THE ARABIC ORIGINS OF “PERCEPTUAL AND SENSUAL TERMS” IN ENGLISH AND EUROPEAN LANGUAGES: A LEXICAL ROOT THEORY APPROACH

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ABSTRACT
This paper investigates the Arabic origins or cognates of perceptual and sensual words in English, German, French, Latin, and Greek from a lexical root theory perspective. The data consists of 130 terms or so like see, look, watch, observe, speculate, inspect, expect, touch, catch, seize, feel, ache, ail, smell, sniff, hear, eat, taste, chew, masticate, and so on. All such words, the results show, have true Arabic cognates, with the same or similar forms and meanings. Their different forms, however, are all shown to be due to natural and plausible causes of linguistic change. For example, English, French, and Latin observe comes from Arabic baSar, abSara (v) ‘see’ via reordering and replacing /b & S/ by /v/; English and German hear/hören derives from Arabic 3air, a3aar (v) ‘ear, hear’, changing /3/ to /h/; English and German see/sehen obtains from Arabic sha22a/sha33a ‘see’, merging /sh & 2 (3)/ into /s/. As a consequence, the results indicate, contrary to Comparative Method claims, that Arabic, English and all (Indo-) European languages belong to the same language, let alone the same family. They, therefore, prove the adequacy of the lexical root theory according to which Arabic, English, German, French, Latin, and Greek are dialects of the same language with the first being the origin. Because of their phonetic complexity, huge lexical variety and multiplicity, Arabic words are the original source from which English and all the others stemmed.

Keywords: Perceptual & sensual words, Arabic, English, German, French, Latin, Greek, historical linguistics, lexical root theory

INTRODUCTION
The lexical root theory (Jassem 2012a-f, 2013a-m) was first proposed as a rejection of the classification of the comparative 'historical linguistics' method that Arabic belongs to a different language family from English, German, French, and all (Indo-)European languages in general (Bergs and Brinton 2012; Algeo 2010; Crystal 2010: 302; Campbell 2006: 190-191; Yule 2006; Crowley 1997: 22-25, 110-111; Pyles and Algeo 1993: 61-94). On the contrary, it firmly established the inextricably close, genetic relationship between Arabic and such languages phonetically, morphologically, grammatically, and lexically or semantically (Jassem 2012a-f, 2013a-n).

Twenty studies have been conducted so far. Phonetically, Jassem (2013c) outlined the English, German, French, Latin, and Greek cognates of Arabic back consonants: viz., the glottals, pharyngeals, uvulars, and velars. Besides, the phonetic analysis is essential in all the papers, of course. Morphologically, three studies established the Arabic origins of English, German, French, Latin, and
Greek inflectional ‘plural and gender’ markers (Jassem 2012f), derivational morphemes (Jassem 2013a), and negative particles (Jassem 2013b). Grammatically, four papers described the Arabic origins of English, German, French, Latin, Greek, and Sanskrit personal pronouns (Jassem 2012c, 2013l), determiners (Jassem 2012d), and verb ‘to be’ forms (Jassem 2012e). Lexically, eleven studies successfully traced the Arabic origins of English, German, French, Latin, Greek and Sanskrit words in key semantic fields, including numeral words (Jassem 2012a), common religious terms (Jassem 2012b), water and sea terms (Jassem 2013d), air and fire terms (Jassem 2013e), celestial and terrestrial terms (Jassem 2013f), animal terms (Jassem 2013g), body part terms (Jassem 2013h), speech and writing terms (Jassem 2013i), time words (Jassem 2013j), family words (Jassem 2013k), cutting and breaking words (Jassem 2013m), and movement and action words (Jassem 2013n).

The rest of this paper is organized into four sections: (i) research methods, (ii) results, (iii) discussion, and (iv) conclusion.

RESEARCH METHODS
The Data
The data consists of 130 perceptual and sensual words or so such as see, look, watch, observe, speculate, inspect, expect, touch, catch, seize, feel, ache, oil, smell, sniff, hear, eat, taste, chew, masticate, and so on. Their selection has been based on the author’s knowledge of their frequency and use and English dictionaries and thesauri. For quick reference, they will be arranged alphabetically alongside of brief linguistic notes in (3.) below.

As to etymological data for English and European languages, all references are for Harper (2012); for Arabic, they are for Altha3aalibi (2011: 205-13, 294-96) for food, Ibn Seedah (1996: 1/111-125 for sight; 13/9 for hearing; 4/118 and 5/20 for food and eating), and Ibn Manzoor (2013) in the main.

In transcribing the data, normal spelling is used for practical purposes; nevertheless, certain symbols were used for unique Arabic sounds, including /2 & 3/ for the voiceless and voiced pharyngeal fricatives respectively, /kh & gh/ for the voiceless and voiced velar fricatives each, capital letters for the emphatic counterparts of plain consonants /t, d, dh, & s/, and /’/ for the glottal stop (Jassem 2013c).

