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## The Initial Coronal Consonants of Some Inflectional Suffixes in Bashkir

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### 1. Introduction

Bashkir, a member of the North-Western branch of the Turkic family, spoken in the Volga region along with the other Turkic languages, namely Kazan Tatar and Chuvash went through some sound changes over time which affected its both vocalic and consonantal systems. The historical changes which affected the vowel system of Bashkir, known as the Volga Vowel Shift<sup>1</sup> connect it to the rest of the Volga Turkic languages, namely Kazan Tatar and Chuvash which are also affected by the same phenomenon. Some historical shifts affecting its consonantal inventory, such as *s*'s becoming *h* in word and syllable initial positions<sup>2</sup> and *θ* in final positions, *z*'s becoming *đ* in almost all positions<sup>3</sup>, and also *ç*'s having been replaced by *s*<sup>4</sup> separate it from the rest of the Volga Turkic languages at large and connects it to some of the Central Asian Turkic languages, such as Turkmen<sup>5</sup>, and also to Yakut, a Siberian Turkic language.

Some of the phonetic changes affecting the initial consonants of a group of inflectional suffixes in Bashkir, which come to play in some specific sound environments, not necessarily the historical ones, are morpho-phonemic and are observed in some other Central Asian Turkic languages spoken in an area nearby Bashkir. It is important to identify the properties of those sound changes for two reasons: One is to identify the essentials and the fundamentals of those sound changes which are not isolated and unique for Bashkir but are continuous and affective in the nearby Turkic languages as well. The second and the more practical reason is to ease out some difficulties and even some confusions over the underlying forms of certain inflectional suffixes with coronal initial consonants and the phonetic changes their initial consonants go under.

Morphonemic sound changes of inflectional suffixes in Bashkir have two aspects, one of which being specific to Bashkir and the other shared by other Turkic languages as well. Desonorization of the sonorant suffix initial consonants when affixed after any kind of consonant and their assimilation in terms of voice are two of the phonetic changes concerning certain inflectional suffixes in Bashkir. The same phenomena find their reflections in some other Turkic languages, such as Kazakh, Kirghiz, Altay (Oırot), and others, some spoken in an area nearby Bashkir and some not. Therefore, desonorization often accompanied by voice assimilation is an important isogloss connecting Bashkir to what Menges calls Aralo-Caspian languages of the Northwest group of Turkic languages. On the other hand, fricativization, another type of sound change affecting coronal initial consonants of the same set of inflectional suffixes in Bashkir is not typically seen in other Turkic languages though

lenition of the consonants other than coronal stops is observed in some Turkic languages. Spirantization of bi-labial stops intervocalically, for instance is a common incidence in Kazakh.

## 2. Statement of the process

A group of inflectional suffixes in Bashkir, namely the dative, the ablative, the simple past tense, the plural, the genitive, and the accusative have coronal consonants in their suffix initial positions. It is difficult to identify the exact forms of those consonants since, in certain sound environments, they appear as the same consonants. Historically, the dative, the ablative, and the simple past tense suffixes have *d* initially, which are -dA, -dAn, and -dI respectively, while the genitive -nIŋ and the accusative -nI have *n*. The plural suffix, which is historically -IAr should also be added to this group of inflectional suffixes since its initial consonant also goes under the similar changes in certain phonetic environments as do that of the rest.<sup>6</sup>

To explain what happens, when the suffixes of the first group, namely -dA, -dAn, and

-dI are affixed to the word roots or stems ending in specific sets of consonants their initial consonants become as one consonant which is identical for each suffix in this group, given that the phonetic environment where the affixation takes place is the same. This can be explained as follows: The initial consonants of the suffixes mentioned change to *d* when the word root or the stem they are affixed to ends in *l, m, n, ŋ, j, z*; as *t* after *p, t, s, θ, ʃ, k*; and, finally, as *ð* after *r, ð, y, w*. While this explains what happens after consonants, yet what we observe is different after vowels. Post vocally the initial consonants of the ablative, the genitive, the accusative, and the simple past tense suffixes realize as *n*. The initial consonant of the plural and the dative suffixes, on the other hand is *l* after vowels.

