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The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

Zaidan Ali Jassem, Ph.D.

Abstract

This paper investigates the genetic relationship between derivational affixes or morphemes like *ensure*, *whiten*, *opinion*, *activity* in Arabic and English mainly as well as German, French, and Latin. Applying the lexical root theory as a theoretical framework, it shows, unlike traditional claims in comparative historical linguistics that Arabic and English, for example, are members of different language families, how such morphemes are related to and derived from one another, where Arabic may be their end origin. More precisely, *a-*, *e-*, *n-*, *m-*, *t-*, *be-*, and *s-*-based affixes are found in all the above languages to be identical cognates with the same or similar forms and

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

meanings or functions, regardless of minor phonetic and morphological changes.

Keywords: Derivational morphemes, Arabic, English, German, French, Latin, historical linguistics, lexical root theory

1. Introduction

The lexical root theory has been proposed by Jassem (2012a-f) to reject the claims of the Comparative Historical Linguistics Method that Arabic and English, German, French, and so on belong to different language families (Crystal 2010: 302; Campbell 2006: 190-191; Crowley 1997: 22-25, 110-111; Pyles and Algeo 1993: 61-94) and to establish instead the genetic relationship between Arabic and English, in particular, and all other (Indo-)European languages. In his (2012a) investigation, he found that all the numeral words in Arabic, English, German, French, Latin, Greek and Sanskrit have the same or similar forms in general, forming true cognates with Arabic as their end origin. Jassem (2012b) provided further evidence from common contextualized religious terms such as *Hallelujah*, *God*, *Anno Domini*, *Christianity*, *Judaism*, *ruthful*, *welcome*, *worship*, *solemnity*, and so on, which were also found to have true Arabic cognates. For instance, *Hallelujah* is a reversal and reduction of the Arabic phrase *la ilaha illa Allah* 'There's no god but Allah (God)' where *Halle* is *Allah* in reverse- i.e., *Allah* → *Halla* (*Halle* 'God'). Jassem (2012c) showed that personal pronouns in Arabic, English, German, French, Latin and related languages are true cognates, which descend from Arabic directly. Jassem (2012d) investigated determiners such as *the*, *this*, *an*, *both*, *a lot*, *very* in English, German, French, and Latin which were all found to have identical Arabic cognates. Jassem (2012e) established the genetic relationship between verb *to be* forms in those languages and Arabic. Finally, Jassem (2012f) showed that inflectional 'plural and gender' markers formed true cognates in all.

In all studies, Jassem (2012a-f) used the lexical root theory as a theoretical framework. As it has been fully described in the above works, a few words will suffice here as a reminder. The name derives from using the lexical (consonantal) root in examining genetic relationships between words like the derivation of *rewritten* from *write* (or simply *wrt*). It comprises a construct, hypothesis or principle and four practical procedures for analyzing lexical roots. The theoretical principle states that Arabic and Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

English as well as (Indo)European languages are not only genetically related but also are directly descended from one language, which may be Arabic in the end. In fact, it claims in its strongest version that they are all dialects of the same language. The applied procedures are (i) methodological, (ii) lexicological, (iii) linguistic, and (iv) relational. The methodological procedure concerns data collection and selection (excepting loans) by using semantic fields, e.g., numeral words, religious terms, personal pronouns, determiners, inflectional morphemes, verb to be, derivational morphemes, water terms, etc. The lexicological procedure analyzes words by (i) deleting affixes (e.g., *overwritten* → *write*), (ii) using primarily consonantal roots (e.g., *write* → *wrt*), and (iii) search for correspondence in meaning. The linguistic procedure analyzes words phonetically, morphologically, grammatically, and semantically. The relational procedure examines the relationship between words in form and meaning. The method of describing and analyzing the genetic relationship between words is comparative historical. (For further detail, see Jasem 2012a-f; 4. below).

This paper applies the lexical root theory to the investigation of derivational morphemes in Arabic, English, German, French, and Latin to show their genetic relationship to and/or their descent from Arabic cognates. It has five sections: introduction, data, results, discussion, and conclusion.

2. The Data: Derivational Morphemes (Affixes)

Affixes, which may be suffixes (e.g., *happiness*), prefixes (e.g., *unhappy*) and infixes (e.g., *spoke*) in English, German, French, Latin and Arabic, can be inflectional and derivational. The former indicate grammatical information such as tense, person, number, gender, and case; the latter are word-building devices, attached to words for making nouns, adjectives, verbs, and adverbs. The affixes are generally similar in form and function in English (e.g. Kreidler 2006: 273-283), German (e.g., Canoonet 2012), French (e.g., Lawless 2012), Greek and Latin (Green 2008).

Arabic affixes are called 'extra letters' or morphemes, which are *ten* in number: viz., *s*, *a*, *ʔ* (glottal stop), *l*, *t*, *m*, *n*, *w* (*oo*), *y* (*ee/i*), and *h* (Al-Ghalayeen 2010). They may be used singly or in combination as prefixes, suffixes, and infixes. For example, *musta-* in *mustarjil* 'behaving like a man' from *rajul* 'man' is three in one: viz., /m/ for present/past participle forms or agent nouns, /s/ for reflexive action, and /t/ for making verbs.

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

A closer comparison of English and Arabic affixes shows that they are similar in having the above ten consonants in common, in general. Therefore, these consonants will be used in presenting the results below. The inflectional affixes have already been presented and discussed in Jassem (2012c, 2012f). The focus in this paper will be mainly on the derivational ones here.

3. The Results

3.1 A-Based Affixes

The affix *a-* has several inflectional and derivational functions in English and Arabic. As an inflectional suffix, it indicates feminine gender and plurality (Jassem 2012f). Derivationally, as a prefix, it makes verbs or adverbs from nouns like *scribe/ascribe*, *claim/acclaim*, *side/aside* and adjectives such as *sure/assure*, *certain/ascertain*, *round/around*, *loud/aloud*, modifying their meaning sometimes as in *rise/arise*, *wait/await*, *wake/awake(n)*. Sometimes, it denotes the negative, e.g., *asocial*, *atypical*, *abnormal*. As an infix, it marks irregular verbs as in *sing/sang*, *ring/rang*, *sit/sat*.

In Arabic, *a-* may make:

- (i) verbs from nouns like *arsal* 'send' v. *rasool* 'messenger',
- (ii) transitive verbs from intransitive ones such as *amaata* v. *maata* '(cause to) die', *azaala* v. *zaala* '(cause to) vanish',
- (iii) transitive verbs stronger such as *anha* v. *naha* 'finish, end',
- (iv) comparative adjectives like *ajmal* v. *jameel* '(more) beautiful',
- (v) irregular verbs, alternating with /ee/ or /oo/ as in *saala* v. *yasseel* 'flowed, flow', *qaala* v. *yaqool* 'said/say', and
- (vi) yes/no questions as an interrogative particle in Standard Arabic, e.g., *a-katabt?* 'Have you written?' However, in Syrian 'coastal' Arabic dialects, it is usually used as a negative verbal prefix, e.g., *a-katabtu* 'I haven't written it.'

