

RESEARCH ARTICLE

Derivation from Native and Loan Acronyms in Arabic

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ABSTRACT

An acronym consists of the first letters of words in a compound as NASA and UNESCO. Acronyms are pronounced as a word or letter by letter (USA). Arabic has native acronyms (DAESH, HAMAS) and borrowed acronyms for names of companies, organizations, news agency (ALECSO, SANA, WATA, Radar, SEDAW). A unique linguistic phenomenon exists in Arabic where a variety of forms are derived from acronyms pronounced as a word, whether native or borrowed. This study explores derivability of acronyms, the class and meaning shifts that some native and loan acronyms in Arabic have undergone and the productivity level of those derived forms. Derivable acronyms under study are ISIS, HAMAS, FATAH, LASER, AIDS, NATO, WATA, GMC, CD, and RADAR. The most prominent and prolific acronym that was coined during the Arab Spring is DAESH (ISIS). It has more than Although its . استدعاش دعشنة داعشية داعشي دعششة Although its and others as استدعاش دعشنة داعشية داعشي original denotative meaning was the "Islamic State in Iraq and Syria" (الدولة الإسلامية في العراق والشام), DAESH has gone through a meaning and form shift. For example, دواعش refers to members of ISIS, or those who support ISIS; داعشية is the phenomenon of chopping heads and bloodshed; استدعاش the act of violence and atrocities. Such derived forms have a negative and pejorative connotation. Forms derived from LASER and AIDS have derivatives; NATO has the derived adjective (ناتاوى) as الربيع عد التي المعنية الم supporters of NATO" ناتاوين ناتاويين NATO Libyan spring", and singular and the plural nouns that are agents الليبي الناتاوي interference in Arabic revolutions". Those forms have a negative connotation and are used by journalists and social media users who oppose the NATO interference in Arab revolutions. GMC, CD and RADAR only take a plural suffix. Results of the analysis of the derived forms, the class and meaning shifts that acronyms in Arabic have undergone, why some acronyms are derivable, and others are not, are reported in detail.

KEYWORDS

Acronyms, borrowed acronyms, native acronyms, initialisms, derivation, derived forms, derivability, derivation from acronyms,.

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1. Introduction

An acronym is a word formed from the first letter(s) of a single word or each word in a compound. Some acronyms are pronounced as a word (*UNESCO, OPEC NATO, Laser, و*اس نق داعش قسد). others are pronounced letter by letter, which are also called initialisms (*UN, EU, USA, BA, DNA, MBA, م*م م م م (Al-Jarf, 2021; Al-Jarf, 2015; Al-Jarf, 2011; Al-Jarf, 2005; Al-Jurf, 1995).

Although thousands of acronyms exist in English, Arabic has a limited number. Arabic acronyms appeared quite recently due to globalization and contact with other foreign languages, mainly English via the media (radio, TV, newspapers), social media, trade, science, and technology. Arabic acronyms are uniquely and spontaneously created by native speakers. As in English, Arabic acronyms consist of the initial letters of compounds referring to names of educational institutions, companies, organizations, businesses, industries, trade names, government and news agencies and others. They are used in medicine, technology, social media, politics, economics as well as common language. Arabic has three types of acronyms as follows: (i) original Arabic acronyms are (Saudi Educational and Psychological Association); حشد (Jordanian, People's Democratic Party); HAMAS calm. (Islamic Resistance Movement); FATAH فتر (Palestine Liberation Movement); ARAMCO; يونسكو (Syrian Democratic forces); upusco) Saudi New Agency; upusco) Social acronyms pronounced as a word أرامكو ARAMCO; يونسكو (Sigrian Democratic forces); upusco) Saudi Sigrian Liberation (Intercepting Context) (Inte

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UNICEF; الأونروا ;ASA الأيزو ;SOREX فوركس ;ASA أياتا ;AEAN الفيفا ;ASEAN الأسيان ;OPEC أوبك ;ASA جات ;NASA فوركس ;IATA فوركس ;IATA ياهو *YAHOO*; 19 سيداو ;*COVID-19 سيد*او ;*CEDAW*, and (v) transliteration of English acronyms of names of Arabic news agencies, companies, organizations and universities as in اسيدان *KAUST*, سيدان *SANA* أحسن *SIDC*, and أحسن *AHSAN* (Al-Jarf, 2021; Moszczynski, 2014; Al-Jarf, 2015; Al-Jarf, 2011; Al-Jarf, 2005; Al-Jurf, 1995; Al-Jarf, 1994).

