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INFLECTION PRIOR TO DERIVATION: A GENERATIVE ANALYSIS OF THE URDU NOMINAL COMPLEX DERIVATIVES

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ABSTRACT

The present study is devoted to trace inflection prior to derivation process in the Urdu nominal complex derivatives. The core purpose of the present work is to scrutinize the inflection-first phenomenon. Previously, it was perceived that derivation precedes inflection. This work exemplifies numerous instances bearing pluralization of the root prior to trigger the complex derivation. The significance of the study lies in the point that it refutes the long-held perception that derivation supports inflection. This study primarily states that inflection prior to derivation is as permissible as derivation prior to inflection for Urdu. The structures bearing the inflection-first process are examined within the framework of Generativism. The present study also uses morphological attribute value matrix (MAVM) to highlight functions of each morpheme. The study states that inflectional process does not close words to further derivation. The present work highlights that the inflectional affixes do not always be further from the root than the derivational affixes in words containing both inflectional and derivational affixes. It also refutes the claim of Split Morphology Hypothesis that inflectional markers always occur outside derivational markers. The highlighted features are expected to contribute to the derivative theory and may work equally for other Indo-Aryan languages.

KEY WORDS: inflection, complex derivation, function, morphology-syntax nexus

INTRODUCTION

Inflection prior to derivation occupies a distinct feature in the architecture of words. Inflection comprises tense, gender, person, number and so on. Inflectional morphemes indicate grammatical properties and grammatical variants of one lexeme. They unpack the study of grammatical forms of one lexeme. Inflection is purely syntactic and its architecture cannot change the lexical category of a word. It demonstrates some features irrespective to claim them ultimate: its process is not replaced by simple words, it conveys abstract meaning, it has unlimited applicability, its elements are not iterative etc. (Sohrabi, 2015). Contra inflection, complex derivation is one of the word-formation processes, which consist of at least two morphemes: one is free and other is bound (Hussain, 2023). The bound morpheme is a marker distinguished on the bases of semanticity, function, interchangeability, and recurrence (Coats, 1999). However, both inflection and complex derivation are productive processes within the framework of grammar and word-formation process.

The present endeavor is undertaken due to some debatable issues. Firstly, inflectional process closes words to further derivation. Contra this approach, Selkirk (1982) asserts that a context-free system permits the recursiveness, as there is no principle upper bound on the length of words. Secondly, the inflectional affixes will always be further from the root than the derivational affixes in words containing both inflectional and derivational affixes. Thirdly, all derivation takes place in the lexicon, prior to lexical insertion. Fourthly, the claim of Split Morphology Hypothesis that inflectional markers always occur outside derivational markers.

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Contrary to the above arguments, this work also sets a goal to observe the assumption of Selkirk (1982) who states that inflection may assist the process of derivation. In the wake of the above arguments, the present study examines their generalized applicability on Urdu, one of the major Indo-Aryan languages.

SIGNIFICANCE OF THE STUDY

Previously, it was held that inflection occurs after derivation. The significance of the study lies in the inflection prior to derivation phenomenon. This study leads to an observable derivational feature that inflection assists the process of derivation and vice versa. This observation does not restrict the complex derivation to inflection-first or derivation-first convention. Pluralization of the roots can occur prior to trigger the derivational process. Thus, inflection prior to derivation is as permissible as derivation prior to inflection in Urdu.

RESEARCH OBJECTIVES

This study has set some objectives to probe inflection prior to derivation phenomenon. The research objectives of the study are as follows:

i. To trace the underlying patterns of the complex nominal derivatives demonstrating inflection prior to derivation process
ii. To highlight the pluralization of the roots prior to trigger the nominal complex derivation with the syntactic conventions
iii. To capture and represent the multiple functions of each morpheme of the nominal complex derivatives through MAVM?

RESEARCH QUESTIONS

The research questions are given below to meet the objectives of the study to bring to surface its empirical and theoretical significance:

i. What are the underlying patterns of the nominal complex derivatives demonstrating inflection prior to derivation process?
ii. How do the syntactic conventions work to highlight the pluralization of the roots prior to trigger the nominal complex derivation?
iii. How does MAVM capture and represent multiple functions of each morpheme of the nominal complex derivatives?

