Transformation in Pashto Language: An Analysis of Pashto Phrases and Sentences
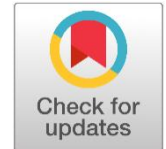
Tariq Amin[a]*, Wasima Shehzad[b], Sadia Choudhri[b] & Mudassir Inam[a]

[a] *University of Lakki Marwat-Pakistan*
[b] *Air University Islamabad-Pakistan*

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ABSTRACT

Transformation is a significant area of research that focuses on how language users utilise knowledge of their language (s) to generate different surface structures from the same deep structure. The study aims to describe how different surface structures are generated from the deep structure and how Pashto speakers use different transformational processes to generate various constructions from a single construction. The study is qualitative in nature, using qualitative data and analysing it qualitatively. The untested sentences selected based on the researcher's general observation served as the study's data. Transformational Generative Grammar theory was used as a theoretical framework for the study. The study confirmed that the speakers of Pashto construct new structures from a deep structure using all the transformational processes found in English. The transformational processes the Pashto speakers use are merging, movement, insertion, and deletion. The study supports Noam Chomsky's view that languages share some universal features.

1. INTRODUCTION

Transformation is a process in which new surface structures are generated from a deep structure. Noam Chomsky (1965) says that every sentence has one underlying structure, and from that underlying structure, different surface structures are generated. Surface structures are generated from a deep structure to meet the communicative need. When we communicate, we depend on different structures such as interrogative structure, negative structure, passive structure etc. It is the different transformations that help us generate these structures. We use four transformations to construct new structures:

*Corresponding author: Tariq Amin, University of Lakki Marwat-Pakistan

E-mail: tariq.ktk.733@gmail.com

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deletion, insertion, movement, and merging. These processes are not unique to just one language, but these can be found in almost all the world's languages. Pashto is one of those languages in which these processes are utilised to meet the communicative function.

Pashto is a language that is spoken in Pakistan, Iran, and Afghanistan as a native language. It is used in the Afghan section of Afghanistan (Hallberg 1992, Penzle 1955). It is the official language of Afghanistan today, besides Dari. It is the provincial language in Pakistan's Khyber Pakhtunkhwa (KPK) province. Pashto has about forty to fifty million speakers. Pashto has the following five significant dialects:

- North-Eastern (Yusufzai) Dialect
- North-Western (Central) Dialect
- South-Eastern (Quetta) Dialect
- South-Western (Kandahar) Dialect
- Middle Tribal Dialect.

There are some differences in pronunciation and vocabulary between these dialects, but the structure of these dialects is the same.

Thesis Statement

Transformations are used in different languages to produce new structures from the surface structure of a sentence. These transformations help language users to communicate their thoughts efficiently and effectively. These transformations are found in almost all the languages around the globe. The current study is undertaken to determine whether these transformations are used in Pashto language and describe how Pashto speakers generate different surface structures from a deep structure.

Research Questions

- What are the different transformational processes used in Pashto language?
- How different surface structures are generated from a deep structure in Pashto language?

Research Objectives

The objectives of the current study are:

- To analyse the different transformation processes in Pashto language
- To enhance understanding of people about Pashto language
- To describe how surface structures are generated from deep structures in Pashto language

2. LITERATURE REVIEW

Transformation is a process through which new sentences are generated from the deep structure of a sentence. Kracht (n.d.) says that transformation is the movement of a constituent to some other place in the sentence. Winkler et al. (n.d.) say that transformation takes an existing syntactic structure and makes a new structure by performing one or more of the following three operations: movement, deletion, or insertion. These operations are constrained by several rules and customarily adhered to constraints. According to Chomsky (1965), each sentence in a language has two levels of representation.

- Surface Structure
- Deep Structure

The deep structure corresponds to the core semantic relations of a sentence. According to Rao (2010), the deep structure of a sentence is a direct representation of the fundamental semantic relations underlying a sentence. It is the underlying meaning of the sentence. Chomsky (1965) says that underneath every sentence in the mind of a speaker is a hidden, indistinct deep structure, the interface to the mental lexicon. Transformational rules convert the deep structure into a surface structure that corresponds more closely to what is pronounced and heard. The proper structure of a sentence as it occurs in speech. It is the apparent structure of a sentence. Nolfo (2000) says that the mind plays a unique role in interpreting sentences and demonstrates the architecture of phrases. He says surface structure results from applying transformations (movement of categories within the syntactic structure) to form interrogative and negative sentences etc.

