

## Morphology of Urdu Verbs: A Word and Paradigm Approach

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### Abstract

The current paper attempts to analyze the morphological processes performed on Urdu verbs within the theoretical framework of Word and Paradigm approach (WP approach). Although WP approach was designed to discuss the inflectional morphology of Fusional languages, it is observed that it is also very helpful in the construction and examination of Urdu verbs that have both fusional and agglutinative characteristics. Moreover the morphological processes on Urdu verbs are discussed with the inflectional as well as derivational paradigms. The study concludes that the WP approach provides an effective paradigmatic set of patterns, although there are some limitations as well, for the inflectional and derivational morphology of Urdu verbs. The research aspires to make its contribution through the application of WP approach to analyze and evaluate the inflectional as well as derivational processes of Urdu verbs. The beneficiaries of the study are the students and researchers in the field of inflectional and derivational Morphology.

**Keywords:** Morphological processes, Agglutinative and Fusional language, Word and Paradigm approach, inflectional and derivational morphology

### 1. Introduction

Word formation is a complex process that involves so many morphological, morpho-syntactic and morpho-tactic processes. Mkanganwi (2002) holds that the words inflect for various grammatical divisions, such as; number, gender, tense, person and case etc. These features are also reflected in Urdu verbs. Morphological rules, on the other hand, can be general as well as specific depending upon the language and the morphological phenomena under study. Matthews (1965) talks about the inflectional part of grammar through WP approach and holds that it can be described in terms of sets of morphosyntactic properties and rules that ‘realize’ them. Ackerman, Rose and Barker (2004) state that inflectional and derivational paradigm are not equivalent in their nature and function and may vary in the range of their applicability but they also share many of similar characteristics. The ‘word-based’ tradition, on the other hand regards morphology as the “branch of linguistics which is concerned with the forms of words in different uses and constructions” (Matthews, 1991). In this way, it can be said that WP approach is not only helpful in comprehension of inflectional morphology but this can also be useful in the understanding of the different derivational processes, ‘uses and constructions’ as well. The study addresses the primary question of how WP approach can provide a well-defined paradigmatic set of patterns for the formation of Urdu verbs. Then subsidiary

questions are; (1) how can WP approach be helpful in the formation of loan verbs, (2) and what are the changes that take place in the formation of Urdu verbs when the lexical verbs are missing? Then what changes take place through morpho-syntactic phenomenon of verb formation? The study is restricted to the analysis of Urdu verbs and their analysis with the application of WP approach.

### 1.1 Theoretical underpinnings related to Word-based Morphology/WP approach

Words are formed through a number of morphological processes whereas Word-Paradigm approach provides a well-defined pattern to understand some of those processes. It is quite opposite to that of Morpheme-based morphology where morphemes are of central importance. Karttunen (2003) observes that the central focus of word based morphology is the word forms and not different parts of the word. Word and paradigm approach considers morphemes non-existent (Shalal, 2018) and studies them as stem modifications that serve as models of set of morphological features. Different patterns are provided by these models and words are grouped on the basis of the pattern they fit and adjust in. To Mathews (1991, p. 197), words should be arranged according to their grammatical categories that are distinguished by the endings. In the words of Robins (1959, p. 128), “The word is a more stable and solid focus of grammatical relations than the component morpheme by itself. Put in another way, grammatical statements are abstractions, but they are more profitably abstracted from words as wholes than from individual morphemes”. Plag (2002), on the other hand, asserts the Word-based morphology expresses the relationship between morphologically related words not by splitting up words into their components but by formalizing the common features of set of words. While considering Urdu verbs, the same is true for inflectional as well as derivational ‘features of set of words’. This approach claims that affixes do not have an independent existence and they are not the part of the lexicon, only words are. It means that the words are not made up of different parts rather they are the complex product of a similar set of features distributed across a particular language that are defined by the different categories.

