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Some Remarks on Adaptive Phonetic Changes of Arabic and Persian Loanwords in Daghestanian Languages

Abstract

The paper deals with Arabic and Persian loanwords in Daghestanian languages. Adaptive phonetic changes and possible semantic deviations are investigated.

Keywords: phonetic change, phonetic adaptation, Iranian loanwords, Daghestanian languages

Numerous loanwords from Arabic and Persian went into vocabulary of Daghestanian languages, especially into Lezgian subgroup often through Azeri. They underwent various phonetic changes which will be briefly characterized below.

In many Persian and Arabic loanwords vocalism was preserved unchanged, but original long vowels are rendered as short vowels, even in these languages in which vowel length can be distinctive in native lexemes, ex.:

Bagv. **insan** ← Arab. **insān** “man”; Tab. **ɣalq** ← Arab. **xalq**¹ “people”; Ud. **fikr** ← Arab. **fikr** “thought”; Bud. **širin** ← Pers. **šīrīn** “sweet”; Ts. **baɣ** ← Pers. **baxt** “happiness”; Bagv. **adam** ← Pers. **ādam** “men”

However, in some other instances vowel shortening was not accomplished, ex.:

Arch. **izārɬu** / **izārɬu**, where **izār-** < ***azār** < ***hazār** ← Pers. **hazār** “thousand”

On the other hand it is not excluded that **-ā-** in Archi was not inherited, but could have been shifted from the initial syllable, if it is supposed that: **izār-** < ***azār-** < ***āzar-** < ***ahzar-** < ***hazar-** < ***hazār-**, where the vowel lengthening can be explained as the compensatory process after metathesis of the initial syllable and disappearance of the laryngeal spirant. Examples taken from other Daghestanian languages point out that such an explanation seems quite plausible, comp.:

Lezg. **ahzīr** < ***hazīr** [metathesis]

¹ Phonetic transcription of Arabic words according to E. Lipiński, *Języki semickie rodziny afro-azjatyckiej. Zarys ogólny*, Poznań, 2001, p. 86.

Tab. **azur** < ***ahzur** < ***ahzar** < ***hazar** shows metathesis of the initial syllable. The second variant Tab. **āzur** < ***azur** presents compensatory vowel lengthening after deletion of the uvular fricative consonant.

Quite parallel sound changes can be postulated for the above quoted Archi form.

In Rutul **gunah** < ***gunāh** ← Pers. **gunāh** “sin”, where original Classical Persian pronunciation of the first syllable was retained, comp. [**gonāh**] in contemporary Iranian Persian.

Despite Arabic and Persian vowels are known in all Daghestanian languages, they underwent various other changes apart from shortening in loanwords.

In some languages secondary nasal vowels were developed from phonetic groups with a vowel in prepausal or anteaconsonantic position [**vN# / vN-C**], ex.:

- Tscham. **waṭā** < ***waṭan** ← Arab. **waṭan** “homeland”
 Khin. **gardā** < ***gardan** ← Pers. **gardan** “neck”
 Khin. **pā^hdžārā** < ***pāndžārā** ← Pers. **pandžare** “window”
 Akhv. **sapū** < ***sapun** < ***sabun** < ***sābun** ← Arab. **ṣābun** “soap”

In some languages secondary pharyngalization of vowels is encountered in phonetic neighbourhood of pharyngeal or laryngeal consonants which can be interpreted as an assimilative process having progressive or regressive direction ex.:

- Tsakh. **hašarat** < ***hašarat** ← Arab. **ḥašārat** “insects” [distal perseverative assimilation]
 Tsakh. **aqal** < ***aqal** ← Arab. **aqal** “reason” [contact perseverative as well as anticipatory assimilation]
 Tsakh. **ḥakim** < ***hakim** “physician” ← Arab. **ḥakim** “wise man” [contact perseverative assimilation]
 Tsakh. **šahar** < ***šahar** ← Pers. **šahr** “town” [contact perseverative as well as anticipatory assimilation]

Although this process seems to be especially frequent in Tsakhur, its traces can also be found in other languages, ex.:

- Lak **adat** < ***ʕadat** ← Arab. **ʕadat** “custom” [contact perseverative assimilation]

The part of Lezgian languages shows so called umlaut-vowels in the same as aforementioned phonetic circumstances, ex.:

- Khin. **gidžgäh** < ***gidžgah** < ***gidgäh** ← Pers. **gidgāh** “temple”
 Khin. **hädät** < ***hadat** < ***ʕadat** ← Arab. **ʕadat** “custom”

Anaptyctic vowels appear sometimes, especially in auslaut syllables, where consonant groups are not permitted for phonotactic reasons, ex.:

- Ud. **fikⁱr** < ***fikr** ← Arab. **fikr** “thought”;
 Tsakh. **šahar** < ***šah^ar** < ***šahr** ← Pers. **šahr** “town”
 Rut. **šähärä** < ***šah^ara** < ***šahra** ← Pers. **šahre** “way”
 Somehow different type of anaptyxis shows ex.:
 Tin. **zah^ur** < ***zahr** ← Arab. **dahr** “poison”

Botl., Ghod. **azar^uda** < ***azarda**, where: **azar-** < ***hazar-** < ***hazār-** ← Pers. **hazār** “thousand”, where anaptyctic vowel is **-u-**, albeit **-a-** would be more expected, taking into account the fact that in the other here quoted examples

anaptyctic vowel harmonizes with the remaining ones. However, in some instances contextually conditioned changes can be involved as ex.:

Tsakh. **toχ^um** < *toχ^om < *toχm ← Pers. **toxm** “family”

Centralization of articulation of high back vowel: **u > i** is confirmed in several instances, ex.:

Khin. **džadigar** < *džadugar ← Pers. **džadugar** “sorcerer”

Khin. **pil** < *pul ← Pers. **pul** “money”

Tsakh. **bistan** < *bustan < *būstān ← Pers. **būstān** “orchard”

Various other quite rare phonetic processes pertaining to vowels can be observed in some other languages as for instance:

a) assimilative labialization under influence of preceding labial consonant, ex.:

Agh. **burunz** < *burundz < *burundž < *burendž < *berendž ← Pers. **berendž** “(uncooked) rice”

The vowel of the second syllable underwent labialization as a result of the distal perseverative assimilation: **u-e > u-u**. Similar assimilations are also visible in some other loanwords, ex.:

Rut. **tuχum** < *toχum ← Pers. **toχm**, comp. also Tsakh. **toχum** “family” [o-u > u-u]

Ud. **umud** < *umid ← Pers. **umid** “hope” [u-i > u-u]

b) Secondary vowel lengthening is attested in one example from Khinalug, where:

kōna < *kohna < *kohan ← Pers. **kohan** “old”.

In this case the vowel lengthening can be elucidated as compensatory process after disappearance of the laryngeal spirant **-h-**.

More attention should be drawn to one example from Krits, namely:

miχ / meχ ← Pers. **mix** “nail”

It can be disputable, whether the variant **meχ** can be simply derived from **miχ** (or maybe conversely) or the two forms were borrowed in different chronological periods and represent two different stages of the development of Persian. If it is true, the first variant **miχ** should be regarded as the older one, comp. also Modern Persian **mex** from older Classical Persian **mix**.

Diphthongs were in some instances preserved in their original shape, ex.:

Av. **haywan** ← Arab. **ḥaywān** “animal”

Arch. **žawhar** < *džauhar ← Arab. **džauhar** “jewel”,

but sometimes they underwent assimilative changes, ex.:

Ud. **meymun** < *maymun ← Arab. **maymun** “monkey”,

where the change **-ay- > -ey-** consists in anticipative assimilation.

Bezh. **bazay** < *bazar < *bāzār ← Pers. **bāzār** “market” draws particular attention. In this word the diphthong appeared secondarily because the auslaut sonorant **-r** was from synchronic point of view wrongly identified with morpheme

of the IV grammatical class: **baza-r**. This morpheme can sometimes change into: **-r** > **-y** or **-r** > **-n** as it is the case in the word in question.²

A parallel morphological change is attested in Bezh. **haza-y** < **haza-r** “thousand”.

