

# Suffixation in the Inflectional Morphemes of Shina Language

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## Abstract

*This paper deals with the suffixation of inflectional morphemes of Shina in nominal and verbal paradigms. Shina is a Dardic branch of Indo-Iranian languages spoken by members of a small ethnic group named Dards in the mountainous ranges of Karakoram, Himalaya, and Hindukush. This language is spoken in several dialects in Gilgit, Astore, Punyal, Baltistan, Chilas to Palas in Indus Kohistan within the Pakistani territories and in some parts of the Kashmir valley in India. Data for this work has been collected from discussions, conversations, and interviews of the native speakers of Shina as well as the previous work on Shina (Radloff, 1998; 1999; Schmidt, 2008). My personal field visits to Gilgit, Diامر and Astore valleys helped me to access the primary data both via discussions / conversations and interviews from native speakers. The linguistic theory used in the present research on Shina is an Item-and-Process approach. Shina is an oral language and now the attempts are being made to develop its orthography. Shina has a strongly suffixing inflectional morphology, so its affixes are exclusively suffixal. Moreover, the accent is strongly marked in Shina, and it determines the declension of nouns and conjugation of verbs.*

**Keywords:** Shina, inflectional morphology, suffixation, borrowings.

## 1. Introduction

Shina is a Dardic branch of Indo-Iranian (Indic) languages spoken by members of a small ethnic group named Dards in the mountainous ranges of Karakoram, Himalaya, and Hindukush. Grierson (1927, p. 109) has given the name of “Pisacha Languages” to the Dardic languages in his earlier work. According to Masica (1991) the most important language of the Dardic branch is Shina, spoken in several dialects in Gilgit, Astore, Punyal, Baltistan, Chilas to Palas in Indus Kohistan within the Pakistani territories and in some parts of the Kashmir valley in India. Bailey (1924, p. xiii-xiv) divides Shina into three main dialects: Gilgiti, Astori and Kohistani with further subdivisions of Astori into Guresi and Drasi, while Kohistani is divided into Chilasi and Kohistani. Radloff et al. (1992) divide Shina into four geographical clusters: Northern, Eastern, Diamer and Kohistan on the basis of their linguistic survey. Beside these dialectal variations, Shina differs in accent and tone from village to village and generation to generation, that may result to questions or disagreement by the readers of this analysis of inflectional Shina morphemes, which according to Schmidt and Kohistani (2008, p. XV), “is the fate of all grammarians who work with unwritten languages”.

Shina inflectional morphology is considerably more complex than that of many other Indo-European languages like English. Several layers of endings may be affixed to a word stem indicating case, tense, person, possession, gender, and other morphological characteristics. The gradual phonetic reduction or adhesion to the stem will also mark the case system in Shina. This results in the formation of a large number of distinct word forms and could be easily handled by an Item and Process approach. According to Item-and- Process approach, affixes are added to the bases which change its form.

This paper deals with the suffixation of inflectional morphemes of Shina in nominal and verbal paradigms. Shina has a strongly suffixing inflectional morphology, so its affixes are exclusively suffixal. Moreover, the accent is strongly marked in Shina, and it determines the declension of nouns and conjugation of verbs (Bailey, 1924).

The aim of this paper is to apply morphological approaches like Item-and-Process to the word structures of unknown languages like Shina, which is a fertile ground for linguistic research. Furthermore, this is an interesting topic because Shina has a more complex

morpheme system than many of the other Indo- European languages. The varieties of Shina dialects make this process more complex as well as interesting.

## **2. Theoretical Background**

### **2.1. Item – and- Process Approach**

The idea of Item-and- Process approach was developed by Hockett (1954), and it is associated with American Structuralist linguistics. In an Item-and- Process approach complex words result from the operation of processes on simpler words (Aronoff and Fudeman, 2005). In English, these additions could be made to the beginning or to the end of a base i.e., by prefixing and suffixing like ‘cat - cats’ and ‘mature- premature. In contrast to the mixture of English prefixation and suffixation, Shina affixes are exclusively suffixal, for example:

‘baal (boy) bali (boys)’ ‘musha’(man) mushei’(men).

