Derivation As The Main Way Of Adapting New Terms To Arabic

Raheem Ali Al-foadi

University of Baghdad

ARTICLE INFORMATION

ABSTRACT

The classical Arabic grammarians firmly worked to maintain the Arabic by adapting the non-Arabic terms and applying the potential abilities of phonological, morphological and semantic systems of Arabic language to make foreign terms adaptable. This process was made by several ways on which the linguists relied to keep the identity of Arabic. Derivation is the most effective way by which the non-stopped modernization of Arabic is done. Derivation makes Arabic able to receive the foreign terms and adapt them to itself; it also works as the most important way of enriching Arabic with native words that are semantically equivalent to foreign terms. The ability of other ways to adapt foreign terms to Arabic is checked by the mechanism of comparing them with derivation. This mechanism is based on five criteria: (1) semantic maintenance; (2) easy cognitive access; (3) morphological pattern set; (4) ability to recreate according to the pattern set; (5) applying the Arabic language system of self-defense. The results of this comparison show that derivation is the safest and the most effective way to adapt and assimilate foreign terms to Arabic, it must be called "the trusted keeper" of Arabic.

1. Introduction

Terminology and modern neologisms developed by different nations aren't understood without recognizing their real meanings by native speakers of any language. The classical Arabic grammarians fixed non-arabic terms in dictionaries and indicated to their original languages to make this problem easy to solve using the existent ways of creating Arabic equal terms and adapting them to Arabic. The classical Arabic lexicographers strictly worked to distinguish the original Arabic words from others in the early successful attempts of making Arabic lexicography. Al-Khalīl ibn Aḥmad al-Farāhīdī clearly stated about non-Arabic words in his dictionary (Al-ʾAin) [1]. The other Arabic classical dictionaries also indicated to al'daḫīl (word adopted from another language; non-Arabic) and to al-muʿrab (transformed into Arabic; arabized). Other terms were used to mark an etymology of words in Arabic dictionaries like ṣiḥāḥ (Arabic original word) and al-mūalld (word derived from Arabic origin by Arabic rules, but it wasn't used by old Arabs) [2], for instance, ṣaīraf (money-exchanger – from "ṣrf", to divert; turn; change money); ṣaīqal (burnisher; polisher – from "ṣql", to polish; make bright; make brighter). Such examples show that classical Arabic grammarians chose the exact root which the new term is semantically associated with and then they created the new term by Arabic pattern set (faīʿal) to give the created terms ability to be assimilated and adapted to Arabic.

The Arabic grammarians had strictly attempted to maintain Arabic language using the safest ways of adapting new foreign terms to Arabic. This situation was caused by requirements of the past. These requirements were performed by Arabic language when the universal civilization of Arabs displayed the abilities of Arabic to create and adapt the scientific and cultural terms to itself. We should investigate these ways by which the terminological concepts are transferred to Arabic and display the most effective classical and modern ways of adapting foreign terms to Arabic used by old and modern Arabic grammarians. The classical ways are:

1.1. al-ištiqāq (derivation)

Derivation is a morphological term used by Arabic grammarians to refer to generating a new word from another, both words have the same origin (three cardinal consonants), determining their material and indicating to mutual original meaning [3]. Arabic derivation practically refers to generating a new word from another; both words have

