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EDITOR'S NOTE

N. B. : Les retranscriptions dans l'article en ligne, contrairement à l'original papier, ne prennent pas en compte les lettres emphatiques. Il est donc recommandé de se reporter à l'article original.

AUTHOR'S NOTE

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I would also like to thank the students who participated in the discussion sessions on which this study is based.

- ¹ This paper examines one of the emblems of language contact and linguistic interference, namely the use of *loanwords*, i.e. words having been originally introduced to Egyptian Arabic (EA), from a foreign language by bilinguals, but currently also occurring in the speech of monolingual speakers of Arabic, sometimes without their awareness of their source. The term "loan" itself is only used idiomatically as neither does the lender consent to the loan, nor is the borrower under any obligation to repay the loan (Haugen, 1950, p. 211). Many words that have been introduced to EA, occur in

monolingual speech and follow the linguistic patterns of EA (on both the phonological and morphological levels among others) so that users are often unaware of their foreignness. When speakers become aware of the use of loanwords, the phenomenon is usually informally labeled as speaking “franco-arabe”.

- 2 The term “loanwords” as used in this paper differs from “codeswitching” and “borrowing”. On the one hand, “codeswitching” means alternating between different languages by bilinguals (at any level of competence in the FL), so that the switches, termed ‘nonce borrowings’ by Romaine (1989, p. 61 and 134) are integrated only momentarily and infrequently, and often extending beyond the individual lexical item to longer stretches of talk. In contrast, “established loan words” (Romaine, 1989, p. 61 and 134) are accepted, recurrent, widespread and collective. They are used regularly and are permanently present and established in the recipient language’s monolingual environment. They have often been integrated into the language and are “used by monolinguals who may or may not be aware of their foreign origin... probably not even perceived as foreign by the majority of speakers” (Romaine, 1989, p. 55).
- 3 On the other hand, the term “loanwords” has been preferred to “borrowing” as the latter is rather confused in the literature. In some studies, it is used to refer to code switching at the word level by bilinguals (Haugen, 1950, p. 212 and Heath, 1989) while it is also sometimes used in others (Haugen, 1950, p. 214-215 and Baetens Beardsmore, 1982) as an umbrella term referring to lexical transfer and comprising different types, namely loanwords, (sometimes called “loanforms”), loanshifts and loanblends. In still other studies the terms “borrowing” and “loanwords” are used interchangeably thus leading to confusion (e.g. Smeaton, 1973). It would be clearer to preserve the term borrowing to conscious efforts or as an umbrella term. The term “loanwords” is used in this study (in lines with Sa’id, 1967, Romaine, 1989, p. 55 and Ennaji, 1995) to refer to more-or-less spontaneously transferred lexical items that show no morphemic substitution and that may be adapted to the phonological and morphological patterns of the recipient language (RL).
- 4 The phenomenon of “borrowing” in general, sometimes including loanwords, has been studied since the 1950’s. Haugen (1950, p. 212) postulates that every speaker “attempts to reproduce previously learned linguistic patterns” in contexts different from “the language in which he learned them” and defines “borrowing” as “the attempted reproduction in one language of patterns previously found in another” (emphasis mine). On the other hand, Weinreich (1964) discusses borrowing as the transfer or introduction of foreign elements from one language into another resulting in the rearrangement of the patterns of the RL. Four major studies of loanwords in connection to Arabic are Sa’id (1967), Smeaton (1973), Khalil (1984) and Heath (1989). Sa’id (1967) studies integration of loanwords into Modern Standard Arabic (MSA), and at parts specifies this to MSA as rendered by Syrian speakers while Smeaton’s (1973) study is of loanwords integrated into the Arabic of Al-Hasa, Saudi Arabia. Khalil’s (1984) study of EA is diachronic, investigating loanword origin rather than integration. Heath (1989) examines the immense body of foreign words introduced to Moroccan Arabic through code switching between Arabic and French in a mainly bilingual community.
- 5 The present study is a *synchronic* one, i.e. examining the integration of loanwords at present without studying such *diachronic* issues as the source of the loanword, be it introduced by bilingual individuals, colonization, cultural encounter (through education, travel or the media), or the need to accommodate science and technology,

hence dependence mainly on English and French, and marginally on Turkish (e.g. /makwagi/), Italian (e.g. /bitsa/), Spanish (e.g. /çâlsâ/), etc. (See the Appendix for the transcription symbols used.) While synchronic studies use descriptive methods in identifying loanwords through non-native sound segments and morphological structure (within the domain of contrastive analysis), diachronic methods usually compare earlier and later forms in the RL, and then compare these with possible source languages, (SLs), to find out the SL of a particular loanword. To do the latter type of study would not be feasible as EA, the subject of this study, is a spoken colloquial rarely written or printed except in modern folk literature, hence the lack of etymological dictionaries specifying SLs of established loanwords, or of records of different historical phases of a certain loan. No one of these etymologies would be absolutely decisive, though, as English, French, Italian and Spanish have many cognates and possible source-words for any given loan, which may be directly borrowed from one language, or indirectly through another one, so that much guesswork would be needed and would still remain mere guessing. Considering this difficulty, Haugen concludes that “Such a [synchronic] technique... would seem to be most useful with previously unwritten languages; indeed it would be the only one available” (1950, p. 229). For the same reason, the present study does not investigate such diminished loans as /tijatru/, /ʔesbetalja/, /talletwââr/, and /ʔagzagi/, which were later replaced by the indigenous /mâsrâh/, /mostaşfa/, /râsiif/ and /sajdâli/, respectively, (in which case the loan prestige form would compete with the native form, one of them marginalizing the other). Instead, this paper studies the various degrees of integrating loanwords into the phonological and morphological Systems of EA. Most loanwords (e.g. /munâwrâ/ from “manoeuvre”, /warsa/ from “workshop”, and /musiiqâ/ from “musica” or “musique”) often undergo such integration so that eventually their foreignness is unfelt and monolinguals use them frequently without the urge to find an indigenous alternative to them (even if one is available).

Integration

- 6 The ensuing part of the paper discusses the integration of loanwords into EA, i.e. the assimilation of regularly used foreign-language items to the patterns of the RL. Integration can occur at a number of levels; the ones studied here are phonological and morphological integration. To examine degrees of integration, the study compares the realization(s) of the loanword in EA to the most probable SL model.

Degrees of integration

- 7 Integration of loanwords into the patterns of the RL should be thought of in terms of degrees (Smeaton, 1973; Baetens Beardsmore, 1982; Hoffmann, 1991). While loanwords may be assimilated to the System by the majority of monolinguals, there are degrees of standardization of loanwords, initially introduced by bilinguals (when codeswitching), loanwords are later produced repeatedly and collectively by monolinguals and may: a) retain their SL sound and morphology, thus not integrated at all either because they are newly introduced to the language, because they resist integration, or because they do not conflict with the RL patterns; b) be partially integrated, adapting only phonologically; or c) be fully adjusted to the sound and morphological patterns of EA with its tri- and quadri-consonantal patterns. In his study of the Arabic of Al-Hasa,

Saudi Arabia, Smeaton discusses three clearly defined stages of morphological integration of loanwords:

- Beyond adaptation to Arabic phonemes, the original word is intact. All original consonants are represented, and no syllables have been elided. Plurals of nouns in -at... or no plural
 - Word shortened or expanded in such a way that it is brought closer to an acceptable Arabic pattern; but plurals of nouns, if any, still in "at".
 - Word fully naturalized into the Arabic morphological system: if a noun, with internal pluralization; if a verb, capable of all the inflectional forms thereof." (1973, p. 61).
- 8 Such variation in the amount of integration can be attributed to a number of factors to be discussed below. Haugen (1950) mentions a scale of "adoptability" along which loanwords are distributed with different degrees of tolerance for foreign elements imported with them. Some may be completely assimilated so that they are not felt foreign (e.g. /musiiqa/) due to their similarity to the phonological and morphological organization of the RL. Moreover, in the process of integration, loanwords may retain more than one phonological and morphological pattern that vary freely (e.g. /medalja/ and /madelja/; /lâmbâ/, /lâmdâ/ and /lândâ/; /lâmbâât/, /lomâd/ and /lonâd/; /gârâfâtâ/, /kârâfâtâ/. /kârâvâtâ/, /kârâvât/ and /kravat/- Fr.: 'cravate').