The different realizations of the initial consonants of these inflectional suffixes in some specific phonetic environments are explained as consonant mutations<sup>7</sup> or permutations.<sup>8</sup> This view considers the historical forms of the dative -dA, the ablative -dAn, and the simple past tense -dI having *d*; the genitive -nIŋ and the accusative -nI having *n*; and the plural -IAr having *l* initially.

To my knowledge there is no attempt to explain why the initial consonants of the given suffixes in Bashkir appear identical after certain sets of consonants. It also needs to be explained whether this is a change phonetically conditioned, and if it is, then, what kind of a change are we faced with. Secondly, as it was introduced above and also will be demonstrated by some data in the following pages, post vocally, suffixes may have two different consonants initially, which are chosen arbitrarily, one being *n* and the other *l*. Hence we do not see the neutralization of the suffix initial consonants after vowels as we do after consonants. Since the initial consonants of the inflectional suffixes examined

here appear as various consonants, more specifically as *n* and *l* after vowels, the post vocalic position can be considered as the real environment where the consonantal phonemes surface. Thus it becomes clear that these suffixes in Bashkir do not follow the historical forms in terms of their initial consonants, and that it remains for the new forms of these suffixes to be identified.

In this paper we are going to argue that the realization of suffix initial consonants examined here are influenced by two different phonetic environments, one being post vocalic and the other post consonantal. Post vocalic realizations are arbitrary, meaning they cannot be explained as the output of regular phonetic rules. Post consonantal changes, on the other hand, are regular, that is, they can be explained by regular phonetic changes. On the basis of this view, we will consider the post vocalic realizations of these suffixes as the basic forms. Then we will build up our discussion on the post consonantal sound changes affecting the initial consonants of those suffixes. We will argue that the consonants in various sets which condition specific types of consonantal changes are chosen on the basis far from being arbitrary. On the contrary, these consonants stand in close relation with each other in relation to some phonetic features shared by all the members of a specific set. We are going to examine the post consonantal sound changes of the suffix initial consonants for the dative, the ablative, the simple past tense suffixes which are historically -dA, -dAn -dI, as well as the plural, the genitive and the accusative suffixes which are historically -lAr, -nlŋ, -nI respectively. Then we will identify the consonant groups after which those changes mentioned take place. Subsequently we will argue that there are mainly two kinds of assimilation affecting the initial consonants of these suffixes: One is voicing assimilation, and the other is manner assimilation (fricativization).

### 3. Introducing the Data

The following observations are made with regard to the phonetic changes in initial consonants of some inflectional suffixes: There are two different phonetic environments for phonetic changes:

1) Post consonantal: Post consonantal sound changes are conditioned by 3 different sets of consonants:

- i. [l, m, n, ŋ, j, z]
- ii. [p, t, s, θ, ʃ, k, f]
- iii. [r, ʁ, y, w]

2) Post vocalic: The initial consonants of the inflectional suffixes we examine realize in two different ways post vocally:

- i. *n* in the case of the ablative, the genitive, the accusative and the simple past tense suffixes
- ii. *l* in the case of the dative and the plural suffixes

### 3.1. Post Consonantal Realizations of the Initial Consonants

#### 3.1.1. Ablative, dative and simple past tense suffixes

The initial consonants of the dative, the ablative, and the simple past tense suffixes realize as follows at the morpheme boundary:

##### i. [d] after [l, m, n, ŋ, j, z]

<b>/-DI/ Simple Past Tense</b>	<b>/-DA/: dative case</b>	<b>/-DAn/: ablative case</b>
Küm-dek 'We buried.'	tel-dä 'on the tongue'	tel-dä 'from the tongue'
Al-dıq 'We took.'	uram-da 'on the street'	uram-dan 'from the street'
	min-dä 'at me'	min-dän 'from me'
	tan-da 'on the crown'	taj-dan 'from the crown'
	kolxoz-da 'in the collective farm'	kolxoz-dan 'from the collective farm'