Examples:

- Wahid broke the window.

- The window was broken by Wahid.
- It was Wahid who broke the window.
- Wahid did not break the window.
- Did Wahid break the window?

The above examples have different surface structures but share the same deep structure. All of them are generated from the same deep structure through transformations. Transformations generate new structures that cannot be generated through phrase structure rules. In order to generate different structures from a deep structure, we need to apply transformations. There are four types of transformations, which are shared by almost all the languages. These transformations are unique to English and can be found in almost all languages.

Merging

In merging, different elements are added to the head of a phrase. Phrases are made from the head. The deep structure of a phrase can be just a head, such as a noun, verb, preposition, adjective, or adverb.

Movement

Movement is a syntactic rule for moving a piece of structure within the tree, giving rise to displacement situations where a word or constituent appears in some position other than where we would expect it.

Deletion

Deletion is a syntactic rule whereby a piece of syntactic structure (built up by the phrase structure rules) is removed under specified conditions.

VP ellipsis

I teach linguistics, and he does Δ, too.

Gapping

I teach linguistics, and he Δ physics.

Insertion

New elements are added to the sentence in this process.

3. RESEARCH METHODOLOGY

The study in hand is qualitative in nature. This is descriptive research in which the researcher the various procedures and techniques used by Pashto speakers to generate new structures from a deep structure are analysed. Transformational Generative Grammar theory was used as the theoretical framework of the study. Aoun and Sportiche (1980) say that transformational generative theory explains the organisation and arrangement of sentences in a language. It explains how correct and well-formed sentences are made or formed. First, the generation of sentences takes place, and then transformation takes place. There are two main parts of this theory, which are as follows:

- Generation or Generative Grammar
- Transformation or Transformational Grammar

The first part of Transformational Generative Grammar deals with generating sentences, i.e., well-formed and

correct sentences. For this, some rules are essential for the construction of correct sentences. Generative Grammar is: "A particular sort of grammar which would have a very explicit system of rules specifying what combinations of central elements would result in well-formed sentences." It means that Generation Grammar is a set of fundamental principles and explicit rules that deal with sentence formation. Once the sentences are generated, transformations are applied to them.

According to this theory, there are two types of structures: deep and surface. The surface structures are generated from the deep structure of a sentence. The surface structures are generated from the deep structure with the help of transformational processes. There are four transformation processes: merging, movement, insertion, and deletion. The current study used the Transformational Generative Grammar theory to find out how different surface structures are generated from the deep structure of a sentence and how these processes are used in Pashto language to produce new structures. The untested sentences were selected based on the general observation of the researcher to see if the transformation processes are used in Pashto language or not.

4. DATA ANALYSIS

Merging

In merging, different elements are added to the head of a phrase. The head is the most essential and obligatory element in a phrase. Without a head, there cannot be a phrase. For a phrase, the head is a must because the phrase builds around the head. The other elements are merged with the head of a phrase, providing extra information about it. Phrases are made from the head. The deep structure of a phrase can be just a head, such as a noun, verb, preposition, adjective, or adverb. For instance, the deep structure of a noun phrase can be just a noun, such as a book. Different surface structures can be generated from the same deep structure, such as:

- Bag
- His bag
- His beautiful bag
- The beautiful red bag
- The beautiful red bag in his room
- The bag that she gifted me

In Pashto language, the same process is followed. New surface structures are generated from the deep structure of a phrase in Pashto language. Pashto is a head-final language in which the head of a phrase always comes at the end of a phrase.

Noun phrase

English	Pashto	Pashto
Boy	Halak	هلک
Beautiful boy	*Khkulay* halak	**خکلے** هلک
A beautiful boy of our village	*Zamoong da kali khkulay* halak	زمونگ **دا کلی خکلے** هلک
A beautiful boy of Karak	*Da Karak khkulay* halak	**دا کرک خکلے** هلک
A beautiful young boy	*Khkulay zwan* halak	**خکلے زوان** هلک

The above structures are generated from the same deep structure, noun هلک. The word خکلے is an adjective and is added to modify the noun هلک. In the third phrase, the prepositional phrase زمونگ دا کلی is the complement of the noun هلک. In the fourth phrase, the prepositional phrase دا کرک is the complement of the head هلک. In the last example, the words خکلے and زوان are adjectives and are modifying the noun هلک. In the example (iii), the prepositional phrase زمونگ دا کلی is the complement of the noun هلک.