The above perceptual and sensual words can make up fully natural texts on their own in today’s English, e.g.,

**Simon** is visual: he looks, observes watches, sees, gazes, inspects, expects, supervises, and invigilates. Carl is auditory; he hears and listens. Charles is tactile; he senses, feels, touches, grasps, and seize. Charlotte is olfactory and odorous; she smells, sniffs, and sneezes. Charlene is alimentary; she tastes, chews, masticates, and eats. All are realists.

Every word in the above fully natural English text has a true Arabic cognate as will be shown in the analysis below!

Data Analysis
Theoretical Framework: The Lexical Root Theory
As usual, the theoretical framework for data analysis will be the lexical root theory (Jassem 2012a-f, 2013a-n). It is so called because of employing the lexical (consonantal) root in examining genetic relationships between words such as the derivation of *observation* from *serve* (or simply *srv*). The main reason for that is because the consonantal root carries and determines the basic meaning of the word regardless of its affixation such as *observation*. Historically speaking, classical and modern Arabic dictionaries (e.g., Ibn Manzoor 1974, 2013) used consonantal roots in listing lexical entries, a practice first founded by Alkhaleel (Jassem 2012e), a linguist, lexicographer, musician, and mathematician.

The lexical root theory is simple in structure, which is composed of a theoretical principle or hypothesis and five practical procedures of analysis. The principle states that:

Arabic and English as well as the so-called 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, whose differences are due to natural and plausible causes of linguistic change.

To empirically prove that, five applied procedures are used in the analysis: namely, (i) methodological, (ii) lexicological, (iii) linguistic, (iv) relational, and (v) comparative/historical. As all have been reasonably described in the above studies (Jassem 2012a-f, 2013a-n), a brief summary will suffice here.

Firstly, the methodological procedure concerns data collection, selection, and statistical analysis. Apart from loan words, all language words, affixes, and phonemes are amenable to investigation, and not only the core vocabulary as is the common practice in the field (Crystal 2010; Pyles and Algeo 1993: 76-77; Crowley 1997: 88-90, 175-178). However, data selection is practically inevitable since no single study can do that in one go, however ambitious it might be. The most appropriate way for approaching that goal would be to use semantic fields such as the present and the above topics. Cumulative evidence from such findings will aid in formulating rules and laws of language change at a later stage (cf. Jassem 2012f, 2013a-f). The statistical analysis employs the percentage formula (see 2.2 below).

Secondly, the lexicological procedure is the initial step in the analysis. Words are analyzed by (i) deleting affixes (e.g., explained → plain), (ii) using primarily consonantal roots (e.g., plain → pln), and (iii) search for correspondence in meaning on the basis of word etymologies and origins as a guide (e.g., Harper 2012), to be used with discretion, though. The final outcome is Arabic baien, baan (v) ‘clear, plain’ via /l/-insertion or split from /n/ (Jassem 2013i).

Thirdly, the linguistic procedure handles the analysis of the phonetic, morphological, grammatical and semantic structures and differences between words. The phonetic analysis examines sound changes within and across categories. In particular, consonants may change their place and manner of articulation as well as voicing. At the level of place, bilabial consonants → labio-dental ↔ dental ↔ alveolar ↔ palatal ↔ velar ↔ uvular ↔ pharyngeal ↔ glottal (where ↔ signals change in both directions); at the level of manner, stops ↔ fricatives ↔ affricates ↔ nasals ↔ laterals ↔ approximants; and at the level of voice, voiced consonants ↔ voiceless.

In like fashion, vowels do not escape change as well. Although the number of vowels differ greatly within and between English (Roach 2008; Celce-Mercia et al 2010) and Arabic (Jassem 2012g, 1987, 1993), all can be reduced to three basic long vowels /aː (aa), iː (ee), & uː (oo)/ (and their short versions besides the two diphthongs /ai (ay)/ and /au (aw)/ which are a kind of /iː/ and /uː/ respectively). They may change according to modifications in (i) tongue part (e.g., front ↔ centre ↔ back), (ii) tongue height (e.g., high ↔ mid ↔ low), (iii) length (e.g., long ↔ short), and (iv) lip shape (e.g., round ↔ unround). In fact, the vowels can be, more or less, treated like consonants where /iː/ is a kind of /j (y)/, /uː/ a kind of /w/, and /aː/ a kind of /h/ or vice versa. Their functions are mainly phonetic such as linking consonants to each other in speech and grammatical such as indicating tense, word class, and number (e.g., sing, sang, sung, song; man/men). Thus their semantic weight is little, if not at all. For these reasons, vowels are marginal in significance which may be totally ignored in the analysis because the limited nature of the changes do not affect the final semantic result at all.