Methodology

- 9 To examine degrees of integration, the study compares the realization(s) of ' the loanword in EA to the most probable original model in the SL(s). First, a corpus of loanwords to be examined was collected from TV programs and commercials, observation and introspection. Next, loanwords and degrees of integration were identified through comparison between the possible SL model and the RL reproduction. Supplementary elicitation from informants helped then to fill in word-class groups and phonological and morphological variants. To do so, informants were asked to: a) fill in blanks orally, b) name items in pictures, c) brainstorm possibilities (e.g. plurals and verbs), and d) comment on their different realizations of the same loanwords.

Phonological integration

- 10 Most loanwords are perceived and/or rendered differently by native speakers of the RL. According to Haugen (1969, p. 3), there are three stages in the process of phonological adaptation. First, a bilingual introduces a new word in a phonetic form close to the model. Without direct access to the model produced by native speakers of the SL, monolinguals can only rely on the pronunciation of bilinguals whose degree of "bilinguality" may vary, hence the possibility of an accent; next, the individual monolingual speakers of the RL each hear the word, in their recognition each approximating the non-native sound patterns to native ones, then each attempting a proximate pronunciation of that, thus leading to different renditions of the same word. With repeated use in the community, the word becomes an established loan exchanged by monolinguals, but varying from one dialect to another due to geographical separation as well as other factors leading to dialectal differences, until systematized use in all aspects of life and the media gives it full status as part of the lexicon.
- 11 To adapt to the phonological patterns of EA, loanwords undergo processes of sound alteration, addition, omission and shifting. This is due to the inherent sound patterns

in EA; for instance, consonant clusters do not occur in syllable-initial position; there is a maximum of two successive consonants; and vowels do not occur in word-initial position (Keshk, 1995). It is through contrastive analysis of EA and the different SLs of loanwords that modifications and the process and degrees of integration of loanwords can be explained (in a way similar to the explanation of language-interference errors in foreign language learning).

Alterations

Consonant alteration

- 12 When producing a loanword, speakers attempt the closest proximation to the model. However, because the SL and RL phonological patterns do not correspond identically, speakers may have to exercise sound alternation either because the RL underdifferentiates these sounds, i.e. they are not phonemes or do not exist in EA, or because the RL overdifferentiates, i.e. because there are more than one possible phonemic realization for such a sound in the RL.
- 13 Firstly, *underdifferentiation* is in question when some of the consonants found in different SLs of loanwords are not phonemes in EA - e.g. [p], an allophone of /b/, and [v], an allophone of /f/ in EA¹ -, or when certain consonants do not exist at all in EA (e.g. /θ/, /ğ/, /tʃ/ and /dʒ/). To facilitate their production, speakers of EA resort to the closest native sound available in their repertoire.
- 14 An example of this is /p/, a phoneme in many SLs but only an allophone of /b/ in EA. It is normally replaced by its voiced counterpart /b/ in such words as /bântâloon/ for “pantalon”, /banduul/ for “pendule”, /boroovâ/ for “prova”, /borotiin/ for “protein”, and /boliis/ for “police” in initial position; in /bâsboor/ or /bâzboor/ for “passeport” and in /debloom/, /dabloom/, or /dabloon/ for “diplôme” in medial position; and in /bajeb/ for “pipe” in final position.
- 15 Another phoneme subject to integration due to underdifferentiation is /v/ as it is an allophone in EA mainly found in loanwords and is often replaced by /f/ (its voiceless counterpart) or by /b/ (its plosive counterpart). This can be evinced in such loanwords as “villa” realized as /vella/ or /fella/, “Victoria” often pronounced /fektorja/, “vitesse” produced as either /vetees/ or /fêtees/, “vitamin” pronounced as either /vetamiin/ or /fetamiin/, “Mervat” rendered as either /mervat/ or /merfat/, “cravate” often pronounced as /gârâfâtâ/, “television” as /telivizjoon/ or /telefezjoon/ and “seven up” as /sevenâbb/ or /sefen/. For each of these loanwords, one easily comes across different variants, some involving maximal integration by replacing /v/ with /f/ and some retaining their non-native /v/, a difference which may be attributed to such social factors as education and exposure to FL. (For a fuller discussion see below.) Another realization of /v/ in integrated loanwords is as /w/ or /b/ in such words as “couverture” realized as /koverta/, /koberta/, or /kaberta/; “vapeur” realized as /wâbuur/, /bâbuur/ or even /bâguur/; “veranda” rendered as /vârândâ/ or /bârândâ/; “valve” realized as /balf/; and “manoeuvre” rendered as /monâwrâ/. In other loanwords, however, it is pronounced as in the model with no integration as in /viitu/ for “veto” and /viiza/ for “visa”.
- 16 A sound not found in Cairene EA is the voiceless dental fricative /θ/, which is replaced in loanwords from Classical Arabic or other SLs by either its alveolar counterpart /s/ as

- in the MSA word “thaqaafah” (i.e. “culture”), usually rendered in EA as /saqââfâ/, and sometimes as /sa’aafa/ (by less educated speakers), or the dental plosive /t/ as in “thalaathah” (i.e. “three”) pronounced in EA as /talaata/. In loanwords from English, /ø/ usually transforms into /t/ as in “thermos” usually pronounced as /tormos/, “thermometer” as /termometr/, and “thermostat” as /termostaat/ (or /sermostaat/).
- 17 Another foreign sound altered for purposes of loanword integration is the voiced alveopalatal /a/, also found in Classical Arabic and other SLs but not in EA. It is often replaced in loanwords by its voiceless counterpart /s/, claimed to be an influence of Coptic on EA, according to Nessim (1996). The loanword /nobetgi/ from “is nobeti” is pronounced /nabatši/ or /nobatši/; “garage” is often heard identical to the model, /garaag/, but is also occasionally pronounced as /garaaş/; “débrayage” is pronounced as either /debrejaağ/ or /debrejaaş/, and “jacket” or “jaquette” as either /ğaketta/ in urban areas, or /şaketta/, /daketta/ or /zaketta/ in different rural areas. Similarly, the affricate sounds /dğ/ and /tş/, not very common in EA, are often replaced in loanwords by their fricative counterparts /ğ/ and /ş/. Instead of pronouncing “Jeep” with an affricate as /dğiip/, it is often pronounced in EA as /ğebb/. The affricate /tş/ is also replaced by the fricative /ş/ in such loanwords as “chips”, rendered as /şebis/ or /şibis/, “winch” as /wenş/, “march” as /marş/, “concerto” as /konşertu/, and “Chile” as /şiili/.
- 18 Another alteration resulting from Cairene EA underdifferentiation, is its pattern of pronouncing both Classical Arabic /q/ and /ʔ/ as /ʔ/, which may lead to confusion between some minimal pairs. In loanwords from Classical Arabic, /q/ is transformed into /ʔ/ in only one of the minimal-pair members but not the other, as in “qârn” pronounced as /ʔârñ/ to mean “horn” and as /qarn/ to mean “century” (an educated concept, hence no need for integration to colloquial standards). Similarly, “qesm” is transformed into /ʔesm/ when it refers to the police station, but is usually pronounced in its unintegrated form /qesm/ to refer to “department”, another educated concept. The word /saqaafa/ is non-integrated by the educated while speakers with very little education may pronounce it as /saʔaafa/.
- 19 On the other hand, consonant sounds may be substituted for others in loanwords due to *overdifferentiation* in EA, i.e. because there is more than one phonemic realization in EA for each such Sound. The emphatic sounds /t/, /d/, /s/, /z/, /q/ and /X/, being unique to Arabic, are often produced in loanwords replacing other available sounds.
- 20 When followed by a back vowel, alveolars are velarized and change to their emphatic counterparts: /t/ > /t/, /d/ > /d/, /s/ > /s/, /z/ > /z/, and /k/ > /q/. The sound /t/ is usually replaced by its emphatic counterpart /t/ as in “tante” pronounced as /tant/, “battery” or “batteria” pronounced /bâtâtârejja/, “point” pronounced as /bont/, “capitaine” pronounced /qobtâân/, “table” pronounced as /tâblejjâ/, “Italia” pronounced as /etâljâ/, “pantaloons” pronounced as /bântâloon/, and “shoot” pronounced as /şuut/. Similarly, /d/ is replaced by /a/ when preceded by a back vowel as in “moda” pronounced /moodâ/. Other emphatic renditions are of /s/ as /s/ as in /sâloon/ for “salon”, and /sââlâ/ for “salle”, and of /z/ as /z/ as in /vââzâ/ for “vase”. In a similar way, /k/ transforms into /q/ in such words as “commission” or “commissione” usually pronounced as /qomisjoon/, and “capitaine” or “captain” pronounced as /qobtâân/.
- 21 Similarly, the sound /g/ in some loanwords is realized as W², another voiced velar sound. Examples are “phonograph” pronounced as /fonoXrââf/, “telegraph” pronounced as /talleXrââf/, and “magnet” or Latin “magnetis” pronounced as /mâXnâtiis/.