2. Literature Review

Although a multitude of acronyms exist in many languages, whether native or borrowed, prior studies that investigated the use of acronyms in some languages are very few. A study by Izura & Playfoot (2012) analyzed 146 acronyms indicated that acronym naming is a complex process affected by variables such as age of acquisition, orthographic and phonological length, bigram, and trigram frequencies, number of orthographic neighbors, frequency of usage, voicing characteristics, print-to-pronunciation patterns and imageability.

In another study, Ndlovu (2012) investigated the presence of abbreviations and acronyms in Ndebele, a language spoken in Zimbabwe, and how they are encoded into the Ndebele noun system. The derived nouns from borrowed acronyms and abbreviations follow the borrowing and noun rules in Ndebele. Some areas where abbreviations and acronyms are prevalent are in specialized terms in particular fields where they form part of the jargon or occupational variety for those disciplines. Abbreviations and acronyms are also used to shorten names of organizations, names institutions, academic titles, titles of persons in academic circles and courses. Over time, most of the abbreviations and acronyms undergo semantic changes to become noun stems, not merely letters standing for words. Ndebele lexicalizes all abbreviations due to its phonological system, with marginal differences between an acronym and an abbreviation. Acronyms in Ndebele undergo phonological, as well as morphological and semantic changes. Both English and Ndebele use the Latin alphabet but there are phonological differences in the same symbols. Ndebele consonants are given the vowel /-a-/ sound in pronunciation to differentiate it from English pronunciation, which has an implication for the use of acronyms in Ndebele.

Regarding the morphological, graphic, and semantic changes that acronyms undergo, Bennane (2019) examined the factors that affect the entrance of acronyms as independent lexical units and the influence of the acronym graphic form on its lexicalization. Results revealed that the relation between an acronym and its meaning is stronger than that between the acronym and its full form. The acronym's graphic form, frequency of using an acronym, and the occurrence of the acronym in many domains and aspects of daily life help in acronym lexicalization. Acronyms written in lowercase like *laser* and *radar* are acceptable in English.

In a comparative study of the structure and frequency of acronyms in Persian, English, Arabic and Turkish by Famian & Sokhanvar (2016), results showed that English has the highest number and highest frequency of acronyms, followed by Turkish, then Persian and Arabic. The researchers found that more than 50% of the acronyms consist of three letters. The alphabet typology plays a more significant role in producing and using acronyms than the morphological typology.

In another comparative study of acronyms in English and Arabic by Hamdan & Fareh (2003) to examine the mechanisms of acronym formation and the contexts in which they are used, results indicated that Arabic acronyms are less frequent and more context-restricted than English acronyms. This might be attributed to linguistic, cultural, and scientific factors.

Since acronyms are a universal phenomenon, and their formation is governed by well-formulated and explicit principles based on regularities, criteria for forming acronyms in English and Arabic were suggested by Mahadin (2011). The aim was to have a universal explanatory approach in order to avoid inconsistencies and overlap in terminology. In addition to the general principles, there are language specific mechanisms to cater for special cases. structural analysis and usage-related aspects should be taken into consideration. In general, acronyms are more common and popular than their full form. This may result in lexicalization and may consequently form the base form for other word-formation processes.

Further studies in the literature, such as Al-Jarf (2023), Kamel (2017); Humeid & Altai (2013); Al-Jarf (2010); Al-Qinai (2007), Al-Qinai (2000), and Mousli (2002), investigated the difficulties that Arab college students have in translating English acronyms to Arabic. Some of the problems detected were transliterating English acronyms and single words/terms from the source text and inserting them in the Arabic translation, in addition to problems of equivalence and similarities between English abbreviations and acronyms and their Arabic translation.

