the two components are spelled separately.

Although the suffix -abad is combined with Arabic roots in city names in Pakistan, India, Afghanistan and Turkmenistan, it was excluded as abad + Arabic root are not used in names of cities in Arab countries.

5.3 Aramaic suffixes

The Aramaic suffix {-el} means "God" as in *Israel, Samuel, Gabriel, Michael Mikael, Raphael, Raphael, Jibrael*, and others. These were coined long ago and are used in Standard Arabic. Some are even used in the Holy Quran (*Israel, Mikael, Jibrael, Israfeel*). Another group of hybrids was mentioned in the Torah and was used in compounds such as: شرحيل *Sharhab-el, Sharh-el, Karb-el, Yeda-el, Zabad-el*, عزرائيل *Azrael, Wahbel, Aws-eel*. Some cynics added {-el} to Proper nouns (some countries or agreements) to refer to the alliance between those countries and Israel during the Arab Spring to as in قطرنايل *Qatarael* (Qatar + Israel), عربنايل *Arabael* (Arabs + Israel), اسلامنايل *Islam-el* (Islam + Israel), مصرنايل *Misra-el* (Egypt + Israel), أمريكانايل *Amrica-el* (America + Israel), إيرنايل *Ira-el* (Iran + Israel), حماسنايل *Hamas-el* (Hamas + Israel), سايكس نايف *Sykes-el* (Sykes-Picot treaty + Israel), سوريانايل *souri-el* (Syria + Israel), صبرا نايل *Sabra-el* (Sabra Massacre in Lebanon + Israel). These hybrids were coined by some activists and journalists during the Arab Spring and are used in political contexts in Colloquial Arabic. {-el} underwent a change in pronunciation as it is pronounced with the long vowel /i:/.

5.4 Greek Suffixes

The following affixes have been borrowed in English from Latin and Greek and have been used in creating many lexical hybrids in Arabic as in the following examples:

- **{geo-}** was borrowed from English and added to an Arabic root. It is noted that the word as a whole is a compound in which the root was translated into Arabic and the prefix {geo-} was kept as it is. جيو اقتصادي (*geoeconomic*); جيو تاريخي (*geohistorical*); جيو حراري (*geothermal*); جيو حيوي (*geobiological*); جيو سياسي (*geopolitical*); جيوفيزيائي (*geophysical*); جيوكهربائية (*geo-electrical*); جيو كيميائي (*geochemical*); جيومعلوماتية (*geoinformatics*); جيواحصائي (*geostatistical*); الجيوفيزياء (*geophysics*). It is sometimes added to Arabized roots such as strategic, demographic, magnetic as in جيواستراتيجي (*geostrategic*); جيو ديموغرافي (*geomagnetic*); جيو ديموغرافي (*geodemographic*).
- **{socio-}** means social. It was borrowed from English and was used to formulate hybrid compound terms denoting certain social phenomena as in استراتيجية سوسيو (*socio-strategic*); سوسيو اعلامية (*socio-media*); سوسيو اقتصادية (*socio-economic*); سوسيو انثروبولوجية (*socio-anthropology*); سوسيو بنائية (*socio-structural*); سوسيو تاريخية (*socio historical*); سوسيو (*socio*); سوسيو تحليلية (*socio-analytical*); سوسيو تربوي / تربوية (*socio-educational*); سوسيو تقنية (*socio-technical*); سوسيو تكنولوجية (*socio-technological*); سوسيو رياضية (*socio-cultural*); سوسيو جغرافية (*socio-geographical*); سوسيو جندرية (*socio-gender*); سوسيو رياضية (*Socio-Athletic*); سوسيو سياسي (*socio-political*); سوسيو شعرية (*socio-poetic*); سوسيو طبية (*socio-medical*); سوسيو قانونية (*socio-legal*); سوسيو معرفية (*socio-linguistics*); سوسيو لسانيات (*sociolinguistic*); سوسيو لسانية (*socio-judicial*); سوسيو قضائية (*socio-cognitive*); سوسيو نقدية (*socio-psychological*); سوسيو نفسية (*socio-textual*); سوسيو نصية , (*socio-vocational*); سوسيو مهنية (*socio-critical*); سوسيو-اداري (*socio-administrative*); سوسيو-بنوية (*socio-structural*); سوسيو-دلالية (*socio-semantic*).
- **{-logy}** from greek, means science, study of or bodies of knowledge as in "technology, physiology, sociology, pedagogy, biology, ideology, geology, anthropology, microbiology" and others. It is also used in nouns referring to writing, discourses, collections (anthology, trilogy). It was borrowed from English and Arabized into {-logia} which was added to some general lexical items used in an ironic or comic context such as تنكة-لوجيا (*tin logia*); مترو-لوجيا (*metro logia*); بطاطو لوجيا (*potatoe-logia*); بيتولوجيا (*home-logia*); (الرسول) سيسي لوجيا (*president Sissi logia*); تناقض لوجيا (*contradiction logia*); تنك لوجيا (*tin-logia (an engineering project*); رشوة لوجيا (*bribe-logia*); ركضو-لوجيا (*running-logia*); طبخو-لوجيا/طبخ لوجيا (*cooking-logia*); شغب لوجيا (*vandalism-logia*); الشغلو-لوجيا (*work-logia*); غسلو-لوجيا (*laundry-logia*); فرح لوجيا (*happiness-logia*); فضفض لوجيا (*self-exposure-logia*); فكر لوجيا (*though-logia, i.e., Ideology*); كسل لوجيا (*laziness logia*); هذرو لوجيا / هذرو لوجيا (*joke logia*); مسحولو-لوجيا (*mopping logia*); همولو-لوجيا (*worry logia*); الجحشنو-لوجيا (*burro logia (implying idiot behavior)*).
- **{-cracy}** is a suffix that was Arabized into قراطية and used which has been used in coining many lexical hybrids in Arabic as in قراطية (*suppression-cracy*); التزوير / التزوير قراطية (*forgery-cracy*); حمقى قراطية (*idiots-cracy*); الدقنو قراطية (*beard-cracy (referring to Islamicclergy)*); دمق قراطية / الدم قراطية (*blood-cracy*); دمى قراطية (*puppets-cracy*); الشورا قراطية (*shura-cracy*); العرب قراطية (*Arab-cracy*); الفوضى قراطية (*corruption-cracy*); الفساد قراطية (*cracy of the West*); الملا قراطية (*mullas-cracy*); المهدي قراطية (*Al Mahdi-cracy*); النفط قراطية (*chaos-cracy*); اللص قراطي (*thief-cracy (a play)*); المصفاة قراطية (*petroleum-cracy*). The new lexical hybrids/compounds appeared during Arab spring. They were created by journalists and activists and some social media users. They have a sarcastic connotative meaning and are critical of some political or social situations. The suffix is attached to a root that is contrary in meaning to 'democracy'.
- **{phobia}** means a persistent, excessive, unrealistic fear of an object, person, animal, activity or situation. It is a type of anxiety disorder. Phobia is used as a free morpheme and as a suffix in many psychological terms such as *acrophobia, agoraphobia, trypanophobia, mysophobia, aerophobia, claustrophobia, dentophobia, glossophobia, xenophobia* and others. It has been borrowed and used in many lexical hybrids in Arabic as a first element in a compound, i.e., a prefix as in فوبيا اتخاذ القرارات الشجاعة (*making strong decisions phobia*); فوبيا الأجانب بالإعلام (*Foreigners in the media phobia*); فوبيا الإخوان (*Muslim Brother phobia*); فوبيا الإسلام السياسي (*Islamophobia*); فوبيا الإسلاميين (*Islamists phobia*); فوبيا التيار الإسلامي (*Islamic Current phobia*); فوبيا الاعتراض على التحرش فوبيا (*objection to harassment phobia*); فوبيا الانتخابات (*elections phobia*); الأوهام (*illusions phobia*); فوبيا التجديد فوبيا (*renewal/innovations phobia*); فوبيا التحرش فوبيا (*harassment phobia*); فوبيا التغريب فوبيا (*alienation phobia*); فوبيا التفجيرات فوبيا (*explosions phobia*); فوبيا التكبير فوبيا (*announcing God in great phobia*); فوبيا التوطين فوبيا (*localization, indigenization, naturalisation phobia*); فوبيا الجيوش العربية فوبيا (*Arab armies phobia*); فوبيا الحرية فوبيا (*freedom phobia*); فوبيا الخلايا النائمة فوبيا (*sleepers cells phobia*); فوبيا الديمقراطية فوبيا (*democracy phobia*); فوبيا السلطة السياسية فوبيا (*political authority phobia*); فوبيا السيارات فوبيا (*bobby cars phobia*); فوبيا السياسة فوبيا (*politics phobia*); فوبيا الشريعة فوبيا (*Shariaa (Islamic law) phobia*); فوبيا الشيعة والربيع فوبيا (*Shiite and Arabi Spring phobia*); فوبيا الصحافة فوبيا (*journalism phobia*); فوبيا العراق فوبيا (*Iraq phobia*); فوبيا العمال فوبيا (*workers phobia*); فوبيا المصالحة فوبيا (*reconciliation and hell of division phobia*); فوبيا الانقسام فوبيا (*Moroccans phobia*); فوبيا المغاربة فوبيا (*victimization/tyranny phobia*); فوبيا المظلومية فوبيا (*Moroccans phobia*); فوبيا الميزانية فوبيا (*budget phobia*); فوبيا النصر فوبيا (*victory phobia*); فوبيا أمريكا فوبيا (*America phobia*); فوبيا الهوية ومخاض الاندماج فوبيا (*Port Said*).