##### ii. [t] after [p, t, s, θ, ʃ, k, f]

<b>/-DAn/: ablative case</b>	<b>/-DA/: dative case</b>	<b>/-DI/: Simple Past Tense</b>
at-tan 'from the horse'	at-ta 'on the horse'	Attı 'He threw.'
baş-tan 'from the head'	baş-ta 'on the head'	Huqtı 'He fought.'
kiläşäk-tän 'from the feature'	kiläşäk-tä 'in the feature'	Baθtı 'He stepped.'

##### iii. [ð] after [r, ð, y, w]

<b>/-DAn/: ablative case</b>	<b>/-DA/: dative case</b>	<b>/-DI/: Sim. Past T.</b>
qað-ðan 'from the goose'	qað-ða 'in the goose'	Qað-ðı 'He dug.'
yar-ðan 'from the shore'	yar-ða 'on the shore'	Bar-ðı 'He arrived.'
taw-ðan 'from the mountain'	taw-ða 'in the mountain'	Tuw-ðı 'He was born.'
may-ðan 'from the fat'	may-ða 'in the fat'	Bey-ðe 'He danced.'

Looking at the examples above one can see that there are three groups of consonants which provide the conditioning environment for the change in the initial consonants of the ablative, dative and simple past tense suffixes, which are -DAn, -DA and -DI respectively. The first group in i consists of the consonants *l, m, n, ŋ, j, z* after which the suffix initial consonant realizes as *d*. The phonetic feature which is common to all the consonants in this group is voice as they are all voiced. The realization of the initial consonant in the same suffixes as *t* happens after another group of consonants including *p, t, s, θ, ʃ, k, f*, which are unvoiced stops and fricatives. Finally, the third group of consonants after which *ð* appears as the suffix initial consonant consists of *r, ð, y, w*. Though it may seem relatively difficult to pinpoint what exactly the consonants in this group have in common, looked closely, one can see that the two of them, namely *w* and *y* are semi-vowels, i.e., approximants which leaves the other two consonants, namely *r* and *ð* out of this natural group.

### 3.1.2. The genitive and the accusative case suffixes

Another group of inflectional suffixes in Bashkir, namely the accusative and the genitive suffixes exhibit the same consonantal changes initially in the same phonetic environments as that of the first group of inflectional suffixes. Historically, the accusative suffix *-nI* and the genitive suffix

*-nIŋ* have a nasal stop initially, which is realized as follows in Bashkir:

#### i. [d] after [l, m, n, ŋ, j, z]

##### */-nIŋ/*: Genitive case

qoral-dıŋ 'of the instrument'  
tel-deŋ 'of the language'  
uram-dıŋ 'of the street'  
taŋ-dıŋ 'of the sunrise'  
taj-dıŋ 'of the crown'

##### */-nI/*: Accusative case

qoral-dı 'the instrument'  
tel-de 'the language'  
uram-dı 'the street'  
taŋ-dı 'the sunrise'  
taj-dı 'the crown'

#### ii. [t] after [p, t, s, θ, ʃ, k, f]

##### */-nIŋ/*: Genitive case

at-tıŋ 'of the horse'  
qap-tıŋ 'of the bag'  
säs-teŋ 'of the hair'  
baş-tıŋ 'of the head'  
ayaq-tıŋ 'of the foot'  
ijek-teŋ 'of the syllable'

##### */-nI/*: Accusative case

at-tı 'the horse'  
qap-tı 'the bag'  
säs-te 'the hair'  
baş-tı 'the head'  
ayaq-tı 'the foot'  
ijek-te 'the syllable'