2.1 Derivation in Arabic

Arabic has several word formation processes for generating new lexical items. The most prominent and productive is derivation where lexical items are formed from a triliteral or quadrilateral root and a set of vowels that alternate with the root consonants. Different derivational patterns (paradigms) are used to derive agents, patients, abstract nouns, nouns of occupation, place, time, diseases, tools, appliances, relative adjectives, the diminutive and others. For example, many words are derived from the verb كتب

"wrote" such as كتاب book; كتاب books كتاب books كتاب books; مكتب books; مكتب books; مكتب desk, office; كتاب library, bookstore; كتاب writing; writing; كتاب male author; demale author; كتابت demale author; كتاب female authors; كتاب corresponded with; كتاب to make someone write; كاتب written; written; or a person asking for something; اكتتاب subscribed; اكتتاب wrote to another person asking for something; استكتاب writing to a person asking for something; اكتتاب subscribed; اكتتاب wrote to another person asking for something; ستكتاب derived from nouns, and even some acronyms, through the process of back-formation as in chapter, بقرب to index, المكتاب to index, فهرس indexing, مكتوب author; dectrified (Al-Jarf, 2015; Al-Jarf, 1994a; Al-Jarf, 1994b).

Not only does Arabic derive words from native roots, but it also derives words from loan words for which no derivatives exist in the doner language. The application of derivational patterns to loanwords constitutes a unique linguistic phenomenon in Arabic, especially when Arabic derives forms from letters, prefixes, prepositions, proper nouns (names of countries& people), social media terms, political, medical, psychological terms borrowed from English, French, Italian, Spanish, Greek, Latin, and others. For example, *Facebook* is a noun in English and no derived forms are derived from it, but in Arabic, Facebook users, who are common people, created a derived action noun فسيكة (**Facebooking*), a derived verb يفسبك (**Facebook)*, and agents/doers) فسبكالي (**Facebookers*) (Al-Jarf, 2021).

Another unique linguistic phenomenon in Arabic is the derivation of a variety of forms from acronym pronounced as a word, whether native or borrowed. Here, verbs, adjectives and abstract nouns are derived from some native as well as loan acronyms that are pronounced as a word but have no derived forms in the doner language. Acronyms, which are compounds, and which are used to carry a certain lexical meaning, lose some of their lexical meaning and start to assume a new denotative and connotative meaning. To the best of the author's knowledge, this linguistic phenomenon has not been investigated by any prior studies in the literature on native or borrowed acronyms. Therefore, this study aims to show examples of native and borrowed acronyms that have derivatives Arabic; how many forms are derived from each and why some acronyms are derivable, others are not.

3. Data Collection and Analysis

A corpus of native Arabic acronyms as well as borrowed acronyms pronounced as a word was collected from informants, the author's own collection, multiple online resources, TV shows, and social media was was collected and analyzed. Acronyms and their derived forms were verified by informants and in dictionaries.

4. Results

Data analysis showed the following:

- 1) Derived forms from native Arabic acronyms as in:
 - Hamas¹: حمساويين (Adj/N, member of Hamas); حمساوية (N, broken Pl, members of Hamas); حمساويين (N, regular Pl, members of Hamas). These forms are mostly used in Colloquial Arabic, i.e., informal contexts. In formal context رجال men of HAMAS is used instead.
 - فتحاوي (Adj/N, member of Fatah); فتحاوية (N, members of Fatah). The contexts in which they are used are similar to HAMAS.
 - DAESH ³ داعش (ISIS) which was created during the Arabic Spring, is very prolific (productive) and has more than 50 derived forms as in: تقش (V, to invade a region and force residents to be like DAESH, slaughter or drag a person without a legitimate reason); الدَّعْش (action N; adj referring to a person who threatens a lot or attacks others for no reason); أدعاش (V, to make someone a member of DAESH); إدْعَاشاً (N, making someone a member of DAESH); أدعش (V, to ake someone a country or region into a DAESH area; systematic intellectual support of DAESH, whether through community solicitation or electronic recruitment, the act of violence and atrocities; تدعشن & استدعش (V, to ask somebody to join ISIS), to do something in favor of ISIS, to behave like ISIS; uke turns in that; الدعش (N, a person who calls to join/support ISIS); to take as a dwelling place); أذا (N, a person who calls to join/support ISIS); (V, to settle in ISIS state); الدعش (V, seize or kill someone unlawfully based on suspicion; to invade a territory and force its people by the sword; to imitate ISIS; to be loyal to ISIS); IC, the deadliest ISIS, believing in ISIS ideology, a noun describing the ISIS swordsman); الدَعَش (N, tools used by ISIS members to in looting, plundering, and seizing other people's property; (N) of

