PROCESSES OF WORD FORMATION IN ENGLISH AND ARABIC

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PROCESSES OF WORD FORMATION IN ENGLISH AND ARABIC

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Abstract

This paper discusses word formation in both English and Arabic. Processes of word formation are the bases upon which words are formed in a language. Firstly, the paper introduces word formation as to definition and processes, along with a few previous studies. Secondly, processes of word formation are discussed in English, and then in Arabic. Then, these processes are compared. Finally, certain conclusions, as well as some further areas of research, are proposed. There are different types of these processes. In English, there are eleven processes of word formation; they are acronymy, blending, borrowing, antonomasia, conversion, backformation, compounding, derivation, clipping, folk etymology, and coinage. In Arabic, there are nine processes of word formation; they include acronymy, blending, borrowing, antonomasia, conversion, backformation, compounding, derivation, and clipping. In English, as well as in Arabic, processes of word formation vary with respect to use: some processes are common, while others are rare. Blending is also known as 'portmanteau'. Clipping has another term that is 'abbreviation'. Antonomasia is sometimes called 'eponymy'. Coinage might as well be called 'neologism'.

Keywords: Morphology, Derivational morphology, Inflectional morphology, Word formation, English, Standard Arabic, Comparative studies.

مستخلص

يتناول هذا البحث الحالات التي يتم من خلالها توليد الكلمات أو المفردات في كل من اللغة الانكليزية والعربية وتسمى نلك الحالات بعمليات تكوين الكلمات. يتعرض البحث في البداية الى ماهية تلك العمليات ثم يستعرض بعض الدراسات السابقة التي تناولتها في اللغة الأنكليزية ولمن ثم اللغة العربية وبعدها تجري مقارنة بين اللغتين. ومن خلال الدراسة والمقارنة فقد ظهرت الكثير من الإختلافات بين اللغة العربية واللغة الانكليزية فيما يتعلق بتكوين الكلمات، إضافة الى ذلك فقد كانت هناك بعض التشابهات أيضا. وفي ختام البحث تم طرح بعض الإستنتاجات الى جانب بعض الدراسات المستقبلية المقترحة.

كلمات دالة: علم الصرف، تصريف الأسماء و الأفعال، الإشتقاق، اللغة الأنكليزية، اللغة العربية، الدر اسات المقارنة.

1. Definition and Related Studies

Word formation is a morphological, and sometimes grammatical, process that aims at producing words in a language. Word formation is a productive process in which words are created. Crystal (2003:523-524) defined word-formation "as the whole process of morphological variation in the constitution of words, i.e. including the two main divisions of inflection and derivation."

Word formation deals with both the existing words as well as the newly created words. For the words that follow a set of regular rules, word formation adopts specific lexical and grammatical conditions and aspects, such as affixation, derivation, and inflection. There have several studies that focused significantly on word formation in other languages in addition to, or with reference to, English. Hang (2003) investigated word-formation in both English and Chinese. He compared the rules of word-derivation and inflection in the two languages using the theory of proto-types. He found that in between English and Chinese, we can find the particular way of word-formation in Chinese-specific properties plus basic level terms-is actually a kind of the application of the prototype theory, thus making the Chinese words distinctively marked with the semantic category feature, which the English words do not often have. This is caused by the cognition of basic level of category of the two nations in word-formation.

Graliński and Krynicki (1999) studied word-formation between English and Arabic through machine translation. They presented Polish word-formations in the context of Polish-to-English Machine Translation. They found that that out of 3044 lexemes that were not recognised by the morphological analyser. They expected that the formalism for word-formation analysis presented here could be a part of any morphological analyser for Polish texts.

Perkles (2008) investigated compounding in English and Russian through the emphasis on the lexemes and the roots. The aim of this thesis has been to present the compound categories in English and in Russian and to show the differences and similarities between them. More precisely, it has focused on the group of complex lexemes known as compound nouns, i.e. those with a noun as second constituent, because it is the biggest and the most interesting one.

2. Scope, Area and Method of Research

The data of the research include the processes of word formation in both English and Arabic, as well as the words exemplifying these processes. The source of these data is a set of words gathered in both English and Arabic.

