STRUCTURAL DECOMPOSITION OF PASHTO PATH PS

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ABSTRACT

Background and Purpose: Past studies categorized Pashto prepositions as pre-position, post-position and ambi-position on the basis of their syntactical position in a unit of grammar. This paper aims to analyze the Pashto path prepositions and to find out its syntactic differences from other major languages, particularly English.

Methodology: A data corpus consisted of 245 clauses and sentences collected from Pashto grammar books was analysed using a nanosyntax approach, following Pantcheva and Svenonius' decomposition of Path Ps and Place Ps where the terminal nodes of Pashto path Ps in the data were identified.

Findings: The findings revealed that Pashto Path Ps exhibited Pantcheva's eight functional semantic heads, but its complexity due to ambiposition and precedence of place Ps over path Ps in complex phrases required adjustments in Pantcheva and Svenonius' syntactical models to harness the complex patterns of Pashto prepositional system. Moreover, the headedness of PPs in Pashto is flexible, as it can be both head initial and head final.

Contributions: This paper not only contributes to the existing literature on Pashto Path Ps but also reflects that the existing syntactic models may further be enriched by their application to cross linguistic data. This paper suggests further studies into Pashto prepositions from other syntactic and semantic perspectives such as nanosyntax algebraic models and iconicity which will not only contribute to the

understanding of Pashto grammar and syntax but also to learning Pashto as a second language and translating it.

Keywords: Preposition, post position, ambiposition, Path Ps, Place Ps.

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1.0 INTRODUCTION

Pashto is one of the major regional languages in Central and South Asia. It is the native language of approximately 40 million people across the world, with the majority of its speakers concentrated in Afghanistan and Pakistan (Lewis, 2009; David, 2013). Though Pashto is 40th widely spoken language, yet research on it has been minimal. Different factors such as lack of governmental interest, non-availability of electronic media channels on Pashto language and War on terror have curtailed interests in research on Pashto language (FATA Research Centre, 2014). Kainat and Sardaraz (2020) also hold that there is few research on the prepositional system of Pashto except for a general discussion focusing on its classification in terms of preposition, post-position and ambiposition on the basis of position in a sentence with reference to the noun (see Momand, 1938; Tegey & Barbara, 1996; Rihtheen, 2003; Babrakzai, 2007). In traditional approaches (see Momand, 1938; Rishteen, 1963; Rihtheen, 2003), prepositions in Pashto language have been regarded as meaningless particles, with only a connecting role between nouns or between noun and verb. However, Babrakzai (2007) and David (2013) have classified them on the basis of location, direction, time and mean. Khan, Muhammad, and Muhammad (2020) take a more elaborate approach to the spatial post position 'thah-to', and have investigated its spatial, temporal and structural usage, highlighting its polysemous nature. This paper adopts the nanosyntax approach to decompose Path Ps¹ in Pashto, following Pantcheva and Svenonius model, and investigates how Pashto Path Ps can be classified within syntactic categories on the basis of their occurrence in language. The nanosyntax approach may

¹ **Abbreviations and definitions:** DP-domain of points or ground, Loc-locative prepositions, Axpart-Prepositions indicating part-whole relationship between the ground and its part, K-possessive preposition indicating possession of space occupied by the Trajector to the whole space, TR-Trajector, LM-Landmark, AV-Auxiliary Verb, dir-direction, Adv-Adverb, Cont.-continuous, Dem-demonstrative, G-goal, Imp-Imperative, Infin-Infinitive, Infl-inflective, N-noun, Obj-Object, Pl-plural, PosP-post-position, PreP-Preposition, Pron-pronoun, PRT-present tense, PST-Past tense, 2P.Pron-second person pronoun, S-Source, Sg-singular, TP-Tense Phrase, VP-Verb Phrase, PP-Prepositional Phrase, V-verb

prove instrumental in generating interest in the analysis of Pashto syntax to investigate the terminal nodes in the Pashto syntax tree and the syntactic and semantic function of each node in the syntactic tree.

Path is a major ontological conceptual category represented by the syntactic category of prepositions (Jackendoff, 1983). The structure of path consists of a path functional head and a reference object, and depending upon the relationship of place or object to the path, the path may exhibit three subcategories: bounded, direction and route. Each conceptual category has specific prepositions such as from and to (bounded), towards and away from (direction) and along (route). Put simply, each preposition in a unit of language reflects the configuration of an object or trajector (TR) within a spatial frame of reference. According to Zwarts (2005), path refers to the space in which an object moves, and each movement has an initial point, middle spaces and final point. Each unit of the conceptual structure of path is represented in language by particular prepositions. The semantic function of prepositions led Zwarts to regard prepositions as semantically equivalent to nouns and verbs. However, Svenonius (2012) is more detailed in the syntactic-semantic analysis of prepositions, and holds that each syntactic node has a specific semantic function in addition to its conceptual meaning, and the combination of syntactic elements give it its semantic composition. Path prepositions carry specific meanings, in relation to the source, goal and route. Pantcheva (2011) added two other functional semantic heads - scale and bound - so each syntactic node carries a specific meaning. In other words, each preposition has a specific syntactic function and is used to denote a specific configuration of an object in its spatial frame of reference in relation to the Landmark (hereafter LM). LM refers to salient entities or space which gives reference to locate the TR, while TR is the moving or stationary entity which is given frame of reference by the LM or ground. Consider the following sentence taken from Svenonius (2012, p. 4),

The cat darted [into/under/to/from/toward] the trees.