phobia; ناصر فوبيا *Libya phobia*; ليبيا فوبيا *Rabaa phobia*; رابعة العدوية فوبيا *Shariaa reinforcement phobia*; تحكيم الشرع فوبيا *(President) Nasser phobia*.

In another set of hybrid compounds in Arabic, {-phobia} is used as a second element of the compound, i.e., a suffix as in اخوانو فوبيا *Muslim Brothers phobia*; اسلام فوبيا/اسلاموفوبيا *islamophobia*; الإصلاح فوبيا *reformation phobia*; إيران فوبيا *Iran phobia*; حجاب فوبيا *hijab phobia*; ارهابيكو فوبيا *terrorism phobia*; السيسي فوبيا *(President) Sissi phobia*; الشيعة فوبيا *Shiite phobia*; العلمانو فوبيا *secularism phobia*; فلسطينو فوبيا *Palestine phobia*.

In most hybrid compounds, the two elements are spelled separately. When used as a suffix, sometimes a combining vowel و /u:/ is inserted to connect the Arabic base with the suffix (علمانو فوبيا, اسلاموفوبيا). Hybrids containing phobia appeared during the Arab Spring and were created and used in political contexts for a while and then disappeared.

- **{anthropo-}** is a Greek prefix that mean "human." It is used in English words such as *anthropology*. انثروبو- اجتماعية *anthropo-social*; تاريخية *anthropo-historical*; ثقافية *anthropo-cultural*; سياسية *anthropo-political*; انثروبو- نفسية *anthropo-psychological*.
- **{hydro-}** is a prefix meaning "water" or "hydrogen" as in *hydrocarbon* and *hydroxide*. It was used to coin lexical hybrids such as هيدرو كهربائية *hydro-electrical*; هيدرو-فلاحي *hydro-agricultural*; وهيدرومعدنية *hydro-electrometallurgical*.
- **{Euro-}** refers to Europe and is used in a limited number of lexical hybrids as in أوراسيا أوراسي *Eurasia*, أوروبومتوسطي *Euro-Mediterranean*.
- **{-ism}** is added to some words to refer to a distinctive practice, system, or philosophy, typically a political ideology or an artistic movement as in communism, socialism, realism, surrealism, cubism, liberalism, imperialism. Lexical hybrids containing -ism in Arabic are اخوانيزم */ixwa:nizm/* Moslem Brothers political movement/state; اردوغانيزم *Erdoganism* (political ideals and agenda of Erdogan); طالبانيزم *Talibanism* (Taliban regime, philosophy or practice); نيو حنبليزم *Neo-Hanbalism* (the new Hanbali philosophy, practice, ideology); وهابيزم *Wahhabism* (the Wahhabi philosophy, belief); سرحانيزم *Sarhanism* (School of Hala Sarhan, an Egyptian journalist and TV personality); مدبوليزم *Madboolism* (the distinctive theater of Abdul-Minem Madbool).
- **{-taria}** as in *Prolitaria*, from the Latin *proletarius*, which refers to the exploited working class, i.e., the class that does not own any means of production and lives by selling its muscular or intellectual efforts. Lexical hybrids containing {-taria} were created as in عسكريتاريا *Askaritaria* (military rule); البدو-ريتاريا *Bedowritaria* (Bedouin social class).
- **{-topia}** as in *utopia* has been borrowed from English and combined with Arabic lexica items as in إسلامتوبيا *Islam-topia* (the ideal Islamic state or ideal Islamic society); مصرتوبيا *Misrtopia* (Egypt-topia, i.e., ideal Egypt); ناهدتوبيا *Nahedtopia*, an internet website.
- The English suffix **{-aire}** is used in nouns such as *millionaire*, *billionaire* which are borrowed in Arabic as whole words. However, in Arabic {-aire} is used in some words such as مفلسيير */miflisyæər/* which means *broke*.
- **{e-}** is an initialism for *electronic*. It was borrowed from English and combined with some Arabic lexical items as in .e-wazifa *وظيفة* أي، a recruitment, job searching website.