the same root and the same general lexical meaning, but they aren't alike morphologically. Their lexical meaning is guaranteed by the original elements of a root repeated in these two words. The grammatical meanings are different according to the pattern sets with which the phonetic structures of new derived words are rhymed, for example, (1) qaṭaʿa (to cut – from "qṭʿ", to cut, formed by the pattern set faʿala); quṭiʿa (it was cut – from "qṭʿ", to cut, formed by the pattern set fuʿila); qāṭiʿ (cutting – from "qṭʿ", to cut, formed by the pattern set fāʿil); (2) ḥamala (to bear; carry – from "ḥml", to bear; to carry, formed by the pattern set faʿala); ḥumila (it was carried – from "ḥml", to bear; to carry, formed by the pattern set fuʿila); ḥāmil (bearer; bearing; carrier; carrying – from "ḥml", to bear; carry, formed by the pattern set fāʿil). This way is called general or small derivation and there are other types of it: (1) big derivation; (2) biggest derivation; (3) al-naḥt (blending). It is safe to say that derivation is able to keep the identity of Arabic since it requires that the foreign terms should be formed in accordance with Arabic pattern sets. The pattern sets of derivation were used as criteria for checking the ability of arabized terms to be assimilated to arabic, for example, dirham (dirham) formed by the pattern set of hijraʿ (crazy; stupid); dinār (dinar) coined by the pattern set of dimās (dark drift); rustāq (place of villages and farmed lands) formed by the pattern set of qurṭās; (paper; sheet of paper) [4].

Practically, the inflected morphology of Arabic is able to offer a limitless potential of deriving new terms by analogy, it depends on a wonderful system of triconsonantal roots. Roots are able to carry specific meanings and generate many variant verbal or nominal forms by their high ability to be inflected according to the morphological pattern set, for instance: (1) the root "drs" which means (learning) – darasa (to learn), durisa (it was studied), dāris (learner); dars (lesson) and durūs (lessons) [5]; (2) the root "ktb" that means (writing) – kataba (to write), kutiba (it was written), kātib (writer) and kutāb (writers); (3) the root "ḫlq" (to create, to make) – ḫalaqa (to create), ḫuliqa (it was created) and ḫāliq (creator).

1.2. al-taʿrib (arabization)

Arabized terms mean the words formed by the rules of Arabic language or resembled to Arabic words [6]. An arabization may be also defined as a process of adapting foreign words by applying the rules of Arabic phonology and morphology to them and making foreign terms able to be used in Arabic, for instance, dirham (dirham – phonetic arabization from Persian diram); ṣaīqal (burnisher – morphological arabization formed by pattern set faiʿal); ṣaīraf (money-exchanger – morphological arabization formed by pattern set faiʿal).

It is worth noting that classical Arabic grammarians exactly distinguished the arabized terms from these ones borrowed from another language – calques. These words (calques) can be seen in nowadays Arabic, for example, radio (radio); heater (heater); telephone (telephone); traffic light (traffic light), but later they were adapted by derivation, here are some of them: miḏīāʿ (radio); midfa (heater); hātif (telephone); išāra murūr (traffic light). To make this phenomenon clearer for Arabic reader, we will give some Arabic terms borrowed by English and the Arabic native speakers can cognize their meaning according to an arabic root, for instance, algebra (mathematic term borrowed from Arabic and derived from the arabic root "jbr", to adjust; repair; restore to good condition); albacore (term borrowed from Arabic and derived from the arabic root "bkr", to be early at or get up early); attar (name of essential oil; volatile oil was borrowed from Arabic and derived from the arabic root "ʿṭr", to aromatize). The terms algebra; albacore and attar are English borrowed from Arabic, therefore an Arabic reader is able to cognize them by the main elements of root with which the meaning is associated.

These definitions are given to arabicization many centuries ago, but they show the actual ability of Arabic to adapt foreign terms by its rules, therefore the modern definitions of this phenomenon aren't able to oppose or to negate the scientific facts made by classical Arabic philologists. The arabicization is understood as a way of adapting foreign terms by the rules of Arabic. According to these rules formed by Arabic linguists, an arabicization can be defined as the process of adapting non-Arabic terms to Arabic language by applying the rules of the phonological, morphological and systems of the language to the foreign terms [7].

One of the most important questions of arabization is are the arabized words able to be assimilated to Arabic or can they exist according to the derivational system of Arabic? The classical Arabic grammarians investigated this problem and solved it by establishing the necessary rules. Ibn Jinni affirmed that the derivation from arabized words is possible only when they are formed by the Arabic pattern set [8]. He proved his rules by the history of Arabic language when Arabs derived from arabized terms by pattern set like mudarham (formed as the shape of dirham).