- 22 Otherwise, some other sounds are altered for no obvious reason, probably due to idiosyncratic mispronunciation of the loanword and diffusion and standardization of such pronunciation. Examples are transforming /z/ into /s/ in the word “jeans” usually pronounced as /gens/, transforming /k/ into /g/ in the word “cravate” when pronounced as /gârâfâtâ/; transforming /m/ into /n/ in the word “album” pronounced as /ʔalbuum/, /ʔalboom/, or /ʔalboon/, and “diplôme” as /debloom/, /dabloom/ or /dabloon/, yet contrarily transforming /n/ into /m/ when pronouncing “piston” as /bestem/. However, sometimes such alterations are explainable in terms of the linguistic context in which they occur. The sound /t/ is transformed into /d/ in pronouncing “pizza” as /betsa/ or /bedza/ so that the two successive consonants /dz/ are either both voiceless or both voiced. Similarly, in the word “passeport”, pronounced as /basboor/, /bazboor/ or /bazabort/, /s/ is often transformed into /z/ to suit the voicing of the following /b/ replacing the voiceless /p/ of the modelword. Also /n/ is transformed into /l/ in pronouncing the word “journal” as /gornâân/ (or sometimes /gornââl/), thus duplicating the same consonant for ease of pronunciation.

Vowel alteration

- 23 In much the same way as SL consonants are altered in loanwords to suit the consonants available in EA, vowels in loanwords are limited to those of EA, namely /i/, /e/, /a/, /à/, /o/, /u/ and /ii/, /ee/, /aa/, /ââ/, /oo/, and /uu/. To suit the sound patterns of EA, vowels in loanwords may undergo two main types of alteration: substitution and/or lengthening. Vowel substitution may be due to their absence from EA, a preference for one vowel over another, or for vowel harmony in a word- Vowels that are not found in EA are substituted by others when they occur in loanwords. An example of this is the French vowel /eu/ which is usually rendered as /ee/ as in /kwafeer/ for “coiffeur” and /ʃofoer/ for “chauffeur”, or as /oo/ as in /doktoor/ for “docteur” and /motoor/ or /mâtoor/ for “moteur”. Another vowel replaced by another is the French /u/, which is sometimes replaced by /uu/ as in /banduul/ for “pendule”, sometimes by /ee/ as in /karikateer/ for “caricature”, and /badikeer/ for “pedicure”, and sometimes by /ii/ as in /monokiir/ or /manikiir/ for “manicure”, and /oiiba/ for “jupe”.
- 24 Other vowels are altered showing a preference for one sound over another. In unstressed syllables, there is preference for /a/. It replaces /o/ in /mâtoor/ for “moteur”, and in /dâk'toor/ for “docteur”. In /manafesto/ for “manifesto”, /i/ is replaced by /a/ while the /a/ of “valve” is reproduced as /a/ in /balf/. Similarly, EA shows preference for /e/ over other vowels. (Though usually claimed to be allophones of the same phoneme in Arabic, /e/ and /i/ are two different phonemes in EA that contrast in minimal pairs such as /kalbe bonni/ and /kalbi bonni/ meaning “a brown dog” and “my dog is brown” respectively.) However, EA shows preference for /e/ over /i/ in loanwords as in /vella/ or /fella/ for “villa”, /weng/ for “wing”, /sewetch/ for “switch”, /zegzaag/ for “zigzag”, and /telefezjoon/ for “télévision” (yet /dikoor/ for “décor”). Similarly, /i/ is replaced by /e/ in some loanwords as /gens/ for “jeans” and /letr/ for “litre”.
- 25 Vowels are also altered to avoid variation and create harmony within a word, thus simplifying its pronunciation, through duplication of the same vowel in adjacent syllables. An example of this is the pronunciation of “aluminium” as /ʔalamonjom/, where the first vowel is duplicated in the second syllable and the other one in the last syllable, thus creating the pattern Ca-Ca-CoC-CoC. Similarly, the loanword based on

“chiffonier” is pronounced /ʃofoniira/, also duplicating the first vowel, thus producing the pattern Co-Co-CVVCV.

- 26 On the other hand, vowels are especially lengthened when they are in a stressed syllable, stress following EA patterns rather than following the model pronunciation of the loanword in the SL. Such lengthening is basic to stressed syllables in EA as it is a syllable-timed language while many of the SLs of loanwords are stress-timed ones, not linking length and stress. This is clarified in the transformation of /o/ to /oo/ in such words as /ga'loon/ for “gallon” and /sa'-loon/ for “salon”, both of them being tri-consonantal words receiving stress on the final syllable. When stress falls on the first syllable of a word, the vowel in that syllable is lengthened accordingly as in /'Iuu-ri/ for “lorry”. Similarly, when stress falls on the second syllable, the vowel in that syllable is lengthened as in /ka'taawet/ for “cutout”, /ma'daam/ for “madame”, and /se'wiitâr/ for “sweater”. Loanwords of four and five consonants also follow the same tendency to have their stressed vowels lengthened. Examples are /dânt'eel/ for “dentelle”, /?etik'eet/ for “etiquette”, /teli'foon/ for “telephone” and /telefez'joon/ for “television”.
- 27 Thus, vowels are altered not only when they are not available in EA but also to simplify pronunciation of loanwords and to suit the stress patterns of EA in the absence of the model word. This is especially so due to the misrepresentation and sometimes lack of representation all together of vowel sounds in the spelling of Arabic.

Addition

Intrusive vowels and consonants

- 28 There are a number of phonological constraints that EA is subject to, which lead loanwords to accommodate phonologically. One such constraint is that a syllable cannot begin with a vowel (Yaquout, 1992). To overcome this constraint, loanword models beginning with a vowel are usually integrated by adding an intrusive glottal stop, /?/, before the vowel at word-initial position (classically called “hamzat al-wâsl” (Hassaan, 1979, p. 278). When in sentence-initial position, “accessoire” is pronounced /?ekseswââr/, “autobus” /?otobiis/, “hotel” /?oteel/, and “élastique” /?astek/.
- 29 Another constraint of EA handled by integration is that it allows no initial clusters, only clusters of two are allowed in syllable-final position (CVCC) (Yaquout, 1992). Initial clusters of two in a loanword are usually broken by adding a syllable starting with a glottal stop followed by a vowel and ending in the originally initial consonant, thus breaking the cluster (?eC-C...). For instance, finding it difficult to pronounce “stretch”, speakers of EA add an initial syllable and other intrusive vowels to break the cluster: /?es-te-retS/. Similarly, “sport cola” is rendered as /?ez-bort/, “sprite” /?ez-be-râjt/, “spray” /?ezbereej/, “studio” /?estodju/, “stable” /?es-tâbl/, and “classeur” /?ak-la-seer/. Vowels are inserted to break up clusters not only before the cluster but also in the middle of it, after the first consonant, to preserve the maximal syllabic length CVCC. Examples are /be-ren-sii-sa/ for “princess”, /ke-ree-ma/ for “crème”, /ke-la-seer/ for “classeur”, /fa-wel/ for “foul”, /?of-sâ-jed/ for “offside”, /haf-ta-jem/ for “half time”, /be-ri-feks/ for “prix fixe”, /be-la-tiin/ for “platine”, /bo-ro-tiin/ for “protein”, /san-da-wetš/ for “sandwich”, /korwâsoon/ for “croissant”, and /ba-la-koo-na/ for “balcon”. The same phenomenon can be seen across word boundaries for purposes of assimilation. When the word starting with a consonant is immediately preceded by a consonant in the previous word, thus forming a cluster across word

boundary, an intrusive vowel is added to break the cluster as in /meš estâbl/ and /ʔezborte koola/. However, no vowel is needed when the previous word ends in a vowel sound e.g. /da stabi/. (In the phrase /meš estâbl/, there is no need for the intrusive glottal stop as the word assimilates with the previous one dividing their syllables thus /me-š estâbl/. The glottal stop and a whole syllable are added when the word is utterance-initial to avoid starting the sentence with a vowel e.g. /ʔestâble xeel/.)