LITERATURE REVIEW

Inflection in derivation reveals a distinct feature in linguistic morphology. Inflectional perspectives consist of tense, gender, person, number and so on. Some studies are important to discuss to trace their focus and potential findings. On inflectional perspective, Carstairs-McCarthy (2002) opines that inflections are only grammatical variants of one lexeme. Since inflection unpacks the grammatical forms of one lexeme, it is easy to acquire by children as well as by second language learners (Berko, 1958; Brown, 1973). Wahid and Farooq (2019) highlight grammatical contrasts in the study of inflection: singular versus plural, past and non-past forms, continuous and non-continuous, perfective and imperfective etc. Inflection also replaces one non-morphemic segment for another e.g. *foot-feet'.* The processes of ablaut and umlaut are discussed to entail

changing the vowel in the morphological structure. This study focuses on the inflectional perspective but it does not highlight its role to trigger derivational process.

Sohrabi (2015) collects some properties to distinguish the inflection and derivation. She states that linguists introduce some properties to draw a line between both morphological operations. Inflection is relevant to the syntax, whereas complex derivation is irrelevant to the syntax. Inflectional properties are considered obligatory but derivational projections are received as optional. Inflectional process cannot be replaced by the simple words contra derivational units. Inflectional elements convey abstract meaning, whereas derivational operations trigger concrete meaning. Inflection communicates the same concept as base but derivation unpacks new concepts. Inflection contains relatively abstract meaning. On the other hand, derivation demonstrates concrete meaning. Both inflectional and derivational properties are regular. Inflection is less relevant to base meaning, whereas derivation is very relevant to the base meaning. Contra derivation, inflection has unlimited applicability. Inflectional properties are at word periphery; however, derivational expressions are close to the base. Inflectional properties are less base allomorphic, while derivational expression demonstrate more base allomorphy. In inflection, cumulative expression is possible, though derivational properties reveal no cumulative expression. Inflectional elements are not iterative. On the other hand, derivational output is iterative. After analyzing both inflectional and derivational paradigm, it is noted that some properties are relevant and verifiable and some of them are all-or-nothing. It is realized that two major views are incompatible: the dichotomy approach and the continuum approach. The former regards inflection and derivation as two disjoint classes, whereas the latter sees the different patterns on a scale between minimally and maximally inflectional/derivational. Despite all these findings, it is traced that this study is void of the claim that inflection assists the process of derivation.

Delahunty and Garvey (2013) take the position that Inflectional morphemes indicate grammatical properties such as plurality, as the ***-s*** of magazines does, or past tense, as the ***-ed*** of *babecued* does. According to them, English has eight inflectional morphemes. On the other hand, derivation creates separate but morphologically related words. Typically, but not necessarily, it involves one or more changes in form. It can involve prefixing, as in *resaw*, and suffixing, as in *sawing, sawer,* and *sawable*. Another type of derivation pertains to the primary stress in a word e.g., *'permit* (noun) *per'mit* (verb). In some other words, the derivational process is related to the final consonant changes e.g., *advice* and *advise*. In some cases, derivational morpheme brings a change in a stressed vowel e.g., divine and divinity. It is noted that the addition of a suffix triggers a change in the final consonant of the root e.g., *seize* and *seizure*. In the structure of multimorphemic word with a stressed tense vowel, the palatalization may be accompanied by a laxing of that vowel e.g., *collide* and *collision*. Sometimes the addition of a marker requires a change in the stress pattern e.g., *'telegraph* and *te'legraphy*. Furthermore, English demonstrates conversion, functional shift or zero derivation, which bring change in part of speech without structural change e.g., *saw* (N) and *saw* (V). This works unpack phenomenal derivational processes but it does not bring to the surface the process of inflection prior to derivation.

Beard (2021) takes derivation a pure lexical operation to generate new words for lexical listing. He observes that inflection is purely syntactic, it cannot change the lexical category of a word; whereas derivation does change the semantics of words and allows the derivate to become a lexical entry in the lexicon. He brings to the surface an interesting point about inflectional process and its role in derivation. He holds if lexical operations precede syntactic ones and derivation is involved in the construction, inflectional markers always occur outside derivational markers. He exemplifies the Russian derivative *lët-čik-a* fly-AGENT-GEN 'the flyer's (pilot's)'. In this construction, the derivational agentive marker *-(š)čik* precedes the inflectional case marker *-a*. This description leaves a research gap needs to be filled in. While analyzing the Urdu data, it is traced that certain markers project inflection prior to derivation. The Urdu data reveal that some roots are