For many decades, the language academies in Arabic states have attempted and done their best to make the creation and adaption of new terms, standardized by trying to set strict mechanism for adapting foreign terms to Arabic, in accordance with the classical ways. These ways are classified differently by language researchers, but the majority of them have taken in to consideration the scientific opinions of classical Arabic grammarians who considered derivation the main way of creating and adapting new terms to Arabic, for instance: (1) derivation; (2) istinbāṭ (discovery); (3) arabization; (4) derivation by translation (loan translation / calques) [9]. We will compare all these ways with each other to discover their abilities to assimilate foreign terms to Arabic.

2.   Methods Of Study

In order to do a language analysis of the ways by which foreign terms are adapted to Arabic language, the following methods were used: descriptive, comparative and the methods of semantic and linguistic analysis. The descriptive method was performed to characterize the classical and modern ways of adapting new terms to Arabic. An objective description of the Arabic ways of adapting foreign terms to Arabic, is taken into consideration to describe

the language features of the ways of adaptation. The comparative method was used to show the ability of each way to adapt foreign terms to Arabic by comparing them with derivation which is highly able to adapt non-terms to Arabic. The semantic association of adapted terms with Arabic roots was analyzed by the semantic method on which the cognitive processes were based to discover the cognitive relation of adapted terms with a real or a metaphoric meaning of Arabic roots.

3.   Disussion And Results

Keeping the original meaning of root, derivation is able to give native speakers of Arabic language an easy access to the meaning of foreign term, adapted to Arabic by derivation. Derivation is applied to find a nearest semantic equivalent in Arabic, using the system of three radical consonant roots on which the Arabic language is based, and then it will be formed by the well-known Arabic morphological set – standardized set of Arabic derivation. For example the word motor to be adapted to Arabic, we have to find an equal semantic root in Arabic and then form it by the appropriate Arabic set by which "the noun of tool" can be derived. As the word motor means an engine which operates a machine, the equal semantic root is (ḥrk) "to operate, make move", and the morphological pattern (mufʿal) is generally used to form a noun of tool. The word motor can be adapted to Arabic language by muḥḥrak (motor).The others are made by analogy: mukttaf (condenser – from "ktaf", to condense); muʿddal (modulator – from "ʿdl", to modulate); muḍḥḥam (amplifier from – "ḍḥm", to amplify); muḥūūal (transformer – from "ḥūl", to transform); muʿzzaz (booster – from "ʿzz", to strengthen; commutate); murammaz (coder from "rmz", to code); mubaddal (commutator – from "bdl", to change; commutate).

The ability of derivation to keep the entomological bases of Arabic root is clear when it's used to adapt foreign terms to Arabic language, because the semantic association between the elements of root and derived term is kept. This process gives the Arabic native speakers an easy access to recognize the lexical meaning of a derived term by the radical consonant elements whose meaning is associated with new terms and to recognize the real language features of new adapted terms by the morphological pattern. The terms indicating to tool by their morphological standardized set which enables the Arabic native speakers to understand the meaning of tool as long as they are formed by the pattern set that the new terms must be rhymed with. For example, the well-known Arabic pattern set (mifʿal) with which the noun of tool must by rhymed to express such activity that can be made by this tool, when the cardinal consonant roots clearly indicate the meaning that they associated with, for instance, miṣʿad (Elevator – from "ṣʿd", to go up; move up; elevate).

To check these ways of adapting foreign terms to Arabic, we have to compare them with each other to show the most powerful one which is able to assimilate the foreign terms to Arabic and to make the semantic and grammatical structures of them easy to understand by Arabic native speakers. This job isn't easy, because depending on the type of word-formation and inflection, the languages are divided into different groups. Classification is determined by the way that new words are created by. Language is not something finished in general; it is always renewed by defined rules [10]. For checking, we have to create the mechanism of comparing which must be investigated in accordance with five criteria, here are they: (1) semantic maintenance; (2) easy cognitive access; (3) pattern set; (4) ability to recreate new terms according to pattern set; (5) applying the Arabic language system of self-defense [11].

