A Comparative Study of Punjabi and English Open-Ended Syntactic Constructions Through the Revised Extended Standard Transformational Generative Theory

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Abstract: Punjabi is one of the major languages spoken in Pakistan, India, and many other parts of the world. Despite its popularity, Punjabi has not been studied and explored extensively, especially with respect to its syntax. In this study, the open-ended syntactic constructions of Punjabi were looked at using the revised extended standard transformational (REST) generative theory. This was done to find out how the surface structures of open-ended interrogative syntactic constructions in Punjabi are made from their deep structures. Subsequently, the Punjabi constructions are compared to their English counterparts with respect to REST to figure out syntactic similarities and dissimilarities between the open-ended syntactic constructions of both languages. The data for this qualitative study has been taken from a ‘Punjabi book, Descriptive Grammars by Bhatia (2013). The selected data has been analyzed through X-bar tree diagrams. The exploratory research design has been used to conduct this study. The findings of this study reveal that Punjabi and English are syntactically distinct languages. Punjabi is an in-situ language since the question words do not move to generate surface structures, while English is an ex-situ language as the question words move to form surface structures through the transformational rules of ‘Wh’ movement and operator movement. Also, English uses dummy auxiliaries, whereas no such dummies are used in Punjabi. Finally, Punjabi interrogative constructions have reduplication features, unlike English open-ended constructions. The syntactic disparities between these two languages have implications for SOV language learners who aspire to learn English and for those enrolled in undergraduate and graduate programs.

Keywords: dummy auxiliary, operator movement, syntactic constructions, transformational grammar

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Introduction

Punjabi is one of the Indo-Aryan languages. It ranks as the tenth most widely spoken language in the world, with an estimated 100 million native speakers. Approximately 30 million people in India and 70 million in Pakistan are native speakers of Punjabi.
It is one of the languages recognized by the constitution as the official language of the Indian state of Punjab. In Pakistan's Punjab province, about 70 million people speak Punjabi as their first language. Additionally, Punjabi speakers can be found in significant numbers in Canada, the United States, and the United Kingdom.

There are a number of scripts (synchronic diagraphs) used for composing Punjabi in Pakistan and India. This language was once written using the Perso-Arabic script. Early in their empire, Sikh emperors employed this script. Shahmukhi, which means "from the mouth of the king," is used in Pakistan. It is an altered version of the Arabic script. In Indian Punjab, the common script is Gurmukhi, meaning from the mouth of the Guru. However, many Indian states, including Haryana, Delhi, and Himachal Pradesh, currently employ the Devanagari script. Both India and Pakistan have made substantial use of the Punjabi scripts indicated above (Riaz, 2011). The Punjabi language has been studied with respect to various aspects like phonology, morphology, language dissertation, and its diminishing features. The present study is comparative as it has addressed Punjabi open-ended interrogative syntactic constructions compared to their counterparts in English.

According to Bhatia (2013), the question words in Punjabi open-ended constructions are often not used at the beginning of the questions, and there is no auxiliary movement, also known as the head movement. The structure of Punjabi question words is significantly different from the structure of English open-ended question words. To find other syntactical parallels and differences, open-ended interrogative phrases in Punjabi have been examined and analyzed with reference to the revised extended standard transformational generative theory.

A variety of question words are used to generate open-ended interrogative constructions in Punjabi, much like in English. They include "Kii" (what), "Kitte" (where), "Kive" (how), "Kio"
(why), and "KauN" (who), among others. Contrary to English language interrogative constructions, in Punjabi language constructions, the question words are not usually placed at the beginning of the syntactic constructions and are mostly used after the subject, for example, ‘Oh kon ai (Bhattia, 2013). English open-ended interrogative constructions do not follow a canonical framework as the interrogative syntactic structures of the Punjabi language do.

To generate Punjabi open-ended syntactic construction; unlike the English language, the movement rule has not been applied. In other words, Punjabi is an ‘Wh’ in-situ language, whereas the English language in most cases is not.

Luraghi & Parodi (2008), elaborated in their earlier study "Conditions on Transformations" by Chomsky, published in 1973, altered the way grammar and language were viewed at the time. Chomsky investigated the results of the desirable blind applications of transformations in this study. Through the application of this program, he learned about crucial restrictions on transformations, including the specified subject condition, the principle of subjacency, and the tensed sentence condition, all of which forbade or restricted some transformations to one cyclic domain. Additionally, Chomsky and other researchers found that whenever an NP or a Wh-element travels, a trace (t) is left behind and is co-indexed with the moving ‘NP or Wh-element’. The trace theory, which gave various traces and attributes, was inspired by this discovery.