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pluralized prior to trigger derivational process. Two examples are analyzed briefly to probe inflection prior to derivation. The first example is *həva:s**ba:xʈgi*** ‘being out of senses’ (N). The root of *həva:s**ba:xʈgi*** is *həva:s* ‘senses’ (N). It is pluralized form of *hɪs* ‘sense’ (N). The second inflection-prior-to-derivation example is *mərd**a:ngi*** ‘manliness’ (N). The root of *mərd**a:ngi*** ‘manliness’ is *mərd* ‘man’ (N). It is singular form of *mərd**a:n*** ‘men’ (N). The inflectional morpheme ***-a:n*** is a plural marker, which is also used with other nominals for pluralization e.g., *ləʃkər**a:n*** ‘troops’ and *karkʊn**a:n*** ‘members’.

Stump (1998) highlights some aspects of change in lexical meaning or part of speech. He points out that two expressions of derivation may fundamentally differ in their meaning, their category membership, or both. However, two expressions belonging to the same inflectional paradigm will share both their lexical meaning and their category. He describes that inflection is generally more productive and more regular than derivation. The critical and arguable point he raises that inflectional process closes words to further derivation, while derivation does not. In English, an adjective is not derived from a noun's inflected plural form e.g., **socksless.* Derivation is possible from a noun's uninflected root, whether or not this is itself derived e.g., *sockless.* A criterion is set from the discussion that in words containing both inflectional and derivational affixes, the inflectional affixes will always be further from the root than the derivational affixes except infixation. This criterion motivates a principle of grammatical organization known as the Split Morphology Hypothesis (Perlmutter, 1988; Anderson, 1982). This principle maintains that all derivation takes place in the lexicon, prior to lexical insertion, while all regular inflection is post syntactic. Split Morphology Hypothesis seems interpreted and its premises appears weakened with the evidences from the Urdu data. The contribution of the present study lies in the core interest to exemplify that inflection prior to derivation is permissible in Urdu.

THEORETICAL FRAMEWORK

This work examines inflection prior to derivation phenomenon with generative perspectives. The theoretical framework is devoted to three major generative perspectives of the complex derivatives embedded with the feature of inflection prior to derivation. Firstly, the study traces the underlying structures of the complex derivatives with inflection-first evidences. Their structures are realized on the convention of syntactic structures. The morphological complex trees are used to demonstrate hierarchical features of the complex derivatives. The representative templates are supported with the complex derivatives for the sake of generalization. Secondly, feature percolation conventions presented by Lieber (1980) are used in the analysis to highlight the features moving from the root to the mother node. The third aspect is to use MAVM derived from LFG to highlight the functions and features of each morpheme of the complex derivatives. MAVM is expected to be a morphological, syntactic, and semantic feature explorer matrix. It unpacks various functions in f-structure and its inner sub-matrixes in attribute-value pairs. Three proposed analytical steps are intertwined in Generativism. These steps are complement to each other. Three analytical steps lay the foundation of template to function paradigm. With the proposed theoretical procedures, the researcher aims to investigate the distinct feature of Urdu namely inflection prior to derivation in morphology-syntax nexus.

RESEARCH METHODOLOGY

In the paradigm of qualitative research, descriptive method is used to analyze the theoretical study of the complex derivatives demonstrating the projection of inflection before derivation. Following purposive sampling technique, the complex derivatives, accomplished with plural stems, are traced and highlighted in the tabular data. It is analyzed how pluralization occurs prior to trigger derivational procedure in the multimorphemic ecologies. Print dictionaries *Feroz-ul-Lughat Jame New Edition*, and *Ilmi Urdu Lughat Jame* are consulted to ransack and enlist the inflection-first instances. Online dictionaries and a thesaurus including *Urdu Lughat*,

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(*http://www.udb.gov.pk/*), *Urdu Lughat* (*http://urdulughat.info/*) and *Urdu Thesaurus* (https://urduthesaurus.com/ are also consulted for meanings, transcriptions, and etymology. International Phonetic Alphabet (IPA) symbols are used to transcribe the data. Syntax Tree Editor, version 0.9.0.3, is used to present the tree diagrams of the derivatives bearing the inflection-first architecture.