Each of these prepositions gives a different position of the cat in relation to the trees, and hence, each has its own meaning quite distinct from the others. Svenonius (2012) also added place Ps Loc, (locative Ps such as in/on/at) K (possessive Ps *of*) and Axpart (part-whole Ps such as front of) (see p.3 below for a detailed explanation) functional semantic heads to the Path, as place is an important element of path as a source, goal or route. For example, in "*Move the truck from in front of the fire hydrant*" (Svenonius, 2012), '*from*' denotes source PathP, '*in*' is loc, '*front*', the Axpart, and '*of*' is K. Thus, the literature includes some fine-grained decomposition of Path

and path prepositions. Path Ps have been investigated in several languages, for instance, English (Svenonius, 2010), Persian (Pantcheva, 2006), and Arabic (Saeed, 2014). This paper reveals that Pashto prepositional system exhibits a range of syntactic and semantic nodes, and suggests that the complex nature of Pashto Path Ps requires some adjustments to the syntactic models of Pantcheva (2011) and Svenonius (2012). The rest of the paper is divided into the literature review, research methodology, data analysis, discussion and conclusion.

2.0 LITERATURE REVIEW

The prepositions scaffolding the concepts relating to the movement of an object along a path are called Path Ps. There are three types of path, *bounded, direction* and *route*. Bounded path has two major domains: source and target. Source path Ps include *from, out of,* while goal path Ps are *to* and *into*. The prepositions *towards* and *away from* indicate direction and *along, through* and *via* indicate the route along the path. Diagrammatically, Jackendoff's path classification (Jackendoff, 1973, 1983) is presented in Figure 1, below.



Figure 1: Jackendoff's Source-Path-goal Schema

Figure 1 shows source as the starting point of a path, direction indicates the movement of an object towards or away from the source, route shows the location of the movement on the path, and goal represents the end point of the path. Following Jackendoff, Zwarts (2005) adds that path is an orbit or a trajectory in space of the movement of an object, with a starting location, closing point and points in between the starting and closing points. In terms of aspect, he classifies prepositions as telic, such as *to, from*, atelic, such as *towards, along* and (a)telic, such as *across, through* etc. Telic prepositions represent a natural end point, atelic prepositions relate an object to a path with no natural end point and (a)telic prepositions may relate an object to a path with natural end point.

Pantcheva (2011) expanded Jackendoff's model by dividing the path into transitional path, orientational path and delimited path. These paths are further divided into eight different kinds of paths which are: Co-initial Ps, such as *from the goal*; Egressive Ps, such as *starting from source*; Recessive Ps, such as *away from the source*; co-final Ps, such as *to the goal*; Terminative Ps, such as *up to the goal*; Approximative Ps such as *towards the gaol*; Transitive

is such as *past the goal*; Prolative Ps such as *along the goal*. Thus, this model precisely indicates the Ps describing the location, movement and direction of an object along a path. However, Pantcheva's model of path cannot be separated from location, which Svenonius calls *Place*. Path projection is combined with place functional semantic heads, Loc, Axpart and K. In other words, a path may have some location which is termed *Place*, and the prepositions used are called *Place Ps*. These are Loc, (e.g. *in/on/at*) Axpart (*in front of, at the top of*) and K (e.g. *of*). Path Ps precede Place Ps. In other words, in syntactic terms, *Path* takes precedence over *Place* (Svenonius, 2004, 2012; Pantcheva, 2011). For example, in the sentence '*He came from the top of the hill*' the Path P is *from*, while the Place Ps are *top* (Axpart) and *of* (K). The Path P '*from*' comes before the Place Ps '*the top of*' and DP (domain of points or LM) '*hill*' in this sentence. In other words, Path Ps precedes Place Ps in the order of syntax tree diagram.

According to Pantcheva (2011), path prepositions can be categorized on the basis of the nature of path and the direction of the movement of the object with reference to the source or goal. In other words, the nature of path and direction of the TR (Trajector) necessitates the usage of a particular preposition. The main contention that Pantcheva and Svenonius make is that path prepositions or Path Ps dominate place prepositions or Place Ps. The basic syntactic structure of prepositions is given in Figure 2, taken from (Svenonius, 2012).

Figure 2: Syntactical Structure of Path Prepositions (Svenonius, 2012)

Figure 2 shows that path prepositions precede place prepositions in the syntax of a language. This can be illustrated with the following example.

1. *He came from the house*

In Example 1, the path preposition *from*, termed the transitional source oriented path preposition (Pantcheva, 2011), comes before *the house* in the syntactic structure of the sentence. This pattern of path prepositions above place prepositions or places has been found in many languages (Svenonius, 2012). One of the aims of this paper is to test this claim of the Path-Place relationship in Pashto.

Pantcheva (2011) decomposed path prepositions into several semantic functional heads, as discussed earlier. Place, one of the major component of path, has been further decomposed by Svenonius (2012) into the functional semantic heads of Loc, Axpart and K within Path. Loc gives the location of the TR within the LM, Axpart refers to the region of LM occupied by the TR, and K refers to the possessive relationship between Axpart and LM. Thus, Path P projections have more elaborate structures than Place Ps. Consider the following sentences.

- 2. He went to the hill
- 3. He went to the top of the hill

2 shows the goal oriented transitional path through Path P 'to' and the LM 'hill', but while sentence 3 represents the same transitional goal oriented path, place Ps 'top' is Axpart, showing the area of the LM 'hill' and 'of' is K, representing the relationship of 'top' to the LM 'hill'. Diagrammatically, the two sentences are represented as.