Sound changes result in natural and plausible processes like assimilation, dissimilation, deletion, merger, insertion, split, syllable loss, resyllabification, consonant cluster reduction or creation and so on. In addition, sound change may operate in a multi-directional, cyclic, and lexically-diffuse or irregular manner (for detail, see Jassem 2012a-f, 2013c).

As regards the morphological and grammatical analyses, some overlap obtains. The former examines the inflectional and derivational aspects of words in general (Jassem 2012f, 2013a-b); the latter handles grammatical classes, categories,
and functions like determiners, pronouns, nouns, verbs, and case (Jassem 2012c-e). Since their influence on the basic meaning of the lexical root is marginal, they may also be ignored altogether.

Regarding the semantic analysis, it examines meaning relationships between words, including lexical stability, multiplicity, convergence, divergence, shift, split, change, and variability. Stability means that word meanings have remained constant over time. Multiplicity denotes that words might have two or more meanings. Convergence means two or more formally and semantically similar Arabic words might have yielded the same cognate in English. Divergence signals that words became opposites or antonyms of one another. Shift indicates that words switched their sense within the same field. Lexical split means a word led to two different cognates. Change means a new meaning developed. Variability signals the presence of two or more variants for the same word (for detail, see Jassem 2012a-f).

Fourthly, the relational procedure accounts for the relationship between form and meaning from three angles: formal and semantic similarity (e.g., third, tertiary and Arabic thalath 'three' (Damascus Arabic tolaat (Jassem 2012a)), formal similarity and semantic difference (e.g., ship and sheep (Jassem 2012b), and formal difference and semantic similarity (e.g., quarter, quadrant, cadre and Arabic qeeraaT '1/4' (Jassem 2012a)).

Finally, the comparative historical analysis compares every word in English in particular and German, French, Greek, and Latin in general with its Arabic counterpart phonetically, morphologically, and semantically on the basis of its history and development in English (e.g., Harper 2012; Pyles and Algeo 1993) and Arabic (e.g., Ibn Manzour 2013; Altha3aalibi 2011; Ibn Seedah 1996) besides the author’s knowledge of both Arabic as a first language and English as a second language. Discretion should be exercised here due to uncertainties and inaccuracies, especially in Harper’s work, though.

Statistical Analysis

The percentage formula is employed for calculating the ratio of cognate words or shared vocabulary, which is obtained by dividing the number of cognates over the total number of investigated words multiplied by a 100. For example, suppose the total number of investigated words is 100, of which 90 are true cognates. The percentage of cognates is calculated thus: 90/100 = 0.9 X 100 = 90%. Finally, the results are checked against Cowley's (1997: 173, 182) formula to determine whether such words belong to the same language or family (for a survey, see Jassem 2012a-b).

RESULTS

The results below show the Arabic lexical (consonantal) roots of English, German, French, Latin, and Greek words. This implies that affixation (prefixes, suffixes, and infixes) are generally excluded to save time, space, and effort here although all have true Arabic cognates (see Jassem 2012f, 2013a).

Absorb (absorption, absorbent, adsorb, syrup) from Arabic shurb, ashrab (v) 'drink'; /sh/ became /s/.

Ache from Arabic aakh 'ache', turning /kh/ into /k/ or waja3 'pain', merging /w & a/, changing /j/ to /k/, and deleting /3/.

Ail (ailment, ill) from Arabic 3ill(at), 3aleel (adj) 'ailment, ill' via /3/-loss.

Alimentation from Arabic lamaDha, talammaDh 'move tongue with food', turning /Dh/ into /t/ and splitting /n/ from /m/; 3ahama, 3ahma(t) (n) 'eat (a handful)' via /h/-loss and /n/-split from /m/; or laqama, talaqqama 'eat (a morsel)' through reordering, turning /q/ into /t/, and splitting /n/ from /m/.

Amaze (amazed, amazing, maze) from Arabic 3amash/3amaS 'to narrow eye gaze' via lexical shift, deleting /3/, and turning /sh (S)/ into /z/ (cf. amuse from Arabic aanas 'amuse', turning /n/ into /m/; maize from Arabic 2ummuS 'chick peas' via lexical shift and /2/-loss).

Appear (appearance, apparition) from Arabic bar'a
'create, find' via lexical shift or from baana, abaana 'appear' where /n/ became /r/.

Attisho from Arabic 3aTas 'sneeze' via /3/-loss and turning /s/ into /sh/.

Audio (audition, auditory, audible, audience, antenna) from Arabic adhun 'ear', adhina (v) 'hear, permit', replacing /dh/ by /d/ (Jassem 2013f).

Aware (awareness) from Arabic ara 'see' via reordering and turning /'/ into /w/; warwar 'look sharply and consecutively' via syllable merger and lexical shift; or ra'ra' 'look' via reordering, syllable merger, and changing /'/ to /w/. See wary.