Both the plural morphemes ‘bali’ (boys) and ‘mushei’ are due to the lexemes ‘baal’ and ‘musha’ undergoing the function ‘make plural’. In Shina the plural marker of the noun varies according to the word ending of the singular noun, which will be discussed latter.

### **2.2. Inflectional Categories in Shina**

Inflection involves the formation of grammatical forms such as past, present, future, plural, masculine, feminine, case and number (Aronoff and Fudenan, 2005). Shina is a highly inflectional language and inflectional affixes affect the form of words. For convenience Shina inflectional morphemes have been divided into nominal and verbal categories. The nominal categories involve number, gender, and case, while verbal categories involve tense, aspect, mood, gender, and voice.

#### **2.2.1. Nominal Paradigm**

Several studies have shown that Shina has two noun genders: masculine and feminine. Those related to the animal kingdom (mainly human beings and animals) are according to sex. For others there is no regular rule, and these can be both masculine and feminine (Bailey, 1924; Biddulph, 1971; Schmidt, 2001). Both masculine and feminine nouns may

have marked or unmarked gender suffixes. Nouns ending in vowels are normally considered gender suffixes, while nouns ending in consonants are suffixless and unmarked. Schmidt (2008, p. 40) presents three types of noun endings in Shina for both genders:

- Nouns ending in unaccented short vowels such as ‘-o’ and ‘-u’.
- Nouns ending in accented short vowels or in long vowels such as:
  - oo’, -oo, -a’a, -u’u, -a’, -u’.
- Nouns ending in consonants.

Bailey (1924, p. 5) is of the view that, “accent is strongly marked in Shina, and it determines the declension of nouns and conjugation of verbs”. Radloff (1999) presents the idea about morphophonemic changes that due to the process of inflection the accent shifts and changes to the root- final and suffix vowels occur. In this case the plural suffix and the oblique suffix attach directly to the root. The oblique suffix /-e / is the form which precedes any one of a variety of case markers that primarily indicate location, direction, or possession, for example /-t / ‘to’, / -r /, ‘in’, /-kaar / ‘for’ etc. as shown below:

/daado/ ‘grandfather’ (sing) /daadei/ (Plural) /daad-e-t/ (Sing oblique /- e / and dative marker /-t / ‘to’) /daad-o-t/ (Plural oblique /-o / and dative marker /-t /.

Bailey (1924, p. 11-3) mentions seven case suffixes in the Shina noun declension for both singular and plural and some rules for case endings. These are:

- |  |                               |
|--|-------------------------------|
| 1. Nominative/1 <sup>st</sup> accusative/vocative case | 5. Locative case              |
| 2. Genitive case                                       | 6. 2 <sup>nd</sup> accusative |
| 3. Dative case   | 7. Agent case                 |
| 4. Prepositional case                                  |                               |

The main point in the declension of all nouns is whether the case suffixes are added to the nominative singular or substituted for the ending of the nominative singular. The general rule is that nouns ending in consonants, accented –i’ or accented -u’ always add the plural or case suffixes to the nominative singular. On the other hand, in unaccented ‘-i’, ‘-u’, ‘-o’, ‘-e’, the final vowel of the nominative singular is dropped before the suffixes. Nouns ending in ‘-a’ generally add the genitive singular suffix, contract for the other singular suffixes, and drop the vowel of the nominative plural before the plural suffixes.

Moreover, Bailey (1924, p. 62) refers to “ho thoki (call), dua thoki (pray), kon doki (listen), hukm thoki (command)” etc. as the dative case of Shina. I am more inclined to take these as the ‘compound verbs’ rather than the dative case of the nouns. If we translate these words exactly into Shina, these become ‘to call’, ‘to pray’, ‘to listen’ and ‘to command’ respectively. The formation of new compound verbs is an areal feature of language contact in South Asia (Romaine, 1999).

Grierson (1927, p. 331) gives eight case terminations of Shina nouns with their singular and plural markers. These are:

<b>Singular</b>	<b>plural</b>
Nominative and Acc...., o, u	-e`, -i`
Agent. -s(e`).	-s(e`)
Oblique. -e`	-o, -u.
Genitive. -e`	-o, -u.
Dative. -t(e`).	-t(e`).
Ablative. -jo, -ju.	-jo, -ju.
Locative I. -r(o)	-(o)
Locative II. -ch, -j.	-ch, -j.