Therefore, the role of ‘Wh’ traces was to act as variables that applied constraints to the moved ‘Wh’ phrase. On the contrary, NP traces acted as anaphors linked to the moved N phrases. Most crucially, move NP was used to replace all NP movement transformations. The effects of relative clauses, questions, and various constructions—some of which did not include an overt Wh-word—such as comparative sentences and topicialized sentences, among others—were also deduced by Chomsky.
in his 1977 paper "On Wh-movement" using a single rule of Wh-movement. In these structures, non-occurring Wh-phrases were eliminated using deletion rules, and filters prevented ungrammatical constructions. After a brief introduction, the next section reviews the relevant literature.

**Literature Review**

In this section, some key terms, for example, deep and surface structures, were discussed; moreover, the main studies conducted in Punjabi grammar, syntax, and other branches of linguistics were included to provide a review of the existing literature. This review created a research gap that this study tried to bridge. Deep structure is an abstract structural arrangement that encompasses all the elements that impact both semantic and structural interpretation. Chomsky enhanced his two-step process for creating deep structures using aspect theory. First, empty phrase markers are produced at termini by phrase structure rules. Then, the lexical components are inserted into the available places. The surface structures develop from the deep structures through transformations and movement rules (Amin, 2012).

In contrast to deep structure, Yule (2020) placed emphasis on surface structure as the structure of individual syntactic construction. Surface structures, that language users speak or write, are generated by applying a variety of movement and transformational principles to underlying structures. These transformational principles may result in incorrect structures if they are applied wrongly.

From the time that the standard model of transformational generative grammar was published in 1965 by Chomsky and all the way up to the minimalist program, the deep structure and surface structure were connected via movements and transformations. It means that as a result of these movement operations or transformations, a constituent that is placed in one location in the deep structure gets relocated to another location at the surface structure. Only heads and large projections are,
however, shifted from one location to another. These components move in a certain way called "head-to-head movement," which involves moving one head to another. In order to create questions from affirmative sentences in English, the head of the inflectional phrase (IP) has been relocated to the complementizer phrase's (CP) position. An NP, for example, goes to a specified location when it is maximally projected (Luraghi & Parodi, 2008). In the following sections, the studies conducted on the Punjabi language have been included.

By applying Chomsky's minimalist approach, a study was conducted to compare Punjabi and English syntactic constructions. The universal grammar method presupposes some universal rules and parametric variations between the two languages, despite the fact that the linguistic characteristics of these two languages differ. Using the most fundamental forms of universal grammar, concepts, and parameters, the work focused on non-finite Tdef structures in Punjabi and English. The study concluded that multiple agreement operations could be used to expand Punjabi participles and infinitival structures with non-finite parts. The evaluation of odd constructions and Tdef components, especially rising ones, in English is governed by the same criteria. These aspects are not pronounced in Punjabi when it comes to Tdef formations (Khan & Kousar, 2019).

Chohan and Garcia (2019) carried out a study with the title "Phonetic Comparison of English and Punjabi." The researchers made an effort to investigate the distinctions between Punjabi and English phonemes. The Levenshtein algorithm framework was applied to this study. The phonemic contrasts and similarities between the two languages were identified using their respective inventories. The inventories were examined using the theoretical framework, and the proportion of similarities to differences was calculated. According to this research, the two languages have a 56.25 similarity level, while there is a
43.75 phonemic divergence. The investigation's findings indicated that there were more phonetic similarities than variances. For Punjabi learners, the sounds that are used in Punjabi are easier to learn than in English, and the phonemes that are different in both languages are challenging to acquire, and learners have to make a conscious effort to master those sounds.

'A Social Study of the Diminishing Features of the Punjabi Lexicon' was carried out by Din & Ghani (2017). The researchers in this study underlined the linguistic changes that the Punjabi language underwent over a number of decades. To evaluate the suggested linguistic changes, the researchers examined the terminology found in traditional Punjabi songs and films like "Heer Ranja" and the questionnaires completed by 110 educated Punjabi speakers. The participants’ responses to perceived changes over the previous few decades were elicited through a questionnaire. The study's findings demonstrated that lexical changes were significant and obvious as a result of developments in industry, technology, education, and particularly electronic media.