In short, the prefixes *a-* in English and Arabic are identical cognates, having the same or similar form and functions.

3.2 E- or Y-Based Affixes

3.2.1 The Affix e(e)-

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

Sometimes *e-* may be (i) prefixed, though often in combination with *-ate*, to make verbs from some nouns and adjectives like *spouse/espouse*, *strange/estrangle* (cf. *emit*, *evict*, *edit*, *elope*, *escape*, *exit*), *vapour/evaporate*, *scale/escalate*, *value/evaluate*, *long/elongate*, (ii) infixed in irregular verbs as in *hold/held*, *fall/fell*, and (iii) silent in verbs like *make*, *take* and nouns like *tale*, *sale*. As to *-ee*, it makes nouns from verbs as in *employee*, *refugee*.

In Arabic, *e-* (*i-*) (sometimes spelled *a-* but pronounced /i/) may be added to:

- (i) triliteral verbs in the imperative as in *jalasa/ijlis* 'sit',
- (ii) transitive verbs, making them intransitive like *Tawa* 'fold' v. *inTawa* 'be folded',
- (iii) irregular verbs as an infix or suffix, replacing /a/ as in *saala/yaseel* 'flowed/flow', *rama/yarmee* 'threw/throw', and
- (iv) nouns for making adjectives or nouns as in *lubnan* 'Lebanon' v. *lubnani* 'Lebanese'.

Therefore, the English prefix *e-* and Arabic *e-* are cognates. However, silent *e-* in nouns and adjectives as in *tale*, *white* is cognate to the Arabic feminine singular suffix *-a(t)* (pronounced /e/ at pause without /t/ in spoken Arabic as in *qaalat* 'tale' → *qaale*, *jameelat* → *jameele* 'beautiful'). In verbs, its cognate is /a/ as in *kataba* '(he) wrote' which is pronounced *katabe* in Iraqi Arabic. (Note that *tale* and *qaal(at/e)* are identical cognates in which /q/ became /t/ and so are *comely* and *jameele* where /j/ became /k/).

3.2.2 The Suffixes *-y* and *-ly*

Both suffixes go together in English where *-y* may make adjectives from nouns as in *funny*, *hairy* and nouns from verbs as in *entry* (cf. *summary*, *fury*, *diary*) whereas *-ly* forms adverbs from adjectives as in *nicely*, *beautifully* and, occasionally, adjectives from nouns such as *friendly*, *lovely*, *manly*. Thus both suffixes are one in origin with /l/ being an insertion in nouns to facilitate pronunciation or distinguish meaning as in *manly* v. *many*. In fact, in Old English adding *-e* turned adjectives into adverbs such as *loud* v. *loude* 'loudly' (Pyles and Algeo 1993: 116). In Modern English, *-ly* replaced it.

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

In Arabic, the suffix *-y* or *-i* (pronounced /ee/) turns nouns into adjectives or nouns, for example, *jabal* v. *jabaly* 'mountain, mountainous', *Arab* v. *Araby* 'Arab/Arabic'. To turn them into adverbials, the suffix *-(a)n* is added, e.g., *Arabiyan*. It also changes verbs to nouns as in *jara* v. *jary* 'running'. Therefore, the English and Arabic suffixes *-(l)y* are identical cognates in which /l/ is an insertion.

3.3 N-Based Affixes

3.3.1 The Suffix *-en* and Prefix (e/i)n-

Jassem (2012c, 2012f) discussed the inflectional cognates of *-en* in English, French, German, Latin, and Arabic. Derivationally, the affix *-en-* is very productive in English which makes (i) verbs from adjectives, e.g., *red* v. *red*, *(e/i)nsure*, and nouns like *enact*, *encourage*, *intone*, *inscribe* (cf. *invite*, *insult*, *include*, *embolden*, *impress*), (ii) irregular past participles like *spoken*, *taken*, *fallen*, and (iii) opposites as in *inhuman*, *inanimate*, (*unhappy*). In Old English, it marked the infinitive as in *helpan* 'to help' (Pyles and Algeo 1993: 120-123).

In German, *-en* is very common which (i) indicates the infinitive such as *singen* 'to sing' and (ii) makes verbs from nouns such as *Übersetzung* (n) v. *übersetzen* (v) 'exercise'. In French and Latin, the suffix *-re* is used for the infinitive as in *être* 'to be', *amare* 'to love'.

Similarly, *-an* is productively employed in Arabic verbs derivationally. It may be:

- (i) suffixed to make verbs from certain nouns like *ward* 'roses', *wardan* 'to flower' and adjectives such as *azraq* 'blue', *zarqan* 'become blue';
- (ii) prefixed and infixed to past tense and present tense verbs each to indicate the passive and/or reflexive such as *inkatab* 'was written', *yinkatib* 'can be written'. In varieties of Syrian and Egyptian Arabic, /t/ replaces /n/, e.g., *itkatab*, *yitkatab* 'was/is written' (see 3.5.3 below); and
- (iii) used as a negative particle alone, which is very common in the Holy Quran and Classical Arabic.

Thus the similarities between the form and functions of *-en* in English and Arabic show that they are identical cognates and point to one common, genetic origin.

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

3.3.2 The Suffixes –ion (-ation)

–ion is very common in European languages, turning verbs into nouns as in *opinion, nation, discussion, correction*. In other cases, –ation is used such as *information, civilization, activation* (see 3.5.3 below).

In Arabic, the suffix –an (pronounced /on/ in some Arabic varieties) may be added to verbs to form nouns such as *ankar* v. *nukraan* 'deny, denial', *Taar* v. *Tayraan* 'fly, flight', *hajar* v. *hujraan* 'leave, leaving'. Thus in light of their similarity in form and function, these suffixes are true, identical cognates.

3.3.3 The Suffix –ing

–ing may be added to verbs (in the progressive tense) which may be used as adjectives and nouns (gerunds), e.g., The man is *running*; The *running* man is fast; *Running* is healthy. In Old English, –(e)nde was used (Pyles and Algeo 1993: 123), which varied with –ing in Middle English (Pyles and Algeo 1993: 161); in Modern English, /g/ is usually dropped (Chambers 2009: 120-25).

In Arabic, its cognate is the compound nominal suffix –anat (= *an* 'v./n. suf.' + *at* 'fem. suf.') as in *wardanat* 'flowering' from *ward* 'roses' in which /t/ turned into /d/ or, less likely, verbal –an as in *wardan* 'to flower' and *yaktuban* 'they (f) write' in which /d/ is an insertion. In other words, –in(g)/–inde can be considered variants of the Arabic nominal suffix –anat. To these can be added –ant/–ance as in *applican(t/ce)*, *defian(t/ce)* (cf. Arabic *bardanat* 'one (f.) feeling cold' from *bard* 'cold').

