Exploring the /w/, /v/, /b/ and /f/ Alternations in Mashoori Dialect (MD) Of Persian Language

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ABSTRACT

Mashoori is a dialectal variation of southeast of Khuzestan Province, Iran. This dialect is spoken in Mahshahr and its regional neighborhood and, inherited from the Old Southwest Iranian Languages. It is somehow rich from the phonological perspective. One interesting phonological process applied in MD is the alteration of consonantal /b/ and /f/ to the semivowel [w] that is assumed to be kind of lenition process. /w/ in the Old Southwest Persian changed historically to [g], [b] and [w] in Persian Dari and to [g], [b] and [v] in Modern Standard Farsi. The data required for this descriptive-analysis study make use of a dialectal report manual gathered by five native speakers of MD, plus data collected from previously done related researches on this process within the theoretical framework of Generative Phonology. Findings render that this process is remarkably different from what is going on in Modern Persian in a way that seems plausible to choose /w/ as the underlying representation, changing to /b/, /f/ and /v/ in Modern Standard Persian under the fortition process.

1. Introduction

Persian in its various varieties is generally divided into Western Farsi and Eastern Dari (Williamson, 2009). This research investigates one of sub-varieties of Farsi used in the city of Mahshahr, also known as Mashoori dialect (MD), utilized in everyday conversations, no matter of educated, illiterate, young or old people. Mahshahr is one of the ancient ports in the Persian Gulf situated at the extreme northeast of Khuzestan province.The port is bounded on the north by Ahvaz and Ramhormoz; on the east by Behbahan; on the west by Khoramshahr and on the south by the Persian Gulf. If you ask them, some of the inhabitants believe their dialect is Lori, and some think it is kind of Bandari, inherited from Old Southwest Iranian variations and is specifically spoken in their regional neighborhood, in the meantime rather close to dialectal variety of Bushehr and Abadan. So, one can find traces of Lori-Bakhtiari dialect in MD, besides phonemic or lexical evidence from former periods of Persian language (Pahlavi, Dari, etc.) or some borrowed foreign lexical items as indications of historical as well as industrial events of the province during the contemporary century. Thus, MD is somehow a close variation of the more general Lori dialect with certain differences from other areas of the province disclosing interesting alternations from phonological perspective that the scope of this research will not allow us to go into more details.

As to the knowledge of writers of this paper, there is no previous scientific work conducted on this dialect, except for one manual of dialectal vocabularies and expressions collected by a native speaker of MD (Nezarat, 1391). Therefore, the present study seeks to analyze one out of many phonological processes applied on the dialect under consideration. Diachronically, these processes have had a major influence on the changes happened to occur in Farsi language. Focused on the alteration of [b], [f], [v] to [w], this research implies the correlations of MD to some of Modern Farsi dialects and variations and aims to compare and contrast the same process in MD with those surveyed in studies on the old vs. modern Farsi and its variations and hence, tries to answer the following questions:

a. Can phonological process accounts to support the /b/, /f/ alteration to [w] in MD?

b. Are these phonological processes conditioned to certain environments?

To this end, the researchers have applied a descriptive-analysis approach to describe the underlying vs. surface forms in MD in comparison with SF and some of its variations in which the mentioned process has been reported.

2. Literature Review

Mackenzie (1967) in his 'Notes on the Transcription of Pahlavi' provides a complement of phonetic types which the OIr. Languages may be assumed to have had (ignoring nuances of palatalization, labialization, etc.) that provides a starting point for examining the content of MP, as follow:

Accordingly, he suggests that the phonemes /p/, /b/, /f/, /m/ and /w/ are in opposition (Mackenzie, 1967: 20) as is obvious in the following instances:

1]

Pahl. B $p't'$ = MMP $p'd$ 'protected' : ψ $b't^{\gamma}$ = M $b'd$ 'may it be' : B $m't'$ = M $m'd$ 'mother' : ψ $w't^{\gamma}$ = M $w'd$ 'wind'.