DATA ANALYSIS

The present section investigates and exemplifies the scaffolding of inflection prior to derivation process in the nominal complex derivation. The fundamental purpose of this section is to probe how pluralization assists the derivational productivity. The description of the distinct feature primarily materializes the set objectives of the study. The analytical steps contain structural, percolational, and functional perspectives. The following table exemplifies the inflection prior to derivation process in the nominal complex derivatives:

Table: Some Examples of Inflection Prior to Derivation in Nominal Complex derivatives

Roots (N)	**Inflection (pl.)**	**Complex Derivation**	
mənzər ‘scene’	mənɑ:zır ‘scenes’	mənɑ:zır**kʌʃ** ‘delineator’	(N)
ʈərf ‘direction’	əʈrɑ:f ‘directions’	əʈrɑ:f**bi:n** ‘periscope’	(N)
ʃri:f ‘noble’ (N/A)	əʃrɑ:f ‘decent people’	əʃrɑ:f**iɑ** ‘ aristocracy’	(N)
ləfz ‘word’	əlfɑ:z ‘words’	əlfɑ:z**ijəʈ** ‘verbalism’	(N)
fıkər ’thinking’	əfkɑ:r ‘thoughts’	əfkɑ:r**ijəʈ** ‘philosophy of thoughts’	(N)
mərz ‘disease’	əmrɑ:z ‘diseases’	əmrɑ:z**ijɑ:ʈ** ‘pathology’	(N)
hıs ‘sense’	həvɑ:s ‘senses’	həvɑ:s**bɑ:xʈgi** ‘out of senses’	(N)
dʒʊrsu:mɑ: ‘germ’	dʒrɑ:si:m ‘germs’	dʒrɑ:si:m**kʊʃi** ‘disinfection’	(N)
xʊlq ‘civility’	əxlɑ:q ‘disposition’	əxlɑ:q**ijɑ:ʈ** ‘morality’	(N)
əsl ‘origin, essence’	əsu:l ‘principles’	əsu:l**psənɖi** ‘pertaining to canons’	(N)

The first left column consists of the singular nominals. The central column displays the plurals of the singular nominals, which provide scaffolding for the complex derivation given in the third column. The plural base words of the Urdu data support the assumption of Selkirk (1980) who proposes that inflection may assist the process of derivation. Thus, inflection prior to derivation is as accomplishable as derivation prior to inflection in Urdu.

The data given in the above table propose some representative structures bearing plural stems to trigger the nominal complex derivation, which are as follows:

i. $N \rightarrow [N^{r} \quad N^{af}]$
$[(Neg^{af}/af) \quad N^{r} \quad N^{af}]$
ii. $N \rightarrow [N^{r} \quad A^{af} \quad N^{af}]$
$[(Neg^{af}/af) \quad N^{r} \quad A^{af} \quad N^{af}]$

Two structures, along with their extended proposals, are traced from the above data: bimorphemic and trimorphemic. The first structure comprises a nominal root and a nominal marker. The second structure is selected to apply the theoretical framework. Its structure is trimorphemic. The proposed nominal strand contains a derivational move from a nominal root to an adjectival bimorphemic derivative and from the adjectival bimorphemic derivative to a nominal trimorphemic derivative.

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The extended proposal of the proposed structure leaves a place for prefix addition. The purpose of the extended proposal is to indicate that the derivational process is multimorphemic and recursive. The nominal complex derivative ***bəɖəxla:qija:ʈ*** 'immorality' conforms to the segmentation of the extended proposal. Its morphemic sectioning is given below:

N → [(Neg^{af}/af) N^{r} A^{af} N^{af}]
bəɖ- 'bad' (Neg^{af}) + [*əxla:q* 'disposition' (N) + ***-i*** → *əxla:q**i*** 'moral' (A^{af}) + ***-ja:ʈ*** (N^{af}) → *əxla:q**ija:ʈ*** 'morality' (N)] = ***bəɖəxla:qija:ʈ*** 'immorality' (N)

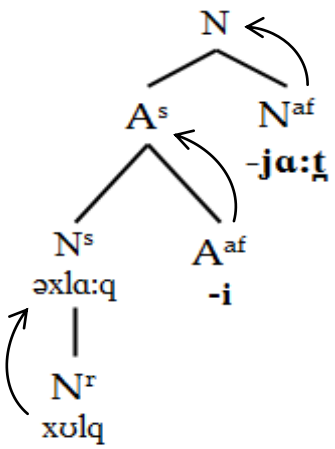
In the above morphemic segmentation of ***bəɖəxla:qija:ʈ*** 'immorality', the prefix ***bəɖ-*** 'bad' is attached to the derivative *əxla:q**ija:ʈ*** 'morality' (N) at the fronting position after suffixation to make the morphemic segmentation easy to understand. The attachment of the negative marker ***bəɖ-*** 'bad' generates the antonym of *əxla:q**ija:ʈ*** 'morality' (N) and effects its structure and semantics.