3.3.4 The Suffix –ness

–ness is a very productive suffix in English for turning adjectives into abstract nouns such as *carefulness, business*.

In Arabic, the nominal suffix –anat (pronounced /-ana(h)/ at pause) changes verbs to abstract nouns productively, e.g.,
ward 'rose' → *wardan* 'to blossom' → *wardanat* 'flowering',
walad 'boy' → *waldan* 'act like one' → *waldanat* 'childishness',
azraq 'blue' → *zarqan* 'become blue' → *zarqanat* 'bluishness'.
Therefore, the Arabic suffix –anat is the source cognate of –ness in which /t/ (or /h/ at pause) evolved into /s/. In other words, –ness may be

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

analyzed as *n-* 'v. suf.' + *-ess* 'fem. suf.', which is exactly what *-anat* is in Arabic: i.e., /an/ 'v. suf.' + /at/ 'fem. suf.' which became /s/.

3.3.5 The Suffixes *-er/-or*

-er/-or are used in English, German and French to make agent nouns from verbs, e.g., *speak, speaker; act, actor*. In addition, *-er* may be used in comparative adjectives as in *tall/taller, thin/thinner*.

In Arabic, the suffix *-an* can make agent nouns from verbs and adjectives, for example, *sakira* 'drink alcohol', *sakraan* 'drunkard, drunken'; *shariba* 'drink', *sharbaan* 'drinker, drunkard'. In addition, although the comparative is made according to a certain pattern in which vocalic changes apply such as *jameel* 'comely', *ajmal* 'comelier', *Taweel* 'tall' v. *aTwal* 'taller', the suffix *-aan* is often added to nouns in spoken Arabic to express a 'hypothetically' comparative state, e.g., *Tawlaan* 'grown taller (than before)', *bardaan* 'getting colder (than usual)'.

Thus, Arabic *-an* and *-er/-or* in English are cognates where /n/ developed into /r/. To support that *-er/-or* being a further development of *-an*, consider its usage in *American, Arabian, republican*, etc. Adding *-er* to **Americar* and **Araber* would sound very odd indeed. In fact, there are words in English that have both forms with slight semantic differences, for example, *drinker, drunkard, drunken; speak, speaker, spoken*. Moreover, the use of *-er/-or* instead of *-en* in such words differentiates verbal from nominal functions.

3.3.6 The Suffixes *-al, -ar*

-al varies with *-ar* in making adjectives from nouns like *logical, departmental; particular, circular* (cf. **circular*). Like *-(e/o)r* above, their Arabic cognate is *-an*, split into /l & r/.

3.3.7 The Suffix *-ure*

-ure varies with *-ion* in making nouns from verbs such as *pressure* (cf. *compression, depression, repression*), *pleasure*, (cf. *measure, treasure*). Like *-(e/o)r* and *-a(r/l)* above, it derives from the Arabic suffix *-aan* which makes nouns from (i) verbs as in *baTula* 'expire' v. *buTlaan* 'expiry', *khasar* 'lose' v. *khusraan* 'loss' and (ii) adjectives or nouns as in

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

baaTil 'false, invalid' v. *buTlaan* 'invalidity'. Sound change turned /n/ into /r/.

In short, all the *n*-based affixes in English, German, French and Arabic are identical cognates in which /n/ turned into /r/ or /l/ in certain cases. In French and Latin, Arabic /n/ passed into /r/, especially in the infinitive. That is, the changes of /n/ to /r/ and /l/ can be treated as kinds of assimilation or dissimilation as happens in *inappropriate*, *illegal*, *improper*, *irreparable*.

3.4 M-Based Affixes

3.4.1 The Suffix –ium

In Latin place names (and English, German and French loans), *-ium* is used for place, for example, *auditorium*, *stadium*. In Arabic, the prefix *ma-* signals place when prefixed to verbs as in *katab* 'to write' v. *maktab* 'a place for writing, desk, office'. Therefore, the affixes *-ium* and *ma-* are cognates, whose positions are interestingly reversed.

3.4.2 The Suffix –eme

–eme denotes 'singularity, smallness' in English nouns, e.g., *sememe*, *phoneme*, *morpheme*, *grapheme*. In Arabic, the suffix *–eem* occurs with this meaning once in the Holy Quran in the word *zaneem* 'illegal child' from *zina* 'illegal sex'. So both are identical cognates. (For inflectional use, see Jassem 2012c).

3.5. T-Based Affixes

3.5.1 The Suffixes –ity, –ite, –t, –th, and –itis

All these suffixes are related in English, French, and German. *–ity* makes nouns from adjectives such as *equality*, *legality* (French *legalite*, German *legalität*); *–ite* may be used in nouns and adjectives as in *termite*, *site*, *erudite*, *white*; *–t* makes nouns from verbs and adjectives like *weight*, *sight height* and may mark the irregular past and past participle forms like *slept*, *wept*, *dreamt*, *learnt*; *–th* forms nouns from verbs as in *health*, *death* (cf. *fourth*); *–itis* signals disease as in *tonsilitis*, *hepatitis*.

In Arabic, the suffix *–at* (pronounced /a(h)/ at pause) forms nouns from (i) verbs like *walada* 'give birth' v. *wiladat* 'birth' and (ii) adjectives, e.g., *aSfar* 'yellow' v. *Sufrat* 'yellowness', *Islami* 'Islamic' v. *Islamiat*

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

'Islamism'. Sometimes the related compound suffix *-iat* (*i-* 'adj. suf.' plus *-at* 'fem. suf.') turns (i) adjectives into nouns such as *2urr* 'free' v. *2urriat* 'freedom' and (ii) nouns into 'artificial' ones like *wathan* 'stone' v. *wathaniyat* 'paganism'.

In summary, the Arabic suffixes *-(i)at* and *-ity, -itis, -ite, and -t(h)* in English are cognates, especially in view of the fact that all are 'feminine' in gender (cf. *-ette* 'fem. suf.' in *Henriette* (Jassem 2012f). In *-th*, /t/ became /th/ (cf. Jassem 2012a).

3.5.2 The Suffix *-hood* (German *-heit*)

In English *-hood* makes abstract nouns from common ones such as *manhood, motherhood*. Originally, it has two meanings: 'hat' and 'manner or quality' (Harper 2012).