- 30 Still another constraint of EA phonology is that no two vowels can occur in succession without being separated by an intrusive consonant (Smeaton, 1973, p. 30). The feminine singular suffix /a/ at the end of some loanwords (and indigenous ones too), is usually turned into /-et/ when inflected for the genitive. For instance “battery” or “batteria”, pronounced /bâttârejja/ in isolation, becomes /bâttârejjet el'ârâbejjâ/, “flannel”, pronounced /fanella/, becomes /fanellet ennaadi/, “couverture”, pronounced /koberta/ becomes /kobertet esseriir/, “musica”, pronounced /musiiqâ/, becomes /musiiqet leftetaah/, “jacket” pronounced /gaketta/ becomes /gakettet elbadia/, and “workshop” pronounced /warsa/, becomes /warset ennâggââr/.

Gemination

- 31 One of the recurrent phonological patterns in EA is germination, i.e. consonant doubling. Some loanwords undergo gemination to approximate EA patterns. One such pattern is /CVCVCVCCV/ as evinced in /kârâmelâ/ from “caramel”, /gârâfâtâ/ from “cravate”, and /manafella/ from “manivela” or “manivelle”. Variations on this pattern are exemplified in /fanella/ from “flannel”, /bâttârejja/ from “battery” or “batteria”, /dântellâ/ (also /danteel/) from “dentelle”, and /talleXrââf/ from “telegraph”. But gemination can also be accounted for in terms of orthographic doubling as in /vella/ or /fella/ from “villa”, /bâttârejja/ from “battery” or “batteria” and /dântellâ/ from “dentelle”, where pronunciation is influenced by the spelling³.

Omissions

Syllabic omission

- 32 Another process of loanword integration is omission. According to Smeaton (1973, p. 86), some loanwords undergo syllabic omission, either to facilitate pronunciation or in the direction of the Arabic tri- or quadri-consonantal root structure, “trimming away consonants and syllables but a representative portion of the original term is left” as in loans like /t(e)reng/ for “training suit”, /tomatiiki/ for “automatic”, /tombiil/ or /ʔotombiil/ for “automobile”, /ʔakserateer/ for “accelerator”, and /siinima/ for “cinéma”. In words like /fiinu/ from Italian “alfino”, meaning “bread”, and /ʔastek/, (meaning “élastique”), the first syllable has been omitted due to its homonymy with the EA definite article /el-/. This integrative process may go to extremes where a multi-word expression undergoes omission of one of the words (and sometimes also simplification of the other). Examples are /bâwâr/ for ‘power steering’, /self/ for “self adhesive”, /ʔânsâr/ for “answering machine”, and /t(e)reng/ for “training suit”.

Shifting

Stress shifting

- 33 Another area where loanwords are integrated into the RL to suit its phonological patterns is word stress. Though somewhat complicated and too numerous to cite here, major Arabic stress rules, according to Hassaan (1979, p. 172-174), are: 1) Stress the last syllable if it has a long vowel, 2) Stress the penultimate syllable if it has a long vowel while the last syllable has a shorter vowel, or if both the penultimate syllable and the last one are of medium length.
- 34 Loanwords follow the same stress patterns of Arabic whatever their SL Stress is placed on the last syllable in bi-syllabic words following the pattern (CV(C)-'CVVC) when the last syllable is long (e.g. /tâ'wuus/ for “peacock”). Examples are /dok-'toor/ for “doctor”, /bâs-'boor/ for “passeport”, /ʔal-'boom/ for “album”, /gor-'nâân/ for “journal”, /mo-'toor/ for “moteur”, /râ-'dââr/ for “radar”, and /do-'lââr/ for “dollar”. Similarly, tri-syllabic loanwords receive stress on the last syllable when this is realized by a long vowel, following the patterns (Ca-CV-'CVVC) and (Ce-CV-'CVVC) as in /saga'giid/ for “carpets” and /ge-ne-'haat/ for “pounds”. Examples of tri-syllabic loanwords receiving stress on the last syllable, which has a long vowel, are: /bân-tâ-'loon/ for “pantaloon”, /te-li-'foon/ for “telephone”, /ʔâ-vâ-'rool/ for “overall”, /se-ker-'teer/ for “secrétaire”, /tal-leX-'rââf/ for “telegraph”, /gen-tel-'maan/ for “gentleman”, and /kâ-râ-'tee/ for “karate”. Alternatively, stress may be placed on the last syllable if it consists of a short vowel followed by two consonants, whatever the number of syllables (Kharma and Hajjaaj, 1989, p. 26) as in /kat-'sabb/ for “ketchup”, /ter-mo-'metr/ for “thermometer”, and /se-ven-'ʔâbb/ for “Seven Up”.
- 35 Stress falls on the penultimate syllable if the penultimate vowel is long and the last one short (Hassaan, 1979, p. 173) as in /'baa-ku/ for “packet”, /ka-'taa-wet/ for “cutout”, /bal-'loo-na/ for “balloon”, /fâ-'tuu-râ/ for “fattura” i.e. “bill”, and /ʔo-ma-'tii-ki/ or /ʔo-to-ma-'tii-ki/ for “automatic”. Stress would also fall on the penultimate syllable if both penultimate and final vowels are of medium length, This applies to bisyllabic words as in /'ban-ju/ for “agno” /ka-'set/ for “cassette”, /'sam-bu/ for “shampoo”, /'rad-ju/ (or “radio”, /'war-sa/ for “workshop”; tri-syllabic words as in /ko-'ber-ta/ for “couverture”, /ga-'ket-ta/ for “jacket”, /me-'dal-ja/ or /ma-'del-ja/ for “medallion”, and /nâ-'bât-si/ for “is nobeti”; and quadri-syllabic words as in /bât-tâ-'rej-ja/ for “battery” or “batteria”.

Metathesis

- 36 Without access to theSL model, and only hearing loanwords infrequently and second hand, the loanwords are subject to further change through speakers who have little to aid them remember the standard pronunciation of the word. They fall back on similar words or patterns if they have access to any. Some widespread transpositions are /boroovâl/ and /boroovâr/ existing side by side with /boloovâr/ for “pullover”. Other examples are /retl/ for /letr/ i.e. “litre”, /falenna/ for /fanella/ i.e. “flannel” and /belenti/ for /benalti/ i.e. “penalty” with the plural /belentaat/ building on the transposed form rather than the one closer to the model. Production of the transposed version of a loanword could, however, be a marker of little education and lower social class.