Figure 3: Syntactical structure of 'to the hill' Figure 4: Syntactical structure of 'to the top of

Figures 3 and 4 show that place is adjacent to path, but path takes precedence over place. However, Figure 4 shows that the Axpart of the place is adjacent to Path, and the path leads to the Axpart of the place. Figure 3 shows Path>Place, while Figure 4 shows Path>Axpart<K<Place relationship. This paper will apply this model to Pashto path prepositions to investigate their syntactic and semantic structures and functions.

This syntactic model of path prepositions suggested by Svenonius (2004, 2012) and Pantcheva (2011) has been applied to the prepositional systems of different languages such as English (Svenonius, 2004, 2010), Arabic (Saeed, 2014), Persian (Pantcheva, 2006) and Hungarian (Hegedűs, 2006). Pantcheva (2007) investigated the classes of Persian Place prepositions, and he describes two categories of Persian prepositions, C1 and C2. C1 comprises the fundamental Persian prepositions, while C2 are more representative of Axpart. C1 Ps can be omitted when the compliment is the LM except for Path source Ps such as

Reza *(*æz*) *mædræse amæd*.Reza came back from school (Pantcheva, 2007, p. 2)

The above example suggests that the syntactic structure of English and Persian preposition is the same i.e. the Path P *from/ æz* precedes the DP *school/ mædræse*. It is the same with locative prepositions:

golha-ye ru-ye miz the flowers on the table (Pantcheva, 2007, p. 9)

In this example, the preposition '*ru-ye*' precedes the DP '*miz*' as in English. Similarly, Saeed (2014) investigated the nanosyntax of Arabic prepositions and suggests that Arabic differs from English because of the absence of the locative semantic functional head K, in Arabic. However, apart from this the structure of Arabic Ps is similar to English or other languages. For example, in '*ilā wasați l-bayti*' Path P *ilā* precedes the locative preposition (Axpart) *wasați* and the DP *l-bayti*, as in English.

Pashto prepositions are called د الدات - *da rabth thori* or الدات - *adaath* in Pashto grammar (Rishteen, 1963; Rihtheen, 2003). According to Pashto grammarians, these particles do not have meaning on their own and are used to link nouns or pronouns with a verb for a particular meaning (Rishteen, 1963; Rihtheen, 2003; Zyar, 2003). This claim shows that traditional Pashto grammarians views prepositions as having a merely syntactic function, but which may contribute to the overall meaning of an utterance. This syntactic focus on Pashto prepositions led traditional grammarians to focus on the syntactic properties of Pashto prepositions (e.g. Lorimer, 1901; Rishteen, 1963; Tegey & Barbara, 1996; Zyar, 2003). Pashto prepositions were divided into pre-positions - *sarbal*, post-positions (Lorimer, 1901; Rishteen, 1963; Other place in sentences (Lorimer, 1901; Rishteen, 1963; Tegey & Barbara, 1996; Zyar, 2003). Rishteen, 1963; Tegey & Barbara, 1963; Tegey & Barbara, 1996; Italian (Lorimer, 1901; Rishteen, 1963; Core, Pashto is written from right to left, re, the explanations of examples of the placement of prepositions).

4. د اسد پلار da-PreP Asad-N.Sg plaar-N.Sg of Asad father Asad's father بازار ته .5

Bazaar-N.sg tha-PosP Market to To the market

له پله تر لاندې 6.

lah-PreP *pluh*-N.Sg *thur*-PosP *lande*-PosP from bridge up to under under the bridge (Tegey & Barbara, 1996)

In Example 4, the preposition '*da-of*' comes at the beginning of a sentence in Pashto. In Example 5, postposition '*thah-to*' comes after the noun, while Example 6 illustrates the pre post-position '*lah-lande-from below or under*' construction, where pre-position comes before the noun and post position comes after the noun. This suggests that they mainly focused on syntactical properties with little focus on the semantic properties of prepositions. However, the claim here is that prepositions have both syntactic and semantic functions, and they contribute to meaning and to understanding (Kainat & Sardaraz, 2020).

This rigid division between syntactic and semantic functions has undergone some changes in the recent literature. Pashto prepositions have been classified further on the basis of their functions to establish relationships between different objects and abstract concepts. These relationships include spatial relationships, instrumental relationships and temporal relationships. In other words, the semantic function of a preposition depends on the linguistic context (David, 2013). Consider the following examples.

7. دکور نه da-PreP kor-N.Sg nah-PosP from home from From the house

پەرسى آس تړل 8.

Puh-PreP rasai-N.Sg Aas-N.Sg.Ob tharhul-V.InfinOn>with ropehorseto tieTo tie the horse with rope

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له شپې څخه .9

Lah-PreP shpe-N.Sg.Time Tsakhah -PosPFrom nightfromFrom the night

Example 7 shows the spatial relationship of something with the house, Example 8 shows the instrumental sense of the preposition '*puh*' and Example 9 shows the temporal relationship through the pre-post positions '*lah-nah*'.

