

## **An Investigation of Scrambling in Ilami Kurdish based on Minimalist Program**

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### **Abstract**

Syntax refers to the knowledge of studying the rules of how words are combined and put together to create sentences in a language. The subject of the movement of sentence constituents and the factors affecting it has always been considered by grammarians. One of these constituent movements is the scrambling process. Scrambling is a marked process that moves the constituents of language sentences obligatory or optionally and can play a semantic and cognitive role. This process occurs in languages with free word order, such as Kurdish. The present study has been compiled in the subject of an investigation of scrambling in Ilami Kurdish based on minimalist program. The data presented in this research are based on the construction of structures of Ilami Kurdish sentences, some of which are from the contents of previous researches, and some others using the daily speeches of informant which have been collected through the library- field way and studied in a descriptive- analytical method. The result of research states that the various classifications that have been made for scrambling, including short- distance/ long- distance scrambling, argumental/ non-argumental, leftward/ rightward, normal/ multiple, are exist in Ilami Kurdish. Examining the present data, shows that the Ilami Kurdish dialect is flexible in the face of structural changes, but this is not absolute flexibility. The order of scrambling in Ilami Kurdish is highly dependent on verbal functions such as emphasis and topicalisation; although the scrambling is syntactically optional in the grammar of this language; but in speech, sometimes factors such as verbal focus make it obligatory.

**Key words:** Linguistics, Syntax, Scrambling, Ilami Kurdish, Minimalist Program.

### **1. Introduction**

Syntax refers to knowledge of studying the rules of how words are combined and put together to create and understand sentences in a language. The subject of the movement of sentence components and the factors affecting it has always been considered by grammarians. One of these components is scrambling process as a syntactic movement and the effects of this process on the meaning of sentences.

Scrambling is a process that changes the words order and constituents in a sentence, and as a

result, the arrangement of structures changes from the unmarked state to the marked one (Karimi 2003, Rasekh Mahand 2003, 2006 and Saito 1985, 1989).

Ross (1976) was the first to talk about the scrambling. He considers the free arrangement of words to be the result of movement and displacement, and uses the term “scrambling transformation” for it. Ross doesn’t talk about the cause of the scrambling transformation and he considers it as an optional action that doesn’t change the meaning. Scrambling is an obvious syntactic movement that is divided into two types, short- distance and long- distance scrambling (Mahajan 1989, Miyagawa 1997). Scrambling from another point of view can be classified into two categories: A scrambling in which one of the arguments of the verb (subject or object) is shifted and A' (non-A) scrambling (Mahajan 1990). Miyagawa (2003) states that the short distance scrambling is an argumental movement and the long distance scrambling are a non- argumental movement; however, there is still no consensus on this issue.

Mahajan (1989) and Rasekh Mahand (2003) believe that there are other types of scrambling classification, which are:

1. The leftward scrambling in which the structures move to the beginning of the sentence.
2. The rightward scrambling in which the structures move to the end of the sentence.
3. Multiple scrambling in which more than one structure moves.

Thus, it can be said that the scrambling is a marked process that occurs in various languages that have free word order; including the Kurdish language. This research tries to study the scrambling process in Kurdish, Ilami Kurdish dialect. The Kurdish language (Ilami dialect) has a word order of ‘subject, object, verb’ (SOV) in the unmarked state, which can be transformed under the influence of some syntactic processes and create a marked word order. Although the construction of sentences in Kurdish is in the form of (SOV), in spoken language, sometimes Kurdish speakers change the position of the structures and disrupt the unmarked order of the structures in the sentence. This study seeks to gain a deeper understanding of the sentence structure of this Kurdish dialect by examining unmarked and marked sentences. The theoretical framework of this research is a minimalist program.

### ***1.1. Research questions***

1. Is there a scrambling process in the Ilami Kurdish dialect?
2. What kind of the scrambling process in there in Ilami Kurdish dialect?
3. Is the scrambling process in the Ilami Kurdish dialect optional or obligatory?

