

NATURE AND EXTENT OF COPTIC PHONOLOGICAL INFLUENCE ON EGYPTIAN ARABIC

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Any language undergoes continuous change by internal development and/or by external influence caused by contact with another language.¹ Phonological interference between two languages in contact consists mainly of introducing certain sounds which may or may not be phonemic in one language into another in which they do not exist at all or may exist as allophones. In the latter case, the allophones of the second language are phonematized. For example, Egyptian Arabic has the sound *p* as an allophone of [b] before voiceless stops such as [ʔiptʰasam] for [ʔibtasam] "to smile". However, due to European influence *p* formed a contrast with [b] such as [bəyāno] "his declaration" and [pəyāno] "piano". Accordingly, *p* has lately assumed a phonemic status in Egyptian Arabic besides its allophonic function.

If certain sounds of language *A*, for example, do not exist at all in language *B*, they are either rendered with the nearest phonemic sound of language *B* without any phonological influence, or borrowed directly with a marked interference. This feature is illustrated by the *v* sound which originally did not exist in Egyptian Arabic, but has lately assumed a phonemic status as indicated by [villa] "villa" which contrasts with [filla] "cork".

Certain normal allophonic features of language *A* may be carried over to language *B* in which their occurrence is not normal. Assume, for example, that in language *A* certain sequences of sounds do not occur without a predictable process of assimilation or dissimilation or other allophonic variations conditioned by the nature of the sounds in the language; a bilingual speaker of language *A* and language *B* in which these features are not normal, may extend and normalize these features in language *B*. In this case the influence remains within the allophonic

¹ See Uriel Weinreich, *Languages in Contact* (New York, 1953); Otto Jespersen, *Language, its Nature, Development and Origin* (London, 1947), pp. 191-215; Bloomfield, *Language* (New York, 1933), pp. 444-95; and H. Paul, *Principles of Language* (London, 1888), pp. 456-74.

limit and does not alter the phonemic structure of *B*. For example, a native German who learns English may introduce the allophonic variations of German [s] into English and pronounce *spit* as [ʃpɪt] and *see* as [zī].

Differences in stress patterns among individual languages may lead to a wide range of potential interference between any two languages, the result of which may be the modification of vocalic quantity and quality. In some cases the stress pattern is borrowed with the word, and as a result, vocalic and syllabic variations take place according to the status of that pattern in the borrowing language. In other cases the loanword is borrowed without its original stress pattern, and the pattern of the borrowing language is applied together with the vocalic and syllabic changes necessary according to the distinctive features of this borrowing language. Egyptian Arabic [haydrojɪn] borrowed from *hydrogen* illustrates a lengthening in the last syllable due to the shift of stress according to the patterns of Egyptian Arabic.

INSTANCES OF POSSIBLE INFLUENCE

The accompanying charts represent a phonetic description of Coptic,¹ classical Arabic² and Egyptian Arabic.³ The instances of possible Coptic influence on Egyptian Arabic are those which show features of Egyptian Arabic which exist in Coptic but are lacking in classical Arabic. They can be summarized as follows:

- (1) The phonematization of *p*.
- (2) The phonematization of *g*.
- (3) The laxness of '.
- (4) The phonematization of *δ* and *ē*.
- (5) Aspiration and lack of aspiration of voiceless stops.
- (6) Palatalization of velar sounds.
- (7) The tendency (in Upper Egyptian) to articulate velar sounds further to the front of the mouth.

(1) *The p sound*. It is generally observed that in Coptic loanwords in Egyptian Arabic, Coptic [p] is borrowed invariably as

¹ Data for determining the values of Coptic sounds have been based on the following: W. Czermak, *Die Laute der ägyptischen Sprache* (Vienna, 1931); W. H. Worrell, *Coptic Sounds* (Ann Arbor, 1934); J. Vergote, *Phonétique historique de l'Égyptien* (Louvain, 1945); and E. H. Sturtevant, *The Pronunciation of Greek and Latin* (Philadelphia, 1940), pp. 30-47.

² See W. F. T. Gairdner, *The Phonetics of Arabic* (Oxford, 1925).

³ See R. S. Harrell, *The Phonology of Colloquial Egyptian Arabic* (New York, 1957).