Lexical hybrids containing the affixes *geo-*, *socio-*, *anthropo-*, *hydro-*, and *Euro-* are used in Standard Arabic as they constitute technical terms and they are permanent, whereas most of the lexical hybrids containing *-cracy*, *phobia-*, *-phobia*, *-topia*, *-taria* are used in Colloquial Arabic. Most of them appeared for a short time during the Arab Spring and then disappeared. Those that are used in humorous contexts are temporary as well. In most lexical hybrids, the affix and Arabic base are spelled separately, thus forming a hybrid compound.

5.5 Specialized Lexical Hybrids

Numerous suffixes have been borrowed from English and used to create hybrid terms used in linguistics and chemistry. Those are summarized below.

- **{-eme}**, a suffix that indicates a fundamental unit. It is used at the end of English words such as *morpheme*, *lexeme*, *grapheme*, *phoneme*. It was borrowed from English and used in some hybrid linguistic terms in Arabic, where the first part is an Arabic lexical item with the suffix {-eme} added to it as in حرفيم *grapheme*; صوتيم *phoneme*; لفطيم *lexeme*.

- **{-ate}**, an English suffix used at the end of some names of chemical compounds such as *phosphate, carbohydrates, permanganate, carbonate, nitrate, and chlorate* which are used in science books for school students. It has been borrowed and added to some Arabic chemical names as كبريت *sulfur*; نحاس *copper*; زئبق *mercury*; خل *vinegar*; سكر *sugar*; ليمون *lemon* and others to form names of chemical compounds with a hybrid structure as in هيدرات *hydrate*, خلالات *acetate*, سكرات *saccharate*, فحمات *carbonate*, كبريتات *sulphate*, كحولات *alcohols*, لبنات *lactate*.
- **{-eine}** is a suffix used at the end of words such as *caffeine* and *nicotine* and refers to the stimulant substance in coffee. It was borrowed and added to the end of Arabic words such as "tea" and "coffee" as in حمضين *citric*; زنجبرين *gingerol*; الليفين *fibrin*; شايين (*tea + eine*); العاجين *dentin*; قلويين *alkaline*; قهوين *caffeine*; الكُطرين *adrenalin*. In some examples, the whole word was borrowed, such as *nicotine* and *tannin*.
- **{-ic}** is an English suffix borrowed and used in the names of some chemical compounds and acids. It is written in Arabic "يك" and is used in science books for school students. Where the names of some acids such as *hydrosulfuric, nitric, carbonic, phosphoric, hydrochloric, ascorbic, salicylic, hydrofluoric, tartaric, formic, oxalic, folic, citric* are borrowed as they are. The same suffix was added to the compounds with Arabic names to give the names of the acids derived from them such as حديدك *ferrus*; خليك *acetic acid*; الرصاصيك (*lead + ic*); زئبقيك (*mercury + ic*); الزيتيك *oleic acid*; قصديريك (*tin + ic*); الكبريتيك *sulfuric*; كحوليك (*alcohol + ic*); اللبنيك *lactic acid*; الليمونيك *citric acid*; نحاسيك (*copper + ic*); النمليك **formic acid**; حمض البوليك **uric acid**.

In common language, some people have coined funny hybrids ending in *-ic* as Sameerastic (Sameera, a proper noun + *ic*), التجاهوليك (*overlooking + ic*); الحسدوليك (*jealousy + ic*); الحقدوليك (*grudge + ic*); الخبتوليك (*cunning + ic*).

