

A DESCRIPTION OF THE PHONOLOGICAL SYSTEM OF THE BARDESTANI DIALECT

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Abstract—Bardestani Phonological system includes 23 consonants and 9 vowels (6 simple Vowels and 3 diphthongs). It has three syllables which have the CV (C)(C) forms. voiced uvular stop /G/ (of standard Persian) , appears as/k/,/x/, and /ɣ/ sounds.

The most important phonological processes are: A. Lenition: /f,v,b/ > [w]; /d/ > /ð/; /x/ > /h/ B. Fortion: /w/ > /b/; /f/ > /p/ in initial position of some Pahlavi words C. Insertion of /t/ after final /s/ D. /r/ > /l/ E. Deletion of final /n/ and /h/ F. Vowel alternations: /u/ > /i/; /ā/ > /u/; /a/ > /e/; /a, e/ > /ā G. Change of syllables /āb/, /ab/, /af/ into /ow/ as the result of two phonological processes of lenition and assimilation H. Resyllabification of human proper.

I. INTRODUCTION

Bardestani is one of the dialects of Bushehr province which is talked by the people of Bardestan, a region with the population of 5012. The region is located at north east of Dayyer port and south east of Bushehr, with the distance of 5 and 208 kilometers, respectively. The region is located at the latitude of 51° 58", and longitude of 28° 52". The adjacent dialects are Bordekhoooni, Tangestani, Dashtestani, Dashti, Delvari, Genavei, which are similar to Bardestani dialect in many aspects.

No comprehensive study has been done so far about the dialect. In this study, field method has been applied and also interview, tape recorder, and camera were utilized. The speakers were asked to tell a story, memory, tale, or some historical event of the village, while their voice was being recorded.

The speakers' conversations were recorded without permission to better understand the phonological and vocal features in natural state; however, they were used with their permission. The aim to write this study was to describe and discuss the phonemes of Bardestani dialect regarding its consonants and vowels. Then, layout of the phonemes of the dialect and phonological processes are discussed in detail. In this study, minimal pairs were used to identify and introduce consonants and vowels, and phonemes distribution was shown in the beginning, middle, and final position. Among the phonological processes, the frequent cases were mentioned.

II. PHONEMES CLASSIFICATION

As it was mentioned in previous part, phonemes distribution was shown in the beginning, middle, and final position. Moreover, with respect to the place of articulation, consonants order starts with labial and continues toward glottal.

In vowels distribution, simple vowels are discussed, which are followed by compound vowels, regarding their position (middle or final) in word.

The Persian equivalent of the words in Bardestani dialect are given as well as their phonological coding.

A. Consonants

Table 1. Description and classification of consonants.

Standard Persian		Bardestani dialect		consonants
/puk/	(hollow) بوك	/pik/	beginning	‘bilabial ‘/p/stop voiceless
/fešār/	(press) فشار	/šepār/	middle	
/fenjān/	(cup) فنجان	/kup/	final	

/gonješk/ گنجشک (sparrow)	/bujik/	beginning	‘bilabial ‘/b/stop voiced
/sabr/ صبر (patience)	/sabr/	middle	
som/ سُم (hoof)	somb/	final	
/tanur/ تنور (oven)	/tenir/	beginning	‘dental ‘/t/stop voiceless
/šotor/ شتر (camel)	/ʔoštɔr/	middle	
/masjed/ مسجد (mosque)	/majjet/	final	
/darya:/ دریا (sea)	/derya:/	Beginning	‘dental ‘/d/stop voiced
/sanduG/ صندوق (box)	/sandik/	middle	
/band/ بند (rope)	/band/	final	
/kabk/ کبک (partridge)	/kowg/	beginning	‘velarized ‘/k/stop voiceless
/taxt/ تخت (bed)	/lowke/	middle	
/pārc/ پارچ (pitcher)	/jak/	final	
/haviĵ/ هویچ (carrot)	/geze:r/	Beginning	‘velarized ‘/g/stop voiced
/GerGere فرقره (pulley)	/gargar/	Middle	
/nāvdan/ نودان (downpipe)	/nowg/	Final	
/ʔamme/ عمّه (aunt)	/ʔāti/	Beginning	‘glottal ‘/ʔ/stop voiceless
/māhi/ ماهی (fish)	/moʔi/	middle	
/bādbān/ بادبان (sail)	/šerāʔ/	final	
/porrang/ پر رنگ (bold)	/čir/	beginning	‘fricative -/č/stop

