

Preliminaries to Loanwords Adaptation in GSA

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Résumé:

The long contact situation between French and Arabic in Algeria has certainly led to the incorporation of thousands of French loanwords in Algerian dialects. The following paper presents a preliminary study of loanwords adaptation in Arabic with reference to a village dialect Ghazaouet Spoken Arabic (henceforth GSA) as a recipient language and French as a donor. It reviews some of the phonological factors under which adaptation processes are to appear in French borrowings. The paper also examines a range of morphological modifications that affect the structure of primarily French loans that are widely used in GSA. We consider here specifically the use of salient linguistic forms that are peculiar to this dialect.

1. Introduction

The two languages this paper focuses on are from a typological point of view two independent language systems that belong to two different language families. French is a Romance language descendant from Latin, whereas Arabic is a Semitic language. They are not mutually intelligible. In the speech community of Ghazaouet, nobody speaks Arabic or French independently, but all those who use some form of spoken Arabic refer to French linguistic features that

have been infiltrated in the recipient language, and which have been subject to diverse subsequent influences for some historical and cultural reasons. Sometimes, the interference is so great that it becomes difficult to confirm the source language.

The present paper concentrates on salient phonological and morphological aspects of adaptation. We examine first the context-free adaptation of some phonemes that lack a direct correspondent in GSA phonemic inventory, without neglecting those sounds that are commonly used in the donor and the recipient languages, and which come to take different realizations. We shall consider here the repairs and not the constraints in making loanwords conform to the recipient language segmental inventory. Then, we survey instances in which GSA accommodates aspects of morphological combinations in French loans. We will confine ourselves to some structural environments where assimilation cases are involved. A particular focus will be on the phonological and the morphological repairs employed in adapting the loan to make it appear as 'Arabic'. Mechanisms of phonic and morphological interferences are to be dealt with.

2. Phonological Adaptations

We shall begin with a demonstration of how phonological categorization in general may depart from phonetic reality. The use of nasal vowels is considered here. Unlike French, Arabic does not contrast oral and nasal vowels. As a matter of fact, GSA speakers use nasalization to produce vowels in words like :

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<i>Borrowings</i>	<i>French Gloss</i>	<i>English Gloss</i>
[sāntu:ra]	‘ceinture’	‘belt’
[bāntu:ra]	‘peinture’	‘paint’
[ṣāndʒla]	‘sandales’	‘sandals’
[mānʒe]	‘manger’	‘eat’
[ṭrānʒe]	‘étranger’	‘outsider’
[trī:n]	‘train’	‘train’

There exists in the examples above a case of partial assimilation where the vowel phonemes which occur before the alveolar nasal [n] display nasalization. However, there are instances where no hint of these nasalized sounds is kept in the adapted loanwords, as it is involved in the examples below where the vowels do not display adjacent nasals:

<i>Borrowings</i>	<i>French Gloss</i>	<i>English Gloss</i>
[kʃe:da]	‘accident’	‘accident’
[sɑ:la]	‘salon’	‘living room’
[bi:du]	‘bidon’	‘pail’

Another aspect of phonic interference in GSA concerns the realization of consonant phonemes that are part of the phonemic inventory of the French language, and which have no direct counterparts in GSA. The following borrowings are used for this purpose by way of illustration:

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<i>Borrowings</i>	<i>French Gloss</i>	<i>English Gloss</i>
[fi:sta] ~ [vi:sta]	‘veste’	‘jacket’
[fwajaʒa] ~ [vwajaʒa]	‘il a voyagé’	‘he travelled’
[kubi:rta] ~ [kuvi:rta]	‘couverture’	‘blanket’
[pupija]	‘poupée’	‘doll’
[lamba]	‘lampe’	‘bulb lamp’
[fasma]	‘pansement’	‘dressing’
[tirifu:n]	‘téléphone’	‘telephone’
[kənwɑ:r] ~ [kulwa:r]	‘couloir’	‘corridor’
[fonɑ:ra] ~ [forɑ:na]	‘foulard’	‘scarf’

In adapting a loan, the speaker tries to stick to the source word while still making the loan word conform to the native language segmental system. We shall regard here the first three examples [fi:sta], [fwajaʒa], and [kubi:rta] where the voiced labiodental fricative /v/ is realised: [f], [v], and [b]. The next three words [pupija], [lamba], and [fasma] illustrate another phonic adaptation. It concerns the use of the fortis bilabial plosive /p/ which entails three allophones [p], [b], and [f]. [f] and [v] in free variation and so are [p] and [b]. The use of [f] in [fasma] and [b] in [kubi:rta] is not governed by any rule. Indeed, such repairs in the dialect raise challenging inquiries. The last loans [tirifu:n], [kənwɑ:r], and [fonɑ:ra] suggest that phonological repairs in this dialect do not concern only those phonemes that are not part of GSA phonemic inventory. The lateral /l/ for example which is found in both systems has three realizations [l], [r] and [n]. Sound substitution then includes both

phonemes that are shared between the donor and the recipient languages and those which do not exist in the former. Yet, it is worth mentioning that many educated and young speakers of the dialect keep the original pronunciations of these borrowings as they are in the source language.