Riza (2011) carried out an ethnographic study at NUML. The primary goal of the study was to examine the condition of Punjabi and the attitudes of native speakers of the language in both urban and rural areas. Five families from the metropolitan area and the remaining five from the rural area made up the sample of ten homes. The study's theoretical framework was the constructivist qualitative model, and the data were collected through semi-structured recorded interviews. In contrast to the participants from rural settings, who showed a strong attachment to and ownership of Punjabi, the study found that participants from urban areas did not view Punjabi as significant for communicative and economic purposes.

The process of word sense disambiguation (WSD) determines the appropriate meaning of a word in a particular situation. It was a necessary and indispensable application for any activities involving natural language processing. In this study, the word vectors of 66 ambiguous Punjabi nouns
for an explicit WSD system of the Punjabi language were examined separately using the two deep learning techniques, multilayer perceptron and long short-term memory (LSTM). Simple word vectors that were directly extracted from a corpus of Punjabi language that were manually sense-tagged serve as the inputs for deep learning algorithms. For the WSD problem of the Punjabi language, the multilayer perceptron beat the LSTM deep learning method. Using feature sets from the Unigram and Bigram languages, six Conventional supervised machine-learning approaches were also tried on the same dataset. The deep learning methods using simple word vectors outperformed the prior methods. (Singh & Kumar, 2020).

The Linear Correspondence Axiom (LCA), which held that word orders could be comparable despite apparent differences, was compared in this study between Punjabi and English in terms of their SOV and SVO word orders. This study used Chomsky's minimalist framework against the backdrop of universal grammar (i.e., presuming universal principles underlie apparent variety in languages: Principles and Parameters), where LCA was considered to hold true at least in its empirical conclusions. This study concluded that SVO order at the base was also based on Punjabi. The migration of the object to the specifier-I position or Spec Agro position and the movement of the verb+ auxiliary complex to ‘I’ were what distinguished it from SVO languages like English (Khan et al., 2023). The review of the existing literature showed that no such study has been conducted with respect to the revised extended standard transformational generative theory by comparing open-ended interrogative Punjabi and English syntactic constructions.

**Significance of the study**

This paper has examined the syntactic analysis of the open-ended interrogative constructions of Punjabi and English, offering a thorough comparison and contrast. While English syntax has been extensively studied, the syntax of the Punjabi language has not been explored at length. The study has also had local implications, as it compared the syntax
of Punjabi to one of the world's most spoken languages, i.e., English. The study has also had academic significance, as it can be beneficial for students studying Indo-Aryan languages and English. Analyzing syntactic constructions at the underlying or deep structure helps learners understand how surface structures are generated from deep ones, as well as the functional aspects of major grammatical categories. The study is also significant for learners studying syntax at undergraduate and graduate levels, as syntax books are replete with instances of syntax constructions from different Indo-European languages that Pakistani students find irrelevant. Therefore, this comparative study may motivate the students and make the subject worth studying.

**Research Questions**

1. How are Punjabi open-ended interrogative syntactic constructions different from those of English with respect to the revised extended standard transformational (REST) model?

2. What different transformational rules or movement rules are applied to generative Punjabi open-ended surface structures from deep ones?

**Research Methodology**

The qualitative research approach was utilized in this study, which emphasized socially constructed reality and its interpretation in context. It is an interpretive and naturalistic approach, focusing on understanding behavior and existing phenomena in natural settings. In-depth information and understanding of phenomena are the goals of qualitative researchers who emphasize feelings, emotions, and mental processes. Collecting data, analyzing it, and producing reports are the three basic components of qualitative research (Mills & Gay, 2019). This approach is essential for studying behavior and existing phenomena in natural settings, allowing researchers to gain a deeper understanding of the world around them.

Qualitative research involves collecting data from various sources, such as observations, interviews, documents, films, and records. The process involves organizing and interpreting the data.
through various procedures, such as conceptualization, reduction, and coding. The results are presented in articles for journals, conferences, and books. Qualitative research focuses on selecting small data sets or participants to gain insight into a particular phenomenon, analyzing narrative and visual data, and interpreting the data. Unlike quantitative research, it perceives the world as unstable, cohesive, and with numerous truths and interpretations. Research design is essential for guiding a study toward its objectives. This study compared Punjabi and English syntactic formulations with respect to the revised extended standard transformational generative theory, adopting a hybrid comparative-exploratory design.