There are two genders in Shina i.e., masculine, and feminine. Masculine nouns have generally the gender suffixes -o, -o', -oo, -oo', -u, -u', etc or they may end with a consonant sound. In the same way feminine may have the gender suffixes -i, -i' or -ii or these morphemes may end in a consonant sound (Schmidt, 2001). Gender in some nouns is indicated by prefixing ‘bi:ro’ (male) and ‘sonchi’ (female) such as ‘bi:ro dono’ (bull) and ‘sonchi gao’ (cow).

### **2.2.2. Verbal Paradigm**

Grierson (1927) presents the transitive and intransitive verbal conjugation of Shina. Verbs in Shina agree with the subject in number and person. The finite tense has two genders each in the singular, while in the plural; they are all of the common gender.

If the singular subject of the verb is masculine, the masculine form of the verb will be used and if it is feminine, the feminine form of the verb will be used and these verbs are conjugated. For example:

‘baalse khat likao’ (The boy wrote a letter). Masculine form of verb “likhao”. Gilgiti dialect is “likhagao” Astori and Kohistani “likhao”.

“mulai say khat likhi” (The girl wrote a letter). Feminine form of verb “likhi”. Gilgiti dialect is “likhagi”.

The subject of the transitive verb in all tenses is put into the agent case such as “tuse`likhaga” (you wrote), where ‘-e`’ is agent case marker in subject. The infinitive ends in “-thoiki”, “-oik”, “-ok” as in “kum thoki” (to ωορκ), “khoki” (to eat) etc. Grierson (1927) divides the tense of the transitive verbs into three groups. The first group is formed of the future tense, the second is on an old past participle and, “third group consists of Periphrastic tenses formed with the help of auxiliary verbs”. Periphrastic tenses consist of:

- a) The future perfect formed by conjugation of conjunctive participle such as, “mu giye bum” (I shall have gone).
- b) The tense of obligation formed by conjugating the infinitive as “mas likhoki hanus” (I have to write), and
- c) An element of uncertainty equivalent to the English “perhaps” is made by adding “bai” with main verb such as “yesi khat likhao bai” (perhaps he has written a letter). All these three forms belong to the indicative mood.

### **3. Methodology and the Data**

Until recently, Shina was not a written language and original historical written material is very limited. With the advent of the Karakoram Highway in the northern part of Pakistan, the society in general has opened and literature is now being written in Shina. Some texts

have been written down by native speakers, but these texts are in the Urdu variant of the Arabic script. On the other hand, western researchers have written texts in the Roman script. The researchers have used the same Romanization and International Phonetic Alphabets in the present study.

The linguistic theory used in the present research on Shina is an Item-and-Process approach. According to this approach, affixes are added by means of processes that affect the form of the base. Thus, Shina being a strongly suffixing language could easily be dealt with under an Item-and-Process approach. According to this approach, complex words result from the operation of processes on simpler words (Aronoff and Fudeman, 2005).

Data for this work has been collected from discussions and conversations of native speakers of Shina as well as previous work on Shina by Radloff (1998, 1999), Schmidt (2008) and Amin Zia (1986). My personal field visits to Gilgit, Diamer and Astore valleys helped me to access the primary data both via discussions / conversations and interviews from native speakers which enabled me to understand morphological and dialectical differences in Shina of these three regions. Morphemes used in the data have been selected from discussions of the native speakers and then the speakers were asked to use these morphemes in different situations. Once native speakers used a morpheme in different situations, then these were noted down using the International Phonetic Alphabet.

#### **4. Data Analysis**

The most common method of word-building in all languages of the world is by means of affixation; in some languages such as English, both prefixes and suffixes are used, but the pure Shina morphemes only take suffixes with their bases for this process. Due to extensive contact with English and Urdu in the past and educational and media development in the present, Shina has borrowed a large number of lexical items from these two languages. This borrowing has affected the original morphology of Shina and even new generation is unacquainted with old Shina words such as ‘agai’ (sky), ‘birdi’ (earth) spoken by older generation. A large number of Urdu words are now extensively used in Shina and these Urdu words take both prefixes and suffixes and have changed its highly suffixing nature. The Urdu morpheme ‘wakif’ (acquainted) takes a prefix ‘naa’ making it ‘naawakif’ (unacquainted) which is widely used in Shina, though it has its own morpheme

with an ‘o’ suffix ‘ajono’ meaning the same ‘νααωακιφ’ but is seldom used by the Shina speakers. Like in other Indo-European languages, in Shina, words occur in different forms and one has to learn the paradigms/ patterns to know about different form changes of morphemes. I will investigate the noun and verb paradigms due to the limitation of space in this research work.