#### iii. [ð] after [r, θ, y, w]

##### */-nIŋ/*: Genitive case

qar-ðıŋ 'of the snow'  
qað-ðıŋ 'of the goose'  
ay-ðıŋ 'of the month'  
taw-ðıŋ 'of the mountain' taw-ðı 'the mountain'

##### */-nI/*: Accusative case

qar-ðı 'the snow'  
qað-ðıŋ 'the goose'  
ay-ðı 'the month'

### 3.1.3. The plural suffix

Finally, the plural suffix *-lAr* patterns with the rest of the inflectional suffixes mentioned so far in terms of phonetic changes its initial consonant goes under:

#### i. [d] after [l, m, n, ŋ, j, z]

##### */-lAr/*

qoral-dar 'instruments'  
til-der 'languages'  
uram-dar 'streets'  
yiŋ-der 'sleeves'  
taj-dar 'crowns'  
kolxoz-dar

ii. [t] after [p, t, s, θ, ʃ, k, f]

at-tar 'the horses'  
as-tar 'the hungry people'  
iʃ-tär 'the business'  
uq-tar 'the arrows'

iii. [ð] after [r, θ, y, w]

qað-ðar 'the geese'  
hıyır-ðar 'the cattle'  
taw-ðar 'the mountains'  
tay-ðar 'the foals'

### 3.2. Post Vocalic Realizations of the Initial Consonants

Post vocally, the suffix-initial coronal consonants realize in two forms:

i. [n] after vowels

**/-dAn/:** ablative case

qala-nan 'from the city'

büre-nän 'from the wolf'

täðrä-nän 'from the window'

**/-dI/:** The Simple Past Tense

Qara-nım 'I watched' Qara-nıq 'We watched.'

Qaran-nıj 'You watched.' Qara-nıj-ið 'You watched'

Qara-nı 'He watched' Qara-nılar 'They watched.'

**/-nIŋ/:** Genitive case

bala -nıj 'of the child'

qala- nıj 'of the city'

büre- neŋ 'of the wolf'

täðrä-neŋ 'of the window'

**/-nI/:** Accusative case

bala-nı

qala-nı

büre-ne

täðrä-ne

ii. [l] after vowels

**/-dA/:** dative case

qala-la 'in the city'

büre -lä 'In the wolf'

täðrä-lä 'at the window'

**/-lAr/** plural suffix

qala-lar 'the cities'

büre-lär 'the wolves'

täðrä-lär 'the windows'

To summarize what the data introduced so far suggest is that, post consonantly, suffix-initial coronal consonants are identical in certain phonetic environments. This cannot be taken as to mean, however, that suffix initial consonants are neutralized compared with their historical components. This is evident by the fact that, post vocally, the initial consonant for a group of these suffixes is realized as *n*, which includes the ablative -dAn, the genitive -nIŋ, the accusative -nI, and the past tense suffix -dI, while it is *l* for another group including the dative -dA and the plural -lAr suffixes. What all this suggests is that some inflectional suffixes in Bashkir are re-grouped with

respect to their coronal initial consonants in comparison to the historical forms. The regrouping is observed in post vocalic forms of those suffixes while the same suffixes show neutralization post consonantly in terms of their initial consonants.

#### 4. Discussion and Conclusion

As illustrated in 3.1, and 3.2, there are mainly two different phonetic environments which are affective on the realization of initial coronal consonants of the inflectional suffixes examined here in Bashkir; one is the post consonantal and the other is the post vocalic.