/kasif/ (dirty) کثیف	/parčal/ middle	‘ palato-alveolar
/guše/ (side) گوشه	/koč/ final	voiceless
/zibā/ (beautiful) زیبا	/i̯u/ Beginning	‘fricative -/j/ stop
/masjed/ (mosque) مسجد	/majjet/ middle	‘ palato-alveolar
/toxme/ (seeds) تخمه	/maj/ final	voiced
/sut/ (whistle) سوت	/fikfiku/ Beginning	‘/f/fricative
/seft/ (tight) سفت	/soft/ middle	‘labiodental
/gozaštan/ (pass) گذشتن	/towf/ final	voiceless
/?ārezu/ (dream) آرزو	/voye/ Beginning	‘/v/fricative
/pelle/ (stair) پله	/leyedu/ Middle	‘labiodental
/Gassāb/ (butcher) قصاب	/kassāv/ Final	voiced
/Lāne/ (nest) لانه	/sellat/ Beginning	‘/s/fricative
/Perastu/ (swallow) پرستو	/pilišur/ Middle	voiceless ‘alveolar
/sag-e māde/ (bitch) سگ ماده	/lās/ final	
/zabān/ (tongue) زبان	/zebu/ beginning	‘/z/fricative
/kuze/ (jug) کوزه	/kize/ Middle	voiced ‘alveolar
/lāyar/ (thin) لاغر	/lavoz/ Final	
/žiyān/ (fierce) ژيان	/žiyān/ Beginning	‘/ž/fricative
/gejda/ (eighteen) هجده	/hažda/ middle	‘palatal ‘alveolar
/rož/ (lipstick) رژ	/rož/ final	voiced
/kuk/ (stitch) كوك	/šekāl/ beginning	-/š/fricative

/γār/ (cave) غار	/ʔeʃkat/	middle	‘palatal ‘alveolar
/gusfand miš/ (sheep) گوسفند	/miš/	final	voiceless
/čāG/ (fat) چاق	/γoč/	beginning	‘uvular ‘/γ/fricative
/zoγāl/ (coal) زغال	/zoγāl/	middle	voiced
/rig/ (pebble) ریگ	/riγ/	final	
/ʔāvizān/ (hung) آویزان	/hēylangā/	beginning	‘/h/fricative
/pahn/ (wide) پهن	/pahn/	Middle	voiceless ‘glottal
/zud/ (early) زود	/gah/	Final	
/xis/ (wet) خیس	/xulis/	Beginning	‘/x/fricative
/giʃ/ (dizzy) گیج	/paxt/	Middle	‘velarized
/andak/ (little) اندک	/šox/	Final	voiceless
/muš/ (mouse) موش	/mošk/	beginning	‘bilabial ‘/m/nasal
/pirāhan/ (shirt) پیراهن	/ʃeme/	middle	voiced
/gandom/ (wheat) گندم	/genom/	final	
/ʔanār/ انار (pomegranate)	/nār/	beginning	‘dental ‘/n/nasal
/divāne/ (crazy) دیوانه	/genā/	Middle	voiced
/xun/ (blood) خون	/xuyn/xin/	Final	
/lab/ (lip) لب	/lonʃ/	Beginning	‘/l/lateral
/ʃeld/ (volume) جلد	/ʃolt/	middle	voiced ‘alveolar
/ʃuʃe/ (chick) جوجه	/bučil/	final	

/yekpārče/ (united) یکپارچه	/yekāger/ beginning	‘/y/approximant voiced ‘palatal
/meyguy-e xošk/ میگوی خشک (dried shrimp)	/robyum/ middle	
/mādar/ (mother) مادر	/dey/ final	
/mošt/ (fist) مشت	/ronj/ beginning	‘alveolar ‘/r/trill voiced
/šoqāl/ (jackal) شغال	/ture/ middle	
/gonješk/ گنجشک (sparrow)	/bonjir/ final	

Table 2. Consonants of Bardestani dialect

Place of articulation Manner of articulation		Bilabial	dentoalveolar	dental	alveolar	Palate- alveolar	palatal	velarized	velar	glottal
		Stop	Voiceless	p		t				k
Voiced	b			d				g		
Fricative	Voiceless		f		s	š			x	h
	Voiced		v		z	ž			ɣ	
fricative stop	Voiceless					č				
	Voiced					ǰ				
Nasal		m		n						
Lateral					l					
Trill					r					
Approximant							y			

In this dialect, there are a sum of 23 consonants. Moreover, this dialect lacks the stop, velar, voiced /G/. There is no “w” phoneme in this dialect, and the words with this sound are either Arabian or English loan terms, like /ɣows/ (duck) and /selow/ (slow), or allomorphs of /b/, /f/, or /v/, which are discussed in phonological processes.