Resistance to phonological integration

- 37 Knowledge of a foreign language is associated with high prestige by most speakers. To display their knowledge of a foreign language, some bilinguals refrain from producing the standard, phonologically-integrated loanword and insist on making their utterance sound foreign, hence /telivigen/ rather than /telivizjoon/ for “television” and /ğupaat/ rather than /gibaat/ for “jupes”.
- 38 However, the attempt to sound foreign and bilingual by monolinguals who are not very competent in a foreign language, and who have little access to native speakers so that a correct model of the SL is not easily available, can result in funny hypercorrect distortions like /hapi persdej/ for “happy birthday”, /prâavu/ for “bravo”, /tšok/ for “shock”, and /kaveterja/ for “cafétéria” where they insist on producing such non-indigenous sounds as /p/, /tš/ and /v/, except they are in the wrong place. Such attempts at hypercorrection may be considered an indication of the emergence of new phonological tendencies and fluctuation between different renditions of the same word such as the existence of both /garaag/ and /garaas/ for “garage”, thus using the non-EA phoneme /ğ/ in free variation, in /prâavu/ and /berâavu/ for “bravo”, thus using /p/ and /b/ in free variation, and /f/ and /v/ in /kafeterja/ and /kaveterja/ in free variation. Hypercorrect forms, where monolinguals resist to integrate loanwords, also often show tolerance for, and laboured attempts at, production of consonant clusters in initial position where they would not occur otherwise in EA as in /brâavu/.

Morphological integration

- 39 In much the same way as loanwords may be integrated to the phonological patterns of EA along a continuum from fully integrated on one extreme, to non-integrated on the other, loanwords may be integrated morphologically as well into the RL. According to Smeaton (1973, p. 83), a loanword undergoes modification of morphological structure to achieve harmony with the established predominant pattern and root system (tri- and quadri-consonantal root system in Arabic), thus usually leading to internal pluralization, i.e. broken plural and similar derivations. In this section, three areas of morphological integration will be studied: derivation of a fully fledged paradigm from a loanword, adding a feminine suffix to loanwords, and plural inflection of nouns.

I - perfective : CVVC • verbal noun ; CVVCa

SL	root	perfective	imperfective	active participle	passive participle	verbal n.
	CVVC	CaaC	jeCuuC	CaajeC	metCaaC	CooCa
e.g.	d a a s	daas	jeduus	daajes	meldaas	doosa
shoot	š u u t	šaat	ješuuṭ	šââjeṭ	metšââṭ	šoṭâ
pass	b â â š	bââša	jebââši	mebââši	—	bââšâ

II. - perfective = CaCCaC • verbal noun = CaCCaCa

SL	root	perfective	imperfective	active participle	passive participle	verbal n.
	CCCC	CaCCaC	yeCaCCaC	meCaCCaC	metCaCCaC	CaCCaCa
e.g.	z X z X	zaXzaX	jezaXzaX	mezaXzaX	metzaXzaX	zaXzaXa
center	s n t r	šāntār	ješāntār	mešāntār	metšāntār	šāntārā
format	f r m t	fārmāt	jefārmāt	me fārmāt	metfārmāt	fārmātā
sechoir	s š w r	sāšwār	jesāšwār	mesāšwār	metsāšwār	sāšwār
pasteurize	b š t r	bāštār	jebāštār	—	mebāštār	bāštārā

III a - perfective = CaCCeC • verbal noun = CaCCaCa

SL	root	perfective	imperfective	active participle	passive participle	verbal n.
	CCCC	CaCCeC	jeCaCCeC	meCaCCeC	metCaCCeC	CaCCaCa
e.g.	trgm	targem	jetargem	metargem	mettargem	targama
service	srvs	sarves	jesarves	mesarves	metsarves(a)	sarvasa
doublage	dbiğ	dableğ	jedableğ	medableğ	metdableğ	dablağa
nervous	nrz	narfez	jenarfez	menarfez	metnarfez	narfaza
tension	tnšn	tanšen	jetanšen	metanšen	mettanšen	tansšana
parking	brkn	bârken	jebârken	mebârken	metbârken(a)	—

III b - perfective = CaCCaC • verbal noun = taCCiiC

SL	root	perfective	imperfective	active participle	passive participle	verbal n.
	CCCC	CaCCaC	jeCaCCaC	meCaCCaC	metCaCCaC	taCCiiC
e.g.	kssr	kassar	jekassar	mekassar	metkassar	taksiir
fill	fwwl	fawwel	jefawwel	mefawwel	metfawwel	tafwiil
nombre	nmmr	nâmmâr	jenâmmâr	menâmmâr	metnâmmâr	tanmiir
finish	fnņş	fanneş	jefanneş	mefanneş	metfanneş	tafniış
save	sjjv	sajjev	jesajjev	mesajjev	met/messajjev	taşjiiv
check	şjik	şajjek(tu)	jeşajjek	meşajjek	metşajjek	—
chic	şjik	?eşajjik	jetşajjek	—	meşşajjek	şejaaka

Derivational paradigms

- 40 When a loanword has been fully integrated, it occurs in different parts of speech, thus having a fully fledged derivational paradigm according to EA morphology. In the corpus collected, most loanwords were found to be nouns; however, sortie loanwords

were found to have a full paradigm, which was later elicited from native-speaking informants. Such verbs have probably been integrated into EA by backformation to generate even more words according to patterns suited to tri- and quadri-consonantal roots (Sa'id, 1967, p. 89-98). (See syllable omission above) The derivation of more words from a loanword probably followed two steps; abstracting roots of 3 or 4 consonants, then generating more words according to the derivational patterns of EA. An example of this is the loanword /hagedrogiin/ from “hydrogen”, which lends the EA verb root /hđrğ/, from which /hadrağ/ (perfective verb), /jehadrağ/ (imperfective verb), /hadrağa/ (verbal noun), /mehadrağ/ (passive participle) are generated. Every verb root generates the perfective (e.g. /katab/), imperfective (e.g. jekdeb), active participle (e.g. kaateb), passive participle (e.g. /maktuub/), and verbal noun (e.g. /ketaaba/). All the verbs in the corpus generating full paradigms were found to follow three patterns, namely: CWC, CaCCaC, and CaCCeC.

- 41 Loanwords vary in the amount of integration they undergo. On the one hand, some loanwords may generate two sets of verbs, one transitive, the other intransitive. An example of this is the word “nervous”, from which the root “nrfz” is abstracted, generating not only the transitive /narfez/, /jenarfez/, /menarfez/, and /narfaza/ but also the intransitive /?etnarfez/, /jetnarfez/, /metnarfez/ and /narfaza/. On the other hand, some newly introduced verbs have a very limited derivational paradigm, like the newly-introduced, creative /nebebsi/ (from “Pepsi”) and /barseiti/ and /tebarseli/ (from “Persil”, a detergent), both introduced creatively in TV commercials, meaning to use the product, whether it is “Pepsi” or “Persil”. Another source of variation in the amount of integration of some loanwords limiting their generative capacity is the number of consonants they can be reduced to. Loanwords of three or four consonants are more prone to root abstraction and derivation than words of more than four consonants. For example, the loanword /talleXrââf/ from “telegraph” is difficult to reduce to four consonants, hence the expression /jeb'at talleXrââf/ (i.e. send a telegram) as opposed to */jetalXrâf/ for instance. Given these limitations, however, the fact that loanwords have this derivational capacity counters Keshk's argument (1995, p. 69) that the evidence that a word is a loanword is that no other words can be derived from it.

Inflection

- 42 Most nouns in EA are inflected for gender and number. While in Classical Arabic, they are also inflected for case, this is not true for EA. Loanwords are integrated by conforming to the rules of EA inflection to varying degrees.

Gender

- 43 In EA, nouns and adjectives are inflected for gender so that they are either feminine or masculine. Gender marking for animate referents corresponds to their true gender, usually with feminine and masculine pairs. From “coiffeur” EA has the loanwords /kowafeer/ (m.) and /kowafeera/ (f.); from “cashier”, it has /kašjeer/ (m.) and /kašjeera/ (f.); and from “docteur”, it has /doktoor/ (m.) and /doktoorâ/ (f.) both of which take the plural /dakatra/. However, less integration is shown in generating /sekerteer/ (m.) and /sekerteera/ (f.) from “secrétaire” as the plural form for the feminine is /sekerteraat/ following the pattern while there is no plural form for the

masculine, which therefore often has the generic noun /sekêrtarja/. (For a fuller discussion of plurals, see below.) Even less integration is the case with such nouns not inflected for the feminine like /gârsoon/ from “garçon”, /tajbest/ from “typist”, and /mekaniiki/ from “mechanic”.