Arabic has two formally similar but semantically different cognates, which are (i) *2aTTat* 'head cover' in which /2/ became /h/ and (ii) *hai'at* 'manner' where /t/ changed to /d/. However, it might also derive from the above suffix *-at* into which /h/ was inserted as happens in certain Arabic plurals such as *umm* 'mother' v. *umma^hat* 'mothers', *abb* 'father' v. *ubba^hat* 'fathers'; also it makes abstract from common nouns as in *rajul* 'man' v. *rujoolat* 'manhood'. Furthermore, as /-at/ may be pronounced with /t/ in connected speech (e.g., *rujoolat*) but with /h/ or Ø at pause (e.g., *rujoola(h)*), *-hood* (*-heit*) might be a reversal of *-at* together with the usage of both /h/ and /t/ at the same time and the passage of /t/ into /d/: i.e., *-a(t/h) → -tah → -hat* (hood).

3.5.3 The Suffix *-ate*

-ate is a productive English suffix for marking verbs such as *activate, educate*, adjectives such as *separate, alternate*, and nouns like *consulate, emirate*.

Similarly, the Arabic prefix *ta-* changes trilateral verbs to quadrilaterals in the past tense such as *basama* 'smile' v. *tabassama* 'smile', and quadrilaterals to quintelaterals, e.g., *qaatal* 'fight' v. *taqaatal* 'fight with'. Sometimes, *ta-* varies with *id-* as in *tadhakarra* and *iddakkara* '(he) remembered' from *dhakara* 'mention, remember'; *tadarraba* and *iddarraba* 'train (it.v.)' from *darraba* 'train (t.v.)'. In Damascus Arabic, *-id* passes into *-it* in the passive as in *ittakal* '(it)'s eaten' and *yittakil* '(it) can be eaten'. As an

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

infix, it forms reflexive verbs as in *fakhr* 'pride', *tafaakhar* 'to boast', *iftakhar* 'to be proud'; *sami3a* 'hear' v. *istama3a* 'listen' (cf. Jassem 2012e). Finally, as a suffix, it marks nouns such as *wiladat* 'birth' (3.5.1).

In short, English *-ate* and Arabic *ta-/at* are true cognates, though in different positions.

3.5.4 The Prefixes *de-*, *des-*, *dis-*, & *ad-*

These prefixes are all similar in making verbs from certain nouns such as *scribe/describe*, *value/devalue*, *term/determine*, *ploy/deploy* (cf. *decorate*, *desecrate*, *deserve*, *discuss*, *discriminate*, *dismiss*); *advice*, *advocate*, *admit*, *admire*, *adsorb* (cf. *aggravate*, *accumulate*, *assign*, *attach*, *afford*, *allocate*, *absorb*). They may also signal the negative, e.g., *cry/decry*, *rail/derail*, *ascent/descent*, *unite/disunite*.

The different functions of these prefixes are derived from different Arabic cognates as follows:

- (i) The negative meaning comes from Arabic *Did* 'against' where /d/ turned into /s/ or was deleted;
- (ii) *de-* and *ad-* derive from Arabic *ta-* above which might vary with *id-* as in *tadarraba* and *iddarraba* 'train (it. v.)' (see 3.5.3 above);
- (iii) *des-* and *dis-* derive also from Arabic *ta-* in addition to the infix *-s-* which usually accompanies it to modify meaning, e.g., *katheer* 'much' → *takthur* 'become much' → *tastakthir* 'find it much';

In short, *de-*, *des-*, *dis-*, and *ad-* are all variant forms of their identical Arabic verbal cognate *ta-* (plus *-s-*) in word initial position where /t/ passes into /d/ (or splits into /d/ and /s/).

3.5.5 The Suffixes *-(at)ion* and *-dom*

-ation is a compound of *-ate* plus *-ion* whose Arabic cognates have already been settled (3.5.3, 3.3.2). Alternatively, its cognate is the compound *-atun* (*-at* 'fem. suf.' plus *-un* 'indef. sg. suf.') as in *ummatun* 'nation', *karamatun* 'dignity' in which /t & n/ became /d & m/ each.

As to *-dom* as in *freedom*, *boredom*, it comes from Old English *dom* 'statue, judgement' and/or *doom* 'law, judgement, condemnation, fate, ruin, destruction' (Harper 2012). Arabic has two formally similar but semantically different cognates, which

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

are (i) *dumia(t)* 'statue, dummy' and *dhamm* 'condemnation' where /dh/ became /d/. However, this might not be the case at all. Its true Arabic cognate is *-atun* above in which /t & n/ became /d & m/ each. To substantiate that further, consider *martyr* v. its identical Arabic cognate *ma(y)it* 'dead' in which /r/ is an insertion and *martyrdom* v. *meetatun* 'death' which consists of the root *mawt* 'death', *-at* 'fem. suf.', and *-un* 'indef. sg.'. Thus its relationship to English *-ate/-ation* and Arabic *-at* is clear (see below 3.8.3).

In short, all the *t*-based affixes in Arabic and English are identical cognates in some of which /t/ became /d/.

3.6. S-Based Affixes

3.6.1 The Suffix *-i(s/z)e*

-i(z/s)e is very productive in current English which makes verbs from nouns like *summarize*, *organize*, *devise*, *revise* and adjectives like *Americanize*, *Arabize*.

In Arabic, a few source cognates are possible. First, the prefix *sa-* 'will/shall' changes present tense verbs to the future, e.g., *aktub* 'I write' v. *sa-aktub* 'I will write'. Alternatively, the Arabic prefix *ist-* is a highly likely cognate which modifies meaning in verbs and adjectives, e.g., *katab* 'write' v. *istaktab* 'continue to write', *qaabal* 'meet' v. *istaqbal* 'receive someone', *sahl* 'easy' v. *istashal* 'find it easy'. Finally, it may be considered a phonetic evolution of *-ate* (cf. *summarize* and **summarate*) where /t/ became /s/ or /z/, whose Arabic cognate has already been resolved (3.5.3).

3.6.2 The Prefixes *ex-* and *se-*

Ex- 'out' may modify meaning such as *ex-wife*, *excommunicate*, *extradite*, *exacerbate*, *exaggerate*, *excrete*, *exclude*. Its Arabic cognate is *aqSa* 'out, far' in which /q & S/ became /k & s/ each. Another possible cognate is the above Arabic prefix *-ist* in which /s & t/ turned into /k & s/ together with reordering, for example, *kabeer* 'big' v. *istakabar* 'to be

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

proud' (cf. *exacerbate* in Jassem 2012b). Note that **istcavate* would be phonotactically impossible in English and so *excavate* is the right phonetic choice.

As to *se-*, it modifies meaning in such words as *secrete* (*excrete*), *seclude* (*include*, *exclude*, *preclude*), *separate* (*pair*, *repair*). As its original Latin meaning is 'aside, hidden', then its true Arabic cognate is *zaa2a* 'move aside, shift' where /z & 2/ merged into /s/. Alternatively, it is cognate to Arabic *sa* or *ta-* above as **taparate*, **taclude* would be inadmissible phonotactically. (Cf. Arabic *katab* 'write', *inkatab* 'written', *istaktab* 'go on writing', *binkatib* 'writeable', *sayaktub* 'will write' with *seclude* above.)