B. Vowels

Bardestani dialect has 6 simple vowels and 3 compound vowels.

Table 3. description and classification of vowels.

Vowel	Bardestani dialect	Standard Persian
/i/closed ‘front ‘ rounded	/xin/ middle /?owši/ final	/xun/ خون (blood) /?afšān/ افشان (Sprayed)
/u/close ‘back ‘ rounded	/sur/ middle /čipu/ final	/šur/ شور (salty) چوپان (shephered)
/e/mid-close ‘ front ‘rounded	/ker/ middle /kahre/ Final	/kanār/ کنار (beside) /bozyāle/ بزغاله (goat)
/o/mid-close ‘ back ‘rounded	/doz/ middle /to/ Final	/dozd/ دزد (thief) /to/ تو (you)
/a/open ‘front ‘ rounded	/xar/ Middle /derya/ Final	/xar/ خر (donkey) /daryā/ دریا (sea)
/ā/open ‘back ‘ rounded	/tār/ Middle /borrā/ Final	/tār/ تار (dark) /xarmankub/ خرمن کوب (flail)
/ey/compound vowel	/xeyt/ middle	/naxe māhigiri/ نخ ماهیگیری (fishing thread)
/ow/compound	/tow/ Final	/tab/ تب (fever)

vowel			
/oy/compound	/doyyom/	Middle	/dovvom/ (second) دَوَم
vowel	/xoy/	Final	/bā/ (with) بَا

Table 4. simple vowels of Bardestani dialect

	front	back
closed	I	U
Semi-closed	E	o
open	A	ā

III. PHONEMES LAYOUT

Among these 23 consonants, all can occur in the beginning, middle, and final position. Fricative consonant [ð] is an allomorph of /d/ in especial occasions, which will be discussed. Moreover, consonant /v/ is usually omitted at the end of the words, and when in between two vowels, turns to allomorph [w].

As in standard Persian, vowels of Bardestani dialect cannot occur in the beginning position, and a consonant will occur before. However, all vowels (including simple and compound) can occur in the middle and final position. Regarding compound vowels, vowel /ey/ is frequent, but vowel /oy/ is less common. In addition to the presence in words such as /jow/ (barley), /kowr/ (mesquite), /čow/ (rumor), /mowr/ (weed), and /now/ (new), compound vowel /ow/ is the result of a phonological process which turns the syllables /af/, /āb/, and /ab/ into /jow/, so it can be observed in many words.

Two consonants cannot occur at the beginning of a word; however, more or less, it is probable at the middle or end of a word.

In clusters with two consonants, except /p,b,y,d,v,č,ž/, other clusters can occur as the first cluster, although the type of consonants in consonant cluster can limit their distributions. The following table shows the sample of the words in which different consonants of a cluster with two consonants have occurred after the core of a syllable (i.e. vowel).

Table 5. Consonants in the first position of clusters with two consonants.

/t/	kettle	/ketl/	/f/	Knot	/xeft/	/y/	cash	/nayd/	/n/	Cluster	/pang/
										of palm	
/k/	sweet	/nokl/	/s/	A kind of	/kašp/	/h/	side	/dahl/	/l/	Leaf	/balg/
				palm tree							
/g/	Ominous	/fogr/	/z/	Fishscales	/xezg/	/x/	dance	/raxs/	/r/	Gum	/?ārg/
/?/	Scales	/ra?δ/	/š/	A kind of	/lešt/	/m/	lazy	/lamt/	/j/	Reward	/?ajr/

			palm tree				
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in clusters with two consonants, all consonants except /ʔ, h, ž, ɣ/ can occur at the position of the second consonant.

Table 6. Consonants in the second position of clusters with two consonants.