Behold (hold) from Arabic laa2aDh 'see' via reordering and changing /2 & Dh/ to /h & d/.

Browse (browser) from Arabic baSar 'sight' via reordering and turning /S/ into /s/ or ramaS 'move eye lids' via reordering and turning /m & S/ into /b & s/.

Caress from Arabic qaraS 'sting', substituting /k & s/ for /q & S/.

Catch from Arabic kamash 'catch', replacing /m/ by /t/ or qaTsh 'cut' via lexical shift and turning /q & T/ into /k & t/.

Chew from Arabic akal 'eat', turning /k & l/ into /ch & w/ or jaqqa 'manipulate mouth', merging /j & q/ into /ch/.

Coma from Arabic ghamia 'be in coma', turning /gh/ into /k/.

Conceive (conception, concept; conceal; receive; deceive) via Latin concipere "lit., take entirely; gather, seize, obtain, grasp with the mind, learn' as a combination of con (com) 'all, together, with' from Arabic jamee3 'all' where /j & 3/ became /k & Ø/ or ma3a 'with' via reversal and turning /3/ into /k/ and capere 'take, grasp' from Arabic qaDab/qabaD 'seize' via /q & D/-merger into /k/ or from kasab 'gain, take', merging /k & s/ into /k/. See perceive.

Conscious (conscientious, conscience) via Latin conscious 'knowing, aware', conscire (v) 'to be conscious, to know' as a combination of con (com) 'all, together, with' from Arabic jamee3 'all' where /j & 3/ became /k & Ø/ or ma3a 'with' via reversal and turning /3/ into /k/ and scire 'to know' from Arabic Saa2i 'awake' via /S & 2/-merger into /s(h)/ or from sha3ar 'feel, sense' via /3/-loss.

Dazzle (daze) from Arabic Tassa 'see' via lexical shift and replacing /T & s/ by /d & z/; See dizzy.

Dizzy from Arabic daakh 'to feel dizzy', turning /kh/ into /z/; See daze.

Dine (dinner) from Arabic Ta3aam 'food, eat'; /T & m/ turned into /d & n/ and /3/ was elided.

Drink from Arabic Tarqa3 'drink' via reordering and turning /T, q, & 3/ into /d, k, & n/; or zarnaq 'drink', changing /z & q/ to /d & k/.

Eat (Essen in German) from Arabic 3ashaa', 3ashsha (v) 'food, eat', deleting /3/ and replacing /sh/ by /t (s)/; or 3aDDa 'bite' via /3/-loss, lexical shift, and turning /D/ into /t/.

Embrace (brace) from Arabic raqaba(t) 'neck' via lexical shift, reordering, and turning /q/ into /s/.

Envy (envious) from Arabic 3ain 'eye, envy' via reordering and turning /3/ into /v/ or nafs 'self, eye, envy', merging /f & s/ into /v/.

Examine (examination) from Arabic am3ana 'continue looking into', deleting /3/.

Expect (expectation, expectorate, expectancy) See inspect.

Evident (evidence) See video.

Feel (feeling; German fühlen) from Arabic fala 'itch, scratch, feel', falla 'feel (the head for lice), itch; search'; or fa3al, infaqal 'to feel, to react' via /3/-deletion.

Flavour via Middle English flauryng 'perfuome' from Arabic full(a) 'flower, perfume' via /f/-split from /l/; or fulful 'pepper' via lexical shift and
turning /l/ into /r/.

**Feed** (*food*) from Arabic zaad/athaad 'food, eat', turning /z (dh)/ into /f/.

**Gaze** from Arabic ja2aDh 'look with wide open eyes', merging /j & z/ into /g/ and replacing /Dh/ by /z/; zaagha 'lose sight, focus temporarily' via reversal and replacing /gh/ by /g/; or jassa 'look to ascertain' via /j & s/-mutation into /g & z/.

**Gesture** from Arabic ishaara(t), ashaara (v) 'gesture' via reordering and splitting /sh/ into /gs/.

**Glare** from Arabic ja2ar 'stare, look', merging /j & z/ into /g/ and splitting /l/ from /r/.

**Grasp** from Arabic karbas 'grasp, hold in ropes' via reordering and turning /k/ into /g/.

**Grip** (*gra*pple) from Arabic karaba 'tighten, hold tight', turning /k/ into /g/; or qaDab 'hold, grip', changing /D/ to /r/.

**Guess** from Arabic awjasa 'feel, guess' via reordering and replacing /j/ by /g/ or a2assa, 2iss (n) 'feel, sense', turning /2/ into /g/.