First, the processes of word formation in English will be discussed. Then, the processes of word formation in Arabic will be discussed. Finally, the processes in the two languages will be compared to find similarities and differences, in addition to drawing several conclusions.

3. Processes of Word Formation in English

The processes of word formation in English are acronymy, blending, borrowing, antonomasia, conversion, backformation, compounding, derivation, clipping, folk etymology, and coinage (Barnhart et al. 2006:670, and Doblhofer, 1990:55).

1.3. Acronymy

Acronymy is the process in which the abbreviations of whole words stand for a single meaningful word. The initials of each word are joined to form new words. Acronymy is known also as 'abbreviation'. However, acronyms, spelt as words, should be differentiated from common abbreviations, initialisms or alphabetisms. e.g. USA or UK. Hence, an abbreviation is termed acronymy only when it is pronounced like a word. e.g. *OPEC* 'Organization of Petroleum Exporting Countries', *UNESCO* 'United Nations Educational Scientific Cultural Organization', and *BENELUX* 'Belgium, Netherlands, Luxemburg' (Mossman, 1998:165). Acronymy is widely used in scientific and technical registers to form new words, as in *SARS* 'Severe Acute Respiratory Syndrome', *AIDS* 'Acquired Immunity Deficiency Sickness', and *LASER* 'Light Amplification by Stimulated Emission of Radiation' (Halden, 1992:107).

2.3. Blending

In blending, two words are combined together to produce a new word. Blending is sometimes called portmanteau (Bussmann, 1996:786). The initial letters of the first word plus the final letters of the second word is the common type of blending in English, as many words are produced accordingly. e.g.

breakfast + lunch= *brunch*

television + marathon = telethon

Spanish + English = Spanglish

Yule (1996:66).

The other type is the initial letters of the first word with no deletion at all in the second word, as in: medical + care = medicare, and American + Indian = Amerindian.

Sometimes, the first word is put as a whole without any deletion plus the final letters of the second word, as in: beef + macaroni = beefaroni, and cheese + burger = cheeseburger. However, deletion might be adopted in both words; the final letters are deleted in both words and only the initial letters (in the first and the second word) are used in blending, as in these examples:

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international + police = Interpol
situation + comedy = sitcom
teleprinter + exchange = telex
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Halden (1992:180).

3.3. Borrowing

There are many words in English that have once been borrowed from other languages. English has borrowed from different languages. It has borrowed from French 'chassis, cache, boulevard'; from Italian 'pizza, viola, piano, diva'; from Arabic 'alcohol, zero, zenith', and from Spanish 'cigar, alligator' (Barber, 1987:260). The other source of word borrowing in English is that which is known as loan-translation or 'calque'. This is particularly applicable to phrases and compounds taken from other languages. The words 'trial balloon' and 'marriage of convenience' are borrowed under this way from French 'balloon d'essai' and 'marriage de convenance' respectively (Barnhart et al. 2006:876).

4.3. Antonomasia

Antonomasia means that a proper or personal name becomes an epithet for a certain object. Some of these words are taken from place-names, like 'hamburger' (from Hamburg, Germany), wiener (from Wien or Vienna, Austria), 'gouda' (from Gouda, Holland), 'muslin' (from Mosul, Iraq), and 'limousine' (from Limoges, France). (Doblhofer, 1990:155).

Other names are called after personal names, as in 'nicotine' (after Count Nicote), 'bilharzias' (after T. Bilharz), 'ford' (after Henry Ford), 'watt' (after James Watt), and 'Reuters' (after M. de Reuter), (Barber, 1987:211).

5.3. Conversion

Conversion means that words undergo shift in function, for example, a noun becomes a verb. Some words are changed from nouns to verbs like 'butter' $N \rightarrow$ 'to butter' V, 'radio' $N \rightarrow$ 'to radio' V. Words may be changed from verbs to nouns. e.g. 'must' $V \rightarrow$ 'must' N, and 'to guess' $V \rightarrow$ 'guess' N. Words which are adjectives might as well be changed to verbs, as in 'dirty' Adj. \rightarrow 'to dirty' V, and 'empty' Adj. \rightarrow 'to empty' V (Doblhofer, 1990:187). Moreover, other types of words such as abbreviations and compounds have changed in function; 'ID' is used as a verb 'to ID', and the verb 'print out' has changed into noun 'printout' (ibid.).