**Population**
The population for this study was all the interrogative syntactic constructions provided in the book titled Punjabi: Descriptive Grammars by Bhatia (2013). There are two types of interrogative constructions: open-ended and closed-ended. The open-ended Punjabi syntactic constructions have been purposefully selected for this study.

**Sample**
The secondary data were purposefully selected and analyzed through the X-bar model to show movement operations to generate Punjabi surface structures from deep ones. A comparison was drawn between the Punjabi and English open-ended syntactic constructions by employing the revised extended standard transformational (REST) generative theory.

**Data Collection**
The secondary data were purposefully selected from the book titled 'Punjabi: Descriptive Grammars (2013) by Bhatia. This book has been widely recognized and referred to in many studies carried out to address various aspects of Punjabi grammar.

**Data Analysis**
In this section, X-bar tree diagrams have been used to analyze the data. Tree diagrams have been drawn through both bottom-up and top-down techniques; the bottom-up strategy is mainly used in the
X-bar model, whereby phrases or constituents merge to produce larger phrases and subsequently clauses. The emergence of surface structures from deep structures through transformational rules and movement rules has both been demonstrated using the X-bar model (Carnie, 2021). For instance, the 'Wh' shifts from the verb complement position to the specifier position within the complementizer phrase in English open-ended constructions. Such movement of 'Wh' constituent is called 'Wh-movement'. In the following section, first, an instance of English open-ended interrogative construction is provided, and subsequently, Punjabi open-ended constructions have been given to show dissimilarities and similarities, if any, with regard to the arrangement of the constituents and to the application of movement rules used to form surfaces from deep structures. The question words, in English, are usually placed at the verb complement position in deep structure; subsequently, surface structures are generated by applying the movement rule that shifts the question words to the beginning of the construction, followed by an auxiliary signifying the tense of the sentence. For example, a statement like "Who was she dating?" has a deep structure. "She was dating who?" for example. a. Who was he dating? (Radford, 2009 p.155)
By using a merging process, the verb ‘dating’ combines with the interrogative pronoun ‘Who’ to create a verb phrase, which is then combined with the auxiliary verb "was" to create a T’. Finally, the T’ pairs up with "who" to create the final tense phrase. Subsequently, the complementizer phrase (CP) was created by merging the interrogative C with the resultant TP.

Transformative rules are applied to transform this underlying structure into the surface structure. The C bar has the attribute to attract the auxiliary from T’ to C’. This movement of the auxiliary is called the head movement. The auxiliary at the ‘T’ bar position in the deep structure shifts to position the ‘C’ bar by using the transformational rule. The TNS
feature of the C bar, which draws the auxiliary from the T bar to the C bar, is what causes the movement operation. The pronoun "who," which was shifted from the VP to the CP, is similarly the result of the movement rule. Due to the CP's 'Wh' feature, a 'Wh' word may be drawn from the end of the construction to its beginning. Head movement refers to the first movement that shifts the auxiliary from the T bar position to the head C position. Another type of movement operation known as a ‘Wh’ movement is used to move the word ‘Wh’ from the VP position to the final CP location. After this brief analysis of English open-ended syntactic constructions, the Punjabi syntactic constructions will be analyzed in the next section.

**Punjabi Open-ended Syntactic Constructions**

In Punjabi open-ended interrogative syntactic constructions, the question is not usually used at the beginning. Moreover, there is no head movement of the auxiliary. The structures of Punjabi question words differ significantly from English open-ended syntactic constructions. In this section, the Punjabi syntactic constructions are analyzed through the X-bar tree to ascertain if there is any difference between the deep and surface Punjabi open-ended syntactic constructions. Consequently, this analysis has been compared to open-ended syntactic constructions in English.

TuaaDaa naa kii ai? (Bhattia, 2013, p. 9). (What is your name?) Your name, what is it?

The analysis of this Punjabi construction shows that the phrase ‘TuaaDaa naa’ is the subject, the question word ‘Kii’ is an interrogative pronoun and is employed as a complement, ‘Ai’ is the main verb of the construction, and the subject ‘TuaaDa naa’ consists of a possessive adjective ‘TuaaDaa’ and the noun ‘Naa.’ Being an in-situ language, no movement of the question word takes place. To ascertain how
constituents merge to form phrases and subsequently generate clauses, see Tree Diagram 2.