Although Urdu and Hindi are different in transcription, they share grammar, morphology and a large vocabulary as Rai (2000) observes that one man’s Hindi is another man’s Urdu. Singh and Agnihotri (1997) provide an account of Hindi verb morphology under WP approach whereby they talk about the concepts of stem, root and affixes to show lexical relatedness among different word forms. Then Kellogg (1989) recognizes two voices, active and passive and three moods, indicative, subjunctive and imperative in Hindi. He distinguishes the participles which make up the Hindi verb forms as being imperfective and perfective rather than the present and past. Urdu also possesses and shares some common features with Hindi (Jamil, 2018). Word-based morphology

lays stress on the internal structures of the words that give shape and provide patterns of relations among the newly formed words. The ‘sub-word’ tradition treats morphology in terms of the internal structure of words and the nature of the processes responsible for their disassembly and reassembly (Blevin & Ackerman, 2017). For Matthews (1972) the word is the central unit in word-based morphology and the grammatical words are minimal elements in the study of syntax. Although it concentrates on inflectional morphology and it had been developed to deal with the inflectional morphology of morphologically complex languages but it can also be used to evaluate derivational morphology. The paradigm can be inflectional as well as derivational.

In contrast to the morpheme-based morphology, the morphemes are the central focus of study while they are considered “the stem modifications” in word-based morphology. Plag (2002, p. 236) considers them words having ‘common features’. This means that “stem modifications” can be inflectional as well as derivational. Then mere structural approach is insufficient in its very nature as it fails to discover the semantic aspect of ambiguous sentences. Olphen (1975) observes that the structural approach in itself is insufficient in that it does not detect ambiguity in sentences. Similarly semantic analysis would also yield no specific result as the meaning is to be deducted on the basis of the understanding of the reader. This is why Chomsky (1965) considers morpheme-based models “ill-advised theoretical innovation” because they are unable to evaluate the “unrealized morphological expressions” and “the need to impose a fixed order on sequences of realized and unrealized elements”. These matters are resolved in word-based models as morphemes are considered stem-modifications and words are categorized according to the patterns they fall in. WP approach is suitable for the analysis of Urdu verbs as it provides definite inflectional and derivational paradigms for their construction. One such example in Urdu is the derivation of infinitives from the base form (of verbs) and the agentive derivational form (the noun) from the infinitive. That expressions like ‘k<sup>h</sup> elnæ valə’ (player) is derived from infinitive ‘k<sup>h</sup> elnə’ (to play). However these agentive derivational forms are substitutive to the already existing nouns like ‘k<sup>h</sup>ilari’ (player).

## 1.2 Urdu Verbs and WP Approach

The data consist of Urdu verbs, native and loan verbs, and the evaluation is made with the help of tables and schemas (a formal description of data). This characterization of the WP model highlights the fact that the model is defined less by the units it recognizes than by the relations it establishes between units. The status of words is due to their relative informativeness, as reflected in Robins’s (1959, p. 128) claim that “the word is a more stable and solid focus of grammatical relations than the component morpheme by itself”. The analysis is made on the level of words and categories they fit in. The base

forms of verbs are first of all the lexical entities and then the imperative forms of verbs like ‘lik<sup>h</sup>’ (write), ‘kær’ (do), ‘de’ (give), ‘k<sup>h</sup> el’ (play) etc. The rest of the forms are derived from the base forms having different respective functions to be performed. The analysis primarily focuses on gender, number, tense and aspect of verbs. Urdu verbs are segregated in the coming tables (tables 1 to 4) on the basis of being transitive and causative respectively.

Inflections play an important role in the morphology of Urdu verbs (Knott, 2012). For example, Urdu verb ‘lik<sup>h</sup>’ (write) can take more than twelve different forms (explained in the tables 1 to 4) involving transitive and causative forms to express the gender, number, tense and aspect. Furthermore the transitive verb ‘lik<sup>h</sup> a’ (make somebody write) and the causative verb ‘lik<sup>h</sup>va’ (have somebody write) are represented with different phonological forms and meaning. The main categories of verbs are as follows:

### 1.3 Imperfective forms of verb

The imperfective forms of Urdu verb (also called first form of verb) are represented by “**ṭa**” and “**ṭi**” with embedded masculine and feminine markers respectively. Similarly “**æ**” and “**ĩ**” are the respective masculine and feminine plural markers. The other imperfective forms are represented with the help of future markers as affixes to the base forms. In the paradigmatic model, these verbs are divided into two different levels of transitive verbs **lik<sup>h</sup>** (write) and **lik<sup>h</sup>a** (make sb write) and a causative verb **lik<sup>h</sup>va** (have sb write) are shown in the table as under:

Table 1

Gender	lik <sup>h</sup> (write) trans.	lik <sup>h</sup> a (make sb write) trans.	lik <sup>h</sup> va (have sb write) caus.
Mas. (Sing)	lik <sup>h</sup> ṭa	lik <sup>h</sup> aṭa	lik <sup>h</sup> vaṭa
Mas. (Plu)	lik <sup>h</sup> ṭæ	lik <sup>h</sup> aṭæ	lik <sup>h</sup> vaṭæ
Fem. (Sing)	lik <sup>h</sup> ṭi	lik <sup>h</sup> aṭi	lik <sup>h</sup> vaṭi
Fem. (Plu)	lik <sup>h</sup> ṭĩ	lik <sup>h</sup> aṭĩ	lik <sup>h</sup> vaṭĩ

### 1.4 Progressive (aspect of ) verbs

The progressive aspect of verbs is represented by /rəh/. The masculine/feminine gender is represented with ‘**a**’ and ‘**i**’ respectively while “**æ**” and “**i**” are the respective masculine and feminine plural markers as described earlier in table 1. Moreover the tense is shown and represented with the help of tense markers **hæ**, **t<sup>h</sup>ə/ t<sup>h</sup>i** and **ga/gi** etc. The following table lists the progressive forms of lexical verbs (both transitive and causative).

Table 2

*Progressive forms of lexical verbs (both transitive and causative)*

Gender	lik <sup>h</sup> (write) trans.	lik <sup>h</sup> a (make sb write) trans.	lik <sup>h</sup> va (have sb write) caus.
Mas. (Sing)	lik <sup>h</sup> rəha	lik <sup>h</sup> a rəha	lik <sup>h</sup> va rəha
Mas. (Plu)	lik <sup>h</sup> rəhæ	lik <sup>h</sup> a rəhæ	lik <sup>h</sup> va rəhæ
Fem. (Sing)	lik <sup>h</sup> rəh i	lik <sup>h</sup> a rəh i	lik <sup>h</sup> va rəh i
Fem. (Plu)	lik <sup>h</sup> rəhī	lik <sup>h</sup> a rəhī	lik <sup>h</sup> va rəhī

### 1.5 Perfective aspect (with tʃoka/ tʃoki)

The Urdu verbs take ‘*tʃoka/ tʃoki*’ to represent perfective aspect in all present, past and future tense with embedded masculine and feminine markers respectively while “æ” and “i” are the respective masculine and feminine plural markers as described earlier in table 1 and 2. Furthermore, the tense is shown with the help of tense markers as the suffixes to it. The following table lists the perfective aspect of lexical verbs (both transitive and causative).

Table 3

*Lists the perfective aspect of lexical verbs (both transitive and causative)*

Gender	lik <sup>h</sup> (write) trans.	lik <sup>h</sup> a (make sb write) trans.	lik <sup>h</sup> va (have sb write) caus.
Mas. (Sing)	lik <sup>h</sup> tʃoka	lik <sup>h</sup> a tʃoka	lik <sup>h</sup> va tʃoka
Mas. (Plu)	lik <sup>h</sup> tʃokæ	lik <sup>h</sup> a tʃokæ	lik <sup>h</sup> va tʃokæ
Fem. (Sing)	lik <sup>h</sup> tʃoki	lik <sup>h</sup> a tʃoki	lik <sup>h</sup> va tʃoki
Fem. (Plu)	lik <sup>h</sup> tʃokī	lik <sup>h</sup> a tʃokī	lik <sup>h</sup> va tʃokī

### 1.6 Perfective forms

The Urdu verbs are modified through suffixation “a” to represent the perfective form of verb (also called past form of verb). Moreover the suffixation “a” becomes the sole criteria for this particular perfective form(s) and no changes take place regarding gender and number.