6.3. Backformation

It is the process of producing a new word by deriving it from another common word. The backformed words always denote functional, as well as morphological, change. The functional change is related to shift from noun to verb. e.g. 'babysitter' \rightarrow 'to babysit', 'option' \rightarrow 'to opt', 'television' \rightarrow 'to televise', 'emotion' \rightarrow 'to emote', 'typewriter' \rightarrow 'to typewrite', and 'house-keeper' \rightarrow 'to housekeep' (Williamson, 2004:177).

1.7. Compounding

Compounding is the combination of two words to form one word. Words could be compounded in several ways. Though compounds lexically involve two or more words, yet they are taken as single words. This is because they are formed to give one sense or meaning. Compounds might be compounded through word compounding; two or more grammatical items, for example a noun plus verb. This is called 'grammatical or lexical compounding' (Erlich, 1995:144). Examples of such type include 'bookcase', 'in spite of', and 'nowadays'. Words can be compounded through *and*, as in 'hide-and-seek', 'Jack-and-Gill.' Prepositions are also used to produce compounds, such as 'man-of-war', 'daughter-in-law', and 'face-to-face.'

Reduplicatives, where words or syllables are repeated, are also considered as compounds, being made from two words. e.g. 'tell-tale', 'hugger-mugger', and the like. There is not only compounding of words, but there is compounding of phrases too. This type of compounding is termed 'syntactic compounding', due to the use of phrases or sentences (Partridge, 1997:628). It is used in compounds like 'forget-me-not', 'hop-on-my-thumb', and 'happy-go-lucky' (Barnhart et al., 2006:566). Recently, a new type of compounding has been used. It is formed from one or two letters followed by a word: the letter can be an abbreviation, as in 'e-mail', where 'e' is short for 'electronic', and it can be a mere letter, as in 'T-shirt' (a shirt shaped like the letter *T*), (Mossman, 1998:654).

1.8. Derivation

In derivation, a word is formed through the derivational affixes and inflections. Suffixes which are used to derive nouns including many, of which are '-ment' in 'agreement', '-hood' in 'brotherhood', '-ship' in 'friendship', '-ness' in 'kindness', '-dom' in 'kingdom', '-age' in 'storage', '-let' in 'starlet', and '-ess' in 'actress' (Williamson, 2004:233).

There are suffixes which are used to derive adjectives, including '-less' in 'careless', '-ly' in 'friendly', '-some' in 'tiresome', '-full' in 'handful', '-ish' in 'childish', '-al' in 'conditional', '-y' in 'sunny', '-ing' in 'interesting', and '-ed' in 'bored.' Suffixes which derive verbs include '-ize' in 'criticize', '-ify' in 'signify', '-en' in 'widen', and '-ate' in 'isolate.' Suffixes which are used to derive adverbs include '-ly' in 'happily', '-wise' in 'likewise', '-ward' in 'westward', '-wide' in 'worldwide', and '-style' in 'westernstyle' (Snyder and Thomson, 2006:180). As for derivational prefixes, they are all used to derive verbs: 'en-' in 'enlarge', 'em-' in 'empower', 'be-' in 'belittle', and 'de-' in 'delimit' (Erlich, 1995:144).

1.9. Clipping

It is the process of cutting a word and thus this word becomes a clipped or short one. Clipping is termed as shortening as well as ellipsis (Bussmann, 1996:357). Many words in English are often clipped at the end, that is, the final part of the word is removed. Therefore, 'prof' (professor), 'gym' (gymnasium), 'logo' (logotype), and 'gas' (gasoline) are all clipped at the end (Fromkin and Rodman, 1983:125).

There are rather a few words that might be clipped at the beginning; the initial letters are deleted, as in (disport) 'sport', and (helicopter) 'copter.' In between are the words that are clipped at both parts, like 'flu' (influenza), and 'fridge' (refrigerator). Clipping may involve a shift in form with the same sounds are retained, no matter which part is clipped. e.g. 'mike' (microphone), 'nuke' (nuclear), 'Xmas' (Christmas).

Hypocorism, or the use of diminutives, is another way in which words, especially compounds, are clipped, as in 'cookie' (cake), 'telly' (television), 'roomie' (roommate), and 'goalie' (goalkeeper), (Erlich, 1995:179).