**Gulp** from Arabic ghabba 'gulp, drink'; /gh/ became /g/ and /l/ was inserted.

**Hear** (*German* hören) from Arabic 3a3ar, a3aar, ar3a (v) 'ear, hear', mutating /3/ into /h/ (see Jassem 2013f).

**Hint** from Arabic 3ain, 3uwaina(t) (dim.) 'eye, see', changing /3/ to /h/.

**Hold** (*behold*) from Arabic 3ataal 'carry, hold' via reordering and changing /3 & t/ to /h & d/ or 2aDan 'hold to heart' via reordering and turning /2, D & n/ into /h, d, & l/.

**Hug** from Arabic 3aanaaq 'embrace' where /3/ replaced /h/ and /n/ was dropped; or 2awaqa 'encircle', merging /2 & w/ into /h/ and turning /q/ into /g/.

**Hurt** from Arabic Durr(at) 'hurt'; /D/ became /h/.

**Inspect** (*inspection, inspector, expect, respect, prospect(us), perspective, speculate, scope, telescope*) via Latin inspectus, inspicere (v) 'look into' as a combination of in 'into' and spicere 'look' from Arabic shaba2a, tashbee2 (n) 'see' or shabbaha 'to see, liken', substituting /s & k/ for /sh & 2 (h)/.

**Indicate** (*indication, deixis, index, this*) from Arabic dhaa(k) 'this/that', replacing /dh & s/ by /d & k/ (Jassem 2012c).

**Itch** from Arabic 2akk(at) (my accent 2ichche) 'itch, scratch' via /2/-loss and turning /k/ into /ch/.

**Kiss** from Arabic kazza or Sakka 'to press teeth' via lexical shift, reversal, and replacing /S (z)/ by /s/.

**Lick** from Arabic la2as 'lick' or la3aq 'eat, lick', merging /2 (3) & s (q)/ into /k/.

**Lingual** (*lingua, language, linguist, tongue*) from Arabic lisaan 'tongue' via reordering and turning /s/ into /g/ (Jassem 2013k).

**Listen** from Arabic naSata, anSata 'listen' via reordering and /l/-split from /n/ or Sanna(t) 'listen' via /l/-split from /n/.

**Look** from Arabic la3Sa, la3laS 'look', turning /S/ into /k/; lawaqa 'turn eyes around', turning /q/ into /k/; or zalaq 'look with envy' via reordering and merging /z & q/ into /k/.

**Loom** from Arabic lama2a 'see, appear' via /2/-loss.

**Marvel** (*marvelous*) via Latin mirabilia 'wonderful, strange things', mirare (v) 'wonder at' from Arabic mar'a, ra'a (v) 'look', turning /'/ into /v/; moara, mumaara(t) (n) 'argue' via lexical shift and inserting /l/; or mura3 'strange, wonderful, fearful' via /3/-loss.

**Masticate** (*mastication*) from Arabic maDagha 'chew', splitting /D/ into /st/ and turning /gh/ into /k/; maTaqa 'move tongue around' where /T/ split into /st/ and /q/ became /k/; or maajaqa/majaka 'open and close mouth' where /j/ split into /st/ and /q/ changed to /k/.
Mirror from Arabic mir’aa(t), ra’a (v) ‘mirror’; /t/ became /r/.


Nod from Arabic naada, nawd (v) ‘nod, move head in sleepiness’.

Note (notary, notable, notify, notification) via French and Latin nota, notare (v) ‘mark, sign, letter; to mark’ from Arabic nuqTa ‘dot, sign’, merging /q & T/ into /t/; naada ‘call’ via lexical shift and turning /d/ into /t/; or nawwaha, tanweeh (n) ‘indicate, note’ via /h/-mutation into /t/.

Observe (observation, observatory) via Latin observare of ob ‘over’ from Arabic bi ‘with, in’ + servare ‘watch’ from Arabic baSar, abSara (v) ‘see’ via reordering and turning /S & b/ into /s & v/ or from ashrafa ‘supervise, overlook’ where /sh/ became /s/ (cf. preserve, conserve, & persevere from Arabic Sabara ‘embitter, preserve, persevere’ via reordering and turning /s & b/ into /s & v/). See browse.

Olfactory via Latin olfacere ‘to sniff, get the smell of’ of olere ‘emit a smell’ from Arabic 3aleel ‘of air, cool and pleasant’ via /3/-loss or ree2(at) ‘smell, wind’ via /2/-loss and turning /I/ into /r/ and facere ‘make’ from Arabic faa2a ‘of smell, spread’, changing /2/ to /k/.

Omen from Arabic yameen, yumm ‘right hand, omen’, turning /y/ into /o/.

Ophthalmic (ophthalmology) via Greek ophthalmos ‘eye’, ophthalmikos ‘eye-related’ from Arabic baSar, ibSar ‘sight’, turning /b, S, & r/ into /ph, th & l/; or barhamat ‘opening one’s eye and continuing seeing’ via reordering and turning /b, r, & h/ into /f, l, & th/.