- 44 While animate referents have a pre-determined gender that loanword nouns should meet, inanimate referents have a linguistic gender marking that differs from one language to another. However, in the corpus examined, loanwords with inanimate referents showed a preference for the feminine suffix /a/. Examples are /balakoona/ from “balcon”, /ġaketta/ from “jacket” or “jaquette”, /ġiiba/ from “jupe”, /šootâ/ from “shot”, /bâtâtêjjâ/ from “battery” or “batteria”, /bomba/ from “bomb” or “bomba”, /biira/ from “beer” or “birra”, /ʔesbetalja/ (archaic) from “hospital”, /fâtuurâ/ from “fattura”, /bââçâ/ from “pass”, /šofoniira/ from “chiffonier”, /boola/ from “ball” (meaning “scoop”), and /lâmbâ/ from “lamp”.

Number

- 45 In EA there are two plural inflections. One of them is suffixal and regular, traditionally termed “sound plural” with the two realizations /-iin/ for the masculine and /-aat/ for the feminine and for loanwords that do not fit the tri- and quadri-consonantal patterns. The alternative is the “broken plural” inflection, usually leading to insertion, deletion, and vowel change, and often an indication of maximal integration of a word into the language. On investigation of the plurals of nouns in the corpus, it was found out that some of them take broken-plural inflection, some take the sound-plural /-aat/ suffix, some take either in free variation, and some take neither plural form.
- 46 To start with the broken-plural inflection is rather complicated as it follows several different patterns⁴ that involve inserting infixes, deletion, and vowel change. It applies to words that fit these patterns like the plural loanword /felm/ > /ʔaflaam/ and /došš/ > /ʔedšaaš/ by analogy to /helm/ > /ʔahlaam/, thus seeming even more integrated into Arabic as analyzable word forms that accept infixing, deletion and change. From /warša/, the plural is /weraš/, by analogy to /halla/ > /helal/; from /balf/ the plural is /buluuf/, parallel to /bahr/ > /bohuur/; from /bâbuur/ the plural is /bâwâbiir/ and from /ġornâân/ the plural is /ġârâniin/ parallel to /târtuur/ > /târâtiir/. Similarly, following the pattern /xaatem/ > /xawaatem/, one gets the plural /boliisâ/ > /bâwââles/. The pattern /ʔahl/ > /ʔahaali/ generates such plurals as /luuri/ > /lawaari/, /baaku/ > /bawaaki/, and /radju/ > /radââwi/. Similarly, by analogy to /ta'lab/ > /ta'aaleb/, one gets the plurals /tormos/ > /taraames/ and /bestem/ > /basaatem/.
- 47 Other words take the /-aat/ suffix, Traditionally called “feminine sound plural suffix”, but also used in the “pluralization of nouns of foreign origin which have not been assimilated into Arabic beyond the phonological stage” (Smeaton, 1973, p. 36). It is used either because the word does not follow the EA tri- or quadri-consonantal root structure and therefore does not fit any of the broken plural patterns, or because it is felt to be foreign and unanalyzable, therefore resorting to a suffix to keep the word intact. Examples of nouns that take the sound plural suffix /-aat/ include /ġârâfâtât-at/ for “cravats”, /medaija-at/ for “medals” or “medallions”, /vâzâ-ât/ for “vases”, /koberta-at/ or /kaberta-at/ for “couvertures”, /bâçâ-ât/ for “passes”, and /melisja-at/ for “militias”. In addition to loanwords ending in /-a/ and therefore held to be

feminine, also ones held to be masculine take the sound plural suffix /-aat/ as in the following examples:

/ʔriŋg/	/ʔriŋgaat/	'training'
/reboʔtaaʕ/	/reboʔtaʕaat/	'reportage'
/teliʔoon/	/teliʔonaat/	'telephone'
/boloovâr/	/boloʔvârâât/	'pullover'
/sewiitâʔ/	/sewiitâʔâât/	'sweater'
/râqââr/	/râqâârâât/	'radar'
/senarju/	/senarjuhaat/	'scenario'
/ʕasee/	/ʕasehaat/	'chassis'
/bânjo/	/bânjohâât/	'bagnò'
/ʕâmbu/	/ʕâmbuhâât/	'shampoo'

- 48 Another set of nouns take both forms of plural in free variation, with some speakers having a preference for the sound plural form, and others preferring broken plural forms.

	singular	sound pl.	broken pl.	pattern
garage	gârââʕ	garaʕaat	ʔegreʕa	ʔegneha
villa	v/ʔella	v/ʔellaat	v/ʔelal	helal
jacket	ʕaket/ʕaketta	ʕakettaat	ʕawaaket	xawaatem
pacquet	baaku	bakuwaat	bakaawi/ bawaaki	ʔahaali
radio	radju	radjohaat	râdââwi	ʔahaali
pantalon	b/mânʔâloon	b/mânʔâlonâât	b/mânâʔil	ʔârâʔiir
moteur	moʔoor/mâʔoor	moʔorâât/mâʔorâât	mawaʔiir	ʔârâʔiir
ballon	balloona	ballonaat	balaliin	ʔârâʔiir
album	albuum	albumaat	alabiim	ʔârâʔiir

- 49 The question here is not one of whether such words can be easily reduced to EA root and pattern structure but rather of speakers' linguistic preferences. While some prefer broken plurals as they treat the loanwords as indigenous words integrated into EA lexicon, others may prefer sound-plural suffix addition to keep the word intact and unanalyzed due to their awareness of its foreignness, both positions depending to a large extent on speakers' linguistic background, education and attitude to bilingualism. It could also be the case that newly introduced loanwords start with a sound-plural form and later, when felt to be part of the RL, switch to a broken-plural form, especially as the words go through required phonological integration.

- 50 The existence of both plural forms for the same singular loanword side by side could also exist across different varieties of Arabic. While the plural of /fâtuurâ/ from “fattura” i.e. “bill”, is the sound-plural /fââtuurâat/ in Moroccan Arabic (Ennaji, 1995), the EA plural form of the same word is the broken plural /fawatiir/ by analogy to /târâtiir/. Similarly, the word “macchina” or “maquina” is realized differently in Classical Arabic and EA. While the MSA loanword is /makiina/ with the sound-plural /makinaat/, the EA loanword is /makana/ with the broken-plural form /makan/ by analogy to /samak/.
- 51 The difference between broken plural and sound plural could also be contextual. In EA, there is the possibility of both collective plural like /ward/ and /ʔananaas/ with zero suffix, and counted plural, or what Heath calls “individuating” (1989, p. 134) as /talat wardaat/ and /talat ʔananasaat/ (also in Barsoum, 1979).
- 52 Some loanwords, however, do not accept plural inflection at all, whether broken or sound. Examples are the words /bankenoot/ from “banknote”, which is usually pluralized as /waraʔ bankenoot/; the word /sekerteer/, meaning “secretary” (m.), often takes the plural /sekertarja/; and /kombjuutâr/ i.e. “computer”, taking the plural /ʔaghezet elkombjuutâr/ rather than the infrequent /kombjuutârâat/. This could be attributed to their non-conformity to tri- and quadri-consonantal root structure so that a broken plural would be difficult to generate. Some of them may also be used very infrequently so that the need does not arise for use of the plural and even when/if this happens, it does so at an insignificant frequency so that such attempts at pluralizing them are not standardized.
- 53 It can be seen from the above that broken plural and sound plural are not in complementary distribution as some nouns take only sound plural, some only broken plural, some both, and some neither. The choice could be dictated by the degree of conformity of the loanword to EA patterns. Such degrees of integration could also reflect language attitudes. For instance, the use of broken plurals (where there is a sound-plural form available) could mean that the user is less educated while use of the sound-plural form could be regarded positively as educated or negatively as affected and foreign.
- 54 It should be clear from the above analysis that integration is not a discrete phenomenon, either operating or not operating at all. Rather, loanwords are integrated into EA to varying degrees along a continuum extending from non-integration on the one hand, keeping the loanword intact as in the SL, through minimal integration, to maximal integration into the RL following its phonological and morphological patterns so much that the loanword could be mistaken for an indigenous word. Phonologically, loanwords are integrated into EA by limiting their sounds to the ones available in EA, breaking consonant clusters, conforming to EA syllable structure through syllabic omission, and adhering to EA stress patterns. Morphologically, they conform to inflectional and derivational patterns, e.g. sound-plural ending being an indication of the recent introduction of the word into the language whereas broken plurals show complete integration, usually used by monolingual speakers (Smeaton 1973, p. 85);