There are two main observations made regarding the post consonantal and the post vocalic realizations of the initial coronal consonants of the inflectional suffixes: First, post consonantly, the initial coronal consonants of all the inflectional suffixes analyzed here realize as *d*, *t*, or *ð* depending on the conditioning set of consonants these suffixes are affixed after. The fact that the post consonantal variations of the initial coronal consonants are the same for all the inflectional suffixes analyzed here when affixed to the stems ending in the same set of consonants leads one into thinking that these variations are phonetically conditioned and cannot be the underlying forms. Secondly, in the post vocalic environment, the same suffixes are arbitrarily divided into two groups according to their initial consonants, namely the ones which have *n* initially (including the ablative, the genitive, the accusative, and the past tense suffixes, which are formerly -dAn, -nİŋ, -nI, -dI respectively) and the others which have *l* initially (including the locative and the plural suffixes, which are formerly -dA and -lAr respectively). Finding two different initial consonants for the same set of suffixes makes us believe that post vocalic realizations of these suffix initial consonants cannot be the alternating forms, but should be considered as the basic ones. Based on these two observations we consider the postvocalic forms of these suffixes as basic and the suffix initial consonants realizing in this environment as the underlying phonemes for the same suffixes. Following this idea we suggest that the ablative, the genitive, the accusative, and the past tense suffixes (historically -dAn, -dI, -nI, -nİŋ respectively) should have the phoneme *n* initially in Bashkir while it should be *l* for the dative and the plural suffixes (historically -dA, and -lAr) in the same language.

Now that we have established the initial coronal consonant for the ablative, the simple past tense, the genitive, and the accusative as *n*; and the dative and the plural suffixes as *l* in Bashkir, we need to explain the phonetic changes the initial *n* and *l* consonants of all those suffixes go under in certain phonetic environments. There are mainly three different phonetic changes triggered by three different sets of consonants affecting the suffix initial *n* and *l*, which can be formulated as follows:

1. /l, n/ > [d] / [l, m, n, ŋ, j, z] #——
2. /l, n/ > [t] / [p, t, θ, ʃ, q, k, h] #——

3. /l, n/ > [ð] / [ð, r, w, y] # — —

The phonetic changes formulated above can be explained as follows: The initial coronal consonants, *l* and *n* become *t* after voiceless obstruents [p, t, θ, ʃ, q, k, h]; *d* after voiced consonants [l, m, n, ŋ, j, z]; and *ð* after [ð, r, w, y]. The first two variations, namely *d* and *t* are the outcome of the voicing assimilation and desonorization rules while the third one, namely *ð* is generated by the application of the fricativization rule. These changes can be summarized as follows:

1. Voicing assimilation and desonorization: After all consonants, the suffix initial coronal consonants become voiced or unvoiced depending on whether the conditioning set of consonants is voiced or unvoiced. The voicing assimilation rule is accompanied by the desonorization rule applying to the same set of initial consonants in the same phonetically conditioned environment. These two changes comprising

/l, n/ > [d] / [l, m, n, ŋ, j, z] # — —, and

/l, n/ > [t] / [p, t, θ, ʃ, q, k, h] # — —

can be formulated as follows:

Rule #1:

[+cor, +son, -cont] > [-son, α voice] / [+cons, α voice] # — —

Once the voicing assimilation and desonorization rules apply to the initial coronal consonants *l* and *n* they become either *d* or *t* depending on whether they are preceded by a voiced or an unvoiced consonant. Notice also that, the rule # 1 also contains another rule which desonorize the consonants *l* and *n* after all consonants.

2. Fricativization:

We find another phonetic change being affective post consonantly applying to the initial coronal consonants of the inflectional suffixes examined here, which is fricativization. By this rule, the suffix initial coronal consonants *l* and *n* realize as *ð* when affixed to stems ending in [ð, r, w, y]. This rule may tentatively be formulated as follows:

/l, n/ > [ð] / [ð, r, w, y] # — —

So far we have seen that the fricativization rule applies at the morpheme boundaries affecting the initial coronal consonants of the inflectional suffixes examined here (see above examples at section?). It seems difficult to identify what exactly the consonant or the consonants are which go under fricativization. The undergoing consonants can be either *n* and *l* or *d* and *t*, the latter two being the phonetic variations of the former two after the application of the desonorization and the voicing assimilation rules.