#### 4.1. Noun Paradigm

The noun paradigm is divided into its categories of gender, case, and number with further division of sub-categories according to the noun endings.

##### 4.1.1. Gender

Shina has two noun genders i.e., masculine, and feminine with suffixes which mark gender, or they may be unmarked. It is generally noticed that most of the nouns ending in the vowels are marked and nouns ending in consonants are unmarked. Nouns ending in long vowels and accented short vowels inflect differently from unaccented short vowels (Schmidt & Razwal, 2001). Thus, both masculine and feminine noun endings in Shina are of three types i.e., nouns ending in unaccented short vowels, nouns ending in accented short vowels or in long vowels and nouns ending in consonants. These noun endings are shown in the tables blow:

##### 4.1.1.1. Nouns ending in unaccented short vowels.

Nouns ending in unaccented short vowels have been divided into two groups according to their gender. Here we can notice that masculine nouns end in gender suffix ‘-o’ and ‘-u’, while feminine nouns end in ‘-i’.

##### a) Masculine nouns

	<b>Singular</b>	<b>Plural</b>	<b>Meaning in English</b>
Nominative	bako	bakei	branch of tree (big in size)
Oblique	bake`	bakoo	
Nominative	chato	chatei	dumb
Oblique	chatei`	chatoo	



Nominative	kato	katei	Firewood
Oblique	kate	katoo	

Masculine nouns in this class usually end in gender suffixes ‘-o’ and ‘-u’. Declension of nouns ending with ‘-o’ and ‘-u’ sounds is regular as the last vowel sound ‘-o’ is substituted by ‘-ei’ and ‘-u’ changes to ‘-i’. Here we notice that the gender suffix ‘-o’ of nominative singular ‘chato’ is replaced by gender suffix ‘-ei’ while making it plural. The same rule is applicable to all nouns ending in gender suffix ‘-o’. On the other hand, masculine nouns ending in ‘-u’ adds plural marker ‘-i’ instead of substitution while making it plural.

In the oblique plural, ‘-o’ suffix is made a bit prolonged as compared to nominative singular and this distinction is more prominent in Astori and Kohistani/ Chilasi Shina. The oblique singular suffix is ‘-e’ and it is same for all nouns.

#### b) Feminine nouns

	<b>Singular</b>	<b>Plural</b>	<b>Meaning in English</b>
Nominative	liti	liteye	branch of tree (small in size)
Oblique	litye`	lityoo	
Nominative	chati	chatye	dumb (female)
Oblique	chatye`	chatyoo	

Nouns ending in vowels are usually considered as having gender suffixes, while nouns ending in consonants are suffixless and unmarked. Most of the feminine nouns end with ‘-i’ suffix and this gender suffix could be short or long. Here we notice that the process of mutation from one vowel sound to another to make it plural at the end of base has affected the shape of the initial singular noun. In the above data, plural suffixes are added to the base during the formation of plurals in both nominative and oblique cases.

Here we also notice that the gender suffix ‘-i’ of nominative singular is replaced by ‘-ye’ while making it plural. The same rule is applied with the majority of nouns, but we have a few exceptions as well, such as the noun ‘dii’ (daughter). In this case the gender suffix ‘-i’ of ‘dii’ is replaced by a longer suffix ‘-jarei’. The other example is ‘sucho’ (sister) → ‘sucharei’ (sisters). Here the last suffix ‘-o’ is replaced by a longer suffix ‘-arei’.

We mentioned earlier that masculine nouns end in the gender suffix ‘-o’, but we have some exceptions, and some feminine nouns also end in the ‘-o’ suffix as in the case of ‘sucho’ (sister).