3.6.3 The Suffixes –ese, -ous

–ese may be added to certain (i) proper nouns to make adjectives or nouns such as *Chinese*, *Japanese* and (ii) common nouns to make abstract ones such as *journalese*, *motherese*. As to –ous, it makes adjectives from nouns as in *furious*, *marvelous*.

In Arabic, their direct cognate is the nominal 'feminine' suffix –at which makes abstract nouns from (i) common ones as in *umm* 'mother' → *umoomat* 'motherhood' and (ii) adjectives as in *saalim(at)* 'safe (m/f)' → *salaamat* 'safety'. In speech, /t/ is pronounced /h/ or Ø at pause. Thus, –at and –ese/-ous are identical cognates where /t/ (or /h/) turned into /s/.

3.6.4 The Suffixes –ic (German -isch, French -ique), -age

–ic is very productive in English which makes adjectives from nouns, e.g., *terrific*, *rhythmic*, *Arabic*. –age is added to nouns like *orphanage*.

In Arabic, the suffix –y/-i (pronounced /ee/) makes adjectives from nouns such as *naar* v. *naari* 'fire', *islam* v. *islami* 'peace', *gharb* v. *gharbi* 'west, Europe' (where *gharb* and *Europe* 'west' are identical cognates where /gh & r/ merged.). In some ancient Arabic dialects, /j/ was added, yielding *narij*, for instance. In addition, –ik varied with –i in ancient Arabic dialects as in *hindi* or *hindik* 'Indian'. In Kuwaiti and UAE Arabic dialects today /j/

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

is replaced by /y/ such as *wajh/wayh* 'face', furthermore. (For further detail, see Jassem 1993: 118-120; Jassem 2012c)

In summary, the suffixes *-ic*, *-age*, and *-i* or *-ij* are identical cognates, in which 'inserted' /j/ turned into /k/ (cf. Jassem 2012c). *Age* and Arabic *2ijja(t)* 'age' are identical cognates where /2/ was deleted or merged into /j/, furthermore.

3.7 W-Based Affixes

3.7.1 The Suffix *-ive*

This is a very productive suffix in English, German, and French which makes adjectives from verbs and/or nouns such as *active*, *negative*, *relative*, *creative*.

In Arabic, the very productive suffix *-wi* changes nouns to adjectives and nouns, e.g., *dam* 'blood' v. *damawi* 'bloody', *Hama* 'Syrian city' v. *Hamawi* 'one from Hama', *baiD(a)* 'egg, ovum' v. *baiDawi* 'oval'. (Note that *ovum* and *baiD* 'egg' are identical cognates where /b & D/ merged into /v/ and so are *egg* and *ji2* 'melon' in which /j & 2/ merged into /g/.) Thus, *-wi* and *-ive* are identical cognates in which /w/ turned into /v/.

3.7.2 The Suffix *-fy*

-fy makes verbs from adjectives or nouns, e.g., *personify*, *beautify*, *stupefy*, *defy*. It has two possible Arabic cognates. The first is *-wi* above whose function shifted from an adjectival to a verbal function in English. In other words, *-fy* is a further development of Arabic *-wi* via *-ive*. The second is the very common prefixed particle *fa-* 'so, then', which indicates phrasal succession and sequence, e.g., *katab* '(he) wrote', *fakatab* 'then (he) wrote'. It is reported that a Christian monarch, when he saw the second greatest Caliph of Islam, Omar ibnu-l-Khattab, sleeping rough under a tree, exclaimed: "*2akamta* 'you ruled', *fa3adalta* 'then you were just', *faaminta* 'so you felt safe"', *fanimta* 'and so you slept'. In summary, Arabic *-wi*, English *-ive*, and *-fy* are identical cognates where the last shifted from an Arabic adjectival to an English verbal function.

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

3.8 Miscellaneous Affixes

3.8.1 The Prefixes *be-*, (*pre-*, *pro-*, and *per*)

Be- may (i) modify meaning as in *come* v. *become*, *side* v. *beside*, (ii) make verbs such as *head* v. *behead*, *little* v. *belittle*, and (iii) be inserted in certain words like *absorb*, *abstain*, *abscond*.

In Arabic, although the particle *bi-* 'in, with' is a preposition as in *bi-al-bait* 'at-the-home', it is usually prefixed to all present tense verbs in spoken 'Damascus' Arabic as in *bi-naam* '(he) sleeps'. This is the most likely source cognate thereof.

As to *pre-* as in *prescribe*, *prevent* and *pro-* as in *pronounce*, *programme*, *produce*, they can be considered variant cognates of *be-/bi-* above in which /r/ is an insertion. Noting their meanings, however, both derive from two formally similar but semantically different Arabic cognates: i.e., *pre-* from a reordered *qabl* 'before' while *pro-* from *qaabil* 'accepting' in both of which /q/ turned into /r/ into which /l/ merged. *Per* and *bi-* are identical cognates in which /r/ is an insertion.

3.8.2 The Prefixes *com-* & *con-*

The prefix *com-* and its variants *con-*, *col-*, *cor-*, *co* are added to such words as *compose*, *commute*, *connect*, *consider*, *collect*, *correct*, *co-author*. Since all come from Latin *cum* 'with' (Harper 2012), then their identical Arabic cognate is a reversed *ma3* 'with' in which /3/ became /k/. Alternatively, *com-* might derive from (i) the compound prefix *mus-* (*m-* 'noun suffix' + *s* 'verb suffix') in reverse where /s/ became /k/ as in *qatal* 'kill', *mustaqtil* 'eager to kill' or (ii) *?in-* 'reflexive pref.' as in *?inkasar* 'to be broken' from *kasar* 'break' in which /?/, a glottal stop, changed to /k/.

3.8.3 The Suffix *-ment*

-ment is uncommon, which is used to make nouns from certain 'French' verbs such as *establishment*, *bewilderment*, *amazement*. It comes from Latin *mentum* 'result or product of action' (Harper 2012). Although Arabic *muntaha* 'end, result (of something)' may be its cognate where /h/

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

merged into /t/ or was dropped, this might not be the case at all. However, it can be more appropriately treated as a 'compound' suffix comprised of *m* + *n* + *t* as in *activities* (-ive + -ity + -s). In light of this, its identical Arabic cognate is *-anat* in which /n/ split into /m/ and /n/ as in *zarqanat* 'getting blue' (from *azraq* 'blue', *zarqan* 'to get blue'). To support this view, consider *ferment* (*fermentation*) which comes directly from Arabic *khamr* 'wine' and related derivatives like *khamrat* 'wine', *khamraan* and *khamraanat* 'fermenting, fermented' in which /kh/, a velar fricative, changed into /f/. Thus it is related to *-ness* above (3.3.4).