Some independent data to be introduced at this point show that the

fricativization rule not only applies at morpheme boundaries affecting the initial coronal consonants of a group of inflectional suffixes, but also within words given that the conditioning phonetic environment for the undergoing consonant is the same as that of the former. The fricativization rule applying lexically, however, affects only *d*, not the consonants *n* and *l*. More specifically, *d* becomes *ð* after *w*, *y*, *r*, and *ð* and also between vowels in Bashkir. This is evident in the following examples:

1. Lexically after approximants *w*, *y*, and *r*:

sawda > sawða 'trade'  
 öydöş > öyðöş 'neighbor'  
 sardağ > sarðağ (a recent Russian loanword:  
 çerdağ)

2. between vowels (inter-vocalically):

adım > ađım 'step' 'pace'  
 badam > bađam 'almond'

3. Some derivational suffixes, such as the factitive morpheme *-dİr* show *d* > *ð* change as well when affixed to a root or a stem ending in *ð*:

qıð-dır- > qıððır- 'make someone angry'  
 ber+däy > berðäy 'as one'  
 ber+däm > berðäm 'unique, one'  
 bawır+daş > bawırðas 'blood kin', etc.

We see, however, no *l* > *ð*, or *n* > *ð* change in the same phonetic environment, i.e., after the consonants *w*, *y*, *r*, and *ð*:

qıðlık 'virginity'	qaðna 'treasury'
batırlık 'braveness'	barıaw 'altın para'
yawlık 'napkin'	awna- 'to lie, roll'
baylık 'richness'	qıyna 'to make suffer' <sup>9</sup>

What the above examples suggest is that the undergoing consonant in ? > *ð* / *w*, *y*, *r*, *ð* \_\_\_\_\_ is *d* and not *n*, or *l*, which is relevant to our discussion in showing that fricativization is a general rule affecting the consonant *d* not only when it is the initial consonant of the inflectional suffixes examined here but also when it is within words. As for *d* > *ð* (fricativization) rule affecting the suffix initial coronal consonants, we suggest that it applies secondarily after the application of the voicing assimilation and desonorization rules.

After the application of the voicing assimilation rule, as stated in rule #1, the initial coronal consonants of the inflectional suffixes examined here become *d* or *t*. An independent rule, namely fricativization applies secondarily to *d* and *t*. We do not see however *t* becoming *θ*, a voiceless equivalent of *ð*, in the same phonetic environment, namely after *w*, *y*, *r*, and *ð*. Therefore we conclude that the rule of fricativization applies after the rule of voicing assimilation, and it applies only to the voiced coronal consonant *d*, leaving out the unvoiced *t*.

• As for the set of consonants which condition *d* > *ð* change, with the exception of *ð*, the consonants *y*, *w* and *r* are approximants, i.e., non-nasal

sonorants while the consonant  $\delta$  itself is clearly a voiced interdental fricative. We suggest that the fricativization of  $d$  is triggered not only by non-nasal sonorants (i.e., approximants), namely,  $w$ ,  $y$ , and  $r$ , but also by the voiced fricatives, both group sharing the feature [+continuant] and [+voiced].

Based on this argument, the fricativization according to which  $d$  becomes  $\delta$  can be stated as follows:

[ $d$ ] > [ $\delta$ ] / [ $\delta$ ,  $r$ ,  $w$ ,  $y$ ] / \_\_\_\_\_

Rule # 2 fricativization:

[+cor, -cont, -son, +voice] > [+cont] / [+cont, +voice] \_\_\_\_\_

What this rule suggests is that [-continuant]  $d$  becomes [+continuant]  $\delta$  after a group of consonants, namely  $w$ ,  $y$  and  $r$ , which are approximants, and after  $\delta$ , an interdental fricative, both groups sharing the feature [+continuant] with the resulting consonant  $\delta$ .