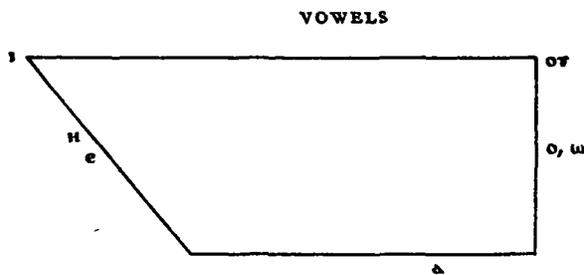
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[b] or [f]. An example of the former is the writer's own name, بشاي *bišāy*, which appears in Coptic as πισσαι *pišāy*. The latter is illustrated by the place-name منفلوط *manfalōt* originating from Coptic μνηπαλωτ *mpalōt*. Further investigation indicates that Egyptian Arabic [p] occurs only in recent European loanwords such as *piḡāma* and *payāno*. Accordingly, the phonematization of

	COPTIC CONSONANTS									
	Stops		Spirants		Nasals		Semi-vowels		Velarized	
	vd.	vl.	vd.	vl.	vd.	vl.	vd.	vl.	vd.	vl.
Labials		p	p ^h	β		m				
Labiodentals				f			w			
Dentals	d	t	t ^h							
Alveolars				s						
Alveopalatals				š	n					
Palatals	j	k	k ^h				y			
Velars	g	k	k ^h							
Uvulars										
Pharyngeals		ʔ								

Others: Lateral = l Trill = r Breath = h

\xrightarrow{B} Bohairic variants \xrightarrow{S} Sahidic variants



[p] in Egyptian Arabic is too recent to be the result of Coptic influence; European influence is far more plausible in this case.

(2) *The g sound.* [g] is phonemic in Cairene Arabic and occurs in the same distribution as Upper Egyptian [ǧ] and the original classical Arabic [ǧ]. It is also phonemic in Upper Egyptian and occurs in the same distribution as classical Arabic [k]. Cairene

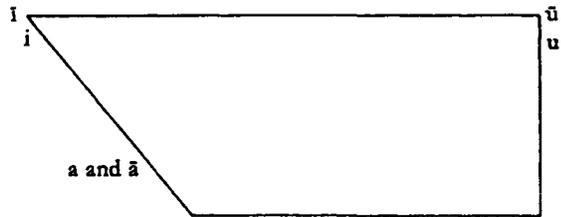
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[g] and Upper Egyptian [g] never occur in the same distribution.

The nearest sound to Egyptian Arabic [g] in Sahidic Coptic is [k]. The actual sound [g] apparently occurs only in Bohairic as an allophone of [k]. Accordingly, there is very little relationship to suggest a Coptic influence.

		CLASSICAL ARABIC									
		CONSONANTS									
		Stops		Spirants		Nasals		Semi-vowels		Velarized	
		vd.	vl.	vd.	vl.	vd.	vl.	vd.	vl.	vd.	vl.
Labials		b	—	—	—	m	—	w	—	—	—
Labiodentals		—	—	—	f	—	—	—	—	—	—
Dentals		d	t	ð	θ	—	—	—	—	ḍ	ṭ
				(d)	(t)					ð̣	
Alveolars		—	—	z	s	—	—	—	—	—	ʃ
Alveopalatals		ɣ̣	—	—	ʃ̣	n	—	y	—	—	—
		↑									
Palatals		(j)	—	—	—	—	—	—	—	—	—
Velars		—	k	g̣	ḡ	—	—	—	—	—	—
Uvulars		q̣	q̣	—	—	—	—	—	—	—	—
		(k)	(k)								
Pharyngeals		—	ʔ	ʕ	ħ	—	—	—	—	—	—
Others:		Lateral = l		Trill = r		Breath = h					

VOWELS



Moreover, Coptic Ⲛ is mainly borrowed in Egyptian Arabic as ʃ such as Ⲛⲁⲗ , Ⲛⲁⲗ *ʃāl* "a kind of fish", and rarely is borrowed as g . On the other hand, Coptic ⲕ is frequently borrowed as k , such as ⲕⲓⲙⲁⲕ , ⲕⲓⲙⲁⲕ , *kiyabk*, a month's name; and seldom as g . This indicates that Coptic [g], aside from its being an allophonic sound, occurs in relatively very few Coptic loanwords in Egyptian

Arabic. Moreover, [g] is not a new sound in Arabic dialects; it occurs in some parts of Hijaz in the same distribution as classical Arabic ج [ǧ] similar to Cairene Arabic.¹ It also occurs in other parts of Hijaz in the same distribution as classical Arabic ق [q] similar to its occurrence in Upper Egyptian.² This indicates that g as a variant of both ج and ق is not uncommon in Arabic dialects. The evidence is, therefore, very strong towards considering [g] an original sound in Egyptian Arabic introduced to Egypt by Arab immigrants who entered Egypt after the Islamic invasion. Accordingly, a Coptic influence for Egyptian Arabic [g] should be eliminated.