Factors influencing degrees of integration

- 55 Factors influencing the degree of integration into the RL of loanwords could be linguistic or extra-linguistic relating to speakers' attitudes and frequency of use of the loanwords. One of the factors influencing integration is the linguistic nature of the loanword itself. Whether it conforms with the phonological and morphological patterns of the RL, e.g. whether it can be reduced to the EA tri- and quadri-consonantal root structure, could have a bearing on which inflections to take and on the generative capacity of the word. For instance, as the noun /talleXrââf/ from “tetegraph” is difficult to reduce to four consonants, we get the expression /jeb'at talleXrââf/ (i.e. send a telegram) rather than */jetalXrââf/, for example. Another is whether such integration would lead to homonymy with other existing words, thus leading to ambiguity, (For example, the newly introduced /diss/ takes the sound plural /dessaat/ thus avoiding homonymy with /doss/ > /?edsaas/ analogous to /helm/ > /?ahlaam/.) Still another factor is the influence of imperfect Arabic spelling of the loanword with no vowels on its' pronunciation e.g. /?asfalt/ or /?esfalt/.
- 56 Another factor influencing the degree of integration of loanwords into RL patterns is speakers' attitude to the SL. On the one hand, some speakers may be apprehensive to the use of loanwords, considering them a form of “cultural / linguistic invasion” and resisting foreign languages (whether consciously or unconsciously). As a result, they either choose to treat loanwords as indigenous words through maximal phonological and morphological integration into EA or even MSA to preserve the language from “alien elements”, or avoid using them all together if there is an indigenous alternative, thus minimizing the feeling of the intrusion of the SLs and showing loyalty to their native language.
- 57 On the other hand, speakers with a positive attitude to foreign languages usually regard the different SLs as prestigious and want to identify with them and project themselves as competent and open to other cultures. For this reason, they may not integrate the loanwords into the RL to identify them with the foreign language and claim themselves as bilingual and bi-cultural. This language attitude could mean two things: a) the tendency to use what Romaine terms “gratuitous loans” (1989, p. 65), i.e. loanwords that exist in free variation with indigenous synonyms and are borrowed for prestige rather than necessity or need; and b) the tendency to produce loanwords in a form closest to the model.
- 58 The farther from the model, the worse the social implications on the speaker. For instance, the word “lamp” is produced variously in EA as /lâmba/, /lâmdâ/, and /lândâ/, with the plural forms /lâmbâât/, /lumâd/ and /lunâd/, all of which move from the least integrated, thus closest to the model, to the most integrated and thus farthest from the model, both phonologically and morphologically. The closest forms to the model are usually used by bilinguals, and imply that the speaker is urban, younger, better educated, socially superior or even elite, while the more integrated forms could imply that the speaker is rural, older, less educated or even illiterate, and socially inferior. Variants of the same loanword exhibiting different degrees of integration, according to Schmidt (1986), vary according to such social parameters as education, exposure to the FL, sex, social class, personality (aggressive and reserved vs cooperative, also conventional vs experimental), mood (tense vs relaxed), formality of situation and topic of conversation. One may also add the factors of education,

religiosity, urban/rural distinction, socioeconomic class, and femininity vs. masculinity, as women are usually more sensitive to the prestige of standard (Ibrahim 1986), usually attempting a foreign accent and refraining from strongly pharyngealized sounds.

- 59 Still another factor would be the speakers' exposure to the foreign language, usually resulting from bilingual education and/or travel. Due to their awareness of the model and wish to keep it intact, they might refrain from maximal integration of loanwords into the RL. According to Haugen (1950, p. 222), "the same word is liable to variations in reproduction because of the varying degrees of bilingualism. The loan is subject to continual interference from the model in the other language... Younger and older speakers will use different forms of the same loan words. The difference usually consists in the extent of phonological and morphological importation.
- 60 One last factor is time and frequency of use of the same loanword so that words that show maximal resistance to morphological incorporation, given enough time, may be gradually eroded to correspond to RL norms (Smeaton 1973). Similarly, the more frequently used ones are soon integrated into the language. Frequency of use of different loanwords borrowed from SLs whose phonological and morphological patterns differ maximally from the RL could lead, in the long run, to the introduction of the patterns of such languages into the RL. An example of this is the introduction into EA of such phonemes as /p/ and /v/ and of consonant clusters in initial position in such words as /brâavu/ for "bravo" and /trella/ for "trailer".

Results of integration

- 61 Loans for prestige, termed "gratuitous loans" in Romaine (1989, p. 65), and "spontaneous innovations" in Sa'id (1967, p. 8), arise mainly due to users who are considered younger, urban, educated, bilingual and socially superior. It is expected that the more prestigious forms would be non-integrated, retaining foreign form and thus implying a certain degree of bilingualism, to be used by groups typically associated with use of prestige forms.
- 62 Due to the variation in degree of loanword integration in the different varieties of Arabic, different synonyms and homonyms are created, often minimizing intelligibility across such varieties. One of the results of loanword integration is the existence of diverse parallel synonyms in different dialects (Holes, 1987). Multiple words for the same concept are introduced and used in the media, especially in drama, and also by scientists, teachers, journalists, writers and translators. For example, the reverse gear is referred to in different varieties of Arabic (and is integrated to varying degrees) as "self", in Hasawi Arabic (Smeaton, 1973, p. 74), and /maršedeer/, /maršerjeer/, and /revers/ in EA. Variation in the amount of integration a loanword is not only dialectal but also within-dialectal. Because of speakers' "varying degrees of bilingualism", a loanword is "subject to continual interference from the model in the other language" so that "younger and older speakers... use different forms of the same loanwords" due to the difference in "the extent of phonological and morphological importation (Haugen, 1950, p. 222). As a result, various phonological and morphological realizations of the same word could coexist in the same community, sometimes influencing intelligibility or leading to different social implications on the speakers' attitudes and degree of bilingualism. Hence, the introduction and use of alternative sets of

semantically equivalent lexical entries depending on users' degree of integration of loanwords. The resultant lack of a unified vocabulary between Arab countries leads them to develop separately, integrating different loanwords and developing unshared lexicon, hence the need for coordination; otherwise the different dialects would turn into separate languages (Abu-Absi, 1986).

- 63 As loanword integration varies in degree in different dialects, this could also result in loanwords integrated in one dialect to become homophonous with indigenous or loanwords used in another. An example of this is the Hasawi-Arabic loanword /tair/ with the plural /tajrâât/, meaning “automobile tire” (Smeatori, 1973, p. 66) being homophonous with EA /tâjjârâât/ meaning “airplanes”. Similarly, the Hasawi-Arabic loanword /fannit/, meaning “to fire or discharge” (Smeaton, 1973, p. 71), is homophonous with the newly introduced EA loanword /fanne/ meaning “finished”. Also in Hasawi Arabic, the verb /sallif/, meaning “to step on the starter” derived from /self/ meaning “self starter” (Smeaton, 1973, p. 74), is homophonous with the Arabic verb /sallef/, meaning “lent”. The source of the problem here is the integration of loanwords that are so much in accord with the patterns and root structures of the spoken language and have acquired such general acceptance, that different dialects borrowing from different languages, and all of them integrating loanwords to different degrees, would eventually lead to homophonous loanwords that have different SLs and different meanings, thus widening the gap between the different dialects of Arabic and taking them away from the common core.