Other examples are:

English	Pashto	Pashto
Book	Kitab	کتاب
Book of Urdu	*Da Urdu* kitab	**دد اردو** کتاب
Book written by Kamal	*Da Kamal leekalai* kitab	**دد کمال لیکلئ** کتاب
Book of Urdu in our room	*Zamoong pa karma k da Urdu* kitab	**نمونگ په کمره که دد اردو** کتاب

We can generate different surface structures from other phrases, such as adjective, verb, and adverb phrases. For example,

Adjective Phrase

English	Pashto	Pashto
Beautiful	Khaista	خائستہ
Very beautiful	*Dair* khaista	**ڈیر** خایستہ

In this adjective phrase, the word خائستہ is the head of the phrase, and the word ڈیر is merged with it, and it provides extra information about the head. The word خائستہ is an adjective, while the word ڈیر is an adverb.

Verb Phrase

English	Pashto	Pashto
To laugh	Khandi	خاندی
Always laughs	*Har wakht* khandi	**هر وخت** خاندی

In the above example, the word خاندی is a verb, and هر وخت is an adverb used to modify the verb.

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Movement

Movement is a process in which elements of a sentence are moved from one place to another to make a new structure. Movement takes place when we transform an active sentence into a passive sentence. We move certain elements from one position to the other. For example,

- D.S: Hameed gave him a pen.
- S.S: A pen was given to him by Hameed.
- S.S: He was given a pen by Hameed.

In the above examples, the words Hameed, a pen, and the pronoun he are moved from one place to another. In this process, we also insert elements, such as by and to, etc., to

convert an active sentence into a passive sentence called insertion. Insertion will be explained later in this article. Besides passivisations, we also move elements from one position to another when we make interrogate sentences from affirmative sentences. For example,

- D.S: Osama will come.
- S.S: Will Osama come?
- D.S: Wahid will go to school.
- S.S: Will Osama go to school?
- D.S: You can do it.
- S.S: Can you do it?

In the above examples, the auxiliary verbs are moved to the front of the sentence to make the sentence interrogative. This is called subject-auxiliary inversion. Wh-movement is another type of movement. Kracht (n.d.) says that wh-movement is the transformation responsible for putting the question word in front of the sentence. In wh-movement, the wh-words are brought to the front of the sentence. For example,

- D.S: You are playing (what) at the ground.
- S.S: What are you playing at the ground?

Sometimes, the wh-word is used as a determiner in a sentence. When we move this wh-word from one position to another, it moves the whole phrase with itself, and it is called Pied-Piping. For example,

- D.S: Ali likes which book.
- S.S: Which book does Ali like?

In the above example, the determiner "which" moves the whole noun phrase with itself to the front position of the sentence.

The other examples of movement are given below.

- D.S:Akbar put the shirt on the table.
  S.S:Which table did Akbar put the shirt on?

- D.S: You are watching a movie on your mobile phone.
  S.S:What are you watching on your mobile phone?

- D.S: Ali likes who.
  S.S:Who does Ali like?

The same method is used in Pashto language as well. For example,

English		Pashto	Pashto
D.S:	Ali is going home.	*Kor ta* si Ali.	کور تا سی علی۔
S.S:	Ali is going home.	Ali si *kor ta*	علی سی کور تا۔
S.S:	Ali is going home.	Ali *kor ta* si	علی کور تا سی۔

In the above examples, the deep structure is the same that is علی کور تا سی, but there are three other surface structures used to communicate the same meaning. Different elements in the sentence are moved from one place to another to produce different surface structures. The same can be seen in the below example.

English		Pashto	Pashto
D.S:	Zahid is a good boy.	*Zahid* sha sara da.	زاهد شه سڑا دا
S.S:	Zahid is a good boy.	Sha sara da *Zahid*.	شه سڑا دا زاهد۔

In the above examples, the deep structure is زاهد شه سڑا دا, and the other surface structure is generated from the same deep structure through the process of movement.

Pied –Piping

Can you do it?