Tree diagram: 2

```
        TP
       / \  
      DP   VP
     /   /  /
    D    N  PRO
   /   /  /
Tuaadaa Na kii
```

The interrogative pronoun merges with the main verb to form a verb phrase. Subsequently, the VP combines with the subject to form a tense phrase, as shown in Diagram 2. No constituent has moved to generate this surface structure from the deep one. Punjabi's surface structure can be summed up as TP + VP. For the aforementioned Punjabi syntactic construction, the transformational rule describing how the deep structure becomes the surface structure is provided as under X1, X2 = X1, X2.

In contrast to its equivalent provided in the parenthesis in 'A' above, i.e., ‘What is your name?’ shows that to generate this surface structure from its underlying deep structure ‘Your name is what,’ the movement of the question word ‘What’ has taken place from the verb complement position, and the main verb ‘Is’ has also moved from T’ to C’ through head movement. For Punjabi speakers who want to learn English, this discrepancy between the syntactic structures and movement norms between Punjabi and English has repercussions.

Below is a study of another Punjabi syntactic structure that uses the word "Wh" as an adverb.

1. Karachi kitte ai? (p. 9). Where is Karachi?
   Karachi, where is it?
'Karachi' is a noun that is employed as the subject of this grammatical construction; 'Kitte' is a question word that also functions as an adverb, which is a modifier or adjunct. The main verb "ai" follows this question word. From the merging of the constituents, it is noticeable that the adverb ‘Kitte’ pairs up with the main verb ‘Ai’ to have a verb phrase. "Kitte ‘is’ an adverb, and its grammatical function is that of a modifier or an adverb. The verb phrase "Kitte ai" combines with the construction's subject to form a tense phrase. This surface structure emerges without the movement of any constituents.

Tree diagram: 3

```
TP
   /\  
  NP  VP
   /\  /\  
Karachi Adv kitthe V' V ai
```

It is clear from comparing this English construction "Where is Karachi" to its equivalent in Punjabi that it goes through two changes: CP's movement rule, whereby the question word "Where" shifts to specifier position in the surface structure from verb complement location in the deep structure, and the movement of the main verb from one head position to the other, i.e., from T to C. This syntactic disparity and the application of movement rules in English have implications for Pakistani learners, and the possibility is that they may commit mistakes in generating English constructions, which could be fixed by highlighting the
syntactic disparity between two languages.

The following syntactic construction elucidates the aforementioned point given in tree diagram 3.

1. Tuu utthe kio gia (p. 10) (Why did you go there?)

You there, why went?

Since the question word ‘Kio’ is an adjunct; therefore, it must be the daughter of X bar and sister to X bar to fulfill the criteria, the adverb ‘Kio’ merges with the past tense of the verb "Gia" to have an adverb bar. The first adverb bar then joins with the adverb of place ‘Utthe’ to form a verb phrase; subsequently, the second adverb phrase merges with the informal pronoun "Tuu" to have the final tense phrase. In this syntactic structure, the constituents are arranged as follows: TP + VP + V’. To generate this Punjabi construction, no constituent has moved to generate this Punjabi syntactic construction.

Tree diagram: 4

```
TP
  P  VP
    Tuu
      Adv
        Utthe
          V ‘
            Adv
              Kio
                V’
                  V
                    giaa
```
It is clear that the English structure given above in the brackets in construction ‘C’ differs from the structure of this Punjabi composition. The question word "why" has been shifted to the front position using the Wh-movement, together with the dummy auxiliary "did" and the verb's morphological change from past tense to base form. In other words, Wh-movement and auxiliary addition are the two operations necessary for English surface structure.

In Punjabi, there are other interrogative grammatical structures that employ the entire interrogative phrase rather than just the question word.

Utthe kii kii gallan hoiaa? (p. 11) (What was discussed there?)

What were the things discussed?

When the desired response to a question takes the form of a list of things, people, events, etc., the question word is repeated in Punjabi. This reduplication characteristic is prevalent in Punjabi and many other South Asian languages (Bhatia, 2013). The bottom-up merging operation makes it clear that the full interrogative phrase ‘Kii kii gallan’ that is used as a complement here merges with the verb phrase to create a tense phrase. The tense phrase then connects with the place adverb 'Utthe' to create a complementizer phrase. This surface structure doesn't require any constituents to move in order for it to exist.
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Since Punjabi is an in-situ language, it is clear from comparing this Punjabi construction to its corresponding English construction that the whole interrogative phrase, such as "Kii kii gallan," does not move. In order to generate such a surface structure, no movement of any constituent is necessary. The interrogative phrase, also known as a determiner phrase, includes the question words ‘Kii kii’ and the noun ‘Gallan’. On the contrary, in its English counterpart, the whole interrogative phrase "What kinds of things?" has been shifted to the beginning. Pied-piping is the term for such a movement procedure. Additionally, the auxiliary also switches to another head position. In other words, pied-piping and head movement of the auxiliary, which is collectively called operator movement, are employed in English construction, whereas no such movements are used in Punjabi construction.