1.10. Folk Etymology

Folk etymology occurs when a word changes overtime, that it becomes of a more popular and familiar sense. It is known also as the way how some words are considered in terms of their etymological derivation due to popular misconception (Barber, 1982:210). There are several words in English which are formed under this process; the greater part of which includes words borrowed from other languages. The word 'coldslaw' is derived from Dutch 'koolsla' (cabbage salad), then it was changed to 'coleslaw.' It, however, has nothing to do with 'cold.' The word 'sir' in 'sirloin' is French for 'on'; it is not related to the word 'sir' in English. English has several other words which are classified as folk etymologies, like 'Welsh rabbit', 'jerusalem artichoke', and 'greyhound' (Pyles, 1971:287).

1.11. Coinage

It is the process of making or forming new words. Coinage is regarded as a big source of word making; this is since it is involved in making many new words (Williamson, 2004:187). Coinage is also termed as 'neologism'

A lot of words have been produced in English by coinage. Some of these words are newly coined, i.e., they have no origin or source of formation, as, for example in 'kodak', 'orlon', and 'antron.' In these words, there is no morphological, phonological or orthographic motivation whatsoever, as in brand names (Bauer, 1983:239). Nevertheless, there are other words the formation of which was based on familiar words; 'kleenex' (clean), 'vaseline' and (German *wasser*), (Barnhart et al., 2006:566).

2. Processes of Word Formation in Arabic

The processes of word formation in Arabic are acronymy, blending, borrowing, antonomasia, conversion, backformation, compounding, derivation, and clipping.

2.1. Acronymy

The common acronyms in Arabic are حماس from حركة المقاومة الإسلامية (Islamic Resistance Movement), and واخ from وكالة أنباء الخليج (Gulf News Agency), (Sayeed, 1995:487). There is a certain type of acronymy that is irregular in form. e.g. لبنا from لبيك from البيك إلبابا (I wait upon thy service, O my Lord!), (منصور (Come to prayer!), وعلى الصلاة which is based on حي على الصلاة (Wright, 1971:294).

Other examples formed like the two acronyms stated above are حوقلة from المنصور، (There is no power and strength save in Allah), (1996:122).

And البراهيم, 1988:202 أبراهيم, Some acronyms may show a variant sort of formation, for example مجوقلة (airborne force). This word consists of the words محمولة (borne) and و (air) and قوة (force), سامراء, a place name from the phrase سر من رأى (was pleased that who saw), and أبجدية (alphabet) from single letters; أبجدية (Farghall and Shakir, 2001:215).

2.2. Blending

The blends produced in Arabic are often made from the initial letters of the first word and the final letters of the second word. e.g.

Sayeed (1995:490).

Blends could be formed from a single word with no deletion plus a single letter in the second word. This applies to the words حمدلة (Praise be to Allah) and بسما (In the name of Allah). In both of these words, the first word whether بسم or حمد annexed to the medial letter in the word ألله , that is \Box , in addition to \Box which is a nominal suffix (Farghall and Shakir, 2001:320).

2.3. Borrowing

In Arabic, there are words borrowed from French like بورصة (stock exchange), بيكور (appearance), كمارك (customs), باليه (ballet), كواليس (backstage), ديكور (production), and خارطة (map), from Turkish شليك (inn), خان (strawberry), كسل (janissaries), كسرى (kiosk) and خديوي (khedive), and from Persian كسرى (Chosroe) and نوروز (Nawroz), (1989:83).

Arabic already borrowed from Greek and Latin; from Latin امبراطور (emperor), فلسفة (Caesar), كاردينال (cardinal), and ميل (mile), and from Greek فلسفة فلسفة (philosophy), and جغرافية (geography), (1996:133،منصور). as far as borrowing from English is concerned, words borrowed in Arabic are related to technology. e.g. كاميرا (movie), كاميرا (camera) فوتو غراف (fax), فاكس (television), and فيام (television) نافزيون (television) دبلوماسية (television) استراتيجية (consulate), and استراتيجية (strategy). Others include اولمبياد (olympics), أكاديمية (medal), كابتن (captain), and ميدالية (academy), (1989:85).