3. Morphological Adaptations

Morphological adaptations include almost every aspect of GSA morphology. A morphological characteristic which applies to all Arabic varieties including GSA, is the construction of many morpheme strings in a *templatic* or a *nonconcatenative* way. The standard account describes words in this language as combinations of two morphemes: a root and a pattern.

The former allows a semantic induction field i.e., an idea or a meaning beyond one particular combination of consonant phonemes. It consists by default of three consonants, though quadrilateral roots are also known in the Arabic morphological system. Some words are made up on a biconsonantal basis. The pattern, which comprises vowel phonemes, makes the vowel melody of the consonant phoneme strings. Thus, the two are arranged according to different canonical patterns.

The process by which words are created by the insertion of roots into patterns is called '*transfixation*'. For example: the Arabic verbal form [kataba] implying 'he wrote' is made up of the consonantal root <ktb> involving the idea of writing and the vowel melody a-a-a. The two are coordinated in the canonical pattern CVCVCV. The latter is used for the active voice for Arabic in the perfective verbs. The passive form [kutiba]

retains the same canonical shape. It also entails the same root i.e. the same consonants respectively but a different vowel melody u-i-a. Many other derivations denoting the same idea are allowed in the language in the same way, and so new additions can easily be handled in Arabic.

Accordingly, the rich morphology the Arabic system is known for is due to the large number of morphological constructions it displays. Words in GSA and other Arabic dialects are formed on the same consonantal basis with some phonological differences ranging from slight to noticeable according to the contexts where they are used. GSA displays the same basis but with noticeable differences according to Maghrebi Sedentary Arabic features.

We shall regard here some salient morphological processes such as the use of the feminine marker {a} as in [bo:t̪a]: ‘boots’, [ʕopa]: ‘soup’, [maʃi:na]: ‘machine’, and [bumba]: ‘bomb’, or the use of the definite article {al} in front of French borrowings. Such a mechanism involves geminate assimilation or germination when followed by a solar consonant as in these words:

/ al+t̪abla /	→	[t̪t̪abla]	: ‘the table’
/ al+si:ma /	→	[ssi:ma]	: ‘the cement’
/ al+ ʕopa /	→	[ʕʕopa]	: ‘the soup’
/ al+ duminu /	→	[dduminu]	: ‘the domino’
/ al+ z̪alame:t̪ /	→	[z̪z̪alame:t̪]	: ‘the match’
/ al+z̪ipa /	→	[z̪z̪ipa]	: ‘the skirt’
/ al+nemro /	→	[nnemro]	: ‘the number’

The outright transfer of morphemes from one language to another is viewed as a means of correcting the inadequacies of the lexicon (*Weinreich: 1974*). In explaining for instance the use of the definite article {al} in loans, one should bear in mind that the French system does not lack a counterpart morpheme. On the contrary, this system makes use of many articles. We mention here specifically the masculine definite article 'le' and the feminine definite article 'la'. The transfer of the Arabic bound morpheme {al} exhibits an effect of economy displayed through the reduction of the two articles into only one form. The term 'economy' traditionally refers to the preference for smaller structures and shorter derivations (*Crystal: 1983*). It is of importance to mention that these repairs are not accidental; they are rather conventionally established in the recipient language.

There exists also another similar process which involves the use of the suffix {a:t} as a feminine plural marker for sound or external plurals. Let's consider these pairs:

<i>Singular</i>	<i>Plural</i>	<i>Gloss</i>
[bu:rsa]	[bursa:t]	'small bag(s)'
[lamba]	[lamba:t]	'bulb lamp(s)'
[kartɑ:b]	[kartɑba:t]	'school bag(s)'
[li:vru]	[livruja:t]	'book(s)'
[tri:ku]	[trikuja:t]	'sweater(s)'

The plural ending {a:t} appears to explain the need of GSA speakers to express some categories of French

loans in a relatively strong way. Accordingly, this plural marker is transferred for the purpose of reinforcement. By doing so, pluralized borrowings become adapted and adopted in daily communication. Of course, the donor language does not lack an adequate morphological process to determine plurality, but the use of such transfers in Arabic depicts the resistance of the recipient language.