/t/	Registration	/sabt/	/v/	rough	/derv/	/m/	snivel	/čorm/	/b/	hill	/tomb/
/k/	Mouse	/mošk/	/č/	month	/borč/	/x/	hen	/morx/	/j/	grip	/ronj/
/g/	Crazy	/dang/	/y/	Vote	/raʔy/	/n/	century	/karn/	/p/	lead	/sorp/
/f/	Dish	/darf/	/d/	early	/jeld/	/l/	kettle	/ketl/	/š/	role	/naxš/
/s/	constipation	/yobs/	/z/	Ruin	/yanz/	/r/	Rubber	/getr/			
							band				

With respect to the alliteration, the existing methods of Bardestani dialect can be shown as follows:

Table 7. syllabic structure of Bardestani dialect

CV	Smoke	/di/	Bread	/nu/
CVC	Tree	/dār/	fat	/yoč/
CVCC	Wool	/kolk/	Wand	/gord/

As in standard Persian, glottal stop [ʔ] would be added at the beginning of the words starting with a vowel (Prothesis process) in Bardestani dialect, like:

/ʔowr/	Cloud	/ʔāley/	Obvious
/ʔowsan/	Pregnant	/ʔāti/	Aunt

IV. PHONOLOGICAL PROCESSES

In this section, phonemes of Bardestani dialect and the differences with standard Persian are discussed. Alternation, insertion, deletion of consonants, and alternation of vowels and syllables are discussed separately with various samples. Phonological processes are usually observed in the initial and end of syllable, syllable borders and morphemes. Forms of standard Persian and middle Persian, such as infrastructure forms, are considered in explaining the phonological processes. In cases that existing forms of Bardestani dialect are more intact and closer to middle Persian, middle Persian is used. In this study, a morpheme-phoneme process which occurs by adding the suffix /-u/ to the structure of syllables is mentioned.

A. Consonants alteration

1) G alteration

Bardestani dialect lacks the phoneme /G/, and instead of the Persian words consisting /G/, phonemes [k], [x], [ɣ] are used in Bardestani dialect, with respect to the phonological atmosphere.

1.1.1.1. /G/ → /k/

A: at the beginning of the words

(Qatar) /Gatar/ → /ketar/, (lump sugar) /Gand/ → /kand/
(Scissors) /Geyči/ → /keyči/, (Qibla) /Gebble/ → /kebble/
(Qanbar, proper noun) /Ganbar/ → /kambar/, (pen) /Galam/ → /kelam/
(tar) /Gir/ → /kil/, (oath) /Gasam/ → /kesam/

B: at the end of the syllable

(vault) /tāG/ → /tāk/, (stiff) /šaG/ → /šak/
(morsel) /logme/ → /lokme/, (loose) /laG/ → /lak/
(Quran) /Gorān/ → /korān/, (hookah) /Galyān/ → /kallu/

C: at the beginning of the syllables

(thermos) /GomGome/ → /komkome/

1.1.1.2. /G/ → /X/

Before the fricative consonants /s/ and /š/ at the end of a word.

Here, a voiceless consonant is the second component of a consonant cluster.

(role) /naGš/ → /naxš/, (defect) /naGs/ → /naxs/
(plot) /naGše/ → /naxše/, (dance) /raGs/ → /raxs/

In some words which are having two /G/ consonants, they may turn into two different phonemes or the phoneme *k*.

(spoon) /GāšoG/ → /kāšox/, (boat) /GāyeG/ → /kāyek/
(stew) /GāteG/ → /kātox/

1.1.1.3. /G/ → /ɣ/

A: at the beginning of some words, /G/ turns into the voiced fricative consonant /ɣ/. In this context, all post-*ɣ* vowels are common in [+front] feature.

(carpet) /Gāli/ → /ɣāli/, (burble) /Gol/ → /ɣol/
(pot) /Guri/ → /ɣuri/, (slice) /Gāč/ → /ɣāč/

B: between two vowels

(sir) /ʔāGā/ → /ʔāɣā/, (ladle) /malāGe/ → /melāye/

This rule cannot be applied to all cases: (interest) /ʔalāGe/ → /ʔelāke/

As it was observed, in this dialect, consonant /G/ of standard Persian turns to /k/, /x/, or /ɣ/.

/k/ is more than the other two phonemes.

1.1.2. /d/ alteration

Alteration of /d/ to /y/ is of lenition type, in which a stop phoneme turns into an approximant. This process is very frequent and occurs in two situations.