## **2. Research Methods**

The data presented in this research are based on the construction of Ilami Kurdish sentence structures, some of which are from the contents of previous researches and some of which are from the everyday speeches of Kurdish speakers which have been collected through the library- field method. The evaluated data are simple and complete sentences that have been selected based on formal criteria. These data were collected orally by question and answer method from family members, including two females and two males in the age group of 20-50 years. These types of data were sentences in Persian that the speakers were asked to translate them into their native language in various grammatical ways, then the movements that occurred in the sentences were identified. All data were analyzed using a descriptive- analytical method based on the principles of the minimalist program.

### 3. Theoretical framework

As mentioned, the theoretical framework of this article is a minimalist program. Many thinkers and theorists such as Chomsky, Radford, Lasnik, Karimi, etc. have talked about the minimalist program. Chomsky (1995) promised linguists a new development in generative grammar by presenting an article entitled "Minimalist programs for linguistic theory"; hence, the minimalist program is a major line of inquiry that has been developing inside generative grammar. The spirit of the minimalist program is based on the view that the more concise the theory, the more desirable it is. The use of the least and most concise theoretical concepts and tools has been one of the ideals of generative grammar since the beginning (ibid:600).

In the minimalist program, only two interface levels are assumed to be language levels, and the levels that were previously present in various types of generative grammar, such as surface structure and deep structure, are removed. This reduction of levels has also been a step towards minimalism. In the language system of this program, there are two parts of vocabulary and computational system. In the vocabulary section, there are lexical, morphological, syntactic and semantic entrances; and the computational system part includes two processes of merging and movement. Spell- out, the input of which is a syntactic part, is the stage in which tree diagram information is divided and manifested in two forms, logical form and phonetic form (ibid: 602).

Radford (2004) also examines and describes structures that not only requires merging operation but also require another type of operation, which he refers to as "movement". According to him, the movements within the sentence can be divided into different types, which are:

1. Head-to-head movement
2. Wh-movement
3. argument- movement

### 4. Background

Ross (1976) was the first to talk about the scrambling in his dissertation "limitations of variables in syntax". He considered the free word order to be the result of movement and displacement, and used the term "scrambling transformation" for it. Webelhuth (1989) examines the scrambling of the German language in his article "The Phenomenon of Syntactic Saturation and Modern Germanic Languages." He considers the scrambling to be the result of inflectional and verbal phrases and believes that short- distance and long-distance scrambling are not different from each other. According to his dual principles, the scrambling is a syntactic movement into a mixed position, which is neither an A position nor an A' position, but a combination of both.

Bailyn (2001) in his work "Scrambling", considers scrambling as a process that occurs in languages with an arrangement of free constructs, and the result is the derivation of the order of non-basic words in that language.

Karimi (2003) in her book "word order and scrambling", studies movements, topicalization, grammatical relations and scrambling in various languages such as Persian, Turkish and Russian based on the data of researchers. She believes that all structures in Persian have the ability to move through the scrambling and be in the topicalized position.

Karimi (2005) in her book "A Minimalist Approach to Scrambling" examines the interaction of semantic and discourse functional factors with the syntactic properties of word order in a sentence in a language that has the scrambling. She believes that the scrambling in Persian is not optional, but has a semantic and pragmatic role.

## 5. Data Analysis

### 5.1. Types of Scrambling

According to the statements mentioned in this research, the types of scrambling are divided as follows:

**Table 1: Scrambling Classification**

a) scrambling as a syntactic movement	argumental	non- argumental
b) scrambling based on doing inside or outside of the clause	short distance	long distance
c) scrambling based on direction	leftward	rightward
d) scrambling based on the number of displaced structures	normal	multiple

#### 5.1.1. Scrambling as a Syntactic Movement

According to the types of scrambling and the statements of researchers, scrambling is divided into two categories: argumental and non-argumental. The main debate about the scrambling is whether this movement falls into the category of argumental movement in which a constituent moves to an A-Position, or whether it falls into the category of non-argumental movement, in which the constituent moves to an A'- Position. Miyagawa (1997, 2003) and Bailyn (2001) consider the argumental scrambling to be the result of the extended projection principle. But the non-argumental scrambling, that is, the long distance scrambling, is considered to be the product of verbal and semantic features.