Arabization as a way of adapting foreign terms to Arabic language, doesn't able to perform the semantic maintenance by which the Arabic native speakers are recognizing the meaning of an original Arabic root by three consonants. The meaning is always associated with these consonants [12], but the arabization is based on doing some simple phonological or morphological changes to adapt a foreign terms to Arabic, for instance, dirham (dirham) or it makes no essential changes, for example, al-komuter (computer), fāksmaili (fax mail), but when we will adapt these terms by derivation, the Arabic native speaker will easily understand them as follows: ḥāsūb (computer – from "ḥsb", to count, think, consider, rate); nāsūḥ)fax mail – from "nsḥ", to copy; duplicate; make an exact cope of; reproduce). In these examples, we can see that an arabization as a way of adapting foreign terms, isn't able to maintain the semantic features of Arabic root when the foreign terms fāksmaili and al-komuter were adopted by arabization, because the association of meaning with the elements of roots is lost. There is no easy access to recognize the meaning of roots with which arabized foreign terms must be associated with in fāksmaili and al-komuter. These terms aren't able to be productive and they don't give new words according to Arabic pattern set. Arabic terms adopted by arabization break the Arabic language system of self-defense, because this system works as a exact mechanism by keeping the association of adapted term with the meaning of original Arabic root which is able to be highly productive by derivation, for example, the same terms when they are adapted by derivation, they will give the native Arabic speakers an easy access to recognize the real meaning of Arabic root (nsḥ) (to copy; duplicate; make an exact cope of; reproduce); (ḥsb) (to count, think, consider, rate) by the cognized semantic relation of Arabic roots (nsḥ) (ḥsb) with adapted by derivation foreign term nāsūḥ (fax mail); ḥāsūb (computer). These terms adapted by derivation are created by Arabic pattern set meaning the noun of tool fāʿūl, for instance, jārūf (shovel); ṣārūḥ (rocket); nāqūs (bell); nāqūr (horn); sāṭūr (chopper), and they are able to be highly productive by generating new Arabic words.

Foreign terms adapted to Arabic by derivation always maintain the semantic association with an original Arabic root: mikbas (compressor – it is associated with Arabic root "kbs", to compress); miṭqāb (punch – it is associated with "ṭqb", to bore; to make a hole). Arabic native speaker cans easily recognize the meaning of adapted term, because he relies on a root elements to understand the essential meaning of a term, and then he will know the derivational meaning of adapted term by pattern set which indicates to the derivational meaning by its structure. Terms created and adapted by derivation terms are able to be productive in Arabic since they can give new Arabic

words. Adapted terms like mikbas (compressor); miṯqāb (punch) nāsūḫ (fax mail); ṣārūḫ (rocket) are made according to the system of self-defense in Arabic as long as they are associated with Arabic roots, formed by Arabic pattern set, and they are able to produce new words in Arabic.

The results of comparing arabization with derivation as two ways of adapting new terms to Arabic testify that arabization isn't a save way to make foreign term adapted to Arabic because: (1) semantic maintenance of Arabic root is broken since the arabized term isn't associated with an Arabic root; (2) native speakers of Arabic aren't able to get easy access to the essential meaning of arabized term because the terms sound strangely for native speakers and an inaccessible to be cognized; (4) arabized terms aren't always formed by Arabic pattern set. Arabs recognize the essential meanings of words by the elements of root, for example, (k-t-b) which essential meaning is writing in kataba (to write); kātib (writer); kutāb (writers) or (ḫlq) ḫalaqa (to create); ḫuliqa (it was created); ḫāliq (creator), and the derivational meanings are understood by pattern set. It means that the derived words in Arabic must be exactly rhymed with pattern sets; (5) these terms adapted to Arabic by arabization are out of the system of language self-defense.

Translation as a way of adapting foreign terms to Arabic isn't able to be compared with derivation since it relied on it and other ways to find the equal Arabic word to the foreign term. The results of comparing derivation with other ways are quite enough to show the ability of translation to adapt foreign terms to Arabic.