Pashto Path prepositions have been discussed at length in the literature to date. Tegey and Barbara (1990, 1996) discussed different kinds of prepositions such as pre-positions, post positions and pre-post positions. They focused on classifying prepositions based on their placement in a sentence, which is helpful for Pashto language learners at the elementary level. Zyar (2003) holds that سربل - sarbal, pre-positions and اوستربل - usturbal post-positions can - سريل come together in a sentence. He also differentiates between them. According to him, all sarbal, pre-positions are اوستربل - simple like 'lah' or 'puh'. Post positions - يووستوى - usturbal are either يووستوي - simple such as 'tah', 'ke', 'pore'; or ببلښتى – derivative, such as 'lah parah', lah mukhe', 'da nuna'; or تربنتى – compound such as 'sarah sarah', 'da nunah nunah'; and بدل - pseudo-post-positions such as 'puh shaan', 'puh rang', 'mukhamukh' on the basis of their syntactic combination or function. However, they (Tegey & Barbara, 1996; Zyar, 2003) do not discuss path preposition as a separate category. Similarly, David (2013) classifies prepositions as pre-positions, postpositions and ambipositions, and further discusses each preposition as a functional particle in language with a spatial, temporal or instrumental function. Khan et al. (2020) investigated the Pashto goal post-position -Tah-to, and they claim this post-position has diverse syntactic and semantic functions and is used polysemously, both in literal spatial and temporal senses and in a metaphorical sense for abstract relationships.

Kainat and Sardaraz (2020) applied the Svenonius model of Place Ps to investigate the syntactic and semantic differences between the English prepositions '*in*' and '*on*' and the Pashto pre-post positions '*puh-ke*' and '*puh-bande*'. They argue that the Pashto prepositional system is more complex because of the most frequent use of the pre-post-position in Pashto. The joint occurrence of pre and post positions in Pashto necessitates changes in the syntactic tree proposed by Svenonius. They recommend further studies of Pashto prepositions from a nanosyntax perspective to extend the existing work on Pashto prepositions, which could contribute to the second language acquisition of Pashto. This paper takes a nanosyntax approach to decompose Pashto path prepositions in order to inquire into different nodes in the

syntactic tree, the syntactic and semantic functions of each node and the path-place relationship of Pashto Ps.

3.0 RESEARCH DESIGN

This path prepositions research focuses on the frequently used prepositions in Pashto. To generate data, pre-positions were looked for in a dictionary (see Zeeya, 2009) and other Pashto grammar books (Rihtheen, 2003; David, 2013; Rishteen, 1963; Tegey & Barbara, 1996; Zyar, 2003). Initially, 214 sentences and clauses were collected from these sources, for example 'lah korah istul- to put out of house' (Zeeya, 2009), 'Bazaar tah- To the market', 'Kitab me Asad nah wakhistuh- I took the book from Asad (Tegey & Barbara, 1996), 'Da kor nah raghlum- I came from home' (David 2013), Thur Kabulah pore-Up to Kabul' (Rihtheen, 2003). Keeping in view the Pantcheva's decomposition of path and Svenonius' classification of Place Ps, the data was further enriched by assimilation process. The aim of this process was to have sufficient data reflecting the major categories of path and place typologies. The process involved searching of the relevant sentences in existing research and translating them or creating Pashto sentences, such as 'Haghah puh maa ther sho- He went across me', 'da Bannu nah Tsomrah laarah dah- How far is the distance from Bannu?' This method was also adopted successfully by Khan et al. (2020) and Kainat and Sardaraz (2020). After the data assimilation process, the data corpus consisted of 245 clauses and sentences. The data set was then checked for any possible mistake by experts in Pashto linguistics and language, Kamran Mangal. This process helped the collection of data representing the eight syntactic categories proposed by Pantcheva and different semantic functional nodes of place Ps advocated by Svenonius. Four examples from the data set of each type of usage of these prepositions and ambipositions were used to illustrate the findings.

This paper takes nanosyntax approach to analyze the terminal nodes of pre-positions, post positions and ambipositions. Nanosyntax offers a better approach to that of the traditional minimalist syntactic approach as it can account for the seemingly erratic and diverse behavior of these linguistic elements. In a minimalist syntactical approach, one node in the syntactic tree represents one lexical unit. However, from a nanosyntactic positions, one node represents a smaller unit of lexis. Thus, this approach offers a more finely grained analysis of the grammar and syntax of a language (Kainat & Sardaraz, 2020; Pretorius & Oosthuizen, 2012; Starke, 2010). In other words, this approach involves the detailed analysis of syntax by further decomposing the lexical units, keeping in view both their syntactic and semantic functions.

4.0 ANALYSIS AND DISCUSSION

4.1.1 Analysis

In the analysis, the semantic functional heads of path Ps as proposed by Pantcheva (2011) and Svenonius (2012) were examined in the data. The nano-syntactical models of Pantcheva and Svenonius were adopted to analyze the Pashto Path Ps to explore the nature of Pashto Path Ps and Place Ps. It was found that Pashto Path Ps, no doubt, showed syntactic terminal nodes as proposed by Pantcheva and Svenonius, but Pashto path Ps also showed differences with syntactic structure of the rest of other languages because of the variations in words order. The findings show that linguistic system is based on cultural experiences of a particular community, and one model based on one group of languages may not be applicable on other languages.

4.1.2 Co-Initial Path Ps

These prepositions in Pashto come either in single post positions or in ambipositions with a pre-position. The most frequently source oriented postpositions or ambipositions are '*nah*', '*i** '*Tsakhah*', '*i** '*iah-nah*'' and '*i** '*iah-Tsakhah*''. Rihtheen (2003) defines its syntactical structure as

10. Lah Noun Tsakhah OR da Noun nah

Some examples of these kinds of prepositions are analyzed below.

da-PreP	kor-N.	Sg nah-I	PosP	
From	house	from		
From the house				
له کوره يې راوړه .12				
Lah-PreP	Korah-	N.Sg.Infl	rawrhah-V.Imp	
From	home		bring	
Bring from home				
ننګر هار نه راغې .13				
Nangarhar	-N.Sg	na-PosP	raghe-V.PST	
Nangarhar		from	he came	
He came from Nangarhar				