¹ Arabic acronym meaning Islamic Resistance Movement

² Arab back acronyms meaning National Palestinian Liberation Movement

³ <u>https://www.europarabct.com/49462-2/</u>

exaggeration referring to a person who is an ISIS influencer, believes in ISIS philosophy and sophism); دَعَاش (N. a person who chooses to live with ISIS); دُوَيْعِش (diminutive form); الدِّعَاشة (N, name of discipline specialized in studying دَعْشَ ;(action N, killing and slaughter)) الدّعاشة (N, practicing ISIS ideology freely) الدّعاشة (N, specialist in ISIS) (N, agent, i.e., a person who threatens a lot, attacks others illegally, sticks to the ideology and laws of ISIS); دَعْش (N, patient (object), a person exposed to ISIS actions); دَعَّش (V, to have an excessive ISIS behavior; to affiliate someone with DAESH; مَدْعَش no دَعْش (N, state/emirate of الدّعيش); تدعيش (N, excessive behavior of ISIS); مدغش (N, state/emirate of msesculin N) (آلدُّعَشَان (N, disease names, ISIS phobia, a mental abnormality); الدُّعَشَان (N, disease names, N); أدْعَشَا (masculine N); دَعْشاء (feminine N); دعشاوي (Adj, a person who kills a lot); دَعْشاء (V, went to live with DAESH); (action N); دَعْوَشَةً (V): دَعْوَشَ (V): مَعْوَشَ (V): مَعْشَشَ (N, agent): المُدَعْشِش (V): مَعْوَشَة (V): م N, a person who believes in ISIS or supports it); الدَّعْشِيّة (N, ISIS ideology); الدِّعْشينيّ (N, one of the upper ISIS leaders, who firmly believes in ISIS); الدعشيّون (N, PI, ISIS members); الدعشري (N, the most daring in robbery, plunder, oppression, and adversity); دَعُوشة & دَعَوُش (places where ISIS ideology is practiced for a fee); دَ stabs a lot); دواعش (N, broken Pl, DAESH followers); الدُّعَيْعِشْ & الدُّعَيْعِشْ الدُويْعِشْ (N, diminutive form showing disrespect, belittling and sarcasm); المِدْعَاش (N, a tool for measuring the level of obedience or submission to ISIS, a thick, sharp sword); المدْعَشة (singular N, a school for preparing ISIS followers/fighters, teaching people ISIS ideology); مدّاعش (broken plural N); مدْعش (feminine N referring to a woman who takes care of female ISIS followers and teaches them their ideology and way of life and their assigned roles); الأدْعُوشَة & المَدْعَشَة (N, a massacre/confrontation of ISIS); N, patient/object case, a) مدعوش (N, an ISIS brigade); الدوعشة (action N.); دواعش & الدُعَّش (N, an ISIS brigade) الدوعشة (N, an ISIS brigade) person who was subjected to ISIS actions) (Jedda, 2019).

The above examples show that DAESH (ISIS) has a variety of derived forms, several derived verbs, nouns and adjectives following Arabic derivational paradigms. Although its original denotative meaning was the *"Islamic State in Iraq and Syria"* (الدولة الإسلامية في العراق والشام), but DAESH has gone through a meaning and form shift with more than 50 forms each of which has a specific meaning. For example, دواعش refers to members of ISIS, or those who support ISIS; is the phenomenon of chopping heads and bloodshed; استدعاش the act of violence and atrocities and so on. Most of the above derived forms have a negative and pejorative connotation. All the derivatives are used in Standard as well as Colloquial Arabic, i.e., in formal and informal contexts.