#### 4.1.1.2. Nouns ending in accented short vowels or in long vowels:

	<b>Singular</b>	<b>Plural</b>	<b>Meaning in English</b>
Nominative	payaalo’	payaalei	shepherd
Oblique	palaale`	payaloo’	
Nominative	musha’	mushei’	man
Oblique	mushe’	musheyo’	
Nominative	tattoo	tatei	hot thing
Oblique	tate`	tatjo	

Masculine nominatives in this data end in long “oo”, ‘o’, ‘oo’, ‘uu’ or short accented ‘u’’. In oblique singular there is uniformity, but in oblique plural, there is variation. Here we notice that the long vowels ‘oo’’, ‘αα’ ’and ‘oo’ of nominative singulars are replaced with ‘ei’ and this rule is true for all nouns ending with these vowel sounds.

#### 4.1.1.3. Nouns ending in consonants.

Nouns ending in consonants are unmarked and these could be both masculine and feminine. Nouns being masculine and feminine in this class are determined by the verb used with it in the sentence. These nouns take ‘-i’ suffix with the nominative plural.

	<b>Singular</b>	<b>Plural</b>	<b>Meaning in English</b>
Nominative	roshandaan	roshandaani	ventilator
Oblique	roshandaane`	roshandaaniyo	
Nominative	gaam	gaami	village
Oblique	gaame`	gaamiyo	

Nominative	baal	bali	boy
Oblique	bale`	balo	
Nominative	uran	urani	lamb
Oblique	urane`	uranu	
Nominative	tum	tumi	tree
Oblique	tumi`	tumu	

Here we notice that oblique singular has the case marker ‘-e’ while the plural has case markers ‘-o’ and ‘-u’. The last consonant sound of nominative singular is not substituted or replaced and remains constant while changing to plural and it takes the plural marker ‘-i’ with it. All Shina nouns ending in consonant take plural marker ‘-i’ in the process of making plural.

#### **4.1.2. Case Suffixes in Shina**

The most salient feature of nouns in Shina is its two layers of stem+ affix combination: one directly attached to the stem in the case of oblique and plural, while another one attached to the stem indirectly in the form of a post position with oblique case. Cases in Shina are marked with suffixes, which are attached to the base. The two layers of case markers in Shina are:

Case layer –1: where the suffix joins the noun stem directly, e.g. plural, oblique

Case layer-2: where the suffix joins the noun stem indirectly through oblique, e.g. postpositions (Shakeel, 2004).

**Table 1: Case Layers in Shina**

Noun	Case layer-I	Case layer-II	Example	Gloss
Baal	Se		baal se	boy (agent)
	-e		Bali	Boys
	-e	-y	Balay	Of the boy
	-e	-T	Balat	To the boy
	-e	-r	Balar	In the boy
	-e	-j	Balaj	on the boy
	-e	-jo	Balajo	from the boy
	-e	-katch	Balakatch	near the boy
	-e	-waar	Balawaar	toward the boy
	-e	-kaar	Balakaar	for the boy
	-e	-saa~t	balasaa~t	with the boy

Shina has a highly developed case system. There are several types of cases in Shina with different case markers, e.g., nominative, and accusative, agent, oblique, genitive dative, ablative, locative I and locative II. Examples are:

	Boy	man	stone	hand
Nominative	baalo	mushao	bato	hato
Agent	baalse`	mushaase`	batse`	hatse`
Oblique	baale`	mushaae`	bate`	hate`
Genitive	baale`	mushaae`	bate`	hate`
Dative	baalete`	mushaate`	batete`	hatete`
Ablative	baalejo	mushajo	batejo	hatjo
Locative I	-----	-----	batero	hatero
Locative II	baalej	mushaje	bataj	hataj

Here we notice that affixes are attached to the bases which change the shape of nouns. The word “baal (boy)” undergoes the process of mutation to form different words for different cases such as:

baal→o, baal→ se, baal→e` ,baale→te, baale→jo,etc.

These different words are formed by applying the Item- and – Process approach in which affixes are attached to the base. Case layer I such as ‘-se’ (agent case marker) and ‘-te’ (dative case marker) etc are directly attached to the stem as shown in the example below:

(2) baalse mulaite kitab dao

The boy-AGENT (case layer I) girl- DATIVE (case layer I) book gave

(The boy gave a book to the girl).