Optic (optician) via Latin opticus and Greek ophthalmikos, ops ‘eye’ from Arabic baSsa, baSboo (n) ‘look, see; eye pupil’; /s/ became /s/.

Pain (penal, punishment) via Latin/Greek poena/poine ‘punishment, hardship’ from Arabic naa’iba(t), nawa’ib (pl.) ‘trouble, hardship’ via reversal; wahn/wahm ‘pain, weakness’ where /w & m/ became /p & n/; banh ‘laughter’ via lexical shift and /h/-loss.

Possess (possessed) from Arabic massa, misaas (n) ‘catch, touch, madness’ or waswas ‘possessed’, turning /m (w)/ into /p/.

Perceive (perception) via Latin percipere ‘lit., take entirely; gather, seize, obtain, grasp with the mind, learn’, composed of per ‘thoroughly’ from Arabic bi ‘with, in’ via /r/-insertion and capere ‘take, grasp’ from Arabic qaDab/qabaD ‘seize’, merging /q & D/ into /k/; kasaba ‘gain, obtain’, merging /k & s/; jaaba ‘bring’ via lexical shift and changing /j/ to /k/; or shabbaha ‘see, liken’, turning /sh/ into /k/ and merging /b & h/ into /v/.

Perspective See Inspect.

Prospect (prospective, prospectus) See Inspect.

Real (reality, realize) from Arabic ra’a, ra’i/ru’ia(t) (n) ‘see; something seen or real’; /r/ split from /r/ or was inserted.

Relish from Arabic la2as ‘lick-relish’ where /2 & s/ merged into /sh/; laslas ‘to stick in (teeth)’ via
lexical shift and turning /l & s/ into /r & sh/; 3alas 'eat' or 3alak 'chew' where /3 & s (k)/ became /r & sh/.

Review (view) via Latin videre 'see' from the Arabic for Video. (Cf. Arabic ra’a, ru’i(a) (n) 'see', merging and turning /r & w/ into /v/).

Revise (revision) via Latin videre/wisere 'see' from the Arabic for Video.

Savor via Latin sapor, sapere (v) 'taste' from Arabic shariba 'drink' via lexical shift, reordering, and changing /sh & b/ to /s & v/.

Scent from Arabic Sannat 'odour, perfume'; /S/ became /s/.

Scope (telescope, inspection, expect, respect) from Arabic shaba2 'see' via reordering and substituting /s & k/ for /sh & 2/.

See (saw, seen, sight; German sehen) from Arabic sha22a/sha33a 'see' via /z (3)/-loss; qasha3a 'see, rise', merging /sh & S/ into /s/; shakhaSa 'see' via /sh, kh, & S/-merger into /s/.

Seem from Arabic sama 'rise, appear'.

Seize (seizure) from Arabic kamash 'catch' in which / k & sh/ became /s & z/ into which /m/ merged; or masak 'catch', merging /m & s/ into /s/ and replacing /k/ by /z/ (cf. size from Arabic qias 'size', replacing /q & s/ by /s & z/).

Sense (sensation, sensitivity) via Latin sensus 'feeling', sentire (v) 'feel, know' from Arabic 2iss, i2saas (n), in2ass (v) 'sense, feeling, voice', changing /2/ to /s/ and inserting /n/.

Show from Arabic shaaf 'see', turning /f/ into /w/.

Silent from Arabic Saanit 'silent' via /l/-split from /n/.

Simon from Arabic sam3aan 'hearer', sami3a (v) via /3/-loss.

Sleep (German schlaffen) from Arabic salab 'of sleep, doze off'; salhab 'look sleepy' via /h/-loss; or l/a/lbs 'confuse, dress' via reordering and lexical shift.

Siesta from Arabic sinat 'sleepiness', turning /n/ into /s/.

Smell from Arabic shamma 'smell', turning /sh & m/ into /s & l/; laSam 'to cover nose and mouth' via reordering, lexical shift, and turning /S/ into /s/.

Smile from Arabic Sammal 'move lips, smile', turning /S/ into /s/ or lathama 'kiss' via lexical shift, reordering, and turning /th/ into /s/.

Sneeze from Arabic nashaq 'draw into nose' via lexical shift, reordering, and substituting /s & z/ for /sh & q/ or khashm 'nose' via lexical shift, reordering, and replacing /kh, sh, & m/ by /s, z, & n/ (Jassem 2013h).

Sniff from Arabic shannaf 'to nose-sense', replacing /sh/ by /s/.

Spectacle (spectacular) See inspect.

Speculate (speculation, specs) See inspect.