Alternatively, it comes, though less likely, from the compound prefix *muta-* with /n/ being a split or an insertion, e.g., *mutafarriq* 'divided' from *tafarraq* 'divide', *farq* 'division'.

3.8.4 The Suffix *-ship*

-ship makes abstract nouns (especially professions) from common ones such as *friendship*, *professorship*. As a full word in origin, its cognates were described in detail in Jassem (2012b). For example, *friendship* is two words in one: *Friend* derives from a reordered Arabic *rafeeq*, pl. *rufqaan*, *rifaaq* or *rufqat* 'friend(s)' in which /q/ became /d/; *ship* is from Arabic *Saa2ib* 'owner, companion' in which /S/ and /2/ merged into /sh/. In Arabic, *Saa2ib* usually refers to one's job like *Saa2ib San3a* 'work owner, craftsman', *Saa2ib shahadat* 'degree holder'. Thus *friendship* combines both such meanings.

3.8.5 The Expression *in a (adj.) way*

This phrase and similar others are very often used adverbially, e.g., *in a nice way/manner*, *in good fashion*, *in elegant style*. *In* is a cognate of Arabic *min* (lit., from) via lexical shift in which /m/ and /n/ merged. *Way* may derive from either of two closely related Arabic words: (i) *wajh* 'face, way' and related *wijhat* 'direction, way' in which /j/ became /y/ while /h/ merged into /w/ or was deleted, or (ii) *hai'a(t)* 'way, manner' in which /h/ became /w/, though less likely. *Style* comes from Arabic *shakl* 'shape, form' in which /sh & k/ became /s & t/ each.

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

4. Discussion

The above results agree with Jassem's (2012a) investigation of numeral words, common religious terms (Jassem 2012b), pronouns (Jassem 2012c), determiners (Jassem 2012d), verb *to be* forms (Jassem 2012e), and inflectional 'gender and plurality' markers (2012f) in English, German, French, Latin, Greek, and Arabic which were found to be rather dialects of the same language. In all, the percentage of shared vocabulary or forms between Arabic and English, for instance, was 100%, which means that they belong to the same language (i.e., dialects), according to Cowley's (1997: 172-173) classification.

Of all the studies above, the most pertinent is Jassem (2012f) which compares very well with this. In both studies, the same morphemes like *a*, *at*, *en* may be used inflectionally (as suffixes) and derivationally (as prefixes and suffixes). Because such morphemes change form or pronunciation due to morphological causes such as derivation, grammatical category, word position, and so on, they are more properly termed morphophonemes: i.e., phonemes with a grammatical function or morphemes with a different pronunciation. Besides, their alternation is morphologically conditioned, resulting in morphophonemic rules, for which a brief summary is attempted below.

- i) The affix *a* was derivationally used as a prefix for making verbs in Arabic and English (3.1 above) and inflectionally as a suffix for feminine gender and plurality (see Jassem 2012f).
- ii) The *e*-/y-based affixes occurred word initially as *e*- in verbs like *estrangle* and word finally as *-ee/-y* in nouns and adjectives like *refugee*, *fury*, *funny*; /j/ (and /k/) are insertions or additions as in *rhythmic*, *leakage*. In Arabic they occurred as suffixes in verbs and nouns as in *jari* 'running', *Araby* 'Arab' (3.2 above). Inflectionally, *e*-marked feminine gender in French and spoken Arabic and plurality in Arabic and Latin (Jassem 2012f).
- iii) The *w*-based affixes occurred as adjectival and nominal suffixes in Arabic as in *baiDawi* 'oval' which changed in English to /v/ in nouns and adjectives as in *relative* and /f/ in verbs as in *rectify* (see 3.7.1-2 above).
- iv) The derivational *t*-based affix was used in Arabic as a prefix in verbs as in *takathar* 'increase', which became /d/ in English as in *decrease*,

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

describe, admit; as a suffix, Arabic /t/ remained the same as in *activate, activity* or became /s/ in nouns and adjectives as in *journalese, wondrous, grandiose* (3.5.1-5 above). Inflectionally, Arabic /t/ varied with /s/ in signaling mainly feminine gender and plurality in English, German, French, and Latin (Jassem 2012f; cf. Jassem 2012c).

- v) The derivational *s*-based affixes overlap with *t*-based ones, which are used as prefixes in Arabic verbs as in *sa-aktub* 'I'll write' or *istaktab* 'continue to write' which remained unchanged in English as in *seclude, secrete* or became /ks/ as in *exclude, examine*. As suffixes, English /s/ developed from Arabic /t/ via /h/ as in *motherese* from Arabic *umoomat* 'motherhood' and *summarize* (3.6.1-4 above). The alternation between *-ize* and *-ate* seems to be phonetically and morphologically conditioned with the former being attached to 'vowel-final' nouns like *summary, American* while the latter to 'consonant-final' adjectives like *active*. This means that they are variants of the same morpheme, say, *-ate*, which was the case in Old English (3.5.3 above). As an inflectional 'plural and feminine gender' suffix, English, German, French, and Latin /s/ developed from Arabic /t/ although it (the latter) stayed the same in some (cf. Jassem 2012c, 2012f).
- vi) The derivational *n*-based affixes occurred as noun and verb suffixes and prefixes in Arabic and English. The *n*-, *m*-, *r*-, and *l*-forms are phonetically conditioned in English, German, and French (3.3.1-7 above). Inflectionally, they occurred as suffixes of plurality in Arabic, English, German, and French, of masculine gender in Arabic but feminine gender in English, German, and French (Jassem 2012f; also cf. 2012c).
- vii) The *m*-based affixes in English, Latin, and Arabic are identical cognates (3.4 above).
- viii) The Arabic and English *b*-based affixes are identical cognates where Arabic /b/ turned into /p/ as in *become, prescribe, proscribe, per* with /r/ being an insertion (see 3.8.1 above).

Thus this study shows over and over again the adequacy of the lexical root theory for the analysis of the close genetic relationships between the above languages where the percentage of shared affixes in general was

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

100% which means that they are dialects of the same language according to Cowley's classification. As a consequence, the main lexical root theory principle that states that Arabic, English, German, French, Latin, and so on are not only genetically related but also are dialects of the same language is empirically sound and verifiably true.

Regarding the four applied procedures of analysis, all operated neatly. First, the lexicological procedure showed that the lexical (consonantal) root was an adequate, analytic tool in relating derivational morphemes to each other. For example, English *de-/di(s)-/ad-* have been successfully traced back to their Arabic root cognate *ta-* (3.5.3 above) by isolating the root 'consonants' and overlooking the 'precise quality of vowels' (cf. Jassem 2012a-f). The etymology or historical origin and meaning of morphemes was found very useful also. For example, English *-i(s/z)e* came into Middle English from Latin via French, which was *-attan* in Old English (Harper 2012); its Arabic cognate is *ta-* where /t/ became /s/.