Argumental movements move the noun phrases with a new reference in the clause based on local principle. Raising and passivization are two types of argumental movement. Scrambling in Ilami Kurdish dialect cannot be precisely placed in the category of argumental or non-argumental movements; because sometimes it is like raising as an argumental movement and sometimes it is like topicalization as a non-argumental movement.

#### 5.1.2. Scrambling based on doing inside or outside of the clause

The scrambling is divided into short distance and long distance scrambling based on its location in the sentence. Jones (1993) uses inner scrambling instead of a short distance scrambling and an outer scrambling instead of a long distance scrambling.

##### 5.1.2.1. Short distance scrambling

Mahajan (1990) considers the short distance scrambling in the simple sentences and inside phrases. This type of scrambling occurs in simple sentences and inside the sentence itself, so that one of the arguments or adjuncts is displaced. For example, in the following sentence, the direct object is moved to the subject position, creating the short distance scrambling.

- 1) A. Ali ktaw-a ?era Zahra san. (unmarked)  
 Ali the book for Zahra bought.  
 "Ali bought the book for Zahra."

In part B, the object is moved to the subject position:

- B. ktaw-a Ali t<sub>i</sub>?era Zahra san. (marked)  
 The book Ali for Zahra bought.  
 "The book, Ali bought for Zahra."

Even the indirect object can have a scrambling in this sentence and be moved to the subject position:

- C. ?era Zahra Ali t<sub>i</sub> ktawa san. (marked)  
 For Zahra Ali the book bought.  
 "For Zahra, Ali bought the book."

The above example can be considered the middle scrambling in which the indirect object is moved to the position before the subject. Whenever the scrambling is done at the level of a sentence and beyond the phrase, the middle scrambling has occurred. Some categorize the middle scrambling into a separate category, while others consider it a sub-branch of short distance scrambling because it takes place within a single sentence (Karimi 2001a). So it can be said that the short distance scrambling can be on the one hand in the scope of the verb phrase, which is the object movement, and on the other hand it can be in the scope of the sentence and move the constituent to the beginning of the sentence. Example 2 is a kind of short distance or inside clause scrambling in which the object phrase is inverted.

- 2) A. rafiqam ktaw dastanê san. (unmarked)  
my friend a book story bought.  
"My friend bought a story book."  
B. **ktaw dastanê** rafiqam t<sub>i</sub> san. (marked)  
a book story my friend bought.  
"A story book, my friend bought."

### 5.1.2.2. Long distance scrambling

In Ilami Kurdish dialect, a long distance scrambling can also occur. But as mentioned earlier, this type of scrambling is done outside the clause and in compound sentences that have a main and subordinate clause. In the long distance scrambling, a constituent is moved from the subordinate clause to the main clause. Consider the following example:

- 3) A. mə zanem kə Ali ktaw-a ?əra Zahra san. (unmarked)  
I know that Ali the book for Zahra bought.  
"I know that Ali bought the book for Zahra."

Now in the above sentence, the direct object has a long distance scrambling and the sentence becomes as follows:

- B. **ktaw-a** mə zanem kə Ali ?əra Zahra san. (marked)  
the book I know that Ali for Zahra bought.  
"The book, I know that Ali bought for Zahra."

### 5.1.3. Scrambling based on direction

Mahajan (1989) believes that if we bring the inverted element to the beginning of a sentence according to the Latin alphabet, the scrambling is leftward; and if we move it to the end of the sentence, the scrambling will be of the rightward kind. Below we will provide two syntactic examples for each of this kind of scrambling:

- 4) A. Ali tupê ?əra Zahra san. (unmarked)  
Ali a ball for Zahra bought.  
"Ali bought Zahra a ball."

#### 5.1.3.1. Leftward scrambling

In this sentence the constituent is moved to the left.

- B. **?əra Zahra** Ali tupê san. (marked)  
For Zahra Ali a ball bought.  
"For Zahra, Ali bought a ball."