In addition, the adverb comes before the subject and the verb in the Punjabi syntactic construction, whereas the adverb is configured at the end of the English construction. The constituents of the Punjabi construction mentioned above in tree diagram 5 are sequenced as
follows: complement phrase + tense phrase.
In order to validate the above-mentioned point in construction 'D', another Punjabi syntactic structure is being looked at.

1. Utthe keRaa keRaa munDa milia? (12)
   (Who (boys) did you meet there?)
Who was the boy who met?
It is once more evident when utilizing the bottom-up merging procedure that the interrogative phrase/determiner phrase "Kehra kehra munDa" merges with the verb's past tense "Milia" to generate a tense phrase. The tense phrase and the adverb of place ‘Utthe’ merge to form a complementizer phrase. This demonstrates that no movement of any component takes place. The components are arranged as follows: complementizer phrase + tense phrase. The construction indicated above demonstrates that the movement operation called pied-piping has not been employed to generate the given Punjabi construction, as the given determiner phrase has not moved to generate the surface structure.

Tree diagram: 6

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Tree diagram: 6
```

```
CP
   /\  
AdvP TP
  /\  
Otthe DP
 /\  \ 
D N VP
keRaa keRaa munDa milia
```
By comparing English and Punjabi surface structures, it is clear that English lacks the reduplication of interrogative constituents, which is a distinctive feature of the Punjabi language. There is no movement of the auxiliary inversion because the Punjabi interrogative construction usually does not utilize auxiliary verbs. Additionally, the adverb's placement varies across English and Punjabi syntactic constructs. Last but not least, unlike English construction, the interrogative form of the Punjabi verb 'Milia' does not undergo morphological change. In contrast to its equivalent in English, which has the constituents ordered as CP + TP + VP, The aforementioned Punjabi structure in English has the syntactic arrangement of CP + TP. The same bottom-up merging operation has been used to analyze another syntactic structure that incorporates an ergative agentive subject, such as "Kis ne" which signifies "who".

1. Kisne munde nu kal apne kar katab ditti? (Who gave the boy a book in his house yesterday?)

Who boy to yesterday his home book gave
Using the bottom-up merging operation, it is evident that the determiner phrase "Kitab," which serves as the construction's direct object, merges with the verb "Ditti" to create a verb phrase. The verb phrase then combines with the DP "apne kar" to create a tense phrase.

The tense phrase subsequently merges with the adverb of time ‘Kal’ to have a verb bar; the verb bar pairs up with the object of the construction to have a verb phrase; and finally, the verb phrase merges with the subject to generate TP. Since Punjabi is a Wh-in-situ
language, the surface structure of this syntactic composition was created without the movement of any constituents. It differs from all previous interrogative constructions in which the question word was either employed as an adverb or a complement, etc. The question word used in the given interrogative structure is the subject of the surface phrase. This Punjabi syntactic construction's constituents are arranged as follows: TP + VP + V’ + TP + VP as shown in the tree diagram 6 above. It is obvious that the surface structures of Punjabi and English constructions, in terms of the position of question words, are the same. In both Punjabi and English forms, the question words are subjects. The subjects of the syntactic structure will also be the answers to these two question words. This demonstrates that the deep and surface structures of this interrogative syntactic formulation are the same. Many inquiries in languages similar to English also use the wh-in-situ formulation, such as "Who bought what?" Since the interrogative English and syntactic structures are the same, Punjabi language learners should not have any trouble learning these kinds of sentences. It could be convenient for Punjabi learners to master these English forms because no auxiliary inversion is required.

The next structure contains an independent sentence embedded in a post-positional phrase.

1. Tuaade xayaal wich kauN kal jiitega (In your opinion, who will win tomorrow?)
(Your opinion in who tomorrow win will?) The bottom-up merging operation shows that the verb and the time adverb "Kal" merge to form a verb phrase. The adverb phrase merges with the interrogative pronoun to have the
tense phrase; the tense phrase then combines with the determiner phrase ‘Tuaade xayaal wis’ to form a complementizer phrase. The components of this Punjabi interrogative structure are arranged as CP, TP + VP. Being a Wh-in-situ language, Punjabi still uses the interrogative pronoun 'Kaun'. Since there is no movement of any of the constituents, the arrangement of the phrases in the question and its response remain unchanged.

Tree diagram: 7