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14. هغه د غره له سر څخه راغی Haghah-Pron.S da –PreP ghru-N.Sg Lah -PreP sar-N.Sg Tsakhah-PosP raghe-PST He of the hill from the top from came From the top of the hill

In 11, there is ambiposition, consisting of path pre-position 'da' and post position 'nah'. In 12, the post position is omitted and the noun is inflected with the vowel sound 'a'. In 13, the path preposition is dropped and the post-position 'nah' is retained. The three examples show three different syntactical usages of source-oriented prepositions in Pashto, which differs from other languages such English or Arabic, where Path prepositions 'from' in English and 'min' in Arabic would be used, illustrating the complexity of the Pashto prepositional system. In 14, the place prepositions Axpart and K are added. The place prepositions 'sar'- 'top' is Axpart in 14, while the preposition 'da' in both sentences is used as K, which is possessive in nature, as defined by Svenonius (2010). These examples clearly show that the syntactical structure of Pashto prepositions strongly deviates from those of other languages including English. The Pantcheva and Svenonius' model of prepositions needs to be restructured to include Pashto, as illustrated in the diagrammatical representation of 11 in Figures 5 and 6.



Figure 5: Syntactic structure of 'from'

Figure 6: Syntactic structure of 'lah-Tsakhah'

Figures 5 and 6 shows the syntactic differences between English and Pashto PPs whereby PostP has to be added to the model to accommodate Pashto prepositions. Figures 5 and 6 show that Path precedes place, as Svenonius (2012) held, but example 13 in Figures 7 and 8 illustrate the opposite.

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PathP	PathP	
Path DP	DP Path	
from Nangarhar	Nangarhar nah	
Figure 7: Syntactic structure of 'from'	Figure 8: Syntactic structure of 'nah'	

Figures 7 and 8 reveal that Path precedes place in the English prepositional system, but in Pashto, it may be otherwise. In 13 above, place precedes path as DP or Location come first in the sentence and path P comes after in a post-position. The syntactic difference is further evident in 14 above. The clause in 14 is syntactically represented in Figures 9 and 10.



Figure 9: Syntactic structure of 'from top of'

Figure 10: Syntactic structure of ' da ghru lah sar Tsakhah'

In Figure 10, Place precedes Path, and the place Ps are further decomposed to K and Axpart. Moreover, DP comes before Axpart, while K, DP, PreP and Axpart are followed by PosP. This shows that the Pashto preposition system deviates from other languages in place Ps in addition to differences in the use of ambiposition. The NP '*sar*-top' modifies the N-ghru, because the clause could be modified by omitting the place p '*da*' and Axpart '*sar*' as '*lah ghru Tsakhah*' which is a PP(NP). The constituent structure can be given in the following tree

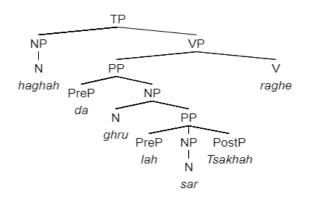


Figure 11: Syntactic structure of 14

4.1.3 Egressive Path Ps

Delimited source-oriented path refers to the path which is delimited by one point from the source. In other words, the path or movement is one point from the source. Pashto also exhibits this kind of typology, but without an elative case marker or separate set of prepositions. The following examples illustrate this kind of typology in Pashto.

مونر له پاکستان څخه سفر شروع کړ .15 mong-S Lah-PreP Pakistan-N.Sg.S Tsakhah -PosP safar.N shoru krho-V.PST We from Pakistan from journey started We started (our) journey from Pakistan to..... احمد د کلي نه وتلي دي .16 Ahmad-Sb da-PreP kuli-N.Sg.S nah-PosP watule de-V.Perft Ahmad from home from has gone Ahmad has gone out of (the) village دا اورګاډي د بنو نه روان دي. 17 Da-Dem orgade-N. da-PreP Bannu-N.Sg.S nah-PosP rawaan-V.cont de-AV This train from Bannu from going is This train is leaving from Bannu. د بنو نه څومره لاره ده .18 da-PreP Bannu-N.Sg.S nah-PosP Tsomrah-Qt laarah-N.Sg. dah-AV Bannu how much From from distance is How far is the distance from Bannu?

In all these examples, the source nouns '*Pakistan*', '*kuli-village*', and '*Bannu*' are bounded spaces which are delimited from the movement of the objects. In other words, movement starts from the boundary of the bounded space, as Pantcheva (2011) refers to it. Pashto language path prepositions do exhibit delimited path typology, but without separate prepositions to reflect this; the same source prepositions '*lah*' and '*Tsakhah*' are used.

4.1.4 Recessive Path Ps

Another typology of path prepositions is recessive, which, according to Pantcheva (2011) refers to the movement of an object away from the source, and is un-transitional in nature, for instance:

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19. From the direction of the house.

Example 21 illustrates the preposition '*from*' as the source relator, but the movement is not exactly from the source. Such paths reflect movements or objects away from the source/LM. Pashto language also reflects this typological category, as in the following sentences.