2.4. Antonomasia

There are some words in Arabic the origin of which is a proper noun and, in certain words, a personal name. The proper nouns almost refer to place-names, and the common words are صيني 'china earthenware' (after China), مهند (a type of swords used to be made in India), كوفي (a type of writing font in Arabic that was originated in منغلبة 'watermelon' (after منغلبة in Syria) and منغلبة 'mongolism' (after Mongolia), (1989:85 (الألوسي، 4 name may refer to a place, but not that of a country or city, as in ديواني (a type of writing font in Arabic once used in الدواوين the government offices during the ages of the Islamic Empire). There is other type of antonomasia which is based on personal names. e.g. خوارزمية 'tangerine' (a variety of citrus in the Levant called after (يوسف أفندى), (1980:108).

2.5. Conversion

The words which are produced through conversion are very rare in Arabic and they are characterized by a change from noun to verb., i.e., formed from nouns;

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'stage' Noun مسرّخ 'to act on stage' Verb 'مسرخ

'phone' Noun ماتَف → داتف Verb 'to phone'

'army' بيش Noun → 'to mobilize army' Verb جيش

'companion' Noun صاحب → 'to accompany' Verb صاحب

(Kharma and Mitchell, 1987:170).
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2.6. Backformation

There is a set of new words in Arabic that have been produced from other common ones in the process of backformation. All the words produced are verbs derived from nouns or adjectives;

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ولمة 'electricity' Noun \rightarrow گهرَبُ 'to electrify' Verb 'to globalize' Verb 'a و globalization' Noun \rightarrow و 'to globalize' Verb 'to programme' Verb 'to Arabic' Noun \rightarrow عُرِّبَ 'to Arabianize' Verb 'to Arabianize' Verb 'international' Noun \rightarrow کُوُّلُ 'to internationalize' Verb 'earnest' Noun \rightarrow عُرِبَنَ 'to pay an earnest' Verb عربون 'fo pay an earnest' Verb
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2.7. Compounding

Compounding in Arabic can be classified under three main types; these types are ترکیب مزجی mixed compounding, ترکیب اضافی genitive compounding and ترکیب مزجی predication compounding. In ترکیب مزجی, the compound is a two element word, often noun-noun, as in فائم + باك بالله على 'capital', and + باک وائمقام 'deputy governor' (2005:752، بعلیکی).

In تركيب إضافي, the compound has two words that are related through the genitive case. It consists of two nouns linked by the definite article درجة 'the', as in درجة الحرارة والكتاب 'temperature', كرة + قدم = كرة القدم 'football', and حرارة = درجة الحرارة 'People of the Book.' It is also used in personal nouns, especially those start with أهل الكتاب and فو الفقار , ابن عباس ;أبو معباس أبو (1967:180، درويش).

Another genitive compounding is that which is adjective-noun, hence it is called صفة مشبهة, as in وافر الذكاء 'good-intentioned' and وافر الذكاء 'much-witted' (1989:106، منهر).

As for تركيب إسنادي, the compound word consists of phrases or sentences. In other words, subject and predicate, as in تأبط شرا 'He carried wickedness underarm' and 'The right grew better' (1975:211). Other examples are جاد المولى 'The Lord gave liberally' and فياوة، 'His butchering shone' (1971:180).

2.8. Derivation

Derivation affixes in Arabic involve suffixes in many cases. These suffixes are used to derive verbs, nouns, adjectives and adverbs. The suffix 4 derives feminine nouns from masculine nouns;

woman teacher مدرسة → woman teacher

And adjectives;

short, fem. قصيرة short, fem.

It also derives generic nouns from verbs;

to plumb, v → سمگر plumber, n

The suffix - derives feminine adjectives;

thirsty, adj عطشی ح thirsty, adj

As well as nouns;

نگر to mention, v ightarrow ذکری mentioning, n

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The suffix & derives feminine nouns;
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virginity, n - عذرية virgin, fem.n

And fem. adjectives from masc. ones;

white, masc. adj. → بيضاء white, fem. adj.

(قباوة، 1971:211).

The suffix نية is another one for deriving nouns from nouns;

جمهور public, n o republic, n

linguistics, n لسانية → linguistics, n

And fem. adj.;

transformation, n → تحویل transformational, adj.

(درویش،115:1967).