E.g. *larkon ne k<sup>h</sup>at lik<sup>h</sup>a* (The boys wrote a letter) and

*larkjon ne k<sup>h</sup>at lik<sup>h</sup>a* (The girls wrote a letter).

Interestingly, the perfective forms of verb (other than the aspect presented in Table 3.3) represent the gender of the object of the transitive verbs and not the Subject. (The verb *lik<sup>h</sup>a* represents the gender of the ‘letter’ and not the ‘boys/girls’).

Table 4 (a)

Gender	lik <sup>h</sup> a (wrote) trans.	lik <sup>h</sup> aja (made sb write) trans.	lik <sup>h</sup> vaja (had sb write) caus.
Mas. (Sing)	lik <sup>h</sup> a	lik <sup>h</sup> aja	lik <sup>h</sup> vaja
Mas. (Plu)	lik <sup>h</sup> a	lik <sup>h</sup> aja	lik <sup>h</sup> vaja
Fem. (Sing)	lik <sup>h</sup> a	lik <sup>h</sup> aja	lik <sup>h</sup> vaja
Fem. (Plu)	lik <sup>h</sup> a	lik <sup>h</sup> aja	lik <sup>h</sup> vaja

But in contrast to table 4 (a),

E.g. *larkon ne kitāb lik<sup>h</sup>i* (The boys wrote a book).

*larkjon ne kitāb lik<sup>h</sup>i* (The girls wrote a book).

The verb *lik<sup>h</sup>i* points the gender of the ‘book’ and not the agent (boys/girls).

Table 4 (b)

Gender	lik <sup>h</sup> i (wrote) trans.	lik <sup>h</sup> aji (made sb write) trans.	lik <sup>h</sup> vaji (had sb write) caus.
Mas. (Sing)	lik <sup>h</sup> i	lik <sup>h</sup> aji	lik <sup>h</sup> vaji
Mas. (Plu)	lik <sup>h</sup> i	lik <sup>h</sup> aji	lik <sup>h</sup> vaji
Fem. (Sing)	lik <sup>h</sup> i	lik <sup>h</sup> aji	lik <sup>h</sup> vaji
Fem. (Plu)	lik <sup>h</sup> i	lik <sup>h</sup> aji	lik <sup>h</sup> vaji

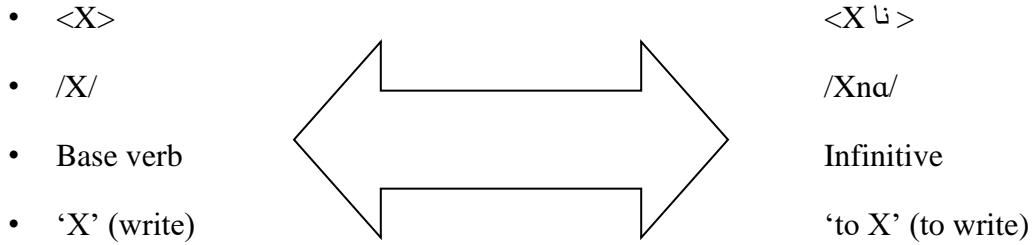
### 1.7 Derivation of infinitives from base form

The infinitives can easily be derived from the base form of Urdu verbs with the application of Word-Paradigm by the addition of infinitive marker -na. This applies to the derivational components of Urdu verbs and is generally applicable to the rest of derived formations as well. The examples are:

Table 5

Sr.	Base Verbs	Infinitives
1	لکھ Lik <sup>h</sup> (write)	لکھنا Lik <sup>h</sup> na (to write)
2	کھیل k <sup>h</sup> el (play)	کھیلنا k <sup>h</sup> elna (to play)
3	رو Ro (weep)	رونا rona (to weep)
4	ہنس həs (laugh)	ہنسنا həsna (to laugh)
5	چل tʃəl (walk)	چلنا tʃəlna (to walk)

The relationship between the base words and the derived words is shown with the help of a 'schemata' (A formal description of data);



Where:

The symbol < X> shows the orthographic form of word

The symbol /X/ shows the phonological form of word

The symbol 'A' shows the base adjectives

The symbol 'X' shows the meaning of word

### 1.8 Derivational process (backformation) through WP approach

The WP approach can also be applicable in the understanding of Urdu derivational categories. The Urdu nouns made with that specific paradigm can easily be reduced and back formed to the infinitive verbs. The examples may illustrate the morphological process of backformation that is derivational in nature.