(shout) /dād/ → /dāy/, wind /bād/ → /bāy/

(dear, son) /rud/ → /ruy/

B: between two vowels

(road) /jādde/ → /jāye/, (God) /xodā/ → /xoyā/

(father) /pedar/ → /peyar/, (Xeder, proper noun) /xeder/ → /xeyer/

1.1.3. /b/ alteration

Alteration of /b/ to /v/ can be considered as a kind of lenition process, in which a bilabial stop consonant turns into voiced labiodental fricative consonant.

A: at the end of a word

(pocket) /jib/ → /jiv/, (well) /čāhāb/ → /čāhāv/

(browbeating) /nahib/ → /niv/, (Robab, proper noun) /robāb/ → /rovāv/

B: between two vowels

(shirt) /lebās/ → /lovās/, (candy) /nabāt/ → /novāt/

(coffin) /tābut/ → /tāvut/, (cultivated) /ʔābād/ → /āvāy/

4.1.4. /x/ alteration

There is a kind of lenition in alteration of /X/ to /h/, i.e. palatal-fricative turns to nonpalatal-fricative (glottal).

A: before /t/

(cook) /poxt/ → /poht/, (burnt) /suxt/ → /soht/

(daughter) /doxtar/ → /doht/ (spilled) /rixt/ → /reht/

(cradle) /mahtak/ → /maxtak/

B: before /l/, /m/

(bitter) /talx/ → /tahl/, (plough) /šoxm/ → /šohm/

(jump) /jah/ → /jax/

4.1.5. Alteration of /f/ to /p/

This alteration occurs at the beginning of the syllable. This process is a kind of fortion in which a labiodental fricative voiceless turns to a bilabial voiceless stop.

(order) /sefāreš/ → /Pārešt/, (press) /fešar/ → /šepār/

4.1.6. Alteration of /w/ in middle Persian to /b/

This alteration occurs in words starting with the glide /w/. This phoneme turns into the stop phoneme /b/ through a fortion process.

(bird) /wāyendag/ → /bāhānde/, (snow) /wafr/ → /bafr/

(sparrow) /winjīšk/ → /bonjir/, (span) /widest/ → /bedas/

(pond) /warm/ → /barm/, (dispatch) /wise kardan/ → /bisikerdan/

4.1.7. Alteration of /r/ to /l/

(mat) /buriyā/ → /bolyow/, (leaf) /barg/ → /balg/
(hole) /surāx/ → /silāx/, (carrion) /mordār/ → /mordāl/
(bolter) /γarbāl/ → /xalbāl/

4.1.8. Alteration of /j/ to /ž/

(conscience) /vojđān/ → /vožđān/, (bowing down) /sajde/ → /sažde/

4.1.9. Alteration of /j/ to /š/

(eighteen) /hajde/ → /hašde/

4.1.10. Alteration of /ž/ to /j/

(pullover) /žāket/ → /jākeyt/

4.1.11. Alteration of /g/ to /x/

(sand) /rig/ → /rix/

4.1.12. Alteration of /b/ to /m/

(pigeon) /kabutar/ → /kemutar/

4.1.13. Alteration of /č/ to /š/

(nobody) /hičkas/ → /hiškas/

4.1.14. Alteration of /s/ to /š/

(hungry) /gorosne/ → /gošne/

B. Consonant insertion

4.2.1. Insertion of /n/

In the following words, consonant /n/ is added after the singular nouns.

(some fish) /māhihā/ → /meynā/, (some tea) /čāyhā/ → /čeynā/

(some bread) /nānhā/ → /nunā/,

(some pieces of ground) /zaminhā/ → /zeminā/

4.2.2. Insertion of /k/

In the following words, consonant /k/ is added to the following words:

(bite) /niš/ → /nešk/, (mouse) /muš/ → /mošk/

(short) /kutā/ → /kutāk/, (mung bean) /māš/ → /māšak/

(core) /haste/ → /?assak/, (comb) /šāne/ → /šenak/

4.2.3. Alteration of /d/

In the following words, consonant /d/ is added to the end of these words:

(gallon) /gālon/ → /geland/, (knot) /gereh/ → /gerend/

(pick) /kolang/ → /keland/,

4.2.4. Insertion of /t/

In the following words, consonant /t/ is added after final /š/.