The phonetic analysis played an indispensable role in relating affixes to each other as a result of the enormous changes that affected Arabic consonants especially in English, German, French, Latin, and even Arabic varieties themselves (e.g., Jassem 1993, 1994a, 1994b, 2012a-f). The main sound changes that affected Arabic consonants here can be summed up as follows:

- (a) Arabic /t/ as in *takallam* 'talk' and *jameelat* 'comely' changed to (i) /d/ as in *determine*, (ii) /s(z)/ as in *obvious*, *grandiose*, *summarize*, (iii) /th/ as in *health*, and (iv) /h/ (or (iv) Ø) in spoken Arabic at pause (3.5 above).
- (b) Arabic /n/ as in *nukran* 'denial' and *inkasar* 'to be broken' passed into /l, r, & m/ as in *logical*, *circular*, *weaker*, *American*, *phoneme* (3.3.1-7 above).
- (c) Arabic /w/ as in *baiDawi* 'oval' passed into /v & f/ as in *active*, *deify* (3.7.1-2 above).
- (d) Arabic /y/ (i/ee) as in *naari* 'fiery' palatalized into /-ij, -ic, -age/ as in *funny*, *acidic*, *roughage* (3.2, 3.6.4 above).
- (e) Vowel shift in tongue height (raising, lowering), part (fronting, backing, centering), length (long, short), and lip shape (round, unround) occurred in all languages; for example, consider the Arabic affix *at* (pronounced /e(h), i/ when final in spoken Arabic) and its

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

English cognates *de-*, *dis*, *ad-* where the low central vowel /a/ became low, mid, and high (cf. Jassem 2012a-e).

Morphologically and grammatically, all the derivational morphemes here and inflectional ones (Jassem 2012e) had Arabic cognates.

Finally, the same or similar semantic or functional patterns occurred as reported in Jassem (2012e). Morphological stability was evident in all derivational morphemes like *t-*, *n-*, and *s-*-based forms in English, French, and German, which still retain the same or similar meanings or functions as their Arabic cognates (3.1-8 above). Morphological shift was noted in Arabic *-aan* whose function shifted from a masculine noun marker (e.g., *sakraan* 'drunkard') to nominal marker in English, (German, and French) (e.g., *Anglican*) (3.3.5 above). Morphological split affected Arabic *ta* from which initial *de-* and final *-ate* came in English (3.5.3 above); also Arabic /n/ split into /l, r, & m/ in English (3.3.1-7 above). Lexical convergence occurred in *-ize* which might derive from (i) Arabic *sa-* 'future suffix' (3.6.1 above) or (ii) *ta* (3.5.3 above). Morphological multiplicity is manifested in the double usage of all the morphemes derivationally and inflectionally; e.g., *n-* and *t-*-forms mark (i) verbs, (ii) nouns, and (iii) adjectives besides (iv) plurality and (v) feminine gender (3.3, 3.5 above). Morphological change happened in constraining *-(e)n* in English to certain verbs and nouns and its overgeneralization in German to all infinitives, realized as *-r(e)* in Latin and French (3.3 above). Finally, morphological variability was evident in the presence of several word derivation variants, which are utilized in different ways in all the languages above, e.g., *de-/dis*, *ad-*, *-ate*, *-ize*, *-en* in English (3.1-8 above).

As regards the relationship between form and meaning, all the above derivational morphemes like *t-*, *s-*, and *n-*-based affixes in Arabic, English, German, and French have similar forms and meanings: i.e., true cognates, with Arabic being their main origin (3.3-6 above); some underwent morphological shift, however. Some are formally different but semantically similar such as *desire*, *admire*, *attack*, *acclaim*, *activate*, all of which derive from Arabic *ta-* (3.5.4 above). Formally similar but semantically different markers occurred such as *-ic*, *-age* v. *Ich* 'I in Old English and German', which all have Arabic cognates (3.6.4 above; cf. Jassem 2012c).

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

In light of the above, therefore, all the foregoing derivational affixes in Arabic, English, German, French, and Latin are true cognates in the sense of having similar forms and meanings. Arabic can be safely said to be their origin all for which Jassem (2012a-f) offered some equally valid reasons which the curious reader can refer to. For example, Arabic has multiplicity and variety in the sense that it has for each morpheme all the above-mentioned variants and many more whereas every other language may have two or three for each type. That is, Arabic has for each morpheme more variants that can accommodate all those in English, German, French, Greek, and Latin put together. As an example, take verb markers in Modern English (e.g., *-ate*) and Old English and German (e.g., *-en*), French and Latin (*-re*) and compare them with Arabic, you will find that Arabic has them all. Furthermore, Arabic is structurally more open as affixes can be prefixed, infixes or suffixed to words while all the others are less so or closed. In addition, all Arabic affixes are related to each other functionally, e.g., the *t*-based suffixes being feminine in gender. Therefore, due to variety, multiplicity and openness, Arabic affixes are the original cognates of all such forms in English, German, French, and so on.

5. Conclusion and Recommendations

The different derivational morphemes (and the inflectional 'plural and gender' markers (Jassem 2012f)) in English, German, French, Latin, Greek, and Arabic were found to be genetically related to one another, forming identical cognates. Almost all morphs have double functions: inflectional and derivational. Inflectionally, they are always in end position while they may be initial and final derivationally. Because they change form according to morphological and phonological factors, they are technically called morphophonemes whose variations are morphologically conditioned. The main conclusions of this paper can be summed up as follows.

- i) *t*-based affixes: Arabic *ta* as in *takathar* 'increase', *salaamat* 'safety' and English *de-*, *di(s)-*, *ad-* (also *at-*, *ac-*, *ag-*, *am-*, *-al*) as in *describe*, *discuss*, *admit*, *attest*, *acclaim*, *amputate*, *allocate*, *aggravate* and *-ate*, *-ity-*, *th*, *-ese* as in *activate*, *activity*, *health*, *journalese*, (*obvious*, *grandiose*) are identical cognates where Arabic /t/ developed into /d., th, & s/ mainly. That is, as a prefix, Arabic /t/ varied with /d/ and its