Table 6

Sr.	Base word	Infinitive	Noun/ agentive
1	Lik <sup>h</sup> (write)	Lik <sup>h</sup> na (to write)	Lik <sup>h</sup> næ valə (Writer)
2	kər (Do)	kərna (to do)	kərna valə (doer)
3	dek <sup>h</sup> (see)	dek <sup>h</sup> na (to see)	dek <sup>h</sup> næ valə (seer)
4	Ro (weep)	rona (to weep)	ronæ valə (weeper)
5	həs (laugh)	həsna (to laugh)	həsna valə (laugher)
6	k <sup>h</sup> a (eat)	k <sup>h</sup> ana (to eat)	k <sup>h</sup> anæ valə (eater)
7	pəth <sup>h</sup> (read)	pəth <sup>h</sup> na (to read)	pəth <sup>h</sup> næ valə (reader)
8	Pī (drink)	pīna (to drink)	pīnæ valə (drinker)
9	dot (run)	dotna (to run)	dotnæ valə (runner)
10	k <sup>h</sup> el (play)	k <sup>h</sup> elna (to play)	k <sup>h</sup> elnæ valə (player)

The above table shows that the WP approach provides not only inflectional paradigms but it can also be utilized to study the derivational processes of word formation. The infinitive form of verb is a separate grammatical category and has its own grammatical functions to perform and so is the agentive case a derivational paradigm.

Inflectional variations, on the other hand, are represented with *tə/ti*, *rehə/rehi*, *ʃukə/ʃuki*, *ɑ/i* and *ga/gi* as illustrated earlier tables 1, 2 and 3.

### 1.9 Causative verbs

Urdu language has the feature of representing the causative verbs in one lexical entity. The examples can be illustrated in the following table. (The process of backformation is to the less productive direction).

Table 7

Sr. No.	Base word	Infinitive	Noun/ agentive
1	lik <sup>h</sup> və (have sb write)	lik <sup>h</sup> vənə (to have sb write)	Lik <sup>h</sup> vənə valə
2	pə <sup>t</sup> h <sup>h</sup> va(ask sb read)	pə <sup>t</sup> h <sup>h</sup> nə (to ask sb read)	pə <sup>t</sup> h <sup>h</sup> nə valə
3	kərvə (ask sb do)	kərvənə (to ask sb do)	kərvənə valə

### 1.10 Dummy verbs

Dummy verb is the word that has the function of completing the sense and meaning of the main verb. There is a large number of verbs already present in the basic lexical forms. In the absence of lexical verbs, nouns and adjectives combine with some dummy verbs to form compound verbs (Mangrio, 2016, p. 12). The same is also interestingly valid and true for loan words. Then five Urdu verbs *ho* ‘be’, *kər* ‘do’, *de* ‘give’, *le* ‘take’ and *d̪ə* ‘go’ primarily function as main verbs and secondarily as dummy verbs (Versteegh, 2001, p. 488) when they serve the role of completing the meaning of the main verb. They can also be the main verb when they are used independently. These verbs firstly take the infinitive forms and then are combined with the main verb to convey the complete sense. The resultant verb also becomes an infinitive verb.

Table 8

Sr.	Dummy verbs	Infin.	Compound verb	Ungrammatical form(s)
1	kər	kərna	əda kərna (to pay)	ədana
2	De	dena	izzə <sup>t</sup> dena (to honor)	izzə <sup>t</sup> ana
3	dek <sup>h</sup>	dek <sup>h</sup> na	Xvāb dek <sup>h</sup> na (to dream)	Xvābna

#### 1.10.1 Role of dummy verbs in the derivation of Loan verbs

In the absence of the lexical verbs in Urdu lexicon, Word and paradigm approach provides a substitute model for the native and the loan words in absolutely the same way. The paradigm becomes; **loan word + dummy verb= compound loan verb**. Interestingly, to produce various forms of verb, the changes are to be occurred in the dummy verbs (whatever they might be) and not in the loan words at all (Mangrio, 2016). The examples of the loan words are shown in the following table:

Table 9

Sr.	Dummy verbs	Infin.	Compound Loan verbs
1	kār (do)	kārna	pay kārna (to pay)
2	dē (give)	dēna	honor dēna (to honor)
3	dek <sup>h</sup> (see)	dek <sup>h</sup> na	dream dek <sup>h</sup> na (to see dream)
4	ho (be)	hona	ængri hona (to be angry)

## 1.11 State verbs

Urdu language has a variety of state verbs. Firstly, there are state verbs that are represented by the auxiliaries like ‘**he**’ (is), ‘**hā**’ (are), ‘**hū**’ (am), ‘**ṭh a / t ṭh i**’ (was), ‘**ṭhæ**’ (were), ‘**ho**’ (be).

e.g. vāh ek uṣṭād **he** (He is a teacher)

māē ek uṣṭād **hū** (I am a teacher)

In above examples, ‘**he**’ and ‘**hū**’ are state verbs. Secondly there are also some compound state verbs that are made up with the combination of nouns/adjectives and a dummy verb.

## 1.12 Limitations of WP approach and solution (adjustment rules)

The WP approach is quite helpful in the morphology of inflectional and derivational words but there are some limitations with the approach. While talking about the morphological processes of Hindi verb formation, Singh and Sarma (2011) state that the combination of the root and the suffix may trigger changes in the suffix or the root itself. The same is also true for Urdu verbs. See the following table;

Table 10

Sr.	Root form(s)	Infinitives	Past form(s)	Unacceptable form(s)
1	dē (give)	dēna	diya	deya
2	le (take)	lenaa	Liya	leya
3	kār (do)	kārna	kiya	kəra
4	pī (drink)	pīna	piya	pīya
5	sī (sew)	sīna	siya	sīya
6	ṭṭ <sup>h</sup> ū (touch)	ṭṭ <sup>h</sup> ūna	ṭṭ <sup>h</sup> ua	ṭṭ <sup>h</sup> ūa
7	ḍḍa (go)	ḍḍana	geya	jaya

Word-based morphology does not provide any guideline for this kind of morphological changes but this limitation does not spoil the efficacy of WP approach as the irregular verbs are very limited in number and they can be accounted for easily. The principle of infinitives remains the same for all of these Urdu irregular verbs but it is the

past form of Urdu irregular verbs that needs to be tackled. These limitations can easily be addressed in the following way of stem modifications:

- The short vowel ‘e’ is replaced with “i” (1-2)
- The short vowel ‘a’ is replaced with “i” (3)
- The long vowel ‘ī’ is replaced with short vowel “i” (4-5)
- The long vowel ‘ū’ is replaced with short vowel “u” (6)
- The consonant ‘ḍ’ is replaced with ‘g’ (7)
- The verb ‘ḍḡa’ is the only one that undergoes the complete change in the root form of verb.

## 2. Conclusion

Word and paradigm approach was designed to discuss the inflectional morphology of the fusional language(s) but the analysis shows that this approach is also helpful in the generation and examination of the inflectional as well as derivational processes of Urdu verbs formation. There are also some limitations as it is unable to address the irregular form of Urdu verbs but that is exceptional as Urdu irregular verbs are very limited in number that can easily be addressed through above suggested parameters. Aside from the irregular forms of verbs, WP approach provides adequate paradigmatic models to discuss the inflectional as well as derivational processes not only for the native Urdu verbs but also for the loan words (combined together with the dummy verbs). Word-based morphology helps us in understanding the patterns of Urdu word formation through the morphological and morpho-tactic processes. The paradigms in this approach serve as an indicator to differentiate among different forms and functions of verbs they perform. The inflections and the dummy verbs play an important role in the formation of new verbs in the absence of lexical entities. They therefore provide a paradigm for new verbs generation and analysis.

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## Appendix

Table for Abbreviations

Sr.	Words	Abbreviation
1	Transitive	Trans.
2	Causative	caus.
3	Feminine	fem.
4	Plural	plu.
5	Masculine	mas.
6	Some body	Sb
7	Serial	Sr.