The nominal complex derivative *əxla:q**ija:ʈ*** 'morality' is selected to apply the proposed analytical steps. The selected complex derivative conforms to the given strand in *ii* above. The distinguishing feature of *əxla:q**ija:ʈ*** 'morality' (N) is that its base *əxla:q* 'disposition' (N, pl.) is plural of *xʊlq* 'civility' (N, sing.). This plural base supports the assumption of Selkirk (1980) who proposes that inflection may assist the process of derivation. The morphemic segmentation of *əxla:q**ija:ʈ*** 'morality' (N) is given below:

xʊlq 'civility' (N, sing.) → *əxla:q* 'disposition' (N, pl.) + ***-i*** (A^{af}) → *əxla:q**i*** 'moral' (A) + ***-ja:ʈ*** (N^{af}) = *əxla:q**ija:ʈ*** 'morality' (N)

The root *əxla:q* 'disposition' of the given derivative is noun. The adjectival marker ***-i*** is added to the nominal root to generate the adjectival complex derivative *əxla:q**i*** 'moral'. Furthermore, the category-changing nominal marker ***-ja:ʈ*** is added to the derived complex adjective *əxla:q**i*** 'moral'. Consequently, the nominal marker ***-ja:ʈ*** produces the nominal complex derivative *əxla:q**ija:ʈ*** 'morality'. The output shows the recursive derivational attachments: firstly the adjectival marker and secondly the nominal marker.

The recursive derivational pattern of *əxla:q**ija:ʈ*** 'morality' (N) is generative, and its constituents can be displayed on the complex hierarchical tree. Tree diagrams give quick and magnified view of the morphemic segmentation. The hierarchical structure helps elaborate the embedded constituents and features of constituency. The complex morphological tree diagram of *əxla:q**ija:ʈ*** 'morality' (N) is given below to demonstrate percolational, category-changing, and morphosyntactic operations:



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The above Tree Diagram demonstrates the hierarchical and recursive percolational patterns. The feature percolation occurs in three steps, and supports FPC I and FPC II respectively presented by Lieber (1980). The FPC I transfers the root category feature to the first non-branching node. In the above Diagram, the nominal feature of the root *xʊlq* 'civility' (N, sing.) is percolated up to the non-branching node N^s. This percolation feature demonstrates that inflection is also prone to support the complex derivation. It, thus, produces *əxla:q* 'disposition' (N) in the nominal stem node. The second percolation of the adjectival marker ***-i*** and the third percolation of the nominal marker ***-ja:ʈ*** conform to FPC II, which asserts that all features of the affix morphemes, including category features, percolate up to the branching nodes. In the present case, the branching nodes are the stem node A^s and the mother node N. This systematic percolation process comes in view in three steps. Each node assigns a category and thematic role to the dominating node. Each projection contains a category feature e.g., the adjectival marker ***-i*** constitutes the adjectival category, whereas the nominal marker ***-ja:ʈ*** generates the nominal category. The affix order principle, taken from Minimalist Morphology, advocates that the lower-ranked morpheme (here ***-i*** (A^{af})) is attached first to the root.

In the construction of *əxla:q**ija:ʈ*** 'morality' (N), two merger operations occur to accomplish the complex derivation: between *əxla:q* 'disposition' (N) and the adjectival marker ***-i*** and between *əxla:q**i*** 'moral' (A) and the nominal marker ***-ja:ʈ.*** The plural nominal *əxla:q* 'disposition' is the result of fusion of the base *xʊlq* 'civility' (N, sing.) and the plural making process. Every node of the above Diagram of *əxla:q**ija:ʈ*** 'morality' (N) is replete with multiple features, which are underspecified to meet the syntactic and morphological needs. The bound morpheme ***-i*** has various functions: it nominalizes the adjectives and vice versa. It is diminutive marker, feminine gender marker, feminine adjectival marker, and the second part of the nominal and the adjectival circumfixes. According to the morphological ecology, it performs the adjectival function, and the rest functions are underspecified. In government and binding relation, locality principle is followed to allow the local or near affix, ***-i*** an adjectival marker to attach first to the root.