Monophthongization of diphthong is testified in Rut. **qimat** < ***qiymat** < ***qaymat** ← Arab. **qaymat** “price”. The similar process took place in most other Daghestanian languages, ex.:

Av., Hunz., Tab. or Bud. **qimat** < ***qiymat** < ..., etc. (comp. above).

According to G. A. Klimov and M. Sh. Khalilov this word can be borrowed directly from Azeri **gijmät** “price”.³ Such an explanation does not seem convincing, because the word in question is attested in almost the same phonetic shape in various Daghestanian languages from Avar-Andi-Dido and Lak-Dargwa subgroups. Azeri language can exert more intense influence only on Lezgian subgroup. Moreover, from phonetic point of view it would be quite strange to suppose that Azeri **g-** was rendered as pharyngeal abruptive **q-**.

Although consonant systems in Daghestanian languages are quite rich, such sounds as for example emphatic consonants typical to Arabic are not known. What can seem astonishing, they are not identified with geminates, but in some languages are rendered by respective abruptives, ex.:

Agh. **χaṭ** ← Arab **xaṭ** “line”.⁴

In other languages they can be identified with usual aspirated obstruents, ex.:

Kr./Bud. **χet** ← Arab. **xaṭ** “line”

As for Arabic emphatic spirants, they usually are rendered by (aspirated) non-emphatic and non-geminated spirants, ex.:

Tab./Agh. **taχsirlu** = **taχsir** + **-lu**, where **taχsir-** ← Arab. **taqṣir** “defendant”

Bud. **sabun** < ***säbun**

However, gemination of spirant is observed in some languages, ex.:

And. **s:apun** < ***s:abun** < ***s:äbun**

Tin **s:apī** < ***s:apin** < ***s:apun** < ***s:abun** < ***s:äbun** ← Arab. **ṣābun** “soap”

It seems quite interesting that voiceless aspirated plosive consonants can be rendered as voiceless abruptive or geminated consonants ex.:

Ud. **deχṭaḳ** < ***daχṭaḳ** < ***daχṭak** < ***taχṭak** < ***taxṭak** ← Middle Pers. **taxtak**

Tab. **t:aχt:a** ← Middle Pers. **taxtak** “board”

Khin. **esk:är** < ***ask:är** < ***askar**

Ud. **äskär** < ***askar** ← Arab. **askar** “soldier”

This fact convincingly proves that not aspirated but abruptive or geminated members of phonological oppositions are treated as the marked members.

² N. Ardoteli, *Bezhta Language: Grammar, Texts, Vocabulary*, Tbilisi 2010, p. 38.

³ Г.А. Климов, М.Ш. Халилов, *Словарь кавказских языков. Сопоставление основной лексики*, Москва 2003, p. 271.

⁴ According to traditionally accepted conventions [t] is emphatic consonant in Arabic and abruptive voiceless plosive in Daghestanian languages.

Phonological glottal constriction, so called hamza, was not preserved in anlaut position but it is rendered variously in intervocalic position. In some languages can be retained without changes, ex.:

Arch. **s:aʔat** < ***saʔat**

Khin. **säʔät** < ***saʔat** ← Arab. **saʔat** “hour”

However, in many others hamza went into voiced [ʃ] or voiceless laryngeal spirant [h], ex.:

Av. **s:aʃat** < ***sahat** < ***saʔat**

Rut. **saʃat** < ***saʃat** < ***sahat** < ***saʔat**

Tin. **saʃati** < ***saʃat** < ***sahat** < ***saʔat**

Ud. **sahad** < ***sahat** < ***saʔat**

The forms with voiceless laryngeal spirant should be regarded as more archaic from the point of view of relative chronology. The sound change **-h-** > **-ʃ-** can be interpreted as sonorization of the spirant in consequence of its lenition in the intervocalic position.

Sometimes hamza disappeared entirely, ex.:

Lezg. **sät** < ***sat** < ***saat** < ***saʔat**.