#### 5.1.3.2. Rightward scrambling

In this sentence the constituent is moved to the right.

- C. Ali tupê san **?əra zahra**. (marked)  
Ali a ball bought for Zahra.  
"Ali bought a ball for Zahra."

### 5.1.4. Scrambling based on the number of displaced constituents

The scrambling is divided into two categories based on the number of moving constituents. The first is the normal scrambling in which a constituent in a sentence is inverted; and second, the

multiple scrambling in which the number of displaced constituents is more than one, but it is nevertheless a well- formed and grammatical sentence. The following examples from the Kurdish language show the existence of these two types of scrambling.

#### 5.1.4.1. Normal scrambling

Each type of leftward, rightward, short distance and... scrambling in which a constituent is displaced, is considered a normal scrambling.

5) A. *mə haw mələ sanəm.* (unmarked)

I that house bought

"I bought that house."

B. *haw mələ mə sanəm.* (marked)

that house I bought.

"That house, I bought."

6) A. *jana da ktaw fəruji sanita?* (unmarked)

These from the book store bought.

"Did you buy these from the book store?"

B. *da ktaw fəruji jana sanita?* (marked)

From the book store these bought.

"From the book store, did you buy these?"

#### 5-1-4-2. Multiple scrambling

Lee (1993) states that a long distance scrambling is theoretically possible at a level beyond a few sentences, but in practice doing so makes the sentence ungrammatical or at least not easy to understand. So it is assumed that the scrambling is somehow related to the movement of phrases not sentences. In multiple scrambling, more than one constituent is inverted simultaneously. The number of moved constituents is more than one and is usually used in double object verbs. This type of scrambling can occur at the short distance and long distance level.

7) A. *Ali tupa -ga ?əra rafiqə- lê pərt (fəra) da.* (unmarked)

Ali the ball to his friends threw.

"Ali threw the ball to his friends."

Sentence (7A) is unmarked sentence in which the constituents are in their right place in the order of the subject- direct object- indirect object- verb. But in sentence (7B), under the influence of the multiple scrambling, the indirect object moves to the beginning of the sentence, then the direct object is moved so the subject and verb are placed after it, that is why it is called the multiple scrambling.

B. *?əra rafiqə- lê tupa- ga Ali pərt (fəra) da.* (marked)

To his friends the ball Ali threw.

"To his friends the ball, Ali threw."

## 6. Discussion and conclusion

In this section we will first answer the questions mentioned in the first part of the article and then a general conclusion will be presented on the subject of the research. The first question was that whether there is a scrambling in the Ilami Kurdish dialect. Regarding the answer to this question, the researchers, after numerous linguistic studies and according to their intuition as the speaker of this language, consider the Ilami Kurdish as one of the languages with free word order that has scrambling, without changing the meaning of the sentence.

According to the second research question, what kind of scrambling process is there in Ilami Kurdish dialect; it can be said that there are various divisions that have been made for the scrambling in the Ilami Kurdish dialect which includes: short distance/ long distance scrambling, leftward/ rightward scrambling, argumental/ non argumental scrambling and normal/ multiple scrambling.

The third question posed in the research was that is the scrambling process in the Ilami Kurdish dialect optional or obligatory?

An examination of the data taken from the native speaker's conversation show that scrambling acts as an optional process in this dialect, which is caused by various verbal and pragmatic factors.

So this study states that the scrambling is a syntactic process of markedness that can take place in languages with free word order, such as Kurdish, Persian, Hindi.... In order to get out of its unmarked state and become marked, something must happen in less frequent context. The scrambling in Ilami Kurdish dialect is the markedness, process, which changes the information structure of the text by changing the position of constituents, without changing the main meaning of the sentence.

The important point about the scrambling in Kurdish is that in everyday speech, speakers use this process more subconsciously; the history of this issue goes back to the oral history of Kurdish language in past centuries and the lack of written sources of this language. The history of writing and translating in Ilami Kurdish dialect is not more than two decades. This has led to being free word order language which its structures can be easily moved by speakers.

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