Spy (espionage) from Arabic baSSa, baSeeS (n) 'see' via reordering and turning /S/ into /s/; or Sabba(ba), taSabbab 'look'.

Stare from Arabic shaTara 'look at two at the same time', turning /sh & T/ into /s & t/; zaara 'to look with a narrowed eye', splitting /z/ into /st/; 2atara 'to look sharp', turning /2/ into /s/; shazara 'to look from the back of one's eyes', turning /sh & z/ into /s & t/; or at'tara 'continue looking', splitting /s/ from /t/.

Sting from Arabic naghz(at) 'sting' via reordering and replacing /gh & z/ by /g & s/.

Suck (soak) from Arabic Sakka 'press teeth' via lexical shift and turning /S/ into /k/ or saqa 'drink, soak' via lexical shift and turning /q/ into /k/.

Summon (admonish, admonition, monitor) via Latin summonere of sum (sub) + monere (v) 'advise, warn' from Arabic amina/amman 'to (make one) feel safe' via lexical shift; or sam3aan 'hearing' via /3/-loss. See monitor.
Surveillance via French surveillance 'supervision' and Latin vigilare 'to watch' of sur from Arabic Dhahr 'back, top' where /Dh & h/ merged into /s/ and wajal 'fearful, watchful', turning /w/ into /v/. See vigil.

Survey via French surveir and Latin supervidere 'oversee' of super from Arabic Subbar 'high' and videre 'to see' from the Arabic for Video. (Cf. ashrafaja 'survey, overlook, supervise', turning /sh/ into /v/).

Swallow from Arabic za(w)la3 'swallow', turning /z & 3/ into /s & w/.

Swoon from Arabic nu3aas 'sleepiness' via reversal and replacing /3/ by /w/.

Tactile (tact) via Latin tangere 'touch'. See tangible.

Tangible via Latin tangere 'touch' from Arabic Tajja, inTajja 'beat-touch', turning /T & j/ into /t & ch/ and inserting /n/; or daqqa, indaqqa 'touch, knock, dig' where /d & q/ became /t & ch/.

Taste via French tat (tast) 'taste' from Arabic dhaaq, dhawq(at) (n) 'taste', turning /dh/ into /t/ and splitting /q/ into /st/. (Cf. ethic, etiquette from Arabic zaq (dhauq) 'ethic, manners'.)

Tickle (tick, ticklish) from Arabic dagh(dagh) 'tickle' replacing /d & gh/ by /k & t/.

Touch (tactile) via Latin toccare 'knock, strike' from Arabic Takkkha 'strike', turning /t & kh/ into /t & ch/; dassa 'insert, touch', daas 'step'; or daqqa 'touch, catch', turning /d & s (q)/ into /t & ch/.

Video (evident, evidence) via Latin videre 'to see' from Arabic waDa2a 'see', turning /w & D/ into /v & d (s)/ and deleting /2/; or waTauf 'move eye lids and brows', merging /w & f/ into /v/ and turning /t/ into /d/.

Visit (visitation) via French and Latin visiter/visitare 'go to see' of visere 'behold, visit' and videre 'see, notice' from the Arabic for video or from baSSa(t) 'see (seeing)' or baSar 'see', turning /b/ into /v/.

Voyeurism from Arabic faah/fooh 'mouth', deleting /h/.

Wake (awake) from Arabic faaqa, afaaqa 'wake', changing /f & q/ to /w & k/.

Wary (wariness) from Arabic wari3 'fearful' via /3/-loss. See aware.

Watch from Arabic 2adaja 'see, look' or 2addaqa 'see, look' where /2, d, & j (q)/ became /w, t, & ch/.

Whine from Arabic 'anna 'whine', turning /'/ into /w/.

Wink from Arabic 3ain 'eye', splitting /3/ into /w & k/ or 2ink 'jaw' via lexical shift and replacing /2/ by /w/.

Wonder (wonderful) from Arabic naDhar, unDhur 'see, look', changing /Dh/ to /d/.

To sum, the total number of perceptual and sensual words amounted to 130 or so, all of which have true Arabic cognates: i.e., 100%.

DISCUSSION

From the above results, it can be clearly seen that perceptual and sensual words in Arabic, English, German, French, Latin, and Greek are true
cognates for having similar or identical forms and meanings. Their differences, however, are due to natural and plausible causes of phonetic, morphological and semantic change. The percentage of shared vocabulary between Arabic and English here was 100%, which exceeds Cowley’s (1997: 172-173) classification according to which an 80% ratio indicates membership to the same language- i.e., dialects. Consequently, the results are in harmony with all the findings of previous studies (Jassem 2012a-f, 2013a-m) in which English, German, French, Latin, Greek, Sanskrit and Arabic were all found to be rather dialects of the same language, let alone the same family.