The fact that  $d > \delta$  change fails to carry out after the voiced fricative  $z$ , as evident from the examples *kolxoz-dar* 'collective farms', *maraz-dar* 'illnesses', and *faraz-dar* 'hypotheses', raises the question as to whether voiced fricatives are not to be included in the set of consonants which trigger fricativization of  $d$ . This, however, is a situation which can easily be explained by resorting to the syllable structure of Bashkir. It should be noted that only a few voiced fricatives, namely  $\delta$ , and  $z$  can appear in syllable and word final positions in Bashkir, among which  $\delta$  has the most wide spread occurrences in comparison to the latter. Some Arabic loanwords, such as *maraz* 'illness', and *faraz* 'hypothesis' as well as recent Russian borrowings, such as *kolxoz* 'collective farm' are some of the few words in which the voiced fricative  $z$  also seems to appear at the end of the word. The native  $z$  in Bashkir, on the other hand, seems to have long been replaced by the interdental  $\delta$  in syllable and word final positions, as evident from the following examples: *awız* > *awıđ* 'mouth', *küz* > *küđ* 'eye', etc.

In conclusion, we suggest that the words with the final voiced fricative  $z$  after which the suffix initial  $d$  fails to change into  $\delta$ , as in *kolxoz-dar* are exceptions, and the voiced fricatives, which are only represented by the consonant  $\delta$  in word final position should be included in the group of consonants which trigger the fricativization of  $d$  at morpheme boundaries as well as within words.

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<sup>1</sup> See Berta 1982, 1989, Rona-Tas 1975, and others on this issue.

<sup>2</sup> On initial  $s$  becoming  $h$  in Bashkir, see, for instance, B. A. Serebrennikov "O Prichinakh Prevrash'eniia Nachalnogo  $s$  v  $h$  v Bashkirskom Iazyke" Sovetskaja Tiurkologija 1973:2, pp. 11-15.

<sup>3</sup> Native Bashkir words do not have initial *z*'s. The only words which set counter examples to the phenomenon of *z*' having been replaced by *ð* are the recent Russian and some old Arabic loan words.

<sup>4</sup> The affricate *ç* becomes *ş* in what Menges calls in Aralo-Caspian languages including Kazakh, Kara Kalpak, Nogay, etc., but not in Kipchak-Uzbek, and not in Abaqan group and Tuva group. *Ç* becoming *s* in Bashkir, in Shor, in some dialects of Abaqan group, and also in Yakut appears to be an important isogloss connecting Bashkir with the Siberian languages. See Karl H Menges. *The Turkic Languages and Peoples: An Introduction to Turkic Studies*, Otto Harrassowitz, Wiesbaden 1968, p. 93.

<sup>5</sup> Bashkir and Turkmen are the only Turkic languages to have interdental fricatives *θ* and *ð* for which old *s*'s and old *z*'s are the source consonants in both languages though Bashkir does have a second source, namely *d* for the lately developed consonant *ð*. While Turkmen seems to replace old *z*'s with *ð* in all positions initial *z* in Bashkir has survived. On the interdental *ð* in Bashkir and Turkmen language, see: Dmitriev, N. K., "Zvuk *ð* v Sovremennykh Tiurkskikh Yazykov", in: Dmitriev, N. K. *Stroy Tyurkskikh Yazykov*, Izd-vo Vostochnoy Literatury, Moskva 1962, pp. 12-18.

<sup>6</sup> There is also an enclitic in Bashkir, namely *da* whose initial consonant goes under the similar changes as that of the other suffixes mentioned here.

<sup>7</sup> See: Benzing, J., "Das Baschkirische", In: *Philologiae Turcicae Fundamenta I*, ed. by Deny Jean: K. Grønbech, H. Scheel, Z. V. Togan. Franz Steiner Verlag, Wiesbaden 1959.

<sup>8</sup> See: Dmitriev, N. K., "Étude sur la Phonétique bachkire", *Journal Asiatique* CCX, 1927.

<sup>9</sup> As we see in those examples, *n* and *l* freely combine with what we call approximants, i.e., *w*, *y*, *r* as well as the other consonants which induce desonorization of initial consonants for our group of inflectional suffixes. This can be interpreted as this: desonorization rule applies only at morpheme boundaries in Bashkir.