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

- alternants in English but, as a suffix, it remained the same or became /th or s/ (3.5 above). As an inflectional, the same rule holds in general (Jassem 2012f, cf. 2012c). As a rule, one can state that derivational and inflectional Arabic /t/ changed to or varied with /d & s/ in all the above languages (cf. Jassem 2012c). Formulaically, /t/ → /d/ ##----- (word initially); /t/ ↔ (varied with) /d, th, & s/ -----## (word finally)
- ii) *s*-based affixes: As prefixes, Arabic *sa-* and *ist-* as in *sa-aktub* 'I'll write' or *istaktab* 'continue to write' and English *se-* and *ex-* as in *seclude*, *secrete*, *exclude*, *examine* are identical derivational cognates where /ist/ became /iks/. As suffixes, English /s/ as in *motherese* and *summarize* developed from Arabic /t/ (via /h/) as in *umoomat* 'motherhood' (3.6 above). The same rule applies to the inflectional *t-* and *s-* based 'gender and plural' morphemes (Jassem 2012f) in Arabic, English, German, French, and Latin where Arabic /t/ varied with /s/. As a rule, one can state that, although derivational and inflectional /s & t/ in Arabic, English, German, and French overlap in many ways, Arabic /t/ turns in these languages into /s/ in final position, signaling feminine gender and plurality in essence (cf. Jassem 2012c).
 - iii) *n*-based affixes: Arabic, English, German, and French *n*-based morphemes are identical cognates derivationally (and inflectionally (Jassem 2012f) where /n/ turned into /m, r, & l/ also (3.3 above). As a rule, one can state that derivational and inflectional Arabic /n/ may vary with /r, l, & m/ in all such languages.
 - iv) *m*-based affixes: Latin and English *-ium* and Arabic *ma-* are identical cognates (3.4 above).
 - v) *w*-based affixes: Arabic *-wi* as in *baiDawi* 'oval' and English *-ive* as in *relative* and *-fy* as in *rectify* are identical cognates where /w/ changed to /v & f/ (3.7 above).
 - vi) *b*-based affixes: Arabic *bi-* and English *be-* (also *pre-*, *pro*, and *per*) as in *become*, *prescribe*, *proscribe*, *pervert*, *per* are identical cognates where Arabic /b/ turned into /p/ with /r/ being an insertion (3.8.1 above).
 - vii) *e*-(/y)-based affixes: Arabic *-y* (pronounced/spelled /i or ee/) as in *Araby* 'Arab' and English *e-*, *-ee*, and *-y* as in *estrangle*, *evolve*, *refugee*, *funny*, *lovely* are identical cognates (where /j/ and /k/ may be inserted or added as in *rhythmic*, *leakage*) (3.2 above).

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

viii) *a*-based affixes: Arabic and English *a*- as in *azaal* 'demolish' and *amass* are identical cognates derivationally (and inflectionally where Arabic /a/ may vary with /e & i/ in feminine and plural nouns in English, German, French, and Latin (Jassem 2012f)) (3.1 above).

Thus, despite the huge number of affixes in English, (German, and French), they can be reduced to a limited, mainly consonant-based set.

In summary, the lexical root theory has over and over again proven to be applicable to and adequate for the analysis of the close genetic relationship between derivational and inflectional morphemes in Arabic, English, German, French, Greek, and Latin. The double use of the same morphemes inflectionally and derivationally in all point to a common genetic source at the top of which Arabic firmly stands. To consolidate these findings, further research is required into all language levels and their application to language teaching, lexicology and lexicography, translation, cultural (including anthropological and historical) awareness and understanding (Jassem 2012a-f). As a vast, useful, and extremely interesting research area, its results will hopefully help unite a deeply disunited world where learning a language and, consequently, adapting to a new culture may become awfully easier in the end.

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References

- Al-Ghalayeen, Al-Shaikh Mustafa. (2010). *Jaami3 Al-duroos Al-3arabiyat*. Saida and Beirut: Al-Maktabat Al-3aSriyat.
- Campbell, L. (2006). *Historical linguistics: An introduction*. (2nd ed). Cambridge, Mass.: The MIT Press.
- Canoonet. (2012). Derivation. Retrieved <http://www.canoo.net> (1 November 2012).

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

- Chambers, J. K. (2009). *Sociolinguistic theory: Linguistic variation and its social significance*. (3rd ed). Oxford: Wiley-Blackwell.
- Crowley, T. (1997). *An Introduction to historical linguistics*. (3rd ed). Oxford: Oxford University Press.
- Crystal, D. (2010). *The Cambridge encyclopedia of language*. (3rd ed). Cambridge: Cambridge University Press.
- Green, Tamara N. (2008). *The Greek and Latin roots of English*. (4th ed) Plymouth: Rowman and Littlefield.
- Harper, Douglas. (2012). *Online etymology dictionary*. Retrieved <http://www.etymonline.com> (October 10, 2012).
- Ibn Manzoor, Abi AlFadl Al-Misri. (1955-1974). *Lisan al3arab*. Beirut: Dar Sadir.
- Jassem, Zaidan Ali. (1993). *Dirasa fi 3ilmi allugha al-ijtima3i: Bahth lughawee Sauti ijtima3i fi allahajat al-3arabiyya al-shamiyya muqaranatan ma3a al-ingleeziyya wa ghairiha*. Kuala Lumpur: Pustaka Antara.
- _____. (1994a). *Impact of the Arab-Israeli wars on language and social change in the Arab world: The case of Syrian Arabic*. Kuala Lumpur: Pustaka Antara.
- _____. (1994b). *Lectures in English and Arabic sociolinguistics*. Kuala Lumpur: Pustaka Antara.
- _____. (2012a). The Arabic origins of numeral words in English and European languages. *International Journal of Linguistics* 4 (3), 225-41. URL: <http://dx.doi.org/10.5296/ijl.v4i3.1276>
- _____. (2012b). The Arabic origins of common religious terms in English: A lexical root theory approach. *International Journal of Applied Linguistics and English Literature* 1 (6), 59-71. URL: <http://dx.doi.org/10.7575/ijalel.v.1n.6p.59>
- _____. (2012c). The Arabic origins of English pronouns: A lexical root theory approach. *International Journal of Linguistics* 4 (4), 83-103. URL: <http://dx.doi.org/10.5296/ijl.v4i4.27>.
- _____. (2012d). The Arabic origins of determiners in English and European languages: A lexical root theory approach. *Language in India* 12 (11), 323-359. URL: <http://www.languageinindia.com>.
- _____. (2012e). The Arabic Origins of Verb "To Be" in English, German, and French: A Lexical Root Theory Approach. *International*

Language in India www.languageinindia.com

13 : 1 January 2013

Zaidan Ali Jassem, Ph.D.

The Arabic Origins of Derivational Morphemes in English, German, and French: A Lexical Root Theory Approach

- Journal of Applied Linguistics and English Literature 1* (7), 185-96.
URL: <http://dx.doi.org/10.7575/ijalel.v.1n.7p.185>.
- _____. (2012f). The Arabic origins of number and gender markers in English, German, French, and Latin: a lexical root theory approach. *Language in India 12* (12). URL: <http://www.languageinindia.com>.
- Lawless, Laura K. (2012). Making French nouns feminine and plural. Retrieved <http://french.about.com> (1 November 2012).
- Pyles, T. and J. Algeo. (1993). *The origins and development of the English language*. (4th ed). San Diego: HBJ.
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Language in India www.languageinindia.com

13 : 1 January 2013

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