Case layer II is indirectly attached to the stem with oblique case which are actually fused postpositions. Thus, the oblique case is most easily distinguished when it occurs before postpositions beginning with consonants or independent postpositions (Schmidt and Kohistani, 2001). Here in this example ‘-se’ is agent case marker which is directly attached to the subject noun. The dative marker ‘-tei’ is attached to the indirect object ‘mulai’.

(3) mulaise baalesaa~t bujuk inkaar thi

The girl- AGENT (case layer I) boy-OBL (Case layer I) with (case layer II) refuse did (The girl refused to go with the boy).

In sentence (3) two ways of suffixation are used at the same time, both directly with the stem ‘mulai + se’ or ‘baal’ and ‘saa~th’ which is actually a postposition fused indirectly with the oblique case. The word ‘saa~th’ actually is a kind of bound morpheme which requires a base to be attached to give the complete meaning. The sign ‘~’ represents the length of the word as well as its nasalized characteristic.

It is noted that the dative case marker differs widely in different dialects of Shina. Bailly (1924, p. 211) presents the dative singular suffix as ‘-ra’ and plural as ‘-re’ while Schmidt

and Kohistani (2001, p. 123) give dative singular and plural suffix as ‘-r’ for the Kohistani Shina. The people living in Gilgit and Astore usually use ‘-te’ as the dative case marker.

The dative marker ‘-t(e)’ is observed in Gilgiti and Astori dialects and Grierson (1927, p. 331) also mentions the same dative marker for Shina singular and plural nouns.

(4) ‘tuse mute dare-katch intizaar tharaga’

You –OBL (case layer I) me –DAT (case layer I) door –OBL (case layer I) at/near the (case layer II) wait made. (You made me wait at/ near the door).

Here ‘-e’ is the oblique marker, ‘-te’ is the dative marker and ‘katch’ is a case layer II suffix which is attached to the oblique case. Though it has been shown as a separate word to show the second layer of the case system in the Shina language, but it does not give meaning in isolation, and it serves as a bound morpheme which is attached to the base to make it meaningful.

#### **4.1.3. Number:**

The formation of noun plural in Shina is also interesting as well as complicated. Here three types of nouns have been dealt with for their word-formation process from singular to plural, nouns ending with a vowel sound, nouns ending with a consonant sound and nouns with zero morph.

##### **4.1.3.1. Nouns ending with a vowel sound.**

The same approach of Item- and- Process is used in plural nouns in which singular nouns undergo the process of mutation. The last vowel sound of nouns can undergo different patterns of mutation that is a change to another vowel sound, which is not consistent. For example:

shako (arm)→ shakei , last ‘o’ sound has changed into ‘ei’ to make plural.

Chai<sup>h</sup> (woman)→ chei, a dropping ‘ai’ is changed to diphthong ‘ei.’

kursi(chair)→ kursei, a short ‘i’ is replaced by ‘ei’ sound.

mulai<sup>h</sup> (girl)→ mulai<sup>v</sup> a dropping ‘ai’ sound is replaced by raising ‘ai’ sound.

ho~nto (lip)→ honti ‘o’ is replaced by a very short ‘i’, the 1<sup>st</sup> ‘o’ in singular is nasalized.

Paa (foot)→ pai ‘a long raising sound ‘aa’ is replaced by a diphthong ‘ai’.

Here we noticed that the process of mutation from one vowel sound to another to make it plural at the end of the base has affected the shape of the singular noun. We also noticed that sometimes the morpheme does not change, but the rise and fall of the tone (as in case of ‘mulai’→mulai’) changes the noun from singular to plural, which shows that Shina is also a tonal language as a result of its close proximity to Chinese.

#### 4.1.3.2. Nouns ending with a consonant sound:

Unlike the nouns, ending with a vowel sound, nouns with a consonant ending show some consistency or regularity (like the English regular nouns) in Shina while changing from singular to plural. The addition of the ‘i’ sound with the base changes a noun from singular to plural and this ‘i’ serves as a bound morpheme. This shows that the ‘i’ morph is in one-to-one correspondence with the free morpheme. Thus, the rule for making plural of such nouns ending in consonants is quite simple and that is the addition of plural marker ‘i’ with the base. For example:

kitab (book) → κἰτᾱβἰ (tables)	N <sub>plural</sub> → N-i
masjid (mosque)→ masjidi (mosques)	N <sub>plural</sub> → N-i
charch (church)→ charchi (churches)	N <sub>plural</sub> → N-i
tabl (table)→ tabli (tables)	N <sub>plural</sub> → N-i
pen (pen)→ peni (pens)	N <sub>plural</sub> → N-i
balugun (tomato)→ baluguni (tomatoes)	N <sub>plural</sub> → N-i
khat (bed)→ khati (beds)	N <sub>plural</sub> → N-i