- 2) Derived forms from borrowed (loan) acronyms as in the following:
 - لليزر (V, use laser); ليزرة (Adj, treated with laser); ليزري (Adj, يزري (Adj, يزري (Adj, يزري)) ليزرات (N, laser treatment); ليزرات (N, regular feminine PI, LASER's). LASER entered the Arabic language decades ago. The derivatives herein are used in Standard Arabic and have a neutral meaning as LASER has a technical meaning.
 - واتاوي: (Adj, related to WATA; N, member of WATA); واتاوي (N, regular masculine Pl, *members of WATA association*). These derivatives are used in informal and Colloquial Arabic, blogs and the WATA website. They have a positive connotation.
 - الناتو NATO: ناتويين (Adj, belonging to, or having the characteristics of NATO); ناتويين (N, regular masculine PI, members of NATO as in الربيع الناتوي *the NATO Spring*). These derivatives are used in informal and Colloquial Arabic, and on social media. They have a sarcastic and derogatory meaning.
 - الإيدز AIDS: أيدز (V, caught AIDS): مأيدز (Adj, Adj, infected with/having AIDS). The derivatives are used in Colloquial Arabic.
 - رادارية (RADAR: رادارات) (N, regular feminine PI); راداري (masculine Adj); رادارية (feminine Adjective). It is used in both Standard as well as Colloquial Arabic as it is a technical term.
 - سي دي CD: سيديهات (N, regular feminine PI) only. It is used in Colloquial Arabic as the equivalent to CD in Standard Arabic is "الأقراص المدمجة" *compact disk*.
 - GMC: جيمسات (N, regular feminine PI, GMCs); موس (broken PI, GMCs). Although GMS is an initialism that is pronounced letter by letter in the doner language (English), it is pronounced as a word in Arabic /dʒims/ due to insertion of short vowels in between the consonants as it is the case in Arabic words. The two plural forms are used in Colloquial Arabic (Al-Jarf, 2020b). /dʒims/ in Arabic has undergone a meaning shift as it refers to any "van" whether it is manufactured by GMC or another company like Toyota, Hyundai or even Lexus.

On the other hand, Arabic speakers have not derived forms from most acronyms such as OPEC, UNESCO, FAO, UNICEF, ASIAN, CEDAW and others probably because of the length and structure of some acronyms. Some acronyms do not match any native Arabic word in pronunciation, for phonotactic reasons or because the contexts in which such acronyms are used do not require the use of any derived forms, i.e., there is no need to use a derived verb or a noun.

⁴ World Arab Translators' Association

Although NASA has the same length and rhymes with WATA and NATO, no forms have been derived from it by Arabic speakers. Radar, CD, GMC are not derivable, and can only be inflected with the Feminine Plural suffix {-a:t} (Al-Jarf, 2020b; Al-Jarf, 1994b).

Finally, it is noteworthy to say that many acronyms pronounced as a word can be attached to the definite article {al-} at the beginning of the acronym whether they are derivable or not as الآسيان UNESCO; الفاو (ASEAN, but not الفاو (ASEAN, but not i) wATA; الأسيان NASA.

5. Discussion

Data analysis has demonstrated four levels of derivability: (i) cases where a full range of forms can be derived (DAESH, Laser); (ii) cases when only very few forms are derived (NATO, WATA); (iii) cases where only plural suffixes are added; (iv) the majority of English acronyms borrowed in Arabic as well as most native acronyms are not derivable.

In addition, data analysis has revealed that derivability (selection of the derivatives) is not random. It is a complex process affected by a number of variables/factors that include the following:

- Properties of the base, i.e., the number and type of consonants in the acronym and whether it is similar to consonant combinations in Arabic words. The pronunciation of the acronym should be compatible with the Arabic phonotactics. The borrowing should conform to the Relevance Theory, which states that derived forms should be homophonous to existing words. In ليزرة which is derived from laser the triliteral root /l z r/ was extracted which is similar to /j d l/ in /jadwal/ "schedule'.
- Whether internal modifications can be made in the borrowed acronym to allow the creation of derivatives, i.e., whether the morphological mechanism can adjust borrowed acronyms into any of the Arabic derivational patterns with or without the deletion of a syllable and/or some of the consonants (GMC).
- The frequency of using an acronym and its derived forms. If the derived forms are frequently and constantly used in
 many aspects of daily life, this will help in its lexicalization. This means that acronyms that are used frequently,
 constantly and in several domains will be treated as any other lexicalized item in Arabic. NATO has a derived
 adjective/noun in Arabic, but NASA does not, probably because NATO is more frequently used than NASA in the news,
 media and social media. The adjective/noun derived from NATO appeared during the Arab Spring when NATO forces
 entered Libya and some people approved the NATO intrusion in Libya, others did not. Some journalist coined the
 adjective and were using it sarcastically by saying 'the NATO Arabic Spring'.
- The need for using derived forms. There is no need for using a verb and a noun referring to NASA, UNESCO and others.
 When journalists needed a form from NATO to use in a sarcastic context, they created the adjective/noun using if rom it.
- Forms derived from acronyms should be phonetically acceptable to the Arabic speaker's ear.

Those factors are consistent with findings of prior studies in the literature such as Bennane (2019), Altakhaineh (2017), Lak (2014), Izura & Playfoot (2012), Bueasa (2015) and Hafez (1996), although the focus in those studies is on acronym formation, acronym naming, plural formation, and phonological adaptation. The same generalizations made in those studies can be applied to derivation from borrowings, regardless of the kind of borrowed unit.

By contrast, acronym length, the number and types of syllables and the position of stress in the acronym affect the phonological adaptation and plural formation in borrowings, mentioned by the above studies, do not seem to affect derivability. This is evident in cases where borrowed acronyms of the same length, same structure and same stress pattern are not equally derivable: one case is derivable, the other is not as in *WATA, NATO & NASA*.

Furthermore, there are no unified rules that govern derivability of acronyms in the present study because there are so many exceptions, and no conformity in the degree of derivability, i.e., number and type of derived forms from borrowings, and whether an acronym is derivable or not. This finding is contradictory to findings of prior studies that found consistency in assigning number and gender markers to loanwords such as Al-Quraishi & Mansour (2020), Mohammed & Samad (2020), Hamdi (2017), Dashti & Dashti (2017), Laks (2014), Al-Saidat (2011), Badarneh (2007) and Hafez (1996).

6. Conclusion and Recommendations

This study investigated derived forms from foreign as well as native acronyms pronounced as a word in Arabic. This phenomenon cannot be generalized to all loan and native acronyms in Arabic. There are variations in how many forms can be derived and which acronyms are derivable. Derivation from acronyms is spontaneous. Common people, social media users, and some journalists derive some derived forms from acronyms to fulfil a need or a purpose. Some of those derivatives are used in Standard Arabic (SA) only as in *DAESH, HAMAS, FATAH*, and *Laser*, others are used in Colloquial Arabic (jaci). They have also revealed variations in the types and how many forms are derived from each. Therefore, this study recommends raising translation and language students' awareness of the following issues: (i) Which derived forms are used in SA, which ones

are used in CA and should not be used in SA contexts; (ii) Some derived forms used in Arabic should not be translated to English because they are considered ungrammatical as in *laser اليزرات ليزرات ليزال ليزرات ليزال ليزرات ليزرا ليزرات ل*

Secondly, the current study was based on analyzing derived forms of 10 acronyms only. There is a dearth of resources showing all borrowings, and only one inadequate dictionary of Arabic etymology by Abu-Hashimah's (2007) is available. Therefore, Arab linguists, translators, lexicographers, and researchers are encouraged to compile a comprehensive dictionary of borrowings and etymology in Arabic that covers all borrowings from as many languages as possible. The list should be organized in the form of a monolingual or bilingual dictionary/glossary with entries. Each entry should include a borrowing, the language from which it was borrowed, whether it is used in CA or SA, its derivatives in Arabic, the part of speech of each derivative and its meaning (Al-Jarf, 2020a).

Finally, a test of derivability can be given to a sample of language and translation students. The test may contain derivatives from acronyms such as DAESH derivatives and unused derived forms. The students can be asked to make judgments as to why some forms can be derived and used, others cannot and why and how each can be translated. This would lead to a deeper understanding of the derivability issue as used by native speakers of Arabic.

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