Another way that we compare with derivation is al-istinbāṭ (discovery) represented by searching for any metaphoric association of foreign term with arabic root and forming it by the Arabic pattern set; it is also called a metaphoric derivation [13]:"qiṭār" (train; originally used to describe a group of camels) [9]. This way is fully based on the rules of derivation since it requires the semantic association with Arabic root, full rhyming with Arabic pattern set, but it differs from derivation. The al-istinbāṭ or discovery always consists with the metaphoric meaning of Arabic words. However, discovery needs an association with an Arabic word and it is formed by the pattern set; it isn't able to give a direct cognitive access to know the essential meaning of adapted term as the derivation does.

4. Conclusion

This study shows that derivation is the safest way used by classical and modern Arabic linguists to adapt foreign term to Arabic; it is also works systematically to keep the rules of arabic language by which the foreign terms can be adapted and able to produce new arabic words. Derivation is practiced actively in Arabic to adapt foreign terms because it: (1) guarantees the semantic maintenance of Arabic roots; (2) gives an easy cognitive access to recognize the essential meaning of adapted terms; (3) is able to form terms by pattern set; (4) makes the adapted foreign terms able to produce new words according to the pattern set; (5) applies the language system of self-defense; (6) saves the order of radical consonant by which the meaning of adapted terms is recognized.

References

1. 1.Al-Farāhīdī A.A.. Mahdī Makhzūmī, (Ed), Ibrāhīm Sāmarrā'ī (Ed). (1980-1985). Kitab Al-'ayn. Wizārat al-Thaqāfah wa-al-Iʿlām, Baghdad, Iraq (In Arabic).

2.Al-Ḥamzawy M.R. (1986). Al- Luġa Al-'arabia wa al-ḥadatha, (2-d ed). Beirut: Dar Al-ġarb al-islami. (In Arabic).

3.Al-Ṣālih Ṣ. (1968). Dirasast fi fiqh Al- Luġa. (3-d ed). Lebanon: Dar al-'illm (In Arabic).

4.Sībawayh A. U., Hārūn A. M., (Ed). (2004). Al-Kitab. (5-th ed.). Al-Qahira: Maktabat al-Khānjī (In Arabic).

5.Al-foadi R.A. (2016). Printsipy fonogrammatiki v prilojenii k progressivnoi yazykovoi kategorizatsii arabskikh i russkikh kornei. Philological Sciences. Scientific Essays of Higher Education, 6, 20-26.

6.Al-Jawhari I.H., A.A.ʿAṭār (Ed). Al-ṣiḥaḥ (Taj al-luġa wa-ṣiḥaḥ al-'A rabia). Al-Qahira: Dar Al-kitāb al-Arabi, Al-Qahira, Egypt (In Arabic).

7. Stetkevych J. (1970). The modern Arabic literary language. Chicago: Chicago University Press.

8.Ibn Jinni A.U., Al- Najjar M.A. (ed). (without date). Al-Khaṣ'iṣ vol.1. Beirut: Dar Al-Huda.

9.Baker M. (1987). "Review of Methods Used for Coining New Terms in Arabic." Meta 322, 186–188.

10. Karam R.A. (2009). Slovoobrazovatelnaya struktura zookompozitov s glagolnoi osnovoi v yazykakh razlichnykh tipov. "Proceedings of Voronezh State University. Series: Linguistics and intercultural communication", 2, 105-109.

11.Al-foadi R.A. (2014). Odin Klyuch ot deri v deskrayniy mir arabskogo yazyka – fleksiya: osnovnyia pokazateli

flektivnosni. Betlin: Lambert Publishing Academy.

12. Belkin B.M. (1975) Arabskaya leksiralogya. Moscow: MGU.B.M.

[13]   Karam R.A. (2011). Slovoobrazovatelnaya metafaricheskaya nominatsaya v sovremennom russkom yazyke (Slovoobrazovatelno-kognitivnyi analiz). Zbornik materialov oblastnogo provilnogo seminara 16-17 iulya. Elets: EGU imeni I.A. Bunina, 104-119.