Recommendations

- 64 Faced with the proliferation of loanwords borrowed and integrated differently by different users and in the different communities, many linguists recommend that some system be imposed on both loanword importation and integration. On the one hand, it is often suggested that loanwords be limited to necessity (as opposed to loans for prestige) and that such loanwords be checked and revised, especially if indigenous alternatives exist, to encourage lexical creation as opposed to lexical importation. To do so, Ibrahim and Jernudd (1986) suggest use of Arabic in new domains (e.g. educational, social, economic and political domains) to establish the needed lexicon⁵. If done in Arabic, specialists would have to create Arabic equivalents for the required terminology, thus minimizing lexical importation, and purifying the language from “alien elements”. Ibrahim and Jernudd also emphasize the role of the media and language academies to arabize under time pressure, thus minimizing loans, by looking for existent Arabic alternatives, coining or deriving quickly before loanwords are borrowed and integrated. On the other hand, some linguists point out the need for keeping loanwords separate from indigenous Arabic words. To trace the origin of loanwords, it is recommended that etymological dictionaries of loanwords introduced to Arabic be compiled including word origin, SL, and phonological, morphological and semantic development. To do so, loanwords used in different domains should be collected and their etymology studied. The limitations and difficulties of doing such a diachronic study could be minimized if loanword origin is traced soon after they have been introduced to the language where little guesswork would be needed in tracing their SL. Further studies could also investigate factors leading to loanword use and integration in the different dialects, preferably with a quantified analysis of who integrates more and why.

BIBLIOGRAPHY

- ABU-ABSI S., "The Modernization of Arabic: Problems and Prospects", *Anthropological Linguistics* 28(3), p. 337-346, 1986.
- BAETENS, BEARDS, MORE H., *Bilingualisme. Basic Principles*, Tieto Ltd, Avon, 1982.
- BARSOUM M.-Th., *A Study of the Acquisition of the Broken Plural in Colloquial Egyptian Arabic*, Unpublished M. A. thesis, The English Language Institute, The American University in Cairo, 1979.
- EL-MENOUFY Afaf, *A Prosodic Approach to Egyptian Colloquial Arabic*, Unpublished M. A. thesis, University of Edinburgh, School of Applied Linguistics, 1963.
- ENNAJI Moha, "A Syntactico-Semantic Study of the Language of News in Morocco", *International Journal of the Sociology of Language* 112, p. 97-111, 1995.
- HAFEZ O. M., "Turn-taking in Egyptian Arabic: Spontaneous Speech vs. Drama Dialogue", *Journal of Pragmatics* 15, p. 59-81, 1991,
- HASSAAN Tammaam, *Al-lugha al-'arabeyya: ma'naaha wa mabnaaha* (The Arabic Language: Its Meaning and Structure), GEBO, Cairo, 1979.
- HAUGEN Einar:
- "The Analysis of Linguistic Borrowing", *Language* 26, p. 210-231, 1950.
 - *The Norwegian Language in America*, Indiana University Press, Bloomington, 1969.
- HEATH Jeffery, *From Codeswitching to Borrowing: Foreign and Diglossic Mixing in Moroccan Arabic*, Kegan Paul International, London, 1989.
- HOFFMANN C., *An introduction to Bilingualism*, Longman, London, 1991.
- HOLDS Clive, *Language Variation and Change in a Modernising Arab State: The case of Bahrain*, Kegan Paul International, London and NY, 1987.
- IBRAHIM Mohammed:
- "Standard and Prestige Language: a Problem in Arabic Sociolinguistics", *Anthropological Linguistics* 28 (1), London and NY, 1987, p. 115-126.
 - and JERNUDD Bjorn, "Introduction", *International Journal of the Sociology of Language* 61, 1986, p. 5-6.
- IPA, Principles of International Phonetic Association, University College, Department of Phonetics, London, 1949.
- KESHK Ahmad, *Al-lugha wa al-alaam: abhaath fi al-tadaaxul wa al-ta'riib* (Language and Discourse: Papers in Interference and Integration), Nahda Press, Cairo, 1995.
- KHALIL Gaber, *Lexical Borrowing from French and English by Egyptian Colloquial Arabic*, Unpublished M. A. Thesis, Dept of Linguistics, State University of New York, Buffalo, 1984.
- KHARMA Nayef and HAJJAAJ Ali, *Errors in English Among Arabic Speakers: Analysis and Remedy*, Longman, London, 1989.
- NESSIM Yohanna, *Coptic influence on Cairene Egyptian Arabic*, Paper presented at the Cedej Round Table, April 1996.

RATCLIFFE Robert, “Arabic Broken Plurals”, *Perspectives on Arabic Linguistics II*, Mushira Eid and John McCanhy (eds.), John Benjamins, Amsterdam, 1990, p. 94-119.

ROMAINE Suzanne, *Bilingualism*, Basil Blackwell, Oxford, 1989.

SA'ID Majed, *Lexical Innovation through Borrowing in Modern Standard Arabic*, Princeton University Publications, Princeton, 1967.

SCHMIDT Richard, “Applied Sociolinguistics: the Case of Arabic as a Second Language”, *Anthropological Linguistics* 28 (1), 1986, p. 55-72.

SMEATON B. H., *Lexical Expansion Due to Technical Change*, Indiana University Publications, Bloomington, 1973.

WEINREICH Uriel, *Languages in Contact: Findings and Problems*, Mouton, London, 1964.

YAQUOUT Ahmed Sulaiman, *Fi 'elm el-lugha al-taqaaboli* (Contrastive Linguistics), Dar El-ma'rafa el-gaame'eyya, Alexandria, 1992.

APPENDIXES

Appendix: symbols used

EA	Egyptian Arabic	MSA	Modern Standard Arabic
RL	recipient language	SL	source language
C	consonant	V	vowel
(m.)	masculine	(f.)	feminine

In addition to these abbreviations, the paper uses the following transcription system

Vowels

/ā/	/ðārāb/ = he beat	/a/	/katab/ = he wrote
/u/	/bārdu/ = also	/o/	/kont/ = I was
/i/	/kalbi bonni/ = My dog is brown.	/e/	/kalbe bonni/ = a brown dog
/āā/	/gāāni/ = neighbour	/aa/	/gaari/ = current
/uu/	/ruuḥ/ = Go!	/oo/	/rooḥ/ = soul
/ii/	/diin/ = religion	/ee/	/deer/ = debt

Consonants

/ħ/	/ʔ/	/d/	/k/	/g/	/m/	/n/	/l/
/ʕ/	/h/	/s/	/z/	/ʔ/	/w/	/w/	/j/
/ʔ/	(emphatic) velarized voiced alveolar fricative						
/ʕ/	(emphatic) velarized voiceless alveolar fricative						
/ʕ̣/	(emphatic) velarized voiced alveolar plosive						
/ʔ̣/	(emphatic) velarized voiceless alveolar plosive						
/ħ/	voiced dental fricative						
/h/	voiceless dental fricative						
/ʔ̣/	voiced glottal plosive						
/q/	voiceless uvular plosive						
/c/	voiced pharyngeal fricative						
/ʕ̣/	voiceless pharyngeal fricative						
/X/	voiced velar fricative e.g. /XorʔAb/ i.e. "crow"						
/x/	voiceless velar fricative e.g. /ʔʔX/ i.e. "brother"						
/ʕ̣/	voiced alveopalatal fricative						
/ʕ̣̣/	voiceless alveopalatal fricative						
/ḍg̣/	voiced alveolar affricate						
/ṭṣ/	voiceless alveolar affricate						

NOTES

1. These are not phonemes in EA, [p] being an allophone of /b/ as in [sapt] for /sabt/ i.e. “Saturday”, and [v] being an allophone of /f/ as in [ravd] for /rafɖ/ i.e. “refusai”.
2. This has probably been introduced through Levantine *jîm*, where the script is interpreted as /g/ so that the script representation of the sound /g/ is *ghayn*, pronounced in EA as /X/.

3. Counterexamples are /biira/ from “birra” and /fatuura/ from “fattura”.
 4. In his discussion of Classical Arabic, Radcliffe (1990: 113) cites 27 broken plural patterns from which the following have been found relevant to EA and loanwords thereof. helm > ?hlaam; genaah > ?egneha; halla > helal; šahr>šohuur; xaatem>xawaatem; ?ahl > ?ahaali; taclab > tacaaleb; tartuur > taratiir.
 5. The case for Arabicizing university education is just one case in point where the present practice in supposed teaching of medicine in English, for example, is merely using the English terminology while the rest is produced in Arabic, probably due to teachers' and students' low proficiency in English, coupled with the lack of Arabic equivalents for the medical terminology.
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INDEX

Mots-clés: arabe (langue), linguistique

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