Abolghasemi (1377) describes the historical changes of Persian consonants and claims that /w/ in Old Southwest Iranian turns to [w], [b], [g] in Persian Dari and to [v], [b], [g] in Modern Standard Farsi (Abolghasemi, 1377: 76):

2] Pahl. *wād* = **Dari.** *bād* 'wind'
Pahl. *wišad* = **Dari.** *Gošad* 'wide'

Henderson (2009) claims every SF /v/ corresponds to a Kabul Persian[1] /w/, but the reverse is not true. This is because KP /w/ has a number of underlying sources, including /b/ and /f/ that in specific places produce a /v/, as in F *æfɣɒ̄n*→ C *æwɣɒ̄n* 'Afghan'; F,D *qæbz* → C *qæwz* 'constipation', and some F, D's /b/ before a vowel or pause also appear as /w/ in C, without an intervening stage as /w/, as in F, D ɒb → C ɒw 'water'; F, D *šæb* → C *šæw* 'night'; F, D *bɒh bɒh* → C *wɒh wɒh* 'bravo' (Henderson, 1975: 653).

Kambuzia et. al. (2013) trace the same alteration among phonological processes applied in Bala-Gueriveh Lori dialect and mark it as a lenition type process:

3]

SF	B-G Lori	En. Equi.
næbɒt	nevɒt	Canary
sæboc	sevɛk	Light

The explanation is that the bilabial stop /b/ will be alternated with the labiodental fricative [v] in the environment between vowels; also, the change will occur in the word final position after an anterior vowel, as follows:

4]

SF	B-G Lori	En. Equi.
ʤib	ʤiv	Monster
ɢejb	ʁe:v	disappeared

Moreover, /b/ changes to [w] after a [+low, +back] vowel [ɑ], as the example (5) illustrates:

5]

SF	B-G Lori	En. Equi.
cetɒb	ketɒw	Book
tɒb	tɒw	Twist

Kambuzia et. al. reported rare instances of the mentioned phonological alteration in Standard Farsi (SF), in words bāz and tābe turning to vāz and tāve (Kambuzia et. al., 2013: 170-172).

In another article, Kambuzia and Sobati (2014) studied the alteration among [w], [b] and [v] in Kalhori Kurdish dialect under the title *lenition or fortition* (Kambuzia & Sobati, 2014: 209-215). The study reports some observations about alternations between this dialect and SF, the first is that K-K has no [v] in its phonological system. Rather, there is the soft-palate semivowel /w/ remained from Persian Dari in this dialect and to-day it changes to [v] in SF under the fortition process. Second, phonemes [b], [f], and [v] are introduced as allophones as:

6]

SF	K-K	En. Equi.
hefdah	hevdah	seventeen

The third case implies the semivowel /w/ turns to consonantal stop [b] in initial position of words in SF, for instance:

7]

SF	K-K	En. Equi.
bārān	wārān	rain
bād	wād	wind

Forth, /f/ alternates with [w] in final position of words or after vowels. Accordingly, the change of /f/ to [w] in the environments after vowels causes the vowels /ā/ and /a/ turn to /o/, such as the following examples:

8]

SF	K-K	En. Equi.
cafš	koš	shoe
banafš	benowš	purple

Mirdehghan et. al. (2014) discussed a lenition process of altering consonants /v/ and /b/ to semivowel [w] in Delfan Laki dialect, wherever surrounded by two vowels and turning /b/ to [w] after vowel /ɒ/, as is obvious in the following examples:

9]

SF	D-Laki	En. Equi.
sæboc	sowɛk	light
tæbær	toəear	ax

Kambuzia et. al. (2013) quoted from Sadeghi (1363: 98) that the phonological process of alteration of /b/ to [v] in the environment between two vowels has been reported in dialect of Hamedan and other central dialectal variations of Persian (Kambuzia et. al., 2013:172).

We have already reviewed instances of the alteration of /b/, /f/ to [w] in different dialectal variations of Persian. Since the surface representation is the output of the phonological rules, processes, and constraints applied to the underlying representation, it's time to choose the underlying form to represents what has happened to it between MD and SF. Therefore, this research relies on the following reasons to choose /w/ as the underlying form in MD:

a. Traces of the labiovelar soft palate /w/ and its allophones are reported in Old Southwest Iranian languages inherited to Pahlavi, Dari and to dialectal variations of SF (Mackenzie, 1967; Abolghasemi, 1377; Sadeghi, 1363; Kambuzia & Sobati, 2014).
b. The alteration is reported in most of the present dialectal variations of Persian (Sadeghi, 1363; Kambuzia & Sobati, 2014).
c. The phoneme /w/ is reported in various borrowed lexical items from Arabic language (Kambuzia et. al., 2014: 212).
d. The natural pronunciation of the labiovelar soft palate semivowel /w/ requires less effort than bilabial stop /b/ and labiodental fricative /f/ and is reported in the majority of cases in MD.
e. The alteration of /w/ with its allophones /b/, /v/ and /f/ in neither of cases under this study produced a new lexeme, such as /cafš/→ [koš], /ʔæfsar/→ [owsar], /ʔab/→ [ow], /ʔæbr/→ [owr].