Furthermore, the results lend further backing to the adequacy of the lexical root theory for the present analysis. The main principle which states that Arabic, English, German, French, and so on are not only genetically related but also are dialects of the same language is, therefore, verifiably sound theoretically and true empirically. The clearest proof to that here is retracing English perceptual and sensual words to true Arabic cognates on all levels of analysis: phonetic, morphological, grammatical, and semantic.

The recurrence of lexical convergence in the data is due to formal and semantic similarity between Arabic words, on the one hand, and their English cognates, on the other. For example, observe derives from formally and semantically similar Arabic words- namely, abSara ‘see’ via reordering and turning /S & b/ into /s & v/ and/or ashrofa ‘overlook, foresee’ via /sh/-mutation into /s/; see is another case in point. Similarly, semantic multiplicity stems from the same reasons where some English words may have more than one meaning, which may have more than one likely Arabic cognate; for instance, possess has two meanings, both of which derive from formally and semantically similar Arabic words- namely, massa, misaas (v) ‘touch, madness, devil’ where /m/ became /s/ and/or waswas ‘devil, whisper’ via /w/-mutation into /s/. As can be seen, all are similar in form and meaning.

Now it is time to turn to the short, exemplary perceptual and sensual text in 2.1 above, which contains some very common words in the field. The analysis has shown that every single word has a true Arabic cognate, which can be checked in the results above and/or the relevant previous studies like Jassem (2012c) for pronouns, (2012d) for determiners, (2012e) for verb ‘to be’, (2012f) for inflectional morphemes, (2013a) for derivational morphemes, and (2013l-n) for names.

What does all that entail? At least two things can be mentioned. Firstly, it entails that Arabic and English are dialects of the same language for having the same words with similar or identical forms and meanings (cognates), with Arabic being the source or parent language because of its phonetic complexity and lexical multiplicity and variety (for detail, see Jassem (2012a-f, 2013a-i). Secondly, it has immensely huge and interesting implications for general linguistic theory and language origin (Jassem 2013l). On the one hand, it implies that the so-called proto-Indo-European language hypothesis is baselessly fictitious which should be rejected outright because all English words are traceable to Arabic sources. On the other hand, it implies, on a larger scale, that all human languages are related to one another, which in the end descended from a single 'perfect' source, which emerged suddenly and completely. However, it became simpler and simpler over time like English words being simpler than their Arabic cognates phonetically, morphologically, and semantically; the same applies to today’s Arabic words, which are simpler than Classical Arabic ones. In addition, the change or simplification operated and proceeded very, very slowly over time, spanning thousands of years as has been shown in Pagel et al (2013) in which it was found that some 27 common English core words (e.g., pronouns) changed or simplified little in the last 15,000.00 years!?

Is it possible and feasible to reconstruct that old, original, fully-fledged, perfect source, technically known as proto-language (Harper 2012) or proto-world-language (Ruhlen 1978, 1994)? Very much so, indeed. How? That can be successfully achieved on the basis of (an) ancient world language(s), which have survived into modern ones, though in different forms. This is because all human languages are variable offshoots of that old, perfect source. Of all, Arabic is perhaps the greatest
survivor, which may be the best possible link to that old perfect language on which analysis should focus. Indeed, Arabic can be said to be a great, great living linguistic inheritor and survivor, which could have maintained almost all the features of that original, perfect language. Evidence from pronouns in world languages has provided some clues to that (Jassem 2012d, 2013l) but more research is still needed to settle the issue once for all.

CONCLUSION AND RECOMMENDATIONS
To sum up, the main results of the study are as follows:

i) The lexical root theory has been adequate for the analysis of the close genetic relationships between perceptual and sensual words in Arabic, English, German, French, Latin, and Greek.

ii) The 130 perceptual and sensual words or so in English, German, French, Latin, Greek, and Arabic are true cognates with similar forms and meanings. However, their differences are due to natural and plausible phonetic, morphological, and lexical factors of change (cf. Jassem 2012a-f, 2013a-n).

iii) Phonetically, the main changes included substitution, reversal, reordering, split, and merger; lexically, the recurrent patterns were stability, convergence, multiplicity, shift, split, and variability; the abundance of convergence and multiplicity stem from the formal and semantic similarities between Arabic words from which English and European words emanated in the first place.

iv) The phonetic complexity, huge lexical variety and multiplicity of Arabic perceptual and sensual words compared to those in English and European languages point to their Arabic origin in essence.

v) Finally, the current work supports Jassem's (2012a-f, 2013a-n) calls for further research into all language levels, especially lexis or vocabulary. The application of such findings, moreover, to language teaching, lexicology and lexicography, translation, cultural (including anthropological and historical) awareness, understanding, and heritage is badly needed to promote cooperation and disseminate acculturation.

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REFERENCES


_____. (2013g). The Arabic origins of "animal" terms in English and European languages: A