The above data shows that ‘i’ is a bound morpheme attached to the base noun ending with a consonant sound. The first two words ‘kitab’ and ‘masjid’ are borrowed from Urdu, ‘church’, ‘table’ and ‘pen’ are borrowed from English and ‘balugun’ and ‘khat’ are Shina nouns. The same Shina plural formation rule is applied to the borrowed words.

Nouns ending with a /s/ sound changed into /zi/:

ustas (teacher)→ ustazi (teachers) 's' is replaced by zi morph.

muus(meat)→ muzi (meat uncountable in English but countable in Shina)

The English noun 'eggplant' (a kind of vegetable) has one morpheme, but the Shina name for the same 'shino balugun' has three morphemes (shin + o + balugun).

#### 4.1.3.3. Zero Morphs

Like English, Shina has also certain nouns with zero morphs where the base does not change. In these cases, the plural feature is still added to the noun, but nothing happens to the base. In English the plural rule for 'hair' according to Item- and- Process approach will be 'HAIR<sub>plural</sub> →HAIR'.

The same process is applied to the Shina zero morphs:

<u>Singular</u>	<u>Plural</u>
wai(water)	wai N <sub>plural</sub> →N (both countable and uncountable in English)
paju (salt)	paju N <sub>plural</sub> →N (both countable and uncountable in English)
sigal (sand)	sigal N <sub>plural</sub> →N (both countable and uncountable in English)
liti (small branch of tree)	liti N <sub>plural</sub> →N (countable in English )

The above data shows that that zero morphs in Shina have the same plural formation process as English nouns 'hair' and 'sheep'.

#### 4.2. Verb Paradigm

If we take a verb paradigm as an illustration from Shina, it will give certain forms of affixation according to the tense, gender, number, and the context in which it is used. Here we take the conjugation of some verbs which is changed according to the tense, gender of the noun and number. It must be noted that unlike English, Shina verbs are used according to the gender of the nominative subject and these verbs take the gender suffix '-t' with them.



tus ramae: (You domesticate) last morpheme is an ‘-ea’ attached to base ‘ram.’  
mus remum: (I will domesticate), last morpheme is ‘-am’ sound attached to the base.  
mus ramaalus: (I had domesticated), ‘-aalus’ is attached to base ‘ram...’  
mus ramamus: (I am domesticating), ‘-amus’ is suffixed to the base.  
yes ramung: (He is domesticating), base takes an ‘-ung’ suffix.  
yes ramilei: (They had domesticated), ‘ei’ at the end of word.  
yes ramang: (she is domesticating), base takes an ‘-ang’ suffix.  
mulai say rami: (The girl domesticated), ‘-i’ suffix is attached with female subject.  
ball say ramo: (The boy domesticated). ‘o’ suffix is added with the male subject.

It is observed that unlike the English base ‘domestic-’, neither the Shina base ‘ram-’ (though retains a constant shape throughout), nor different suffixes (changing forms) have any sense in isolation. To make them meaningful, they are to be attached to each other. Here this case of Shina contradicts the idea of free morphemes of English.

Just like English, a morpheme in Shina can also have different forms such as verb, noun, and adjective with changes to its base. The morpheme ‘ramalo’ is adjective in which last suffix ‘-alo’ seems to carry the paradigms of quality and number as for many domesticated animals the adjective ‘ramalei’ is used having a change from ‘o’ to a diphthong ‘ei’. This paper will only deal with the inflectional morphemes, not the derivational ones. In the above examples, we notice that different suffixes are added to the base, which change its form such as; ram past, 3rd person plural → ramilei (They domesticated).

Shina verbs can be divided into two conjugations e.g., transitive, and intransitive. All the transitive verbs are regular, while the second conjugation includes all the intransitive verbs and a few transitive ones as well (Bailey 1924:26). There are separate forms of Shina verbs for different tenses, numbers, and gender. There are three tenses i.e., present, past, and future and two numbers: singular and plural, while Shina gender is divided into masculine and feminine.