3. Methodology

The study is conducted by a descriptive-analytic method. Data of research were collected primarily from a manual of dialectal MD vocabularies and expressions, secondly verified with some casual conversations of MD speakers in small parties and provincial TV programs. This study selects /w/ as the underlying form as is already discussed, hence the observed alterations were explained from MD that have kept the underlying form to SF. Then various cases of the phonological process in different environments were recognized and the raw data were transcribed. Consequently, the data were described using generative phonology rules and notations.

4. Analysis and Discussion

The research data drop a hint that both alternations of /w/ and /v/ are there in MD as the following examples suggest:

10]

MD	SF	En. Equi.
versa	beist	stand up
væk	goftæn	talk
jowab	jævab	answer
dowazdah	davazdah	twelve

Another alteration is that of the change of /b/ to [w] in either the initial or final position of word/ syllable, illustrated in the example **(11):**

(11. a) **/ow/ to [ab]:**

MD	SF	En. Equi.
/ʔow/	[ʔab]	water
/ʔowæci/	[ʔabæki]	watery
/ʔowræ/	[ʔabrah]	canal
/ʔowɾ/	[ʔabr]	cloud

(11. b)

/ʔowlæ/	[ʔable]	smallpox

(11. c)

/ʔowsiow/	[ʔasiab]	watermill
/ʔæftow/	[ʔaftab]	sunshine
/šow/	[šæb]	night
/tow/	[tæb]	fever
/sowz/	[sæbz]	green

(11. d)

/sowab/	[sævab]	requital
/cetab/	[ketab]	book
/cæbab/	[kæbab]	kebab
/ʔænnab/	[ʔænnab]	jujube
/hesab/	[hesab]	counting

The motivation behind the alternation of /w/ with [b] in the path of time from Persian Dari to Modern Standard Farsi is not immediately transparent. The voiced labio-velar approximant /w/ is notoriously slippery when it comes to phonological classifications. This is unique in the consonant world, because of the semivowel nature of /w/ which carries that although the sound is vocalic in nature, it is not 'syllabic'. But still it seems that it is because of the vocalic characteristics of this semivowel that drive the alternation of OIr /w/ to SF [b] as modern SF doesn't allow the occurrence of two subsequent vowels (VV*). Thus the following classical notation expresses this:

Rule: 1

$$
\begin{bmatrix} +\text{high} \\ +\text{back} \\ +\text{round} \\ +\text{sonorant} \\ -\text{consonantal} \end{bmatrix} \longrightarrow \begin{bmatrix} +\text{anterior} \\ -\text{coronal} \\ +\text{voice} \\ -\text{sonorant} \\ +\text{consonantal} \end{bmatrix} \Bigg/ \; V \underline{\quad} \begin{cases} V \\ \# \end{cases}
$$
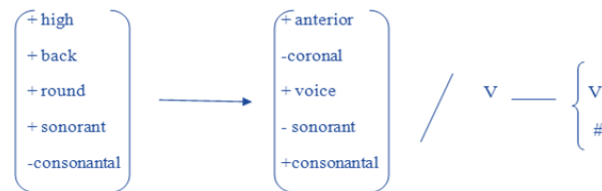
Therefore, the sequence /ow/ in (11.a, c) changes to [ab] and [æb] in /ab/, /ʔasiab/, /šæb/, /ʔæbr/ and /ʔaftab/. As this process involves a change from a weaker semivowel to a sound involving a greater articulatory effort it is a fortition type alteration. The interesting point is that the same alternation is observed in derivationally related word forms, such as /ʔowaki/, /ʔowræ/ and even in more recent word /ʔable/ that assimilates to the supposed underlying from through lenition process turning to [ʔowlæ] (11.b). However, in example (11. d) there are instances of current words applied contemporarily in SF that do not undergo the change in MD, despite the fact that the coda is common for lenition (Kambuzia & Sobati,2014:215) i.e., /ketab/, /kabab/ and /ʔænnab/. This is probably resulted in the existence of other special lexical items in MD for them, or because of the growing tendency of individuals to standardization of dialects close to SF.