له كوره مي لري وليد. 20 Lah-PreP korah-N.S leere-Adv me-Pron wulid-V.PST+2P.Pron From house away Ι saw him I saw him away from the house له کلی څخه لري روان و .21 Lah-PreP kuli-N.S Tsakhah-from lure-adv rawaan-V.PST.Cont wu.AV From village from away going was He was going away from village زه د کور نه لري ولاړ ووم .22 Zuh-Pron de-PreP kor-N.S nah-PosP lure-Adv wularh-V wum-AV Ι from home standing from away was I was standing away from home له كور څخه شمال ته روان و .23 lah-PreP kor-N.S Tsakhah-PosP shumaal-N. tah-PosP rawaan-V.PST wu-AV North from home from toward going was

He was going from home to the North

Pashto exhibits the recessive path typology described by Pantcheva (2011). In all the examples except 23, the adverb '*lure-away*' is combined with the preposition '*lah-from*', illustrating the recessive category of path prepositions. In other words, these examples exhibit the location of TRs away from the source. In 26, the ambiposition '*lah-Tsakhah*' combines with the direction goal noun '*North*' to show the movement of the TR away from the source. These examples also show different syntactic structures from other major languages due to ambiposition in Pashto. The phrasal constituent structure of 23 is represented as

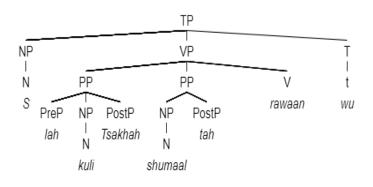


Figure 12: Constituent Structure of 23

4.1.5 Cofinal Path Ps

The prepositions used to show goal as the final destination of an object or way are called cofinal. The major prepositions of cofinal paths in English are 'to' or 'into'. In Pashto, 'thah' is the major post position used to configure an object's movement towards the goal/LM. The following examples illustrate this.

احمد مكتب ته ولاړ .24

Ahmad-N makthab-N.G thah-PosP wularh-V.PST Ahmad school went to Ahmad went to school کور ته لاړ .25 Kor-N.G thah-PosP larh-V.PST Went home بازار ته ځم .26 bazaar-N.S thah-PosP Tzum-V.Cont Home I am going to I am going home سليم د غره سر ته وخت .27 Salim da-PreP ghru-N Sar-PosP.Axpart thah-PosP ukhoth-V.PST Salim of hill climbed top to Salim climbed to the top of the hill

Examples 24 to 27 show that '*thah-to*' is the major preposition used for configuring an object with reference to the goal/LM. Hence, the typology of cofinal prepositions is exhibited in Pashto. However, as illustrated by the source-oriented prepositions, Pashto syntactical structure

deviates from English and other major languages because of the post-position. Moreover, Pantcheva and Svenonius' path over place hypothesis is not fully complied with in Pashto, as in the case of 27, represented in Figure 13 (below), where place precedes path.

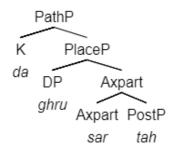


Figure 13: Syntactic structure of 'da ghru sar tah'

Similarly, the syntactical structure of the Pashto prepositional system also differs from other languages in the positioning of the functional heads K and Axpart. 27 may be written as

28. K-da DP-ghru Axpart-sar PosP-thah

Whereas the English structure is

29. PreP-to Axpart-top K-of DP-hill

(28) and (29) show the syntactic differences between the Pashto and English syntax and prepositional systems. The constituent structure of 27 is

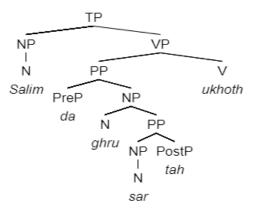


Figure 14: Constituent structure of 27

4.1.6 Terminative Path Ps

Terminative path is the mirror image of egressive path. This path is delineated as one point from the goal. In English, the major terminative path preposition is '*up to*'. Pashto exhibits this category of path typology, as the following examples show.

تر كابله پورى .30 Thur-Prep Kabula-N.G pore-PosP from Kabul upto Up to Kabul ترما پورې .31 Thur-PreP maa-Pron pore-PosP from me upto Up to me تر کورہ پوری ځم .32 Thur-PreP Korah-N.G pore-PosP Tzum-V.Cont from home up to going I am going up to home تر هغه کور پورې لاړ شه .33 Thur-PreP Haghah-dem.Pron kor-N.G pore-PosP larh shah-V.Imp from That house up to go Go up to that house!

In phrases 30 to 33, the ambiposition '*thur-pore—up to/till*', or preposition '*thur-from/up to*' or post position '*pore-up to*' are used to denote the path one point away from the bounded goal. This category is more evident in Pashto than the egressive path. These two paths show the distance or journey or movement of an object to one point less than the goal or destination, while the destination is configured as bounded space. In other words, it shows the path up to the bounded space, but not the space itself. However, terminative path in Pashto shows its difference from other languages, as place precedes path, represented in Figure 15.

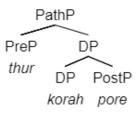


Figure 15: Syntactic structure of 'thur kor pore'

In Figure 15, the goal place '*korah-home*' precedes the path P '*pore-up to*', while in English the preposition '*up to*' precedes the goal/place '*home*'.

4.1.7 Approximative Path Ps

The approximative path category includes those prepositions which place an object on the route to the direction of the goal, but with no transition of the object. The major preposition in English configuring an object with reference to the goal is *'towards'*. In Pashto, this category of path typology is illustrated with the following examples.

د شمال خوا ته .34 Da-PreP shumaal-N.G khwa-N.dir thah-PosP Of North side to Towards the north كابل طرف ته .35 Kabul-N.G tharaf-N.dir thah-PosP Kabul side to **Towards Kabul** د غره په لور .36 Da-PreP ghru-N.G puh-PreP lor-N.dir Of hill side on Towards the hill د کور په لوري لاړو. 37 Da-PreP kor-N,G puh-PreP lori-N.dir larho-V.PST Of house side on went Went towards the house

Examples 34 to 37 show the approximative path. In Pashto, as the examples reveal, the postposition '*thah*' is combined with the direction noun, or pre-position '*puh*' is combined with a direction noun to indicate the approximate path. The TRs, in all the above cases indicate the route towards the goal with no transitionality. The clause 37 and its translation reveals the difference between Pashto and English as below.