- (jump) /pareš/ → /perešt/, (pillow) /bāleš/ → /belešt/
(show) /namāyeš/ → /nomāyešt/, (sport) /varzeš/ → /varzešt/
(friction) /māleš/ → /mālešt/, (itching) /xāreš/ → /xārešt/
(roar) /γorreš/ → /γorrešt/, (order) /sefāreš/ → /pārešt/
(bright) /rowšan/ → /rust/, (bite) /niš/ → /ništ/

4.1.15. Insertion of /f/

In the following word, consonant /f/ is added to the end of the word.

- (sweep) /jāru/ → /jāruf/

C. Deletion of consonant

4.3.1. deletion of /t/

In the following words, this consonant is usually deleted, such as:

- (yogurt) /māst/ → /mās/, (loose) /sost/ → /sos/
(eight) /hašt/ → /haš/, (handle) /dastgir/ → /dasgir/
(napkin) (dastmāl) → (dasmāl), (laundry) /raxtšu/ → /raxšu/
(Haft Sang, a kind of game) /haftsang/ → /hafsang/
(Hafrang, proper noun, of seven colors) /hafrang/ → /hafrang/
(master) /?ostād/ → /?ossā/, (slow) /?āheste/ → /?asey/

4.3.2. Deletion of /d/

In the following words, this consonant is deleted, such as:

- (some) /čand/ → /čan/, (thief) /dozd/ → /doz/
(wage) /mozd/ → /moz/, (grate) /rande/ → /rene/
(smile) /xande/ → /xene/, (wheat) /gandom/ → /genom/
(near) /nazdik/ → /nezik/, (bracelet) /dastband/ → /dasbena/
(smoke) /dud/ → /di/, (pearl) /morvārid/ → /morvāri/

4.3.3. Deletion of /l/

In the following words, this consonant is deleted:

- (similar) /mesl/ → /mes/, (pants) /šalvār/ → /ševār/

4.3.4. Deletion of /v/

- (stipend) /mavājeb/ → /mājow/, (agree) /movāfeG/ → māfek/

4.1.16. Deletion of /r/

(unless) /magar/ → /mege/, (other) /digar/ → /dege/
(cucumber) /xiyār/ → /xiyā/

4.1.17. Deletion of /h/

(straw) /kāh/ → /ka/, (way) /rāh/ → /ra/
(king) /šāh/ → /ša/, (curse) /fohš/ → /foš/
(city) /šahr/ → /šar/, (peace) /solh/ → /sol/
(morning) /sobh/ → /sob/, (alone) /tanhā/ → /tanā/
Excuse /bahāne/ → /bune/, (Mashhad) /mašhad/ → /mesa/
(four) /čahār/ → /čār/, (fourty) /čehel/ → /čel/

4.1.18. Deletion of /n/

(me) /man/ → /mo/, (this) /?in/ → /?i/
(treatment) /darmān/ → /darmu/, (ground) /zamin/ → /zemi/
(tongue) /zabān/ → /zebu/, (rain) /bārān/ → /boru/
(shepherd) /čupān/ → /čipu/, (sugar bowl) /Gandān/ → /kandu/
(expensive) /garān/ → /geru/

4.1.19. Deletion of /m/

(eye) /čašm/ → /čiš/, (gendarme) /žāndārm/ → /jāndār/

4.1.20. Deletion of /ʔ/

(candle) /šamʔ/ → /ša:m/, (source) /manbaʔ/ → /mambe/
(situation) /vazʔ/ → /va:z/, (mint) /naʔnāʔ/ → /nanā/
(compliment) /taʔārof/ → /tārof/, (time) /dafʔe/ → /da:fe/

4.1.21. Deletion of /y/

(Satan) /šeytān/ → /še:tun/, (village) /velāyat/ → /velāt/
(husband) /šuy/ → /ši/, (verse) /beyt/ → /bet/
(sheikh) /šeyx/ → /šix/

4.1.22. Deletion of /g/

(life) /zendegi/ → /zendey/, (thirst) /tešnegi/ → /tešney/
(hunger) /gorosnegi/ → /gošney/, (fatigue) /xastegi/ → /xassej/

4.1.23. Deletion of /z/

(every day) /harruz/ → /harru/, (today) /?emruz/ → /omru/
(onion) /piyāz/ → /piyā/, (yet) /hanuz/ → /heni/

4.2. Vowels alteration

4.4.1. /u/ → /i/, changing a front vowel to a back

In Bardestani dialect, /u/ vowel changes to /i/; changing /u/ to /i/ and vice versa is because of the common features of the two vowels. Both are high, tensed, and approximants.