Moreover, in the following example (12) one can trace the generalization of applying the underlying representation of /w/ and its allophonic /v/ by changing the /b/ in some borrowed words from modern SF word forms and their inflectionally vs. derivationally related expressions.

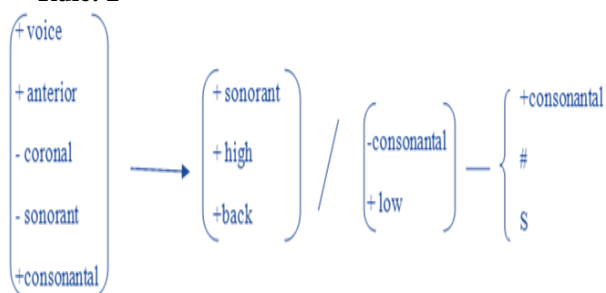**12]**

/b/ to [w], [v]:

SF	MD	En. Equi.
/tabe/	[towæ]	pan
/tabestan/	[towestun]	summer
/ʔæbrishæm/	[owresum]	silk
/tæbær/	[towær]	ax
/delbaz/	[delvaz]	cloud
/dær be dær/	[dær væ dær]	helpless
/ʔetebar/	[ʔehtevar]	credit
/ghæbz/	[ghæbz]	receipt

The process goes after the application of Rule (2):

Rule: 2

Comparing the data of this study with that of the standard Farsi indicates that MD has kept the labiovelar /w/, that is substituted with /b/ and /v/ in modern Farsi. Henderson (2009) claims that appearance of /v/ implies an intervening stage during the process of lenition that occurs in more formal sub-varieties of the standard Persian (2009: 654), although it seems that /v/ appears in more recent lexical items or word forms applied in SF, for instance, in /ʔehtevar/, /delvaz/ and /ghævz/ shown in example (12).

As you follows the alterations of /f/ from Persian Pahl. to Persian Dari and modern SF, you see the consonant is more or less unchanged (Abolghasemi, 1377). But, it has two other alternates occurring in some sub-varieties of Persian that is illustrated in example (13) of MD in which fricative /f/, /v/ turns to [w] in /kowš/ and /ʔowsar/ in coda position, to name a few.

13]

/æf/, /av/ to [ow]:

SF	MD	En. Equi.
/ʔæfsar/	[owsar]	rein
/cæfš/	[koš]	shoe
/bænæfš/	[benowš]	purple
/dæftær/	[dæftær]	notebook
/ræftar/	[ræftar]	behavior
/ʔavišæn/	[owshu:mæk]	thyme

Contrary to this, the change doesn't happen in /dæftær/ or /ræftar/. Maybe the reason comes out of the presence of a consonantal stop /t/ after it that blocks the change, because of the nature of constriction that carries with it. Rule (3) describes hows and whys of the process already mentioned using the traditional notation tools:

Rule: 3
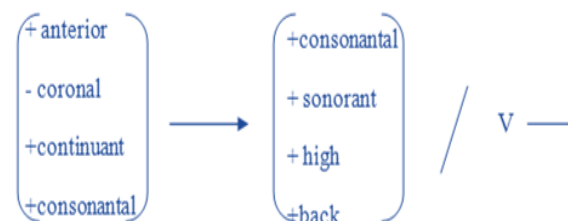
5. Conclusion

In this study, the alternations of /w/ with its /b/, /v/ and /f/ counterparts between Mashoori Dialect and Standard Farsi were described within the framework of Generative Phonology through both fortition and lenition processes that work simultaneously to inspire the alterations. Regarding the first question of the study, the research data suggest that the semivowel /w/, still applied in MD, has been inherited from Persian Dari and turns to various alternations in SF through fortition process. The same observation is reported in Kalhori Kordish (Kambuzia and Sobati, 2014) and a few other sub-varieties of SF (Kambuzia et. al, 2013). As to the second question this article seeks to answer, it worth mentioning that while syllable position restricts these processes to intervocalic and coda positions, it is observed that paradigmatic effects of language are responsible for triggering the alterations, as instances of the grammatically related forms of a base undergo the change whenever the base motivates the process; as well as the standardization effects reported in case of recently utilized contemporary word forms which somehow blocks the process.

Furthermore, the outcomes reveal that this dialect has kept relations with OIr Persian (Pahl, Dari), modern Standard Farsi and some of its variations; as to the existence of /w/ and lots of Pahl/Dari stems that provide a rich case study for diachronic research about the Persian language.

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