- **{-ide}** is an English used at the end of some chemical compounds as in *oxide, chloride, hydroxide, fluoride, bromide, hydride, nitride, phosphorus, iodide* which were borrowed in Arabic as they are. **{-ide}** was borrowed, spelled "يد" and used in coining hybrid names of chemical compounds such as كبريتيد *sulfide*; السكريد *glycoside*.
- **{-ite}** is an English suffix used at the end of chemical terms as *nitrite, hypochlorite, calcite, and hematite*. It was borrowed in Arabic, spelled "يت" and used in hybrid chemical terms in Arabic such as كبريتيت **sulfite**.
- **{-one}** is an English suffix used in chemical terms as *cyclone, acetone*. It was borrowed in Arabic and used to create chemical terms taught in textbooks such as خلون *acetone*; قلون (*alkali + one*); عصبون (*nerve + one*); كظرون (*adrenal + one*).
- **{-ous}** and **{-us}** are English suffixes used to derive adjectives from chemical terms as in *nitrous, chlorous, and hypochlorous*. They were borrowed in Arabic and spelled {ون} with a change in pronunciation to /o:z/ and used to derive hybrid chemical terms as in حديدوز *ferrous*; الرصاصوز (*lead + ous*), زئبقوز *mercuric*; قصديروز (*tin + ous*), كبريتوز *sulphurous*; نحاسوز *copperous*.

Foreign suffixes *-ic, -ous, -ate, -ide, -ite* in hybrid chemical terms used undergo change in pronunciation and become /i:k, o:z, a:, i:d, i:t/ respectively. So, whether those suffixes are in fully borrowed chemical terms or hybrid chemical terms they are pronounced in the same way.

It is noteworthy to say that hybrid technical terms herein are not prolific. Few examples have been used in chemistry schoolbooks for decades. This means that those hybrid terms are used in Standard Arabic.

6. Discussion and Conclusion

Lexical hybrids in Arabic are neologisms, i.e., newly coined words, identifying a new concept (Al-Jarf, 2010) through the process of morphological borrowing between Arabic and other languages such as Turkish, Persian, Aramaic, Greek, Latin, and English. Structural analysis of the hybrid lexemes or compounds in Arabic showed that those that are technical terms are used in Standard Arabic, and in formal as well as informal contexts. They are used less frequently both typewise and tokenwise. They are limited in number and are more permanent as many were coined by specialists and Arabic language academies. On the contrary, hybrid lexemes and compounds that appeared during the Arab Spring were spontaneously created by some journalists, social media activists and political analysts for 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. This is consistent with results of a study by Riionheimo (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.

In addition, most political lexical hybrids in Arabic have less conceptual versatility and conceptual prestige in comparison with native morphemes or specialized hybrid terms used in some domains such as linguistics, chemistry, sociology and others. One of the most important factors responsible for the influx of political lexical hybrids in Arabic during the Arab Spring is the feeling that it is more expressive and prestigious to use English suffixes combined with Arabic bases and that it is more innovative and effective to use foreign affixes or lexemes than pure Arabic words as found by prior studies by Al-Jarf (2016) and Al-Jarf, 2011a).

A third issue is that new political lexical hybrids especially those that emerged during the Arab Spring are not listed in Arabic language dictionaries (Al-Jarf, 2022c; Al-Jarf, 2020a; Al-Jarf, 2014b). Therefore, student translators may use specialized lexical hybrids as equivalents to foreign specialized terminology, but should not give lexical hybrids used in general, political or humorous contexts to equivalent foreign lexemes. In the latter case, students translators should use native Arabic equivalent terms as equivalents to foreign affixes as in saying رهاب rather than {phobia}, اجتماعي instead of {socio}, مائي instead of {hydro} and so on. Explanatory equivalents can be used as well.

Finally, this study recommends that future research focuses on investigating the hybridization phenomenon in Arabic using free and bound foreign morphemes especially those used in IT, computers, social media and business domains (*book, café, cast, center, com, expo, extra, four, gate, hyper, -ium, leaks, libro, link, mania, mart, media, meter, mini, mobile, -pedia, net, pal, petro-, pharma, phone, press, pro, sat, show, soft, super, talk, tech, times, top, tube, web, wiki*) as such hybrids are prevalent in names of websites, blogs, companies, T.V. stations, T.V. shows, satellites, newspapers, press agencies and others.

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