The above Diagram highlights the projection of endocentricity in the construction of *əxla:q**ija:ʈ*** 'morality' (N) with the nominal marker ***-ja:ʈ*** (N^{af}). The whole construction is named N due to the nominal category of ***-ja:ʈ*** (N^{af}). It is noted that the higher the node is, the more dominating feature it projects. The use of binary branching displays merger discretely and avoids the mismatch of branches.

The third analytical step is functional paradigm. MAVM is a feature explorer mechanism. It captures the functions other than described above. The functionality attached to each morpheme is examined in the following MAVM of *əxla:q**ija:ʈ*** 'morality' (N):

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DERIV	*əxla:q**ija:ţ*** 'morality'	
CATEG	N	STR: complex COMP: trimorphemic NUM: singular TYPE: abstract CASE^{M}: feminine ORGN: Arabic
ROOT	*xʊlq* 'civility' (N, sing.)	
AF_1 (SUF_1)	***-i***	CATEG: adjectival MORPHEME: bound C-CHANGING: + ORGN: Persian
AF_2 (SUF_2)	***-ja:ţ***	CATEG: nominal MORPHEME: bound C-CHANGING: + ORGN: Arabic

In the above nominal MAVM, the top most function DERIV indicates the value of the complex nominal derivative *əxla:q**ija:ţ*** 'morality'. The second function CATEG has nominal value. It has a further sub-matrix to trace morphological and syntactic features of the derivative under analysis. The nominal complex derivative *əxla:q**ija:ţ*** 'morality' has complex structure. Its construction is trimorphemic: the root *xʊlq* 'civility' (N, sing.) used as *əxla:q* 'disposition' (N, pl.), the adjectival marker ***-i,*** and the nominal marker ***-ja:ţ*** constitute the structure of *əxla:q**ija:ţ*** 'morality' (N). The function NUM shows that it is singular as a whole. The function TYPE shows that the derivative under analysis is an abstract noun. This Urdu derivative takes a singular genitive case marker. The third function is ROOT. The root of the complex derivative *əxla:q**ija:ţ*** is *xʊlq* 'civility' (N, sing.) whose plural is *əxla:q* 'disposition' (N, pl.), which belongs to the Arabic origin. This step supports inflection prior to derivation in Urdu. The fourth main function is $AF_1(SUF_1)$ ***-i*** which, according to the morphological ecology, is an adjectival marker. It is the first suffix, as indicated with the subscript notation. Its features are given in attribute-value pairs in the sub-matrix, which indicates that it is an adjectival marker, bound, and category-changing morpheme. It belongs to the Persian origin. The fifth main function is AF_2 (SUF_2) ***-ja:ţ***. It is a nominal marker. It is the second suffix in the given nominal complex derivative. Its values are given in attribute-value pairs in the inner matrix. They indicate that it is a nominal maker, bound, and category-changing morpheme. Its origin goes back to Arabic. Thus, the formalism MAVM unveils many functions and features, which are overlooked by the thick syntactic description.

CONCLUSION

The present work strives to unpack a derivational phenomenon, which validates pluralization of roots prior to trigger the nominal complex derivation. This concluding point does not restrict the complex derivation to inflection-first or derivation-first convention. It is noted that inflection prior to derivation is as permissible as derivation prior to inflection for Urdu. The study also states that inflectional process does not close words to further derivation. Inflection, in numerous cases, provides sound scaffolding for the derivational output. This study supports the argument of Selkirk (1982) who asserts that a context-free system permits the recursiveness, as there is no principle upper bound on the length of words. The present work highlights that the inflectional

affixes do not always be further from the root than the derivational affixes in words containing both inflectional and derivational affixes. This study negates that all derivation takes place in the lexicon prior to lexical insertion. It also refutes the claim of Split Morphology Hypothesis that inflectional markers always occur outside derivational markers. According to the objectives of the study, this work presents the underlying patterns to configure the representative structures: one consists of nominal root and nominal marker, the other comprises nominal root, adjectival marker, and nominal marker. It highlights the syntactic protocols on the representative structures. It uses MAVM to capture and represent the multiple functions of each morpheme of the nominal complex derivatives under analysis. It is speculation that other Indo-Aryan languages may demonstrate the same feature, as sister languages share features in a number of ways. The future researchers may add generously to trace and highlight inflection prior to derivation process in other major and minor languages of Indo-Aryan language family.

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