(jug) /kuze/ → /kize/, (blood) /xun/ → /xin/
 (was) /bud/ → /bid/, (hollow) /puk/ → /pik/
 (hair) /mu/ → /min/, (needle) /suzan/ → /sizan/
 (far) /dur/ → /dir/, (typhoon) /tufān/ → /tifu/
 (shepherd) /čupān/ → /čipu/, (side) /pahlu/ → /pa:li/
 (money) /pul/ → /pil/, (hole) /surāx/ → /silāx/
 (alley) /kuče/ → /kiče/

4.4.2. /ā/ → /u/

In the following words, one of the nasals /n/ or /m/ is located, which changes /ā/ to /u/.

/ā/ → /u/  -C
[nasal +]

(bread) /nān/ → /nu/, (name) /nām/ → /num/
 (dinner) /šām/ → /šum/, (seed) /dāne/ → /dune/
 (raw) /xām/ → /xum/, (unlawful) /harām/ → /herum/
 (house) /xāne/ → /xune/, (read) /xāndan/ → /xunde/
 (shepherd) /čupān/ → /čipu/, (knee) /zānu/ → /zuni/

4.4.3. /a/ → /ā/

(uncle) /ʔamu/ → /ʔāmu/, (aunt) /ʔamme/ → /ʔāme/

4.4.4. /a/ → /e/

(Ali) /ʔali/ → /ʔeli/, (cheese) /panir/ → /penir/
 (Hasan) /hasan/ → /hesan/, (hailstone) /tagarg/ → /teγerk/

4.2.5. /ā/ → /o/

(clamor) /bang/ → /bong/, (part) (dāng) → /dong/

(sleeve) /ʔāstin/ → /ʔofti/

4.2.6. /o/ → /ā/

(old) /kohne/ → /kāne/

4.2.7. /u/ → /o/

(shower) /duš/ → /doš/, (frog) /Gurbāye/ → /korvak/

(duffle) /tubre/ → /tobre/, (ear) /guš/ → /goš/

D. Syllable alteration

In three groups of the following words, the syllables /af/, /āb/, and /ab/ have changed to /w/.

Lenition of labial consonants /b/, /v/, and /f/, and their change to glide /w/ is seen in many Persian dialects; when labial consonants /b/, /v/, and /f/ occur at the end of a syllable, lenition occurs and they turn into /w/. This process is the input of another process in which, the core of the syllable (vowel) is affected by glide /w/ and become assimilated with the consonant /w/ in being

back and roundedness. Moreover, [high +] which is a feature of /w/ affects the preceding vowel and leads to promotion of the vowel.

The mentioned analysis about these three alterations to /ow/ can be applied to Bardestani dialect.

4.5.1. A: /āb/ → /ow/

(water) /ʔāb/ → /ʔow/, (smallpox) /ʔābele/ → /ʔowle/

(sun) /ʔāftāb/ → /ʔaftow/, (swing) /tāb/ → /tow/

(pregnant) /ʔābestan/ → /ʔowsan/, (summer) /tābestān/ → /towsu/

B: /ab/ → /ow/

(fever) /tab/ → /tow/, (partridge) /kabk/ → /kowg/

(night) /šab/ → /šow/, (cloud) /ʔabr/ → /ʔowr/

(green) /sabz/ → /sowz/, (tools) /ʔabzār/ → /ʔowzāre/

(Gabr) /gabr/ → /gowr/

C: /af/ → /ow/

(bridle) /ʔafsār/ → /ʔowsār/, (sprayed) /ʔafšān/ → /ʔowši/

(banner) /darafs/ → /dorowš/, (shoes) /kafš/ → /kowš/

E. Metathesis

Metathesis can be seen in the following words:

(bucket) /satl/ → /salt/, (lock) /Gofl/ → /kolf/

(ridiculous) /masxare/ → /maxsere/, (prescription) /nosxe/ → /noxse/

(drill) /mašG/ → /maxš/, (roof) /saGf/ → /safk/

(picture) /ʔaks/ → /ʔask/, (match) /kebrit/ → /čerbit/

(justice) /ʔadl/ → /ʔald/

F. Constructing proper nouns

In Bardestani dialect, suffix (-u) is added to the end of proper nouns in order to make diminutive names or casual forms of names. In most cases, adding this suffix leads to deletion of some phonemes in the word, so that alliteration occurs again.