(3) *Laxness of ʿ*. An investigation of the status of ʿ in other Semitic languages indicates that ʿ often tends to weaken and finally disappear. This tendency is illustrated by Akkadian at an early period, and by modern Hebrew at the present time. It is also reported that in some of the Hijāzi dialects ʿ weakened and became markedly depharyngealized.³ Accordingly, the laxness of ʿ in Egyptian Arabic can be best explained as caused by internal development without reference to external causes; thus making a Coptic influence in this respect questionable.

A counter-argument in this case, however, should be mentioned. It is possible to consider the laxness of ʿ in Akkadian as a result of Sumerian influence. Also modern Hebrew could have lost the sound value of ʿ on account of its contact with European languages. This encourages the assumption that by the same procedure Egyptian Arabic lost the tense value of ʿ as a result of its contact with Coptic. However, this argument leaves unanswered the weakening of ʿ in other Arabic dialects.

(4) *The ō and ē vowels*. A survey of Egyptian Arabic words which include [ō] as a phonemic vowel indicates that Egyptian Arabic [ō] occurs invariably in the same distribution as classical Arabic *aw*, such as *yawmun* "day" which appears in Egyptian Arabic as *yōm*. Coptic loanwords, however, with an [ō] vowel are always borrowed into Egyptian Arabic with [ū], such as Coptic *qwrē fōte* "towel" which becomes in Egyptian Arabic *فوطه fūṭa*. It is obvious, therefore, that Egyptian Arabic [ō] could not have originated under a Coptic influence. Moreover, the levelling of the diphthong *aw* into *o* in Egyptian Arabic is not unparalleled in other Semitic languages, and other Arabic dialects

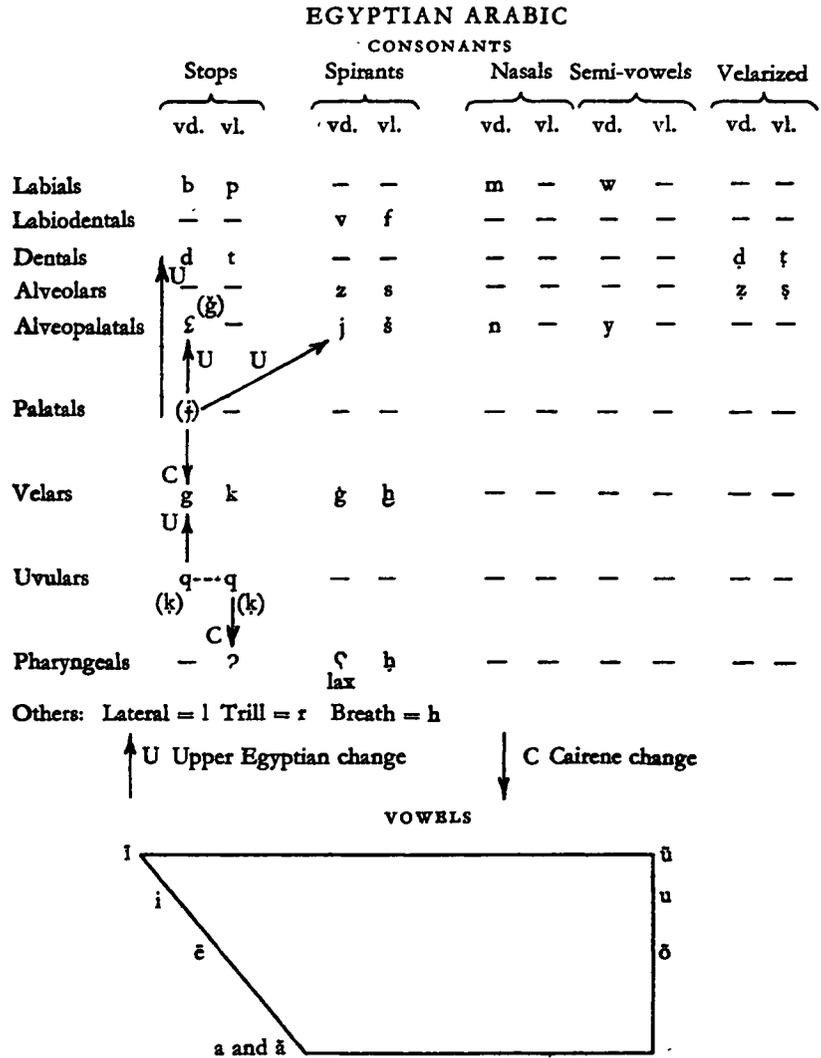
¹ C. Rabin, *Ancient West Arabian* (London, 1951), p. 176.

² *Ibid.* p. 125.

³ *Ibid.* pp. 127, 201.

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as well. In Hebrew, for example, proto-Semitic **yawm*-, “day” and **fawr*-, “bull” appear as *yōm* and *šōr*. Accordingly, the introduction of [ō] into Egyptian Arabic is best explained as an internal linguistic change; and again a Coptic influence should be eliminated in this case.