#### 4.2.1 The Present Tense

	<b>Singular</b>	<b>Plural</b>
<b>Male</b>	muse likhamus ( I write) tuse likhano (you write)	bese likhones( We write) those likhanet( you write)
<b>Female</b>	mase likhamis ( I write) tuse likhani ( you write)	bese likhones (we write) those likhanet (you write)

Here we notice that the verb ‘likhanet’ is the same for both male and female plural, while the rest of the verb form changes according to gender and number. In the above-mentioned data, ‘mus’ is a male gender suffix while, ‘mis’ is a female gender suffix.

These gender suffixes are attached to the root in this way:

likha + mus → likhamus (suffix marker representing the male subject nominative)

likha+mis →likhamis (suffix marker representing the female nominative subject).

#### 4.2.2. The Past Tense

	<b>Singular</b>	<b>Plural</b>
<b>Male</b>	mase likhsus/lus (I wrote) mese likhamsus/lus (I was writing) tuse likhaso/lo (you wrote)	bese likheses/les (We wrote) bese likhoneses (We were writing) those likhaset/let (you wrote)
<b>Female</b>	mase likheses/lis (I wrote) mase likhamlis( I was writing) tuse likhase/lei (you wrote) res/yes likhali (she wrote)	bese likhases/les (we wrote) bese likhoneses/les (we were writing) those likhaset/let(you wrote) res/yes likhili (they wrote)

As regards the markers of past tense, they vary from area to area. The people from the Gilgit region use the past marker ‘-sus’, the people from Kohistan use ‘-gus’ and the Astori dialect has the past tense marker ‘-lus’ for male gender and ‘-gis’, ‘-sis’ and ‘-lis’ for

female gender respectively. Different suffixes are attached to the base ‘likh’ to give a complete sense of the morpheme. The ending ‘–sik’ is attached to the root ‘likham’ to make past conditional sentences such as:

mas likhamsik (I should have beaten)	bese likhonsik (we should have beaten)
tuse likheisik(you should have beaten)	those likhaesik (we should have beaten)
yes likhesik (he should have beaten)	ris likhaesik (they should have beaten)

#### 4.2.3. The Future Tense

	<b>Singular</b>	<b>Plural</b>
<b>Male</b>	mase likham( I shall write)	bese likhon ( We will write)
	tuse likhae (you will wrote)	those likhiyaat(you will write)
<b>Female</b>	mase likham (I will write)	bese likhon(we shall write)
	tuse likhae (you will write)	those likhiyaat (you will write)
	yes likhai (she will write)	res likhain (they will write)

Here we can notice that suffixes in the verb of future tense are same for both genders, i.e., the male and female. In all the three tenses one verb ‘likh’ has been used and it has been noticed that Shina verb is highly inflectional, and it changes according to the tense, gender and number.

#### 5. Conclusion

Since the focus in this research was on the inflectional morphology of Shina, we had ample opportunity to look at the conjugations of verbs and declension of nouns through suffixation and stem alteration. It is interesting to know that Shina has three main dialects: Gilgiti, Kohistani and Astori and each has many accent varieties which result in the differences in case markers of Shina nouns. We also noticed that forms of a lexeme in Shina are determined by syntactic environment such as that Shina verbs take different forms according to context, tense, voice, gender, and number.

Shina is a highly inflectional language, and it has a strongly suffixing morphology. Several layers of endings are affixed to a word stem indicating case, tense, person, and gender. In

the nominal paradigm, Shina has two noun genders: masculine and feminine and the endings of the noun determine the inflection. These nouns have gender suffixes such as a vowel ending, or these may end in a consonant sound which is considered unmarked. Beside the gender, Shina nouns are either singular or plural. Nouns ending in consonant take a plural suffix 'i', while nouns ending in vowels inflect differently, substituting the final suffix with another one. We also noticed that Shina has eight case endings which are marked with suffixes attached to the base.

The most interesting observation was the productivity of Shina verbs i.e., a verb in Shina changes into several forms according to different tenses, gender, and number. A verb with different suffixes attached to it is still a verb in Shina.

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