- 38. K-da DP-kor PreP-puh Scale-lor
- 39. PreP-Towards DP-house

In Pashto, DP or place comes first, whereas in English, path P comes first; in Pashto, the preposition or post-position combines with a noun to make a circum-position defining the approximative path, whereas in English, the preposition alone indicates the approximative path. The phrasal structure of 37 is drawn as

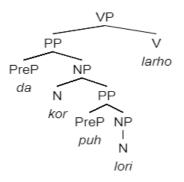


Figure 16: VP Structure of 37

4.1.8 Transitive Path Ps

'Transitive path' indicates that the object or path moves past the source at some point. The transitive path is the route path, using the prepositions '*past*', 'across', over, etc. in English. Pashto also uses this category of path typology through different prepositions or post positions, as in the following.

```
40. هغه په ما تېر شو.
Haghah-Pron. puh-PreP maa-Pron.G ther sho-V.PST
He on me crossed
He went across me
```

هغه په ونې تېر شو .41

Haghah-Pron. puh-PreP wune-N.G bande-PosP ther sho- V.PST

He on tree over passed

He went past the tree

هغه په کورباندې واوښت .42

Haghah-Pron. puh-PreP kor-N.G bande-PosP wawuhth-V.PST

He on house over crossed>went past

He went past the house

- تر پلهٔ لاندې تېر شو .43
 - Thur-PreP plu-N.G lande-PosP ther sho-V.PST
 - Of bridge under passed

He passed under the bridge

In the above examples, the LMs '*maa-me*', '*wune-tree*', '*kor-house*' and '*pul-bridge*' are moved past passed by objects. That is, the TR has traversed the LM at undefined points representing the TRs on the route path. The path is transitional, as the TR crosses the LMs on the route, as the LM is not the goal. The examples above illustrate the transitive category path typology in Pashto.

4.1.9 Prolative Path Ps

'Prolative path' is a path category showing the configuration of TR with the LM or ground at all points. The major preposition in English reflecting prolative path is '*along*'. Pashto has the same typology, as illustrated in the following phrases.

44. د سړک سره سره روان وو Da-PreP sarhuk-N.R sara-PosP rawaan wu-V.PST from road along walking was He was walking along the road 45. درياب د سړک سره سره بهېږي Daryab-N.TR da-K sarhuk-N.G sara sara-PosP bahegi-V.PRT River of road along flows

(The) river flows alongside the road

د درياب په غاړه ګرځيدو .46

Da-PreP daryab-N.G puh-K gharhah-N.Axpart gurzedo-V.PST

bank

of river on

walked along

He walked along the bank of the river

د کلي نه گرد چاپېره ګرځي .47

Da-PreP kuli-N.G nah-PosP gurdchapera-Adv gurzi-V.PRT

From village around walks

He walks around the village

The above examples indicate the prolative path typology in Pashto. The post-position '*sarah-along*' in 44 and 45 in combination with route Ground nouns '*sarhuk-road*' and preposition '*puh*' in 46 on combination with the Axpart '*gharhah-bank*' of the grounds '*daryab-river*' make the prepositional path prelative, because of the non-transitional nature of the path, as the TR and LM are mapped point by point. In 47, '*gurdchapera-around*' is a locative adverb, which, in combination with the verb '*gurzi-walks*' indicates the point to point relationship of the TR with the LM. Thus, Pashto follows Pantcheva's path typology, but the Pashto prepositional syntactic structure differs from other languages, as illustrated below.

- 48. K-da DP-daryab PreP-puh Axpart-gharha
- 49. PreP-along Axpart-bank K-of DP-river

Examples 48 and 49 show that Pashto syntactic structure is different from that of English. In Pashto, DP comes before K, Axpart and PosP, while in English, PreP, Axpart and K comes before DP. Moreover, the use of PosP in Pashto is a factor which distinguishes Pashto from other major languages. The Phrasal structure of 47 is given below.

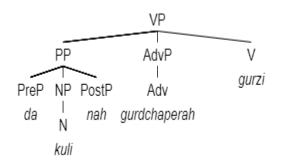


Figure 17: VP Structure of 47

4.2 Headedness of PPs in Pashto

Pashto follows SOV structure, but it is quite flexible and not rigid, as this structure can be replace with OSV in past tense and it is further flexible in sentences with ditransitive verbs (Roberts, 2000). Similarly, though, most of the PPs are head initial, some of them are head final such as the postposition '*tah*', '*sarah*'. The phrasal constituent structure of head initial and head final prepositions in 12 and 25 can be given below.



Figure 18: PPs structure of 'lah kora'

Figure 19: PPs structure of 'kor tah'

In 12, as the PPs structure shows, the object of the preposition *lah* is the noun *kor* which is inflected with *-a* sound, equivalent for postposition *nah*, while in 25, the object of the postposition *tah* is the noun *kor*. In the following sentence, the postposition *sarah* is used.

```
50. زه احمد سره روان یم
Zu Pron.S Ahmad-N.Sg sarah-PosP rawaan-V.Imp yum-AV
I am going with Ahmad
```

The object of postposition *sarah* in the above sentence is *Ahmad*. The phrase shows that postposition is the head of PP. Its constituent structure is given below.