It is clear by comparing the Punjabi construction 'H' to its equivalent in the brackets that, despite some small grammatical differences, the surface structures of both constructs are largely the same. Since Punjabi is a head-last language, the construction uses the postposition, whereas English, which is a head-first language, uses the preposition phrase. Being a head-first language, English puts the auxiliary "Will" before the primary verb "Win," but the English verb lacks a formal future form and instead expresses the future through other means. On the other hand, the basic form of the verb "Jeetay" has a future form in Punjabi.
that is indicated by adding the suffix "Gaa."

Findings

Punjabi is a wh-in-situ language, with question words such as 'Kii', 'Kon', 'Kitte', 'Kive', 'Kio', and 'KauN' used to ask questions. These question words often follow the subject, as opposed to English, which usually employs the 'Wh' question word at the very beginning. While English interrogative syntactic structure is non-canonical, Punjabi's is. The Punjabi open-ended interrogative forms differ from their English equivalents in four key ways: the placement of question words, the absence of auxiliary verbs, the reduplication of question words, and the number of transformational rules used. Depending on what is being asked, Punjabi question words may be positioned differently inside a structure, and the lack of auxiliary verbs has ramifications for Punjabi students who wish to study English. Additionally, Punjabi is the head-final language as it employs post-positions, unlike the English language, which uses prepositions since it is the head-final language. The present study has implications for SOV language speakers who are aspirants to learn the English language: due to syntactic disparity, the learners find it somewhat challenging to master English open-ended constructions as they are mostly different from their counterparts in the Punjabi language. However, by providing explicit instruction and highlighting the parametrical differences, the learning process can be facilitated and made more effective. The present research has a limited scope as it addressed the comparison of the Punjabi open-ended interrogative constructions only to those of English through the revised extended standard transformational theory. For future research, other types of syntactic constructions, i.e., negative, passive, and imperative, may be studied using this theory. Moreover, other grammatical theories may also be exploited to study the syntactic
constructions of major languages spoken in Pakistan.

**Discussion**

Open-ended interrogative formulations in Punjabi differ from those in English in four key ways: the placement of question words, the absence of auxiliary verbs, the reduplication of question words, and the number of transformational rules employed. Depending on what is being asked, Punjabi question words may be positioned differently inside a structure, and the lack of auxiliary verbs has implications for Punjabi students who are interested in learning English.

The present research also has implications for syntax learners enrolled in graduate and undergraduate programs at different universities in Pakistan. As all the major languages spoken in Pakistan have SOV structures, it could help them draw comparisons between their native languages and those of their target language, i.e., English. Moreover, most of the syntax books contain examples from different Western and South Asian languages, which Pakistani learners find irrelevant and uninteresting. This comparative syntax would provide SOV language learners with motivation to draw syntactic similarities and dissimilarities between Punjabi and English open-ended interrogative constructions.

The previous studies included in the literature review section of this research address various aspects of the Punjabi language. The review included studies like the comparison of English phonemes with their counterparts in English, the comparison of Punjabi and English clauses through a minimalist approach, the diminishing features of the Punjabi lexicon, and language dissertation studies. In this respect, this study is significant as it has applied the revised extended standard transformational model to draw a comparison between the open-ended syntactic constructions of both Punjabi and English.
Conclusions

Punjabi is a wh-in-situ language, with question words such as 'Kii', 'Kon', 'Kitte', 'Kiv', 'Kio', and 'KauN' used to ask questions. These question words often follow the structure's subject, as opposed to English, which typically uses the 'Wh' question word at the start. While English's interrogative syntactic structure is non-canonical, Punjabi's is. The location of question words, the lack of auxiliary verbs, the reduplication of question words, and the number of transformational rules used all distinguish open-ended interrogative formulations in Punjabi from those in English. Depending on what is being asked, Punjabi question words may be positioned differently inside a structure, and the lack of auxiliary verbs has ramifications for Punjabi students who wish to study English.

References


Khan, A. R., & Kausar, G. (2019). A minimalist comparison of Punjabi and