Secondary sonorization of voiceless laryngeal spirant: **-h-** > **-ʃ-** can be encountered in some languages as for instance in Krits and Khinalug:

Kr. **maʃsul** < ***mahsul**

Khin. **mäʃsul** < ***maʃsul** < ***mahsul** ← Arab. **maḥsul** “harvest”

Disappearance of implosive consonant segments, especially in final syllables can be encountered in some examples, ex.:

Dar. **taɣ** < ***taɣt** < ***taxt** < ***taxtak** ← Middle Pers. **taxtak** “board”

Ts. **baɣ** < ***bax** < ***baxt** ← Pers. **baxt** “happiness”

Ud. **gam** < ***garm** ← Pers. **garm** “warm” shows dissimilative disappearance of one sonorant in the phonetic sequence: **-RR** > **-R**.

Consonant clusters in final syllables are not permitted in Daghestanian languages and this phonotactic constraint can easily elucidate abovementioned sound changes.

An assimilative process can be observed for example in:

Tscham. **azalla** < ***azal-da** < ***azar-da** < ***hazar-da** ← Pers. **hazār** “thousand”.

It is the case of anticipative assimilation of the dental resonant and voiced dental plosive:

-rd- > **-ld-** > **-ll-**.

This change goes even further in Hinukh, where the final syllable, being unstressed, was apocopated:

ʃazal < ***ʃazal-la** < ***ʃazal-da** < ***ʃazar-da** < ***hazar-da**

Addition of an epithetic segment in auslaut is rarely attested, ex.:

Darg. **dʒind** < ***dʒin** ← Arab. **dʒin** “bad ghost”

Since epithesis belongs to so called irregular phonetic changes, it is impossible to clarify its causes.

Simplification of alveolar affricate: **dž-** > **ž-** can be encountered in numerous languages, ex.:

Lezg., Tab. **žiger** < ***žigar** < ***džigar** "lung" ← Pers. **džigar** "liver"⁵
 Botl., Ghod. **žanaza** < ***džanaza** < ***džanāza** ← Pers. **dženāze** "dead", "corpse"
 Arch. **žauhar** < ***džauhar** ← Arab. **džauhar** "jewel"

Such a phonetic change is quite natural because in consonant systems of Daghestanian languages voiced velar affricate [**dž**] is not known or has not phonological status and occurs mainly in foreign words.

Methathesis of phonetic segments is attested in few instances, ex.:

Ud. **arbeš:um** < ***abreš:um** < ***abrešum** ← Pers. **abrešum** "silk"
 Lezg. **ahzir** < ***ahzar** < ***hazar** < ***hazār** ← Pers. **hazār** "thousand"

Abovementioned sound changes are most probably caused by phonotactic constraints, but it is not possible to solve this question in detail at current state of the knowledge. Phonotactics of Daghestanian languages still requires further investigation.⁶

It is beyond doubt that above presented examples and their investigation can only be a very tentative attempt at describing and explaining of adaptive phonetic changes in Persian and Arabic loanwords in Daghestanian languages. These problems seem to be very interesting and require further meticulous research.

Abbreviations

Agh. – Aghul
 Akhv. – Akhvakh
 And. – Andi
 Arab. – Arabic
 Arch. – Archi
 Av. – Avestan
 Bagv. – Bagvalal
 Bezh. – Bezhta
 Botl. – Botlikh
 Bud. – Budukh
 Darg. – Dargwa
 Ghod. – Ghodoberi
 Hin. – Hinukh
 Hunz. – Hunzib
 Khin. – Khinalug
 Kr. – Krits

⁵ It seems that primary meaning of this word can be reconstructed as "internal organ". Semantic differentiation "lung" :: "liver" should be regarded as a later secondary process.

⁶ C. Baramidze, *Phonological Structure of Tabasaran*, Tbilisi 2009, p. 3.

Lezg.	– Lezgian
Middle Pers.	– Middle Persian
Pers.	– Persian
Rut.	– Rutul
Tab.	– Tabasaran
Tin.	– Tindi
Ts.	– Tsakhur
Tscham.	– Tschamalal
Ud.	– Udi

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