Egyptian Arabic [ē] can also be indicated as an internal development within the language originating from classical Arabic *ay*. Examples to illustrate this development are classical Arabic *ʔayrum* “fowl” which is rendered in Egyptian Arabic as *ʔēr*. Moreover, Coptic *u* is always rendered in Egyptian Arabic either

as \bar{a} or \bar{i} , such as $\epsilon\eta\eta\epsilon$ and $\mu\alpha\rho\eta\epsilon$ which appear in Egyptian Arabic as إهناس 'ihnās "place-name" and مرييس marīs "south wind". Accordingly, the phonematization of [ē] in Egyptian Arabic cannot have been caused by Coptic influence.

(5) *Aspiration and unaspiration.* Bohairic and Cairene voiceless stops are aspirated. On the other hand, Sahidic and Upper Egyptian voiceless stops are unaspirated. The fact that Bohairic was longer in contact with Cairene, and Sahidic with Upper Egyptian makes the tendencies of aspiration shared by the first pair and unaspiration shared by the latter more than accidental. Since the aspiration of voiceless stops is also a feature of classical Arabic, such aspiration in Cairene Arabic may be considered original; however, the loss of aspiration in Upper Egyptian—a feature which does not exist in classical Arabic—may be considered a result of Coptic influence.

Other features of Sahidic which are mostly based on the loss of aspiration of voiceless stops are also carried over to Upper Egyptian. These features are illustrated by the complete or partial reduction of short vowels in the environment of a stress, and subsequently the existence of consonantal clusters.¹

(6) *Palatalization of velars.* This feature again applies to Upper Egyptian Arabic and Sahidic Coptic where the velar stop [k] has an allophonic variant [kʲ] before a high front vowel. At the present time, however, this palatalization occurs in Upper Egyptian Arabic with most of its consonantal sounds before an [i] vowel.² It will be very hard to explain this feature of palatalization shared by both Sahidic and Upper Egyptian as mere coincidence. Furthermore, it is not yet known that there were any other Arabic dialects which exhibited the same feature. There is little doubt, therefore, that the palatalization of Upper Egyptian sounds is a feature caused by Coptic influence.

(7) *Fronting the point of articulation.* The final phonological feature of possible Coptic influence on Egyptian Arabic is the tendency towards fronting the point of articulation of certain sounds—a feature which applies only to Upper Egyptian. By reviewing the chart of Upper Egyptian sounds, it can be observed that classical Arabic [j] is rendered in Upper Egyptian as [j], [ǰ] and [d].³ Also classical Arabic [k] is rendered in Upper

¹ Compare Upper Egyptian [mktáptš] with Cairene [makatáptiš] "I did not write".

² Compare Upper Egyptian [ʔeh] with Cairene [lēh] "why".

³ *Ibid.* pp. 125, 126.

Egyptian as [g]. This feature of Upper Egyptian, the tendency to articulate palatals as alveopalatals and uvulars as velars, becomes peculiar when it is contrasted with Cairene which apparently exhibits just the opposite tendency. Cairene renders classical Arabic [j] as [g], and [k] as [ʔ]. In seeking the origin of this peculiar feature of Upper Egyptian, it should be borne in mind that while proto-Coptic uvulars became velars other Arabic dialects also shared the same feature, especially in Southern Arabia. The most plausible explanation, therefore, is to attribute this feature to internal development in the language. However, the fact that Cairene did not share it with Upper Egyptian may indicate that Coptic might have had some influence on Upper Egyptian only in accelerating this phonetic development. Accordingly, this case may be considered an instance in which Coptic had only a limited influence on Egyptian Arabic.

CONCLUSION

From the above summary it can be seen that Coptic did not influence Egyptian Arabic as much as it would be expected to under normal conditions of bilingualism. There are seven cases in which Coptic theoretically could have influenced the Egyptian Arabic phonology. However, Coptic did not show any influence on Cairene Arabic at all, and influenced Upper Egyptian Arabic only in two of these cases—the influence in a third case was limited. Moreover, this Coptic influence on the Upper Egyptian phonology was restricted to allophonic features only. This leads to the following conclusions:

Bilingualism between Coptic and Arabic must have been on a very limited scale. This, in turn, indicates that the Arabic-speaking portion of the population in Egypt after the Islamic invasion was mostly of Arab origin; converted Copts must have been, therefore, a minor segment of the population. Also Coptic seems to have had little prestige as compared to Arabic; and therefore linguistic interference could not take place in any recognizable measure from Coptic to Arabic.

This investigation, assign from its linguistic value, will help, no doubt, in the revaluation of the relationship between the Arabs and the Copts shortly after the Muslim expansion in the Middle East.