The process of making plurals does not concern only this type of pluralization in GSA. It involves internal or broken plurals too. Forms like [bb^wa: sən]: ‘basisns’, [mm^wa:ʃən]: ‘machines’, [tʷa:bəl]: ‘tables’, [kra:tʷən]: ‘cardboards’, and [bb^wa:ʃən]: ‘stoppers’ are closer to GSA broken quadrilaterals [mfa:tæh]: ‘keys’, [ʃrɑ:wəl]: ‘trousers’, and [ʃnɑ:dək]: ‘cases’ than to French ‘bassines’, ‘machines’, ‘tables’, ‘cartons’, and ‘bouchons’. Besides, some loans may have more than one plural pattern. [bu:rsa] for instance can either become [bursa:t] or [bb^wa: rəs]: ‘small bag(s)’. [ko:rba] similarly becomes [korba:t] or [krob]: ‘basket(s)’, and so is the case for [farʃe:tʷa] → [fra:ʃɑt] or [farʃe:tʷɑ:t]: ‘fork(s)’ and [bi:du] → [bb^wa: da] or [bi:duja:t]: ‘pail(s)’.

Apparently, some loans can have more than one plural form as much as some proper Arabic terms. The point is that the *nonconcatenative* aspect of Arabic morphology seems to operate on loans in the same way it does on Arabic forms.

GSA morphology includes a linguistic feature, traditionally called the diminutive, whose form and meaning are related to the consonantal root. The form

relation, on the one hand, although discernible, remains complex for it comes under different patterns. The meaning relation on the other hand is straightforward, as it is never far from the root it is derived from. The process of making diminutives in GSA is not obtained via prefixation or suffixation; it is rather via infixation. Pattern modification is attributed as it involves some phonological and morphological processes such as vowel lengthening and metathesis. The following are instances of loans diminutives in GSA via the insertion of the infix {i}::

<i>Noun</i>	<i>Diminutive</i>	<i>Gloss</i>
[gami:la]	[gwi:mla]	‘porringer’
[basi:na]	[bb ^w i:sna]	‘basin’
[maʃi:na]	[mm ^w i:ʃna]	‘machine’
[bu:rsa]	[bb ^w i:rsa]	‘small bag’
[tɔbla]	[twe:bla]	‘table’

It appears that all the loan diminutives display the same pattern CCVCCV. The consonant cluster in the first syllable obtain either through the insertion of [w] which has no explanation from the phonological structure of the words [gami:la] and [tɔbla] or through geminating the initial consonant of [basi:na], [maʃi:na], and [bu:rsa]. The germination of the bilabial consonants [m] and [b] evokes labialization in [bb^wi:sna], [mm^wi:ʃna], and [bb^wi:rsa].

There exist other types of morphological transfers which include verb morphemes like the use of the prefix {t} and the suffixes {i} and {iw} to conjugate verb forms in the imperfective of the second person ‘you’ respectively in the singular and the plural form. We notice for instance:

- / t+ plõnʒe / : ‘you dive’ (singular)
- / t+ plõnʒew / : ‘you dive’ (plural)
- / t+ fri:ni / : ‘you brake’ (singular)
- / t+ fri:niw/ : ‘you brake’ (plural)

This process exhibits instances of partial assimilation like the voicing of /t/ to /d/ in:

- / t+ derãʒe / → [dderãʒe] : ‘you annoy’ (singular)
- / t+ dibru:ji / → [ddibru:ji] : ‘you unravel’ (singular)

It is crucial to note here that verbal loans are subject to prefixation and suffixation in the same way Arabic verbs display the perfective, the imperfective and the imperative tenses. Affixation in verbal forms has been regularly established in French borrowings. And so, morphemes with simple grammatical constructions are likely to be transferred in GSA, as French tenses and conjugations are more complex for application. The inflected verbal and nominal systems of GSA morphology display therefore no resistance to the introduction of new stems. In explaining the motives of similar phenomena in bilingual societies, *Weinreich (1978: 39)* confirms that, “what leads bilinguals to

establish the interlingual equivalence of the morphemes or categories is either their “formal similarity or a similarity in preexisting functions”

4. Conclusion

Although the present paper is a preliminary analysis of loanwords adaptation in GSA, and further research is clearly required to confirm the findings, as the data base is relatively small, important indications are to be made on this basis. Primarily, phonological adaptations are made each time the structural environment requires them according to the phonic medium of GSA. Secondly, the incorporation of Arabic bound morphemes in French loans is not accidental, it is rather conventional. But most importantly, the paper supports the view that Arabic inflectional and derivational morphology is word-based rather than root-based, as the data suggest instances of morphological combinations based on French words and not on roots, since the donor language system displays a concatenative or a non templatic morphology. The conjugation of the verb [fri:na] which is derived from [fri:n], a loan that has been adjusted according to the phonemics of GSA, can display all verbal forms and tenses that are part of the Arabic morphological system, and so is the case of [ksilira]: ‘he accelerated’ and [bantar]: ‘he painted’, and many other verbs that have been adapted in GSA. Nominal forms are also subject to adaptation in the dialect. The use of the plural form in its internal and external categories and the use of the diminutive are some instances of transferring Arabic bound morphemes to adapt loans according to the recipient language where nonconcatenative fixed output

morphology plays a prominent role. Presumably, the different arguments we have developed so far prove that the notion that Arabic word formation is root based is a false statement, and highlights the perspective which supports the view that Arabic morphology is rather stem based.

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