The resulting shortened name consists of two syllables. The first consists of a vowel and a syllable. The first syllable is CV. The second consists of a consonant and the suffix /-u/. Syllable of diminutive names has the form of CVC+u.

(Ameneh) /ʔāmene/ → /ʔāmenu/

(Rahman) /rahmān/ → /ra:mu/

(Shahrbanu) /šahrbānu/ → /ša:ru/

(Ebrahim) /ʔebrāhim/ → /bereymu/, /ʔobu/, /ʔebrām/

(Asghar) /ʔasḡar/ → /ʔaḡu/, (Akbar) /ʔakbar/ → /ʔaku/

(Jahangir) → /jahāngir/ → /jōngu/,

(Xadije) /xadije/ → /xeʃu/, /xeyʃu/

(Raziye) /rāziye/ → /rāzu/, (Roshan) /rowšan/ → /rowšu/

(Ali) /ʔali/ → /ʔalu/, (Sedighe) /sediGe/ → /seyku/

(Gholam) /ʃolām/ → /xolu/, /xoli/

(Fateme) /fāteme/ → /fo:ti/, fātu/, /fāmu/

(Ghasem) /Gāsem/ → /kāsu/, (Karam) /karam/ → /keru/

(Mandani) /māndeni/ → /mondu/, (Mojtaba) /moʃtabā/ → /moštu/

(Mohammad) /mohammad/ → /menu/, /ma:/

(Ma'sumeh) /maʔsume/

Sometimes, the suffix /u/ is added to the intended name to make a diminutive name.

(Hasan) /hasan/ → /hasanu/, (Hossein) /hoseyn/ → /hoseynu/

(Yusef) /yusef/ → /yusofu/, (Hajar) /hājar/ → /hājeru/

(Keshvar) /kešvar/ → /kešvaru/, (Golshan) /golšan/ → /golšenu/

(Dariush) /dāriyuš/ → /dāriyušu/, (Xavar) /xāvar/ → /xāvaru/

CONCLUSION

The results of the study show that Bardestani dialect has 23 consonants and 9 simple and compound vowels. In comparison to the standard Persian, this dialect lacks phoneme /G/ (stop, velar, voiced). In this syllable, construction of syllable is as CV(C)(C). in this dialect, phonological processes are as follows:

1. Due to lack of consonant /G/ in this dialect, in the words consisting /G/ in standard Persian, /G/ turns into /k/, /ɣ/, or /x/, and /k/ is more frequent than the others.
2. Three lenition processes are alteration of /f/ and /b/ to /v/, alteration of /d/ to /y/, and alteration of /x/ to /h/.
3. In words which most of their infrastructure comes from middle Persian, two kinds of fortion processes can be seen: changing glide /w/ to /b/ and alteration of /f/ to /p/, both of which occur at the beginning of words.
4. Alteration of /r/ to /l/, /j/ to /ʒ/, /ʒ/ to /j/, /g/ to /x/, /b/ to /m/, /č/ to /š/, and /s/ to /š/ are not that frequent.
5. The process of inserting /n/, /k/, /d/, and /t/ occurs at the end of /š/.
6. Deletion of /t/ at the end and middle of a word.
7. Deletion of /d/ at the end and middle of the word, leading to the vowel alteration.
8. Deletion of consonants /l/, /v/, /r/, /m/, /y/, /g/, and /z/ occurs in the dialect and is less frequent.
9. Deletion of /h/, /n/, and /ʔ/ are frequent.
10. In vowels of the dialect, four frequent vowel alterations can be seen.
 - 10.1. Alteration of /u/ to /i/
 - 10.2. Alteration of /ā/ to /u/ before nasals
 - 10.3. Alteration of /a/ to /ā/
 - 10.4. Alteration of /a/ to /e/
 - 10.5. Alteration of /ā/ to /o/
 - 10.6. Alteration of /o/ to /ā/
 - 10.7. Alteration of /u/ to /o/
11. In syllables /āb/, /ab/, and /af/, two phonological processes of lenition of /b/, /f/ to glide /w/ and “assimilation” of vowel with the glide and its promotion of vowel to /o/ can be observed.
12. Metathesis phonological process is frequent in the dialect.
13. Regarding proper nouns, addition of diminutive /-u/ to the end of proper nouns and deletion of some vowels at the end of the words leads to the further alliteration.

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