English		Pashto	Pashto
D.S:	In which school do you read?		
D.S:	Taso *koom school k* sabaq wayai?		تاسو کوم سکول کے سبق وایی؟
S.S:	**Koom school k** sabaq wayai taso?		کوم سکول کے سبق وایئ تاسو؟
D.S:	In which city do you live?		
D.S:	Taso *koom khar k* pate kegai?		تاسو کوم خار کے پاتے کیگئی؟
S.S:	*Koom khar k* pate kegai taso?		کوم خار کے پاتے کیگئی تاسو؟
S.S:	*Koom khar k* taso pate kegai?		کوم خار کے تاسو پاتے کیگئی؟

The word "کوم" is an interrogative pronoun in Pashto language used to ask questions. When it is used as a determiner, and we move it from one place to another, it moves the whole phrase with itself, as seen in the above examples. The word "کوم" moves the other words, such as خار and سکول with itself. This process is known as pied piping. In example (i), the interrogative pronoun moves "school" while in example (ii), it moves شہر with itself. It shows that the process of Pied-Piping is also there in Pashto language. When an element is moved from one position to another in a sentence, it leaves a trace behind and shows that a sentence' deep structure is retrievable. Other examples of movement are:

	English	Pashto	Pashto
i.	Kamran broke the window.	Kamran *kirki* mata kra.	کامران کھڑکی ماتا کڑا۔
	The window was broken by Kamran.	*Kirki* Kamran mata kra	کھڑکی کامران ماتا کڑا۔
ii.	What is your name?	**Sa** nama da sta?	سہ نام ده ستا؟
	What is your name?	Nama *sa* da sta?	نام سہ ده ستا؟
	What is your name?	Sta *sa* nama da?	ستا سہ نام ده؟
iii.	I live in Karak.	*Za* karak k pate kegam.	زه کرک کے پاتے کیگم۔
	I live in Karak.	Karak k pate kegam *za*.	کرک کے پاتے کیگم زه۔

Deletion

Deletion is a process in which some words, phrases, or clauses are removed from a sentence. Most of the time, we delete the subject of a sentence. For example,

- S.S: Come here.
- D.S: (You) come here.
- In the above example, the subject "you" is deleted from the sentence. We also delete VP when it is the same in the preceding clauses. For example,

- D.S: Bilal wants to play cricket, and Ali wants to play cricket.
- S.S: Bilal and Ali want to play cricket.

The same process is also used in Pashto language. Certain parts are deleted from sentences. For example,

Subject Deletion

English		Pashto	Pashto
i.	D.S: You come here.	*Ta* dalta rasha.	تہ دلتا راشہ۔
	S.S: Come here.	Dalta rasha.	دلتا راشہ۔
ii.	D.S: You open the door.	*Ta* darwaza kulao ka.	تہ دروازہ کھولاؤ کہ۔
	S.S: Open the door.	Darwaza kulao ka.	دروازہ کھولاؤ کہ۔

VP deletion

D.S: Nafees wants to go to Peshawar and Akram wants to go to Peshawar.

D.S: Nafees *Peshawar ta tlal ghwari* aw Akram Peshawar ta tlal ghwari.

نفیس **پشاور تہ تلل غواړی** او اکرم پشاور تہ تلل غواړی۔

S.S: Nafees aw Akram Peshawar ta tlal ghwari.

نفیس او اکرم پشاور تی تلل غواړی۔

In the example (i), the subject تہ is deleted from the sentence. In imperative sentences, usually we delete the subject from the sentence because it is already understood. The deep structure of the sentence is تہ دلتا راشہ and when we delete the subject تہ from it, it becomes دلتا راشہ which is the surface structure of the sentence. In the example (iii), the VP پشاور تی تلل غواړی is deleted from the sentence.

Insertion

In this process, new elements are added to the sentence. We add some elements in English when making interrogative sentences from affirmative sentences. For example,

- D.S: He plays cricket.
- S.S: Does he play cricket?
- D.S: They love to play cricket.
- S.S: Do they love to play cricket?
- D.S: Zahid came late.
- S.S: Did Zahid come late?

We insert the word not when we make a sentence negative from an affirmative sentence. For example,

- D.S: He plays cricket.
- S.S: He does not play cricket.