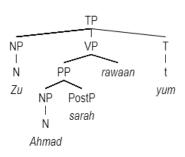


Figure 20: Syntactic structure of 50

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4.3 Discussion

The analysis has revealed the decomposition of path Ps in Pashto at the nanosyntactical level. The previous literature categorized Pashto prepositions either as pre-position, post-position or ambiposition (Rishteen, 1963; Tegey & Barbara, 1996; Zyar, 2003) or the particles of location, direction, means and time with semantic attributes (David, 2013) which had been regarded as meaningless particles (Rihtheen, 2003; Rishteen, 1963). The analysis here has revealed that recent development in syntax and grammar can help further exploration of the development of Pashto grammar and syntax. Using a nanosyntax approach, based on Pantecheva and Svenonius' models, to the study of path prepositions has extended the syntactic and semantic classification of Pashto prepositions. This paper discussed at length path Ps classification depending upon the functionality of each preposition in configuring TR with reference to the LM. The analysis revealed that each preposition has a specific syntactic and semantic function in locating the TR in the Path structure. This can help in rekindle interest in Pashto prepositions and grammar in light of modern theoretical constructs.

The analysis also revealed that Pantcheva's model of path prepositions is applicable to Pashto. Pantcheva's typology of path has eight functional heads, all of which are found in Pashto. These functional heads include co-initial Ps, egressive Ps, recessive Ps, cofinal Ps, terminative Ps, approximative Ps, transitive Ps and prolative Ps. Except for egressive Ps which have the same ambiposition 'da-nah' or 'lah-Tsakhah' as the co-initial and do not have any other definite morpheme, all other Ps are accurately defined as present in Pashto . The recessive Ps consist of ambiposition 'lah-nah' or 'lah-Tsakhah' and adverbs such as 'lure'; cofinal Ps are 'thah'; terminative Ps are 'thur-pore'; approximative path Ps are formed when prepositions or postpositions such as 'puh, pasa, bande, lande' are combined with verbs such as 'ther, wawuht' in sentences configuring the movement of TR past some point on the path; prolative path Ps are indicated by 'sarah sarah, gurdchapera' or when prepositions are combined with Axpart/noun denoting the movement of TR along some route or LM, such as 'puh gharhah', as revealed by the analysis. Moreover, this paper used Svenonius PlacePs model to add to Panchteva's decomposition of path by highlighting Loc, K and Axpart functional heads in path Ps, as in cases 14, 27, and 46. However, Pashto does not always follow the precedence of path over place in some cases, as in 13 in co-initial path, 24 to 27 in cofinal path, 30, 32, and 33 in terminative path, 34 to 37 in approximative path, and 40 to 43. This shows that the precedence of path over place hypothesis is not universal in across languages; some languages may have different syntactical structure of their prepositions. Moreover, the Pashto prepositional system has different syntactic structures in the order of Loc, K and Axpart from English, as illustrated in 28 and 29.

This paper also revealed that omission of post position in Pashto requires morpheme 'a' to be added to the noun as a suffix. However, the pre-position remains in place. This often happens in ambiposition, as in 12, where the source post position '*nah-from*' is omitted and the noun '*kor-house*' has vowel sound '*ah*' as a suffix, making the noun '*korah*'. This phenomenon often happen with the omission of post position '*nah-from*' when preposition '*lah*' is used, because '*lah-nah*' combination is not permissible in Pashto (Babrakzai, 2007). The remaining path post-positions such as '*thah-to*', '*pore-up to*' '*sarah-along/with*', etc. are not omitted. This shows that the prepositional system of Pashto is more complex than that of other languages and the second language learner or translator should have cognizance of such patterns in Pashto language to avoid common prepositional syntactic structure of Pashto and English, which could help second language acquisition. The main difference is that Pashto uses preposition, post-position, ambiposition and circumposition. A simple example, below, will further explain the second language acquisition concern.

```
51. From-PreP home N.S
From home
52. مِنْ بَيْنِتِ .
min-PreP bayti-N.S
from home
53. از خانه .
53. منافع المالي
54. منافع المالي
54. منافع المالي
54. منافع المالي
6 Ghar-N.S se-PosP
Home from
55. د كور نه .
55. منافع المالي
56. منافع المالي
57. منافع الم
```

home

from

From

Examples 51, 52 and 53 are from English, Arabic and Persian. They show the same syntactical structure of PreP-DP. Examples 54 and 55 are from Urdu and Pashto, where there are post

positions with the syntactic structure of DP-PosP. However, Pashto syntactic structure is different even from Urdu, as Pashto has ambiposition with the syntactic structure of Pre-P-DP-PosP. The syntactic differences between Pashto and other languages is one of the factors which create problems when translating Pashto into other languages. This paper suggests further linguistic studies, both theoretical and applied, to further explore the prepositional system in Pashto and the effects of these syntactical differences on second language acquisition and translation.

5.0 CONCLUSION

This paper has extended the previous work on the classification of Pashto prepositions by decomposing path Ps into eight heads in light of Pantcheva's model of path Ps and applied Svenonius' syntactical constructs of Place Ps to the Path Ps, place being one of the important constituent of path Ps. The analysis also revealed that Pantcheva and Svenonius' models of prepositional systems have to be adjusted to harness the complex prepositional system of Pashto by relocating the basic functional heads and by adding PosP as a separate structural element to the existing models. The syntactic differences between Pashto and other major languages mean second language learners and translators need to be aware of the different prepositional patterns in different languages to avoid common prepositional errors in translation. This paper suggests further research into Pashto prepositions to explore their syntactic patterns, which will contribute not only to the theoretical literature but will be instrumental in applied linguistic research.

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