Other suffixes are ے to derive masc. adj.;

French, n → فرنسا French, adj.

ن to derive verbs from nouns;

 $\operatorname{law}, \operatorname{n} \to \operatorname{in}$ to legalize, to render lawful, v

And 1 to derive adverbs from masc. adj.;

lengthwise, adv. طوليا → lengthwise, adv.

(أمين،178:2005).

2.9. Clipping

There are certain words in Arabic which might be shortened or clipped. Clipping occurs either at the beginning of the word, namely the initial letters, as in 'this' (masc.) \rightarrow 1; or at the end of the word, as in 'that' (fem.) \rightarrow 1; and 'that' (masc.) \rightarrow 1; (Sayeed, 1995:490).

However, words might be clipped in the middle, as in مذ 'since' \rightarrow فر (Wright,1971:22), and صبح 'morning' صبح (1996:160، منصور). Another sort of clipping in Arabic is that which involves the preservation of the same sound, as it is manifested in the word 'that' (masc.) \rightarrow Both words here have almost the same pronunciation, except for orthography. Other examples are personal names such as بالله (based on بالمنابع), and the like (مالحين، (based on الدين، (الدين، 2005:109 عنب)). Words can also be clipped through diminutive, in which case a word is clipped but in a diminutive sense. e.g. بني 'girl' بني 'little girl', بني 'son' بني 'little son', خات 'sister' خات 'sister' بني 'little sister', and ناله والمنابع (1989:177، الخية 'little quince' (1989:177، سفير خال المنابع (1989:177، الخية 'some personal names take an entirely different form when clipped;

بریه
$$\leftarrow$$
 ابراهیم بریه \leftarrow اسماعیل سمیع \leftarrow اسماعیل عثم \leftarrow عثمان (1983:95، 1983).

3. Comparison

- 1. In English, acronymy is a common process, with one form and it is vowel-based. That is, vowels are inserted to make the acronym pronounced as a word. For example, in *UNICEF*, *I* and *E* are inserted to change the word from an abbreviation to acronym. In Arabic, acronymy is very rare. It has also more than one form, and it is not necessarily based on vowels.
- 2. In English, blending varies considerably being formed in different blends. In Arabic, blending has only a few forms.
- 3. In English, borrowing is so wide, as English has borrowed many words from various languages. Besides, some borrowings in English have retained the original pronunciation as in French boulevard /bu:leva:d/. in Arabic, borrowings are not as wide as in English, even many foreign words have been borrowed into Arabic. This is may be attribute to the fact that in Arabic foreign words could be arabianized to model Arabic in sound and in form, as in ورشة from English 'workshop', برنامج from 'television', and برنامج 'programme' from Persian' برنامج

- 4. In English, antonomasia is one of the common processes of word formation. In Arabic, antonomasia is rare, as it still needs a thorough investigation.
- 5. In English, conversion is a productive process of word-making, especially with regard to the shift from one part of speech to another. In Arabic, conversion is limited to suffixes only.
- 6. In English, backformation is not so wide and words related are always backformed from nouns to verbs. The same applies to Arabic in this respect.
- 7. In English, there are many different types of compounding. In Arabic, compounding has three main types only.
- 8. In English, there are derivational suffixes and prefixes; the former derive nouns, verbs, adjectives, and adverbs, whereas the latter derive verbs only. In Arabic, there are derivational suffixes only.
- 9. In English, various types of clipping are used. In Arabic, there are limited types of clipping most of which are based on diminutives.
- 10. In English, folk etymology is rather common. In Arabic, folk etymology is not so clear, as it is not easy to identify it.
- 11. In English, coinage is almost common, even though most coined words are based on existing words. In Arabic, coinage is very rare.

4. Further Areas of Research

- 1. An applied study can be conducted to check the EFL learners' recognition or production of words in English.
- 2. There are other minor constructions of words which are not discussed here, particularly those that are not assigned to a specific process of formation. e.g. *e-mail*, *U-boat*, *CD-ROM*,..etc. Besides, newly established processes, such as backronyms, need to be investigated too.
- 3. A further study is needed to investigate the relationship between the lexical level and the phonological level of certain words in English, especially with regard to consonants and vowels.

4. A separate study may investigate a single process of word formation in English and Arabic.

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