In Pashto language, the same process is used. We insert some elements to make new sentences from the deep structure of a sentence. We insert some elements when we make a sentence negative. For example,

English		Pashto	Pashto
i.	D.S: I play cricket.	Za cricket kawa.	زہ کرکٹ کوا۔
	S.S: I do not play cricket.	Za cricket *na* kawa.	زہ کرکٹ *نہ* کوا۔
ii.	D.S: Hamid is going.	Hamid zi.	حامد ځي۔
	S.S: Hamid is not going.	Hamid *na* zi.	حامد*نہ* ځي ۔
	S.S: Is Hamid going?	*Aaya* Hamid zi?	*آیا* حامد ځي ۔
iii.	D.S: That is a goat.	Hagha yawa chilai da.	هغہ یوہ چیلئ دہ ۔
	S.S: That is not a goat.	Hagha yawa chilai *na* da.	هغہ یوہ چیلئ *نہ* دہ؟
	S.S: Is that a goat?	*Ayaa* hagha yawa chilai da?	*آیا* هغہ یوہ چیلئ دہ؟
iv.	D.S: You are sad.	Ta khafa ye.	تہ خفا یئ۔
	S.S: Why are you said?	Ta *walay* khafa ye?	تہ *ولے* خفا یئ؟
	D.S: It is big.	Da ghat de.	دا غٹ دے۔
	S.S: How big is it?	Da *somra* ghat de?	داسومرہ غٹ دے؟
	D.S: You want to pay.	Ta maash warkawal ghwaray.	تہ معاش ورکول غوا
	S.S: Do you want to pay?	*Aaya* ta maash warkawal ghwaray?	*آیا* تہ معاش ورکول غواړے؟
	S.S: How do you want to pay?	Ta *pa sa doal* maash warkawal ghware?	تہ *پہ سہ ډول* معاش ورکول غواړے؟

In Pashto language, نہ is a word used for negation. In the above examples, the sentences are negated with the word نہ. The word آیا is used to ask questions. In the above examples, it is used to make the sentences interrogative. Other words are inserted into the sentences to make them interrogative. Some of them are given below.

English	Pashto	Pashto
i. What	څہ	Sa
ii. Who	څوک	Sook
iii. Where	چیرتہ	Cherta
iv. When	څہ وخت	Sa wakht
v. Why	ولی	Walay
vi. How much	پہ څو	Pa so
vii. How	څنګہ	Sanga

5. DISCUSSION & CONCLUSION

Speakers of every language use limited means to produce many structures. There is a finite number of items in languages that are used by a large number of speakers to communicate what they want to communicate. The recursion property of language is very significant, and it plays a very momentous role in making speakers able to share their ideas, feelings, and emotions by using a finite number of signs of language. The language processes are repeated repeatedly by the speakers of the language. Transformational processes are one of the processes constantly repeated by the users of languages to construct multiple structures from a single deep structure. These processes are merging, deletion, insertion, and movement. Pashto speakers also use these processes to generate different structures they need, such as interrogative, negative, and passive structures etc. In the above examples, these processes can be noted. Pashto speakers use these processes the same way as speakers of other languages,

such as English. Merging is used in almost all sorts of phrase types, such as noun phrases, verb phrases, adjective phrases, etc. In Pashto language, different elements are merged with nouns, verbs, adjectives, etc., to project a head into a phrase. The phrase can be just a noun, verb, adjective etc. In the same way, certain items, such as NP and VP, are deleted from sentences in Pashto language. In insertion, some elements are added to the sentence. Pashto speakers add آیا to make a sentence interrogative and add نه to make a sentence negative. Some items are moved from one place to another in a sentence to produce a different structure, such as an interrogative structure. In Pashto language, the word کوم is moved from one place to another to make a sentence interrogative. Thus, it can be said that these processes are used by almost all the languages in the world. These processes are used not only in English but also in other languages. Pashto language is one of those languages that use these transformational processes.

Contribution to the Existing Knowledge

In different languages, such as English, French, Urdu, etc., researchers have researched how speakers generate new structures from a surface structure and the transformational processes. To my knowledge, no research has been conducted to see such transformational processes in Pashto language. The current research explored that the same transformational processes are used in Pashto language and that Pashto speakers generate surface structures from a deep structure in the same way as the speakers of other languages generate.

Recommendations for the Future Research

The current study was limited to untested sentences that were selected based on the general observation of the researcher. Research can be done in the future on the sentences written in newspapers, articles, and books. Simple sentences were analysed in this research. Future research can be carried out on complex sentences. Researchers can also research the comparative study of transformations in different languages.

Conflict interests

The authors declare no conflict of interest.

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